POLARITIES OF MIND

THE contrast between the trust with which we begin our lives—in our mothers' arms—and the subsequent need to question, examine, and often to reject, lies at the root of the paradoxes which beset our mental life. Since trust comes first, and is natural and necessary, we have little awareness of its continuous support of human existence. In intellectual terms, trust is the unspoken postulate of all childhood plans and projects. To believe what we are told or taught is comparable to the infant's or small child's dependence on love and affection. As we know, the babe denied love suffers psychic mutilation. It cannot grow to normal maturity since the primary nourishment of humanness has been lacking. Love and trust are the spontaneous radiance of the solar system of our psychological universe, and only when obstacles cut us off from these vital energies are we made to realize their crucial importance. Deprivation is a harsh instructor, and while its lessons may be misunderstood, they cannot be ignored.

Yet a general recognition of the natural priority of trust is found in the universal traditions of a Golden Age, far in the past. Every race has cherished ancestral memories of a far-off epoch, a happy time when men lived in harmony with one another, and gods and heroes walked the earth, mingling with ordinary mortals. Of this first race of men, Hesiod wrote:

Like gods they lived with hearts free from sorrow and remote from toil and grief; nor was miserable age their lot, but always unwearied in feet and hands they made merry in feasting, beyond the reach of all evils. And when they died, it was as though they were given over to sleep. And all things were theirs. For the fruitful earth spontaneously bore them abundant fruit without stint. And they lived in ease and peace upon their lands with many good things, rich in flocks and beloved of the blessed gods.

As Arthur Morgan shows in his study of utopias (*Nowhere Was Somewhere*, Chapel Hill, 1946), all the great cultures of the past repeated stories of the Golden Age; and, interestingly, many recollections of a similar trust and moral harmony are found in the oral traditions of those whom we call "primitive" peoples. Stefansson's account of the life of the Coronation Gulf Eskimos, which goes back, he says, tens of thousands of years, reads like a utopian idyll. Ancient patterns of morality in daily life were sustained by living custom. As Stefansson says:

In the Stone Age community those who were selfish lost standing. Those who were altruistic rose in the public esteem. A man who got things to use them himself was not frowned on so long as everybody felt that what he was using was not beyond his needs; but whenever anyone began to keep for himself more than by the usual experience was necessary for his comfort, he lost some of the community's good opinion if he gave the impression that his main purpose for getting things was that he wanted to keep them, then he fell in standing rapidly. However, that situation never went far, in my experience, for I never actually knew anybody who had the "moral" courage to persist in the acquisitive type of unsocial conduct.

Morgan collected such materials in his book to show that racial or cultural memories of ancient felicity based on mutual trust are the foundation of all utopian dreams. Speaking of cultural decline, Morgan says:

The Golden Age began to fade when, with the conquest of some communities by others, or through the coalescence of small communities into larger, life became so complex or numbers so great that intimate acquaintance no longer was possible; therefore duplicity, sham, and other forms of deceit would succeed in practice. Men who have grown up in an atmosphere of good faith and then have to deal with those who explicitly and deliberately follow the Machiavellian code, find themselves greatly handicapped. In time, deep indoctrination of

selfishness, shrewdness, and duplicity, and the resulting cowardice in the ranks of the people, come to be identified with human nature.

This tendency is accelerated by warfare, for under conditions of warfare deceit, suspicion, and brutality seem to be more useful traits than sincerity and good will. War is the greatest destroyer of the traits I have ascribed to "Golden Age" cultures. Communities in regions which for long periods have been the battlegrounds of empires often give the impression that human nature is of a very low order. Where military conquest is followed by servitude of the vanquished, conditions necessary for the survival of dignity and refinement of personality may be largely destroyed.

We have little difficulty in seeing that the circumstances which Morgan attributes "bigness" and concentration of population are hostile to trust, so that the other side of our nature comes into play. The community, the city, the nation—the social matrix—can no longer be a revered and honored authority. Its moral qualities are at best ambiguous, provoking to action other human traits and capacities. Now the rebel, the militant reformer or revolutionary has his hour. Fired by feelings of betrayal, the rebel struggles to re-establish the vision, renew the social fabric, and restore the common basis for attitudes of cooperation and trust. For a comprehensive collection of articulate statements of what Herbert Marcuse has called "The Great Refusal," the reader could hardly do better than to read Isadore Abramowitz's The Great Prisoners (Dutton, 1946) which gives the words of men who were imprisoned, an often executed, for their moral convictions and reforming zeal. The sweep through the centuries, from Socrate to Sacco and Vanzetti, of the tide of outraged moral feel ing is of the essence of human history. Upton Sinclair's The Cry for Social Justice (Lyle Stuart, 1963), provides another access to the same great wave of expression. In his introduction to the first edition in 1915, Jack London captured the spirit of Sinclair's volume:

One has but to read the names of the men and women whose words burn in these pages, and to recall that by far more than the average intelligence have they won to their place in the world's eye and in the world's brain long after the dust of them has vanished, to realize that due credence must be placed in the report of the world herein recorded. They were not tyrants and wastrels, hypocrites and liars, brewers and gamblers, market-riggers and stock-brokers. They were givers and servers, and seers and humanists. They were unselfish. They conceived of life, not in terms of profit, but of service.

