WHERE DOES MANKIND GO FROM HERE?

[This article is by Mariano Picón-Salas, head of the Permanent Delegation of Venezuela to UNESCO. It is reprinted from the November 1959 issue of *Américas*, an intercultural magazine published in English, Spanish and Portuguese by the Pan American Union, Washington 6, D.C.]

IN these turbulent times, as Toynbee describes them, one of the major obstacles to the fulfillment of human destiny is perhaps the conflict between the needs of the individual and the requirements of the Paradoxically, never has man been community. more isolated and at the same time never has he been more swallowed up in the mass than in our large cities. Our industrial civilization (so called) has cut individuals off from the family, trade, and religious groups in which they lived until the end of the eighteenth century and the beginning of the nineteenth. This was when the ancient craft culture vielded to machinery, when the worker was converted into a proletarian, when the delightful small cities in which Western art and religion came to fruition were supplanted by the huge, allembracing metropolis where people have but little time to know and appreciate one another. The bonds of family and friendship, the aesthetic and religious values by which accomplishments used to be judged, were all replaced by mere economic values. In a parody of Marx, one might remark that everything turned into goods. For millions of people, though they might go to church every Sunday and have studied literature at college, life had no other purpose than moneymaking, even if that meant mortgaging one's soul. The solitude of man in his existential abandonment contrasts with the multitude who march seemingly automatically to the often-joyless performance of their jobs and to the consumption of merchandise recommended in advertisements. As to the ultimate end of life, nothing is known but that it must terminate sometime or other in a coronary thrombosis or in a traffic accident

So monstrously has the world's population grown that in order to provide food, clothing, and

work for these huge masses nearly all states (even the most capitalistic, contrary to the old illusion of economic liberalism) have been forced to adopt government controls and insurance against sickness, old age, and unemployment. Otherwise millions would have perished. In this sense, mankind gained in collective justice, and the crises and crashes of capitalist production cause less anguish today than when Karl Marx wrote his apocalyptic book. It is even possible to hope that the world of tomorrow, with science and technology put to the service of the nations and with better forecasting of trends, will succeed in reducing the old moral disgrace to the planet that is called poverty.

But once physical man has been fed, housed, and clothed—and when will this distant goal be reached for the Asian multitudes and for people in many parts of Africa and Latin America?—there still remains another, higher image: that of the spiritual man who with his labors, his disinterestedness, and his creativeness seeks to transcend mortality. To the concept of "social justice" must be added that of liberty, without which no community can call itself fully human. It may be that elephants and buffaloes are better fed than many men, or that they enjoy a greater measure of security than does the citizen in totalitarian dictatorships. But what will always differentiate a man from an elephant or a buffalo is the faculty to develop his creative liberty.

An education—I almost said "a religion"—that reconciles these two obligations, justice to the multitudes and freedom to the individual human being, is the only way out for our afflicted contemporary society. It is not enough—as some of the theoreticians of materialistic optimism thought it was—for every family to own a refrigerator and a car, if we can only enjoy products and are incapable of creating "values."

Out of all the many different levels of culture man has established, I do not believe that he has achieved anything greater, ever since the Greeks, than the development of his moral consciousness. What this means is that he has opposed, to the savage's fear of the all-powerful surrounding world and the savage's violence, the logical thought that we attribute to civilized man. But in the centuries-long road that we have trodden in our march toward reason and culture, no one can boast of having completely overcome the remnants of terror and superstition left in our subconscious minds by our prehistoric heritage. Peoples that had been regarded as having attained a high degree of evolution suddenly revert to frenzied irrationality and delude themselves with myths of passion and inexplicable hatred. They are held in spell by a demagogue or a breed of demagogues; they take to burning books and smashing statues and sending thousands of innocent human beings to gas chambers or concentration camps, as the Nazis did.

The moral consciousness that comes down to us from the words of Socrates and from the Sermon on the Mount—that is, from the two streams, classical humanism and Christianity, that flowed together to form our culture-requires constant care and vigilance. That "civilizations are mortal" was the persistent reminder of Paul Valéry. Man's freedom is not gained only in relation to others; it begins in our very selves. In order for our minds to be cleansed of fear, superstition, and savagery, perhaps we need to give our consciences, our inner selves, the same kind of thorough daily scrubbing that we Unfortunately, education as give our bodies. practiced in our time, loaded with facts more than with true reflection, or overly absorbed in economic concerns, forgets this continuous process of selfknowledge that man must carry on in order to make sure that his conscience is just and serene. Teachers and moralists will have to go back to instructing that a good conscience is worth more than the most luxurious automobile. To draw an innocent paradox, one might say that it would not be a bad thing if trade suffered a little so that souls should benefit.