Life tore at them with its heart-break. They could not escape the hurt of it by selfish refuge in the gluttonies of brain and body. They saw, and steeled themselves to see, clear-eyed and unafraid. Nor were they afflicted by some strange myopia. They all saw the same thing. They are all agreed upon what they saw. . . . But not merely have they reported the human ills. They have proposed the remedy It is so simple a remedy, merely service. Not one ignoble thought or act is demanded of any one of all men and women in the world to make so fair a world. The call is for nobility of thinking, nobility of doing. . . .

The more complex betrayals of the past sixty years may render London's rhetoric suspect to today's readers—our choices are not as simple as he makes them sound. How fine it would be to have only to accept his championship of the poor and oppressed, to embrace his call to brotherhood and a renewal of men's faith in one another! But more is involved in humanitarian reform than generous emotion. We move and respond more cautiously, today. Not only men, but social structures and vesterday's reforms are recognized as confining and distorting influences. falters when suspicions deepen. We cannot help but feel the enormous complexity of the relations between individual and social process, and must wonder if it is any longer possible to make the simple moral affirmations that London found so fulfilling to declare. Today the Great Refusal seems to require dozens of specific avenues of expression, each presenting a particular critical analysis, with the accompanying moral ardor in a distinctly lower key.

We might take as example some passages from *Teaching as a Subversive Activity* by Neil Postman and Charles Weingartner, a book whose title identifies the mood of rebellion in these times.

The authors write in great detail to show how and why the "authorities" in public education cannot be trusted. They say in their introduction:

School, after all, is the one institution in our society that is inflicted on everybody, and what happens in school makes a difference—for good or ill. We use the word "inflicted" because we believe that the way schools are currently conducted does very little, and quite probably nothing, to help us solve any or even some of the problems we have mentioned. . . . The institution we call "school" is what it is because we made it that way. If it is irrelevant, as Marshall McLuhan says; if it shields children from reality, as Norbert Wiener says; if it educates for obsolescence, as John Gardner says; if it does not develop intelligence, as Jerome Bruner says; if it is based on fear, as John Holt says; if it avoids the promotion of significant learnings, as Carl Rogers says; if it induces alienation, as Paul Goodman says; if, in short, it is not doing what needs to be done, it can be changed; it must be changed.

After naming some of the advocates of specific changes, the authors continue:

All of these several men have several things in common. They are almost all "romantics," which is to say they believe that the human situation is improvable through intelligent innovation. They are all courageous and imaginative thinkers, which means they are beyond the constricting intimidation of conventional assumptions. They all have tried to deal with contemporary problems, which means they can tell the difference between an irrelevant dead idea and a relevant, viable one. And finally, most of them are not usually thought of as educators. This last is extremely important, since it reveals another critical assumption of ours: namely, that within the "Educational Establishment" there are insufficient daring and vigorous ideas on which to build a new approach to education.

Post and Weingartner are considerably more than critics of the Establishment, since in the body of their book they examine what may be called the "structure" of deception and psychological betrayal in social institutions which have a constant role in our lives.

It was George Counts who observed that technology repealed the Bill of Rights. In the eighteenth century, a pamphlet could influence an entire nation. Today all the ideas of the Noam

Chomskys, Paul Goodman's, Edgar Friedenbergs, I. F. Stones, and even the William Buckleys, cannot command as much attention as a 30-minute broadcast by Walter Cronkite. Unless, of course, one of them were given a primetime network program, in which case he would most likely come out more like Walter Cronkite than himself. Even Marshall McLuhan, who is leading the field in understanding media, is having his ideas transformed and truncated by the forms of the media to fit present media functions. (One requirement, for example, is that an idea or a man must be "sensational" in order to get a hearing; thus, McLuhan comes out not as a scholar studying media but as the "Apostle of the Electronic Age.")

We trust it is clear that we are not making the typical whimpering academic attack on the media. We are not "against" the media. Any more, incidentally, than McLuhan is "for" the media. You cannot reverse technological change. . . . But you can study media, with a view toward discovering what they are doing to you. . . .

Without mass media, Ellul insists, there can be no effective propaganda. With them, there is almost nothing but. "Only through concentration of a large number of media in a few hands can one attain a true orchestration, a continuity, and an application of scientific methods of influencing individuals." That such concentration is occurring daily. Ellul says, is established fact, and its results may be an almost total homogenization of thought among those the media reach. We cannot afford to ignore Norbert Wiener's observation of a paradox that results from our increasing technological capability in electronic communication: as the number of messages increases, the amount of information carried decreases. We have more media to communicate fewer significant ideas.