The most notable feature of modern civilization is the drive toward the conquest and domination of nature that began with Renaissance science, with the experimental method (*provando e riprovando*) of Galileo. One of its most recent chapters is the splitting of the atom. We are on the threshold of unforeseeable adventures. From the social application of science and technology we expect peoples to emerge from centuries-old poverty, arid zones to be made fertile, the frozen tundras and the humid jungles to become healthful and habitable.

For it is obvious that technology—advanced though it may now appear to be—has still to solve the crucial problem of raising the rate of production to the level of the population explosion. In occupying the planet, the human Prometheus not only builds but destroys as well: he devastates the forests and erodes the mountains. The increasing hunger and poverty in certain parts of Asia, Africa, and even Latin America are an insult to civilization. The masses of the world are today in rebellion against the capitalist antithesis of rich countries and underdeveloped countries.

Nor does the solution lie in the Pharaonic labors and slavery, the curtailment of all liberty, forced upon their multitudes by certain totalitarian states with the utopian promise that they must suffer now so that mankind may be happy two hundred years hence. Like all creations of man, science and technology need ethics, a moral curb on abuses and violence.

At no other period in history have we had to choose more dramatically between life and destruction, war and concord. That man's invention may not bring about his downfall, that he may not blow himself up with his own hydrogen bomb—this is the gravest challenge of our times.

If we reach the point where the development and improvement of our conscience occur at the same rate as our technical progress, man may look forward not only to more security and resources than he enjoys at present but to a universal civilization that is human in the best and fullest sense—one in which peoples cannot be sorted out into cultured and savage, rich and destitute, imperialist and colonized. The great heir of separate and sometimes rival civilizations well may then come into his huge legacy.

East and West, today antithetical terms and even contrary views of man, will synthesize their

3

knowledge and experience, by borrowing from and lending to each other Even now the cultured Englishman, when he visits the British Museum, can recognize that a sculpture from Burma or Cambodia deserves as much consideration as a work of Western art; if he broadens his thinking he may perhaps be led to reflect that, by the same token, a Cambodian is not necessarily inferior to a European.

At other periods of history, brutal means were employed to erase human inequalities: a rich and sedentary people was invaded by a nomadic one, or a "have-not" group overthrew the "haves" in a revolution. But it is not unreasonable to suppose that science and technology, and above all the universal spread of a new concept of justice, will spare tomorrow's world this needless cruelty, or that what used to be resolved through insurrection or barricades will be handled as a problem for the experts. Will it be possible to abolish wars as hygiene has abolished the plague epidemics that decimated Europe in the Middle Ages? Just as diseases that only two or three generations ago were fatal have retreated before modern medicine, will it not be possible to obtain a better spiritual health and balance for the man of tomorrow?

In all this there is no question of shaping an ultimate Utopia-a static paradise such as Marx anticipated after all the revolutions were over and a classless society had been established. But man's natural spirit of emulation could find the same outlet in peaceful creative competition that it formerly did in war and annihilation. Nothing could be more terrible than a society or a state organized as a huge "nursery" bureaucratic administered by the technocrats, where all our needs would be attended to at regular hours and where there would be no room for personal initiative and creative liberty. If the material needs of modern life require planning, man's spirit requires freedom.

It is thus imperative—as Manheim pointed out in an excellent book—to reconcile the two. We may entrust technologists with the building of bridges and roads or with a nation's finances and economic situations but at the same time we look to a humanistic education that will safeguard the autonomy of the soul. Life is not only immanent but also transcendent. Hence the aspiration, also human, to conquer death and approach immortality, which is at the root of all religions. Good work survives the good worker; the industrious mason who carved the stone of a Gothic cathedral knew this, but perhaps the hard-driving businessman has forgotten it. To him the purpose of life is summed up in his bank account, in the splendor of his parties, in luxury of his houses and cars.

If we do not establish a transcendent goal for our lives-be it only the memory of us that we leave to our descendants-we have not raised our standard of morality above that of the pirate, who conducted his existence solely in terms of slaughter, spoils, and attack. All roads must lead to the moral reorientation of our anguished race. Beyond doubt, we live in times of turmoil. Our means are so abundant that we tend to forget the ends. The United Nations experts on technical assistance for underdeveloped countries must have noticed that, as badly needed as are food and schools for everybody, there is just as much of a shortage of that difficult spiritual health that tempers racial and sectarian discord, sublimates hatred and resentment, overcomes prejudice and discrimination, and makes it possible for Easterners and Westerners, whites, Negroes, and Asiatics, to live peacefully together. In these days of jet airplanes and, soon, of space travel, we ask ourselves whether man is not mature enough for the synthesis; whether a true world-wide history cannot now begin.

MARIANO PICON-SALAS

REVIEW REQUIREMENTS OF THE "GOOD SOCIETY"

HARDLY anyone, these days, would have the hardihood to offer a design for the "good society" Too many follies have been of the future. committed in behalf of utopian objectives. The wisdom of present-day institutions—such wisdom as they still reflect-is almost entirely limited to confessions of ignorance and political adjustment to the admitted ignorance. It is the people who claim to know-to know what man is, what is good for him, and what must be done for and to him—who do the damage. The art of government has been variously defined, but in the light of recent history, it seems to us, no definition of government should be acceptable unless it declares the primary fact of basic ignorance concerning all ultimate questions, and conceives government as the intelligent exercise of expediency in the face of that ignorance.

What can be done, is to propose for consideration certain of the requirements of any sort of good society. Conceivably, if enough of those requirements can be described and agreed upon, some sort of general outline will in time emerge.

One such requirement is interestingly set forth in a science-fiction tale by Robert A. Henlein. This story is called "Coventry" and is found in a Signet paperback, Revolt in 2100. The idea we are concerned with comes out when the protagonist, David MacKinnon, is brought before a tribunal for having punched someone in the nose. MacKinnon is confronted with a choice: He must either submit to a program of psychological reconstruction, or accept exile to the hinterland of "Coventry." MacKinnon volubly objects, attacking what seems to him the bland paternalism of the court's decision, which is founded upon the "Covenant" or Constitution established by a fairly recent revolution. After MacKinnon's bitter rejection of the court's ruling, the judge asks him to listen:

The judge commenced.... "David MacKinnon, you have spoken in a fashion that doubtless seems wise to you. Nevertheless, your words were wild, and spoken in haste. I am moved to correct your obvious misstatements of fact. The Covenant is not a superstition, but a simple temporal contract entered into by those same revolutionists for pragmatic reasons. They wished to insure the maximum possible liberty for every person.

"You yourself have enjoyed that liberty. No possible act, nor mode of conduct, was forbidden you, as long as your action did not damage another. Even an act specifically prohibited by law could not be held against you, unless the state was able to prove that your particular act damaged, or caused evident danger of damage, to a particular individual.

"Even if one should willfully and knowingly damage another—as you have done—the state does not attempt to sit in moral judgment, nor to punish. We have not the wisdom to do that, and the chain of injustices that have always followed such moralistic coercion endanger the liberty of all. Instead, the convicted is given the choice of submitting to psychological readjustment to correct his tendency to wish to damage others or of having the state withdraw itself from him—of sending him to Coventry.

"You complain that our way of living is dull and unromantic, and imply that we have deprived you of excitement to which you feel entitled. You are free to hold and express your æsthetic opinion of our way of living, but you must not expect us to live to suit your tastes. You are free to seek danger and adventure if you wish—there is danger still in experimental laboratories; there is hardship in the mountains of the Moon, and death in the jungles of Venus—but you are not free to expose us to the violence of your nature."

Now comes an amiable touch:

"Why make so much of it?" MacKinnon protested contemptuously. "You talk as if I had committed a murder—I simply punched a man in the nose for offending me outrageously!"

"I agree with your æsthetic judgment of that individual," the judge continued calmly, "and am personally rather gratified that you took a punch at him—but your psychometrical tests show that you believe yourself capable of judging morally your fellow citizens and feel justified in personally correcting and punishing their lapses. You are a dangerous individual, David MacKinnon, a danger to all of us, for we cannot predict what damage you may do next. From a social standpoint, your delusion makes you as mad as the March Hare."

The more you think about such a system of social control, the better it seems. The only objectionable thing about the decision of the judge is his pompous manner, and people of the present society—a society which at this writing is determined to execute a man as dubiously convicted as Caryl Chessman, simply to preserve the prestige of the State—are in no position to complain about a little sententiousness on the part of a jurist. On the whole, Mr. Henlein's system sounds ideal.

If we are going to compromise the purity of the anarchist ideal, it should be done in a condition of unqualified humility. The humblest man of all should be the judge, for he is the man who represents the arbitrary and expedient power of the state. The judge should be drilled, not in law, but in humility. He is the man who gives voice to the common failure. Those who must be restrained, lest they harm others, should be given a full explanation of the necessity under which their freedom is restricted. What is "right" or "just" is not at issue. Who knows what, ultimately, is "right" or "just"? All that a society or its representatives can know is whether or not it can cope with certain types of behavior without exercising restraint. When a man crosses the line he is obliged to submit to restraint. There may be a better way to deal with him, but we do not know what it is. We do the best we know, freely acknowledging that it is not good enough.