This is far more than "questioning" and rejection. These writers submit fairly conclusive judgment of dominantly influential institutions, and what they say has the force of measured critical analysis. It also represents a consensus of opinions expressed by some of the most searching minds of the time. Yet this critical outlook is comparatively powerless to introduce change, and its advocates would be likely to split into numerous opposing groups were the power to institute changes to become available.

But what, in any event, stands in the way of radical and constructive change, supposing there could be coherent agreement on a program among leaders of this stature? There is, first, the technical dilution, actually, the transformation and inversion, of ideas which the organs of mass communication impose on those who attempt to use them. An even more formidable obstacle is long-established and virtually spontaneous trust of the common people in the institutions, customs, and traditional beliefs of American Society. Meanwhile, it should be noted that the criticisms voiced by Post and Weingartner are at a highly sophisticated level. It is a question whether those criticisms could be made generally comprehensible without also making them Further questions arise when we ineffectual. consider the fact that the popular trust in existing cultural forms is what holds the country together, even though it is equally true that this uncritical loyalty makes possible abuses and betrayals that are tearing the country apart.

This seems a way of saying that our problems exist because the appropriate balance between trust and questioning requires an order of perception and intelligence beyond the capacity of the majority of the people.

It is for this reason, then, that we are afflicted by feelings of overwhelming paradox. How can people become able to bear and handle institutional disillusionment? What is the responsibility of educators and cultural leaders with respect to the practical functioning of faith and trust? In what relations is trust desirable, and when should questioning and criticism have full play? How are these attitudes and capacities formed in human beings? What would be the result of having all criticism and no trust? To what extent must critics guard against raising a generation of nihilists? Have we, at the popular level, only a choice between angry nihilists and true believers?

We might say that we have to learn to trust other human beings, but not the public institutions. Institutions are not symmetrical expressions of the people, but rather, as Richard Goodwin remarks, expressions of only *parts* of people, usually their weaker, more susceptible or vulnerable parts. We might say this, but we would still be confronted by the unexamined loyalties of the millions who have not become individually aware of the ugly realities behind institutional disillusionment. And what if the emotional cost of this disillusionment seems to them too high, and they redouble the energy of their faith?

Mass methods of "influencing people" are manifestly of no help in such problems, since it is the effects of mass methods that have created our dilemma. What, then, is the thing to do? Is there any point at all in formulating programs for collective adoption? A symbolic remedy was provided by Ivan Karamazov, in the "answer" given by the returned Jesus to the fifteenthcentury Grand Inquisitor, but socially meaningful applications of this idea seem totally obscure. Socrates' reply to Crito's appeal that he evade the official death sentence of the Athenian State gave another solution, but one not likely to be popular since it involved submitting to execution. Victim of mass resentment and the "loyalty" to conventional views of the Athenian populace, Socrates insisted that he must submit to the popular will, though it meant death. For Socrates loved his city, and was determined to honor it as though it were an ideal city, even if its citizens were now honoring lies instead of the truth.

What, Socrates asked Crito, should he reply to a spokesman of the laws of Athens, who addressed him as follows:

You have been content with us and our city. You have definitely chosen us, and undertaken to observe us in all your activities as a citizen, and as the crowning proof that you are satisfied with our city, you have begotten children in it. Furthermore, even at the time of your trial you could have proposed the penalty of banishment, if you had chosen to do so—that is, you could have done with the sanction of the state what you are now trying to do without it. But whereas at that time you made a noble show of

indifference if you had to die, and in fact preferred death, as you said, to banishment, now you show no respect for your earlier professions, and no regard for us, the laws, whom you are trying to destroy. You are behaving like the lowest type of menial, trying to run away in spite of the contracts and undertakings by which you agreed to live as a member of our state. Now first answer this question. Are we or are we not speaking the truth when we say that you have undertaken in deed if not in word, to live your life in obedience to us?

What are we to say to that, Crito? Are we not bound to admit it? . . .

That, my dear friend Crito, I do assure you, is what I seem to hear them saying, just as a mystic seems to hear the strains of music, and the sound of their arguments rings so loudly in my head that I cannot hear the other side. . . .

Whatever Socrates' fate, his conversation with Crito is profound instruction in the meaning of loyalty and trust. It is better, Socrates maintained, to suffer a wrong than to do one. This was the trust Socrates spent his whole life attempting to justify and explain. While he did not make many converts, the fact that he comes close to being the most unforgettable man in history requires explanation.