This policy in respect to those whom we term "offenders" would preserve, or at least not attack, what elements of human dignity are in the man who has to be restrained. Our present policies of trial, conviction, and punishment are filled with self-righteous certainty and tend to destroy the self-respect of those who run afoul of the law.

But how will you get rid of the desire of people to think and behave self-righteously?

This is obviously the key to the whole matter. People who are not self-righteous would naturally construct a society in which many of our present problems could not exist. We continually tinker with our bad institutions while ignoring the attitudes which have created those institutions. This is really a waste of time, since bad attitudes will always transform even the best institutions into bad ones.

The basic problem of self-righteousness is very similar to-in many respects the same asthe problem of conformity. What makes a man anxious to show that he is not like those other people who are bad? In answer, we might say that the weakness of the self-righteous man is that he seeks a political solution for a moral problem. Self-righteousness can exist only in relation to the opinions of others. The self-righteous act is always done for effect—an effect on other people, or on the secret eye of the Deity, who is said to be always watching. The self-righteous man wants to be right in the eyes of others. Being right in his own eyes is not enough, or not important at all, for the reason that he has no real confidence in his own perceptions. It is social approval, or divine approval, he is after, not self-respect.

The self-righteous man needs a group to operate in—a theater where his virtue can be appreciated. Out of this need comes the psychology of conformity and the establishment of norms for righteous or "respectable" human behavior. The individual says to himself, "If I match those norms, I can hold up my head"; or, "If I condemn people who reject those norms, everybody will know where *I* stand, and I will be able to hold up my head."

The prospect of a world without externally or socially established norms frightens the selfrighteous or insecure individual. And if his religion or his society supplies him with bad norms, he is obliged to accept them and to pretend or even agree that they are good. In such a manner, the false fronts of modern society gain popular support. This sort of situation prevails not only in connection with pontificating legal fictions and time-honored institutions. The weaknesses of insecure moral identity pervade every segment of our society. Even within minorities the question frequently arises—"If this disturbing idea is *right*,

our society. Even within minorities the question frequently arises—"If this disturbing idea is *right*, what will happen to *my* morality?" So proposals of radical change in attitude or action often bring no more reaction than this, or produce a confused ambivalence important only for what it reveals about the human beings involved.

Of course, individuals ought to feel "challenged" by the things that other people do. What is wrong in the typical reaction is the response of fear instead of honest interest. Why should we say that it *is* fear? Because courageous acts so often go unpraised and unappreciated. Some paragraphs in the December 1959 *Liberation* illustrate this point:

Seven pacifists are presently serving sentences of six months each for having challenged the right of the United States government to build a missile plant near Omaha, Nebraska. Two others have been released after having served shorter sentences, and three have been sentenced to six months but are out on bail while appealing the verdict. All of them "trespassed" on the missile site in order to ask workers (and all of us) to consider the implications of what they are doing: it is estimated that twenty minutes after having been launched from the Nebraska base, a single missile could wipe out a million persons, six thousand miles away. In antiwar circles there has been more debate about the appropriateness of such an aggressive protest than response in the way of supporting action. So far as we know there has not been a single public meeting anywhere to honor these people who have done what we all should be doing. There have been no picket lines around the jails, no organized protests to the Departments of Justice and Defense.

It is not surprising that the government cracked down on the protesters or that the commercial press showed little or no interest in their case, even though one of them is the son of a congressman and another is the mother of four children, angles which are generally considered to be "newsworthy" even when the more fundamental issues are not. (It is hard to imagine the news media being uninterested if the congressman's son had been arrested for shoplifting, for instance, or for having a drunken fight with a policeman.) But it is disheartening to find so many of those who share the concern of Omaha protesters unconvinced of the propriety of their actions. It has been said, for instance, that Mrs. Marjorie Swann should be home with her children rather than wasting her time in jail. She has been criticized for returning a second and a third time to the site, after her first violations were overlooked. She has been told that she should have accepted the judge's offer of a suspended sentence if she would agree "not to loiter, maintain a vigil or in any way interfere with military operation or construction . . . any place in the United States where military operations or military construction is in progress or being maintained." Probably the best answer to this is in her own words:

"I think of my family—it seems such a *long* time since I've seen them. I wonder what on earth I am doing here. Then I remember Hiroshima, the pictures I saw just the other day of scarred young women who were innocent children on that August 6 fourteen years ago, and of the horribly deformed babies recently born to Hiroshima mothers. And I know in my heart, even if I can't say it in wise words, what I am doing here."