Curiously, in this intensely skeptical and brilliantly critical age, we are now witnessing the spectacle of a sudden rebirth of faith and trust in exotic forms of religion, as though some enormous vacuum were demanding to be filled in the emotional life of the people, especially the young. Here, again, is a form of the paradox produced by the polarities of man's nature. Here, again, is some deep failure of balance, the result, no doubt, of misapplications of both belief and unbelief. One cause of this dramatic abandonment of questioning is no doubt the established habit of cold objectivity on the part of the scientific community, as though the practitioners of science were not men at all, but disembodied intellects, calculating, measuring, manipulating, but never taking part in the moral transactions of a universe where birth and death, good and evil, truth and falsehood, loyalty and betrayal are the currency of being. For in the moral universe, men must balance trust with questioning every day of their lives, and an education or culture which neglects these realities of being human is wholly out of touch with the facts of life.

It has been centuries since mankind, in its cultural aggregates, has undertaken to instruct the young in the necessity of finding the best possible balance between trust and questioning. Individuals, guided mainly by strong intuitive feeling, have sought out teachers or teachings which seem to throw light on this most profound area of learning and self-discovery; but societies, being but poor carriers of intuition, have remained tightly locked in traditions of either uncritical belief or proud negation. So that today, save for the few who seem able to find their way past any obstacles, the paradox of these dual obligations remains an untouched area of inquiry. It is, one may say, truly a private affair, yet it has vast public consequences.

REVIEW THE KEY TO AN AGE

A STRONG case for the study of history could be based on Robert Darnton's *Mesmerism* (Schocken, 1970, \$2.45), a thoroughly informing work on the influential ideas of the closing years of the eighteenth century in France. Mesmer is commonly thought of as an enthusiast who attracted attention by means of a theory of healing, unacceptable to science, later wrongly identified as Hypnotism. Mr. Darnton makes it plain that Mesmer gave currency to ideas which are the key to understanding the mood and longings of the revolutionary epoch, and which exercised an immeasurable influence on subsequent thought. The author states his purpose:

This study would restore him [Mesmer] to his rightful place, somewhere near Turgot, Franklin, and Cagliostro in the pantheon of that age's most-talked-about men. In doing so it may help to show how the principles of the Enlightenment were recast as revolutionary propaganda and later transformed into elements of nineteenth-century creeds.

In the hands of reformers and propagandists, Mesmerism was a doctrine of regeneration and salvation. It seemed to catch the imagination of nearly all those affected by the revolutionary spirit. The rejection of Mesmer's doctrines by the French Academy of Science only added to his indirect influence, since it could now be said that the medical men of the time were part of the "establishment" which was opposed to change and attempting to block transmission to the common people of This aspect of the Mesmer's saving teachings. Mesmerist movement appears clearly in the work of Nicolas Bergasse, a wealthy attorney of Lyon who organized the Society of Universal Harmony in 1781 to support Mesmer's work and spread his ideas. Bergasse saw in Mesmerism the means of return to the "natural society" of Rousseau. Reactionary "doctors" would be driven from the scene and "Mesmerism would regenerate France by destroying 'obstacles' to 'universal harmony'."

Bergasse considered medicine "an institution that belongs just as much to politics as to nature," and threatened, writing in the person of an anti-mesmerist doctor: "If by chance animal magnetism really existed

. . . I ask you, sir, what revolution should we not of necessity expect? When our generation, exhausted by ills of all kinds and by the remedies supposed to deliver it from those ills, gives way to a vigorous, hardy generation, which knows no other laws of self-preservation than those of Nature: what will become of our habits, our arts, our customs? . . . A more robust constitution would make us remember independence. When, with such a constitution, we necessarily would develop new morals, how could we possibly put up with the yoke of the institutions that govern us today?"

Radicals and political reformers regarded Mesmer's ideas as a transmission belt for their schemes of social change. The pamphlets on mesmerism and letters-to-the-editor of the day "show how radical ideas filtered down from treatises like Rousseau's *Social Contract* and circulated at the lowest level of literacy." There was little in Rousseau's arguments to interest the common man, and his treatises were not widely read, but Mesmer's doctrines caught the popular fancy and, when turned to radical purposes, evoked extravagant utopian dreams.

Mesmer arrived in Paris in 1778, announcing his discovery of a subtle fluid which pervades the entire universe, including the human body, and the health of the latter, he maintained, depends upon its unobstructed flow. Sickness, he said, resulted from obstacles to this flow of "animal magnetism," which the practicing mesmerist sought to restore by one or another means. Magnets were often used for this purpose, and Mesmer's treatments included exposing patients to magnetic apparatus. His system, as has been pointed out, can be traced directly to Paracelsus, and Darnton also includes van Helmont and Robert Fludd as earlier thinkers who, with William Maxwell, "presented health as a state of harmony between the individual microcosm and the celestial macrocosm, involving fluids, human magnets, and occult influences of all sorts." Mesmer's ideas were in complete harmony with the vitalist philosophies of his time.

The period was a time of wonderful openmindedness and innovation, much like the present in some respects. While today we have no cosmic philosophers of the stature of Paracelsus or Mesmer, the mystic word "organic" carries feelings similar to the fluid doctrines of the eighteenth century. The fringes of today's science include such conceptions as "rays" emitted by the growing tips of plants, the psychic continuum joining plant and man, as implied by the experiments of Cleve Backster, and dozens of similar theories and doctrines, some overtly "metaphysical," all of which, taken together, stand for exactly the sort of longings and holistic feelings which found such ardent and tumultuous expression toward the end of the eighteenth century. Notice how, today, old pantheisms are being revived, primitive faiths explored, and vitalistic beliefs of the past are obtaining new dress. Since the most creative periods of history have usually been characterized by enthusiasms of this sort, we cannot draw back wisely and say with easy assurance which of these enthusiasms have substantial basis in psycho-physical fact, and which are extravagances, inflated to importance by the generous emotions of the times.

While Mr. Darnton shows considerable respect for Anton Mesmer, speaking freely of his cures without quotation marks, he nonetheless refers to his "innocent quackery," and his German gibberish, as though, from the height of the twentieth century, we now know what is true and false in Mesmer's doctrines and claims. This may not be the case. Not everyone was or is able to do mesmeric healing, it is true, but then not everyone is good at ESP. Such abilities are apparently variable, and all through history extraordinary individuals have exhibited powers well in advance of their fellows, which brought them honest recognition from some and blind adulation from others, while attracting the unqualified hatred of the orthodox in medicine and science. The last word on these remarkable personages is by no means said, although it would be as foolish to embrace all that is attributed to them in the way of claims, as to deny any possibility of truth in what they maintained. Especially is this so in the case of those who, like Mesmer, gained popular support, since it then becomes difficult to separate legend from fact. Mesmer himself, for example, was not "political" in the sense of some of his followers, but was rather convinced that he was disclosing certain veritable laws of nature, and it was only after

he challenged the authority of the Academy, going to "the people" for acceptance of his ideas, that the political interpretation was attached to his movement. Mesmer's fight, Darnton says, was won by challenging the arbiters who sat in judgment upon him. He attacked "the very rules of the game," disqualifying his judges, and this led his discontented political supporters "to challenge the order of society as well as the establishment that limited access to its most prestigious positions." Charles Deslon, Mesmer's first medical convert, said that "Animal magnetism, in M. Mesmer's hands, seems to be nothing other than Nature herself." Mesmer had presented his theory as "the remnant of a primitively recognized truth," and he conceived its benefit to be gained, very largely, through a general moral and philosophic reform, of which the healing power was a concrete demonstration. Mesmer was political only in the sense that he believed that through knowledge of the health-giving properties of animal magnetism, all France might be regenerated, and he wrote to the French National Convention that liberty and health could be the foundation of the harmony achieved by the Revolution. His influence on French men of letters was far from negligible. obtained much inspiration from Mesmer's ideas, and Victor Hugo dreamed of a universal social harmony in Mesmer's language. Lafayette was at heart a Mesmerist and wrote confidently to George Washington in 1784 about Mesmer's "great philosophical discovery."

No one in modern times, Darnton remarks, has taken Mesmerism and other forms of popular science seriously, for the reason that the French of the 1780s "looked out on a world so different from our own that we can hardly perceive it; for our view is blocked by our own cosmologies." Yet today, the barren universe of modern physics has become distinctly unappealing, and the age is ripe for richer, more philosophical cosmologies. The natural intuition of the times longs for a living universe—a place where intelligence counts for something, where "dead matter" does not mindlessly rule, and where aspiration and hope have meaning. For this reason, Mesmer's outlook has underlying linkages with the feelings now coming to birth. This makes his work and times exceedingly interesting to us.

COMMENTARY EIGHTEENTH-CENTURY SCIENCE

A PASSAGE in Darnton's *Mesmerism* (see Review) gives the flavor of the last quarter of the eighteenth century in France:

Extravagant as it seems today, mesmerism has not warranted the neglect of historians, for it corresponded perfectly to the interests of literate Frenchmen in the 1780's. Science had captivated Mesmer's contemporaries by revealing to them that they were surrounded by wonderful, invisible forces: Newton's gravity, made intelligible by Voltaire; Franklin's electricity, popularized by a fad for lightning rods and by demonstrations in the fashionable lyceums and museums of Paris and the miraculous gases of the Charlieres and Montgolfieres that astonished Europe by lifting man into the air for the first time in 1783. Mesmer's invisible fluid seemed no more miraculous, and who could say that it was less real than the phlogiston that Lavoisier was attempting to banish from the universe or the caloric he was apparently substituting for it, or the ether, the "animal heat," the "inner mold," or the "organic molecules," the fire soul, and other fictitious powers that one meets like ghosts inhabiting the dead treatises of such respectable eighteenth-century scientists as Bailly, Buffon, Euler, La Place, and Macquer. Frenchmen could read descriptions of fluids very like Mesmer's under the articles "fire" and "electricity" in the Encyclopédie. If they desired inspiration from a still greater authority, they could read Newton's description of the "most subtle spirit which pervades and lies hid under all gross bodies" in the fantastic last paragraph of his Principia (1713 edition) or in the later queries of his Opticks.