While people may have good reasons for not doing what Mrs. Swann and some others have done, if they are made to feel defensive or guilty by the example of such demonstrations, they need better reasons than they have. It is not a question of imitating anyone or "conforming" to a particular sort of action, but of thought-out personal commitment to a point where no example that anyone sets is upsetting, except as a spur to further reflection and evaluation. Conformity among pacifists can do little more good than conformity among non-pacifists. The weakness of our society lies in the sense of need to conform. Any conceivable "good" society of the future will be made up of people who have recognized the fatal flaw in this feeling and reject it as a major means of social integration.

Another facet of this question is dealt with by Paul Goodman in the December *Liberation*. Mr. Goodman finds some encouragement in the "avalanche of books on the hucksters, the useless cars, the ranch houses, the organization men, the crystal palaces, the statuses, the surfeit of money, and the affluent society." All these symbols of the grip of artificial standards of conformity are under fire, and even if most of the books attacking them are "not very honest," as Goodman says, their total effect may be salutary. He recalls:

We must remember how McCarthyism in its virulent form was halted by a little courage. It is a good time to become extremely vocal, to shout and insist that the candidate make his own speech and not the one prepared for him by Madison Avenue, to call them hucksters and corrupters of youth, to get fired rather than quit.

A lot of words have been put into print concerning the shame of the quiz programs and the ludicrous embarrassment of the big networks and of the advertising profession generally. Goodman's comment is more to the point than anything else we have seen:

The rigged Quiz shows were a remarkably pure sample of our American folly. We start with the brute fact that (a) in our abundant expanding economy it is necessary to give money away to increase spending, production, and profits; and (b) that this money must not be used for useful public goods, in taxes, but must be ploughed back as "business expenses," even though there is a shameful shortage of schools, housing, etc. Yet when the TV people at first tried simply to give the money away for nothing there was a great Calvinistic outcry that this was demoralizing-just as we may gamble on stocks but not on horses. So they hit on a notion of a contest with prizes. But then, of course, they could not resist making the show itself profit-making and competitive in the ratings with other shows, so the experts in the entertainment-commodity got busy and manufactured phoney contests. And to cap the climax of fraudulence, the hero of the phoney contestants proceeded to persuade himself (he says) that his behavior was educational. What a people! They cannot give money away without feeling immoral; they cannot run a contest without feeling they ought to make a profit; they cannot cheat without a rationalization, though this is the system in which they breathe and have their being.

That these people do these things is bad enough, but that the rest of us are willing to reward them for doing it is far worse. As Mr. Goodman says: The present direction of the investigation seems to me to be more important, the inquiry into the bribed disk-jockeying and the hit parade. For this deals directly with our crucial economic problem of synthesized demand, made taste, debauching the public and preventing emergence and formation of natural taste. In such circumstances there cannot possibly be an American culture and we are doomed to nausea and barbarism. And *then* these baboons have the insolence to declare that they give the people what the people demand and that they are not responsible for the level of the movies, the music, the plays, the books!

Goodman's final point is that we make a kind of surrender to these activities when we dignify them with serious criticism:

... the worst about the TV, it seems to me, is *not* the bathetic popular culture, nor the idiocy of the commercial jingles, nor the crassness of the plugging. All these things can be somewhat neutralized by *Mad* magazine, that the 12-year-olds read as their bible. The worst is that it is the image of a *human being* that is there on the screen, grimacing like a clown, uttering gibberish, talking soft soap like a con-man, cajoling like a pimp. And this was designed by other bright human beings, degraded to cynicism and corrupting their intellects by operating like morons. And this is paid for, abetted, and broadcast by still other human beings.

There has been entirely too much æsthetic criticism and criticism of popular culture. For this kind of thing has not the honesty of intention that merits such criticism. It should be met personally like any other insulting or caddish behavior.

In the good society, there will be no audience for this sort of thing, and no one willing to degrade himself by offering it.

COMMENTARY ANIMISM, NOT PANTHEISM

A MAGAZINE may not have guardian angels . . . not without getting delusions of grandeur . . . but it can have guardian readers; or this one has, at any rate. The following letter from a subscriber picks up a dropped editorial stitch with what seems to us just the right emphasis:

Concerning the excellent—and fascinating lead article in the Dec. 9 issue ("Always Wear a Suit and Tie"), I have only one small bone to pick.

Please let us not malign pantheism. I believe the author of the article must have had in mind polytheism.

In my dictionary, Pantheism means: "The form of monism that identifies mind and matter, the finite and the infinite, making them manifestations of one, universal or absolute being; the doctrine which holds that the self-existent and self-developing Universe, conceived as a whole, *is* God."