While mesmerism was rejected by both medical and scientific orthodoxy, it did not really die away as a result. Rather, is went underground and survived as a combining influence and fertilizing agent in scores of ways, although usually in diluted or corrupted form. It emerged in Americe in the nineteenth century in company with Swedenborgianism, and in the doctrines of the "Electro-biologists," and was plainly present in the practices of itinerant healers who wandered over the country. The teachings of Mary Baker Eddy had their inspiration from such sources.

For these as well as for historical reasons, readers may wish to extend their knowledge of Mesmer beyond the socio-political sphere, of which Darnton writes. For this purpose, Margaret Goldsmith's *Franz Anton Mesmer*, published by Doubleday in 1934, will provide an account of his doctrines and work.

CHILDREN

... and Ourselves SMALL FAMILY ENTERPRISES

I WOULD like to describe some positive moves people have made—moves away from bigness and depersonalization. I'll tell about them in the order they occurred.

About three years ago a young couple, the Whittens came to us, indirectly from Scott and Helen Nearing, saying that they wanted to go back to the soil. They stayed a couple of weeks with us and looked around for a permanent place to live. After that they started landed emigrant papers. They had one problem. Gregg Whitten came from Australia when his family moved to the U.S.A. because of the Australian draft, only to find two years later that their sons were subject to the U.S. draft. So Gregg (one of the sons) decided to migrate to Canada. To get Adrienne, his girl friend, into Canada on his papers they needed to be married. There wasn't time to do that in the States, before he was drafted, and there wasn't time to do it formally here in Canada. So after a prosand-cons discussion we all jumped into the VW and went to see a visiting Unitarian minister, hoping he would marry them on the spot. The minister was startled. He confided that he didn't know the Quebec laws about marriages, but neither did we. So, with no papers, no blood tests, no God-blesses, Adrienne and Gregg stood barefoot before the minister, with his reluctant wife and myself as witnesses. We later learned that the marriage, while legal, was "nonnegotiable," whatever that means.

The Whittens found themselves a farm about sixty miles from us in an area called Megantic, which is totally French. They were the first young people to settle there by themselves. Because of the distance we didn't see them often after they moved to the farm, although we visited back and forth once or twice a year.

The Whittens grew their own grain, threshing it by hand. They composted for their small fields, and generally worked very hard. They learned from neighbors how to sugar their maple bush. On one visit we noticed that Gregg had rigged an old bicycle to grind his grain. He would sit on the seat and read

while he pedaled the bike, now attached to the flour mill, to grind out flour.

The first two years they sold their syrup by the gallon to a bulk dealer who came by. They were proud of its high quality rating, but annoyed that the dealer poured it into a huge, unwashed, sour container with other syrups of every grade. They wanted to do something else. Lowell suggested that they design their own label for the bare tin cans they could purchase, saying that he'd show them how to silk-screen the design onto the cans. Soon we had a letter from Gregg saying they would be over to learn how to do the labels. They had individual orders for thirty gallons of syrup and wouldn't have to sell to the bulk dealer this year!

Adrienne had their first baby in February. A country doctor cooperated, showing them how to deliver their baby and what to look for as a sign that they would need him.

This same doctor cooperated with delivery. for the second family I'll tell about. This family used a Dutch photo book I had on the complete birth of a baby. Friends passed on clothing, and the Whittens are now the third couple to use the same, tiny, baby bed I got some place, some time, I don't remember where. The last time I saw Adrienne I passed along our handmade silver baby spoon the four babies have used. Each was a big healthy baby, so you might call it a good, good-luck baby spoon!

A little after we met the Whittens another young couple in their 20s, the Metrics, arrived, asking if we would give them a "job offer" for entry into Canada, so they could qualify for their papers. Other friends had sent them because they couldn't promise employment. This has happened to us a number of times, although, to date, we've never actually given anyone a job. They have all had ideas of their own to try, which worked out.

For two years John Metric taught in the public schools here. He taught special classes of children who had physical, mental, and emotional problems. The first year he taught eighteen of these children, from six to thirteen years old, all by himself. The second year he asked to have fewer children so he could care for them better. The third year there was an unfortunate change in the county hiring personnel, so John did not return to teaching. Then he and his wife, Leslie,

started a herd of Nubian and Alpine goats to produce and sell milk and cheese. That had its ups and downs because it is hard to locate good dairy stock. Finding goats is not like buying cows, of which there are a great many good ones to be had. People are just beginning to go back to using goats.

We talked with the Metrics from time to time about why they didn't start a summer camp for children, as we had done. They had plenty of experience with kids. John had four years in college working with children, and two years of teaching in public school. They had a farm of 100 acres or so, and they didn't want or need a status income. They had goats, a small horse for their son Jebbie, a Newfoundland dog, four cats, a monkey, geese, ducks and chickens. And all these animals were used to children since Jebbie had played with them from the time he was born.

We urged them to write up a resume of what they wanted to accomplish, what they wanted to charge, and giving other information, to mail out to people. They did, and afterward Leslie called to say that one of the families we referred to them was sending a child to their camp. Hooray, we said. They were on their way.

Last fall Fred and Bonnie Cappuccino paid us a visit to talk about camps. They wanted to know the pitfalls, what we had learned, and so forth. We had a great visit. We hoped they would have a camp. Two and a half years ago they had purchased a farm in Ontario, about the same distance as we are from Montreal, so they had the place. They are themselves a small camp to begin with, as they have eleven children. Nine are adopted. Several are black, others are from Japan, Korea, Ceylon, Vietnam, and Bangladesh.

Fred retired from the Unitarian ministry last month (April) and will devote full time to farming and an annual summer program for children. Bonnie was founder and for two years president of Families for Children, an adoption program for youngsters who would not have survived had they not been taken out of intolerable conditions in crowded overseas orphanages and adopted by families in Canada and the U.S.A.

The day they visited us, they brought with them Tran from Vietnam, Shikha from Bangladesh, and Kahlil from Pakistan. Shikha had been with them a short time. She weighed four pounds when the Cappuccinos received her in Bangladesh. She was

now a bouncing eighteen pounds. Tran, who is five, noticed a Vietnamese poster we had on a barn wall. He said proudly, "That's where I'm from."

Kahlil was less sure of himself. He clung to Bonnie until later in the day when we had passed inspection.

A few days ago we received in the mail from Fred and Bonnie a series of information sheets, finalizing their camp program. They really are starting all over again!

After Fred put in his resignation from the ministry I heard a comment by a former member of his congregation: "How can you be an atheist and the minister of a church?" Well, if Christianity is measured by living deeds, then you have to say that there are very few real Christians! And if Fred is an atheist, then he's the most Christian atheist I've met. Becoming parents of nine racially mixed children of all ages is quite a feat, for a Christian, Atheist, Agnostic, or whatever!

SMALL FAMILY ENTERPRISES IN CANADA

John & Leslie Metric Camp: Children, 11-13 years
Ferme Nubineline 100-acre farm with animals and
R.R. I, Magog building projects
Quebec, Canada July 6 to Aug. 24.

July 6 to Aug. 24. Limit: 10 children

Fred & Bonnie Cappuccino
Loch Haven Farm
R.R. I, Maxville
Ontario, Canada

Camp: Children, 8-12 years
100-acre farm, pioneer living
with farm and nature projects,
interracial

July 13 to Aug. 31. Limit: 20 children

Lowell & Virginia Naeve Farrn and Sea Experience R.R. I, North Hatley Quebec, Canada

Camp: Children, 8-14 years 140-acre farm, with land on Bay of Fundy, art-oriented June 29-Aug. 18.
Limit: 22 children (filled for 1974)

Gregg & Adrienne Whitten R.R. I, Piopolis, Comte Frontenac Quebec, Canada Maple Syrup (Grade A) Shipping to eastern Canada and U.S.A.

VIRGINIA NAEVE

FRONTIERS Mind and Brain

THE Los Angeles Times for March 31 presents "exciting" stories on neurochemical discoveries concerning the human brain. heading on one declares that "love" is a matter of "mental programming," since circuits of response come into play to produce "anger, love, hate, fear, anxiety and other emotions" whenever the stimulus is strong enough to overcome the nerve cells in charge of "inhibition." According to the neurochemist quoted, schizophrenia may be "a disease characterized by a weak inhibitory system," with "creativity" having a similar explanation. Asked if the accounting for human behavior in terms of chemistry didn't remove "the mystery of life," he replied that each human presents a unique combination of the factors of heredity and experience, so that "individuality" is preserved.

Another of the stories reports on the expected development of "chemical coping agents" which will produce specific psychological effects—one pill for increasing psychic energy so you can work harder for longer hours, another for stimulating "creativity," and still another for "making it more bearable to separate from a loved one." These new drugs, said the authority quoted, will very likely be without undesirable "side-effects" by reason of refined control over their molecular structure. This story is headed: "Work, Play, Create? New Pills May Let You Choose a Mood."