As this is a philosophy with which, for many years, I have felt myself to be identified, you may imagine my horror at finding myself at the bottom of Mr. Garrigues' triangle, accused of all manner of monstrosities!

Otherwise, the article was a frighteningly accurate commentary on our society. Thank God for MANAS!

We won't quibble about how you go about "thanking" a pantheistic god, but quickly agree with this reader on practically all counts, even though we think that she, and we, could make a better definition of pantheism if we put our minds to it.

The reference to pantheism by Mr. Garrigues bothered us, too, and we would have made a small objecting note somewhere, except for the fact that the Dec. 9 issue (as the editorial remarks) was much too crowded for any additions. An extenuation for Mr. Garrigues lies in the fact that he borrowed this usage of "pantheism" from someone else and the context shows that a special meaning is intended. As we read the passage, *Animism* fits far better than pantheism. The meaning adopted by Mr. Garrigues is that sometimes attributed to pantheism by theist critics who hope to make pantheism seem ridiculous.

For people who are attracted by pantheism, we suggest a reading of Dean Plumptre's *History of Pantheism*, an old, hard-to-get, but excellent (excellent so far as European thought is concerned) volume in which the discovery by Western thinkers of the idea of all-pervasive Deity becomes an adventure story filled with heroism and high courage.

DR. BETTELHEIM IS NOT ALONE

MANAS readers who have read of the monumental work with disturbed children by Dr. Bruno Bettelheim at the Sonia Shankman Orthogenic School of the University of Chicago will probably have been awed by the dimensions of some of the psychological tasks involved. In Truants from Life, Dr. Bettelheim explains that the Shankman Orthogenic School makes it a practice to take many children regarded as hopeless or incurable by more conventional institutions. A perusal of but one or two case studies is usually sufficient to convince the reader that few human beings have the courage, the pertinacity, or the ingenuity which enables Dr. Bettelheim and his remarkable staff to continue to succeed where others have failed.

But not all such difficult work of rehabilitation is undertaken professionally, and not all the courage or pertinacity found in endeavors of this sort is associated with well-known names in psychotherapy. For years we've known of a woman who quietly undertook to aid deserted or partially deranged children. During the past twenty years or so, dozens of such children have been brought into her home, worked with and helped—sometimes adopted. We asked her to make a few notes on her experiences. Here is her brief communication, in answer to our query for some details:

Editors: My goodness! I am so flattered that you would think of using any of my experiences, for I often wonder if I've ever done anything right. One must remember that I took only the rejected, the maladjusted, the unwanted. Each child had a background of insanity, and it showed up in the children in many forms. I have lost count of the actual number of kids we have had in our home, but this much is fact: never did I have any problems such as are associated with juvenile delinquency. No child was ever punished as such; I just talked them to death. We took them to the mountains to let them hear an echo, and we had them look into mirrors. We took them to the ocean, told them to obey the law of the water—or *else*. I was just as fussy over the stealing of a postage stamp as over a five-dollar bill. I would attack scabies, head lice, and masturbation with all the enthusiasm of a nut.

I had Greeks, Jews, and Catholics all at one time. Why the house wasn't burned down, I will never know! But, as I said, I never heard of any law violations by a child who had been in my home over six months. One girl called me on the phone about three years ago and talked for forty-five minutes, then hung up. It had been ten years since I had seen her, and I had no idea she had ever paid any attention to a word I'd uttered.

D. was a screaming wildcat when she came to us. One week after her arrival, she asked me, "How come you haven't told me I am a sinner and am going to burn in Hell?" I had to answer her in a way she would understand, so I just told her I was not wise enough to pass judgment on anyone. A little later she asked if she might use our name, and still later she wanted to know if I gave my girls fancy weddings when they married. D. got her fancy wedding, using our name on the license, seven years after coming to live with us.

I would like to be able to say that D. held true to the pattern that proved so successful for her—but, alas, she did not. She became very arrogant after her marriage, "I want to live my own life and make my own mistakes," I was told. Today, fifteen years and three children later, she is pretty badly mixed up. There are six children in her family, two living nearnormal lives. She is one of the two. Her sister's life has been much the same—spells of deep depression, etc. They want to be friends with me, but on their own terms, not mine.

Did we help? Who can really say? I can bear testimony to the fact that the will *is* stronger in a child and in the mentally sick than in anyone else.

I have a dilly to contend with right now: a "daughter" in love with a mad genius. (Four times a week to a psychiatrist.) I should know how to spell that word—I hear it enough! But I don't.

Tolerance, as we all profess to know, is a great thing, but the experiences described above are apt to carry one considerably beyond and behind tolerance. We should choose the word "compassion" as indicating the sort of participatory understanding which enables an essentially balanced person to see that the "unbalance" of another *is*, in some measure, also a part of himself. And it is the spirit of compassion, certainly, which underlies the highly successful therapy at the Shankman Orthogenic School.

A recent article in *Think* (November, 1959) contains an explanation of the school's philosophy by Dr. Bettelheim.

The Orthogenic School was founded some fifty years ago to explore new frontiers in rehabilitation of severely disturbed children. For the past fifteen years selections have been mostly of children who have potentially normal or better intelligence, but whose psychic illnesses rendered them entirely unable to function in normal schools or families.

Dr. Bettelheim is one of the best-known and respected psychotherapists in his field, but when he comes to describing the basic outlook behind his endeavors and those of his staff, he writes with the simplicity of human warmth—the best therapeutic agent of all:

The school's guiding principle sounds simple enough: to convince these children that this can be a good world to live in. A consistent effort is made to set the best insights of modern education and dynamic psychology into 24-hour-a-day practice. From the moment he wakes in the morning until he is sound asleep at night, each child is guided by the helpful hand of a psychotherapist who is part of the child's life, helping him to master all those tasks of living which have previously overpowered him.

Over the years the school has been able to return to useful life the vast majority of the children it has served; former non-learners are now doing well in some of our finest colleges, some of the previously homicidal delinquents are leaders of their communities. Most important, they now lead normally happy lives.

Compassion and open-mindedness are to be found partners in the Orthogenic enterprise. Dr. Bettelheim does not rely upon formulas, either his own or of established schools, because he has discovered that the psychotherapist who works with children must be willing to change his emphasis at any time. Dr. Bettelheim's conclusion clearly links his own efforts with those of our correspondent:

We feel we are working in a relatively new field, in which not even basic premises are definitely established. But as we discover how to help children solve problems that keep them from succeeding in life, we gain a much better understanding of just where things go astray in the rearing of children. Fewer families today seem able to provide a satisfying human environment for their children. Experience gained at the school and made available to the public at large will, we hope, contribute to teaching the greatest art of all—living a socially useful and emotionally satisfying life.

Volume XIII, No. 4

FRONTIERS Radiation and Motivation

WE have a feeling that many of the capable men who contribute analytical articles to the Bulletin of the Atomic Scientists may also be offering a unique encouragement to dispassionate evaluation of our culture. For when they explain to us the consequences of careless use of the principle of atomic fission-and many of them obviously believe that bomb-testing falls into this category-such writers tend to avoid a partisan approach to the issues involved. The International Commission on Radiological Protection, for example, has recently published recommendations which reveal the cumulative nature of radiation effects. Karl Z. Morgan, director of the Health Physics Division of Oak Ridge National Laboratory, in the November Bulletin sums up some of the ICRP reports by saying that "it is safe only to assume that types of radiation damage, such as genetic mutations, leukemia incidence, and shortenings of life span, increase to some extent with any increase in dose, taking place at any dose rate, following any accumulated dose, viz., there is no threshold."

One difficult question to answer, or even to formulate, might be something like this: What complex of human motivations is responsible for continual increase of exposure? Even lav ignoramuses like ourselves have been made aware of the fact that man is always exposed to the radiation of cosmic rays and to other radioactive charges in the natural background, but one geneticist thinks that such exposures have been below some unknown balance-of-nature "threshold" of multiplying danger. When man begins to increase radioactivity, the question arises as to the point at which an "unknown threshold" may be passed, for either individuals or for large groups of human beings. After stating the sense in which "there is no threshold," Dr. Morgan continues by remarking that "it certainly would, however, be conservative-especially with respect to genetic mutation-to assume a linear relationship between dose and effect all the way from high chronic dose rates to background dose rates. . . ."

What are the chief sources of man's direct contribution to radioactivity? Only a small fraction results from exposure to shoe-fitting machines, TV sets, radium-dial watches, etc. The ICRP approximation (what else can they do?) suggests that a 5 rem (roentgen) exposure is within the boundary of obvious danger with present exposure only 2 rem, but Dr. Morgan also notes that "no allowance was made specifically for the fallout dose from the tests of nuclear weapons, although this might logically be included." And this may, of course, increase. Dr. Morgan continues:

Eventually some of these radioactive materials become deposited in all the various forms of life, including man. Thus, man is irradiated from without by radioactive material in his environment and from within by radio-isotopes as they move through the passageways of the body (i.e., into the respiratory and gastro-intestinal tracts) from which certain fractions are deposited and incorporated into the various organs of his body... Perhaps less than 5 per cent of this suggested 5 rem is being used by the average man of the population in 30 years at the present rate of exposure, but as the nuclear energy industry expands, and if nuclear weapons tests are resumed, we can expect a considerable increase in man's exposure.