A third story, much longer than the others, finds the decisive cause of human feeling and behavior in products of the amino acids called "amines." These are related, the experts say, to depression, schizophrenia, violence and aggression, and also to more positive states such as the ability to "cope." One physician said: "Drugs that elevate the mood seem to increase the activity of the amines in the brain, and drugs that depress mood decrease their activity." Genetic

defects which prevent the organism from replenishing its supply of amines may make an individual susceptible to depression.

Yet there are contradictions. One of the amines, norepinephrine, has been found to both trigger and turn off aggression, with various explanations offered for this strangely alternating effect. The question of what lies behind aggression is regarded as especially important: Is it inborn, or is it learned as a response to environmental conditions—conditions which might be controlled? The *Times* reporter comments:

The answers grow more urgent in a society which is becoming more urbanized and more violent. And the answers will determine whether attempts to curb violence should be based upon biological or biochemical agents, such as drugs, or upon a restructuring of social conditions and learning processes.

While certain chromosomes seem linked to violent and criminal behavior, human responses vary so widely and unpredictably that a researcher has warned:

There are many types of such genetic deficiencies. The real question is not whether we have genes that involve partial deficiencies in synthesis or transport or disposal of these hormones, but whether there are some highly stressful conditions in which that fact becomes clinically significant.

Quite apparently, there is a sensible unwillingness to reach premature conclusions from all this research, but what seems missing, regardless of scientific caution, is consideration of the part which may be played in thought and action by the human being *himself*. Is there, after all, a *mind* behind all these chemical reactions, and is there a soul which may engage in moral decision and choice?

Judging from statements quoted from Dr. Samuel Eiduson, a professor of biochemistry at the University of California in Los Angeles, such possibilities play no part in the thinking of these neurochemists and brain specialists. As the UCLA teacher put it: "If the mind resides in the

brain, then it follows that thought and consequent behavior are expressions of brain function."

The reader of these three stories on brain chemistry would be entirely justified in assuming that this is the unquestioned view of all scientists concerned with study of the human brain. But the reader would be quite wrong in making this assumption, and journalistic science is profoundly at fault in pointing to no other outlook. There are experts and experts, as any cub reporter knows. In the Spring 1974 *American Scholar*, for example, Wilder Penfield, a distinguished Canadian neurosurgeon, writes on "The Mind and the Highest Brain-Mechanism," making plain his own conviction that mind and brain are not the same thing.

After presenting evidence, he says:

For my own part, after years of striving to explain the mind on the basis of the brain alone, I have come to the conclusion that it is simpler (and far easier to be logical) if one adopts the hypothesis that our being does consist of two fundamental elements. . . . Because it seems to me certain that it will always be quite impossible to explain the mind on the basis of neuronal action within the brain, and because it seems to me that the mind develops and matures independently throughout an individual's life as though it were a continuing element, and because a computer (which the brain is) must be programmed and operated by an agency capable of independent understanding, I am forced to choose the proposition that our being is to be explained on the basis of two fundamental elements. This, to my mind, offers the greatest likelihood of leading us to the final understanding toward which so many stalwart scientists strive.

The mind, Dr. Penfield says, uses the highest brain mechanism, which stands between itself and the "sensory-motor computer" part of the brain. The mind cannot function through the body without this highest brain mechanism:

The human automaton, which replaces the man when the highest brain-mechanism is inactivated, is a thing without the capacity to make completely new decisions, without the capacity to form new memory records, and a thing without that indefinable attribute, a sense of humor. The automaton is incapable of

thrilling to the beauty of a sunset or of experiencing contentment, happiness, love, compassion. These, like all awarenesses, are functions of the mind.

While the automaton—the "computer"—which functions by reflex and habit is an extraordinary mechanism, it cannot, Dr. Penfield believes, "explain the action of the mind." And while the mind's access to the body is through the highest brain-mechanism, it nonetheless has an energy of its own—an energy different from that of the neuronal potentials.

What does the mind do? Dr. Penfield has a brief paragraph on this:

It is what we have learned to call the mind that seems to focus attention. The mind is aware of what is going on. The mind reasons and makes new decisions. It understands. It acts as though endowed with an energy of its own. It can make decisions and put them into effect by calling on various brain mechanisms.

Does the mind simply cease to exist, say, during deep sleep? Not if you choose to agree with Dr. Penfield or Charles Sherrington; for then—

the mind must be viewed as a basic element in itself. One might then call it a *medium*, an *essence*, a *soma*. That is to say, it has a *continuing existence*. On this basis, one must assume that although the mind is silent when it no longer has its special connection to the brain, it exists in the silent intervals and takes over control when the highest brain mechanism does go into action.

One may feel grateful to Dr. Penfield for having one's existence restored in what are presumably acceptable scientific terms.