Dr. Morgan also concerns himself with the much larger percentage of exposure attributed to medical use:

It is only to be hoped that all users of sources of radiations, e.g., dentists, ionizing general practitioners, chiropractors, etc., will reduce medical exposures-the principal source of human exposure to ionizing radiation-to the lowest possible values consistent with good medical practice and for the accrual of the most over-all good to the patients and their children. Why is it that many chest X-ray machines deliver 1,000 mr per chest X-ray when just as good and even better X-ray pictures can be obtained from exposures of 20 mr using the best equipment and improved techniques? Why is there no concern that several surveys in some of the cities of the U.S. have revealed that many dentists deliver up to 300 roentgens to the jaw in a single series of dental X-rays and spray rather large doses to the eyes and other parts of the body when better X-ray pictures can be obtained with an exposure of 1.5 roentgens using properly adjusted equipment? Would it be asking too much to require all medical users of ionizing radiation to have knowledge of and to record

the dose delivered to the patient from each exposure? As health physicists, my colleagues and I would like to keep all radiation exposures—including those from fallout and radioactive waste disposal—to an absolute minimum, consistent with the over-all good of man, but it is difficult sometimes for some of us to focus our attention completely on less than I per cent of the radiation exposure problem (fallout) while completely ignoring 99 per cent of it.

So where does motivation enter into all this? Obviously, those who favor more nuclear testing believe in the "big-stick" approach to the problem of war and peace; in psychological terms, this might break down into a special kind of egocentricity linked to the old weaknesses of simple fear and suspicion. Continuous exposure to the small charges of radioactivity which come through TV screens is obviously to be connected with an immature desire to be entertained as much as possible for as long as possible. The "careless" medical uses described by Dr. Morgan must be laid in part to the peculiar sort of arrogance which arises in the profession when the general populace goes in droves to the experts for health diagnosis and treatment, without assuming any responsibility or checking thoroughly into treatments and methods offered.

The point is, we seem to have made something of a case for what the Hindu or Buddhist would call "karma"—by transformation of inadequate human attitudes, cumulatively, into cumulative physiological effects. The men of religion have never been able to get many of us to consider "cumulative human motivation" very seriously, but it is difficult not to take it seriously if we read the articles in the *Bulletin of the Atomic Scientists* with this point in mind.

The *Bulletin* for January, 1958, contains some rather startling material, especially when it is realized that many of the figures from which conclusions are drawn are supplied by the Atomic Energy Commission. Particularly sobering is the article, "Genetic Effects of Radiation," by Dr. James F. Crow, professor of genetics at the University of Wisconsin, and a member of the National Academy of Sciences committee on the genetic effects of radiation. Noting that the added radiation from fallout, atomic energy plants, etc., could only be expected to increase radiation-induced mutations, however slightly, he goes on to establish some further facts:

One must remember, however, that nuclear test explosions send fall-out all over the world, so that some 2.5 billion persons are exposed. Even a very tiny risk, when multiplied by such large numbers, becomes impressive. Various geneticists have attempted estimates, all making use of data from experimental animals, and using various necessary (but unprovable) assumptions, of what might be expected. For example, I have computed that if the world's population is exposed to 0.1 roentgen, there may be some 8,000 children in the next generation born with gross physical or mental defects, or a total of 80,000 in the distant future. Likewise, I have estimated 40,000 embryonic and infant deaths in the next generation, or a total of 700,000 for all time. As stated earlier, such figures based on tangible effects probably underestimate the total effect.

Let me emphasize that these figures may be grossly in error., but they illustrate that a very small fractional effect may involve a very large absolute number of persons when the whole world population is considered....

Geneticists agree that any amount of radiation is a genetic risk. Therefore fall-out is doing some harm to future generations. This harm, if present rates of exposure continue, will be extremely small relative to the other hazards we face. At the same time, since the number of persons exposed to the risk is very large, we can be sure that a large number of persons yet to be born—tens or hundreds of thousands or more—will die, or be deformed, or diseased, or otherwise impaired as a result of bomb testing.

Spread over the whole earth in space, and over scores of generations in time, and not identifiable as victims of radiation, the persons injured as a result of fall-out will be lost in the much larger number of victims of other causes, and probably will not lead to any detectable change in human statistics. But if all the victims could be identified and assembled in one place at the same time, we would all regard it as a horrible tragedy.

So it seems that the meaning of "cumulation" should be thoroughly considered, and not alone from the standpoint of physical science. Even the excessive TV-watcher may be doing more than he ought, by approaching a "threshold" for future generations.