WHAT IS MORALITY?

IT would be difficult to find a more unpopular subject than "morality," and at the same time one in greater need of attention. The reason for its unpopularity was well put in an essay of some twenty years ago by Joseph Wood Krutch, in which he spoke of the mood of the 1920s: "First of all, we said, let us get rid of Puritanism and Provincialism, the two great enemies of the freedom to be ourselves. And we were sure that we had selves which deserved to be free."

This ardor for release from the pressure of moralistic injunction had ample assistance from both scientific anthropology and the academy. In another essay (1956) Krutch examines the influence of a text by a psychologist at the University of Southern California, *Psychology and Life*:

Of its more than six hundred pages little more than one is devoted to "morals," and here is the definition propounded: "Morality is the quality of behaving in the way that society approves. . . . When a person obeys the rules and laws of his society we say that he is moral or good." . . .

Since what is called "right" is merely the law or custom of my community, I need have no concern with anything except what the community knows about. I will be careful to retain its good opinion while secretly taking advantage of every possible opportunity to violate law and custom with impunity. As Machiavelli said, the wise man will by no means always tell the truth but will take care to preserve his reputation for truth-telling because he can't take advantage of others unless they trust him. If, for example, you have a chance to take candy from a baby ask only how likely it is that you will be found out. Conscience will then become nothing but what Mr. Mencken once called it: "That still small voice which whispers, 'Somebody may be looking'." (If You Don't Mind My Saying So, 1964.)

Krutch, however, remained unpersuaded, holding to the attitude he had expressed in *Experience and Art*, published in 1934:

If Love and Honor and Duty can be salvaged, then some one must write about them in a fashion which carries conviction. If we are to get along without them, then someone must describe a world from which they are absent in a fashion which makes that world seem worth having. And it is just the failure to do either of these things quite adequately which reveals the weakness of contemporary literature.

With this encouragement we may turn to the subject we have chosen for this week, a far from easy task. There is, however, a caveat to be entered, a warning to be observed, which we take from the nineteenth-century Samuel Butler, who said in his Notebook: "The foundations of morality are like all other foundations: if you dig too much about them the superstructure will come tumbling down." For us this means, do not attack the subject directly, but circle around it, avoiding definition. Morality, after all, is not something in itself, but is derived as an application of ethics although, since we live in a world of applications, it acquires a great deal of importance. The best way to get at it may be in some particular application, and for this we sought a text in Lafcadio Hearn. Hearn was practitioner of that most difficult of arts, the literary art, a moral How can one be moral man, but no moralist. without being a moralist? By not talking about morals. Morality is not offensive, but moralizing is. The two have been largely confused, which was our reason for saying, at the beginning, that no subject is in greater need of attention. Hearn gave it the attention of an artist.

Hearn was teaching literature at the University of Tokyo between 1896 and 1902 and at some time during that period he discussed "The Relation of Life and Character to Literature." On this occasion, after explaining to his students that translation is "the best possible preparation for original work," he went on to say:

As to original work, I have long wanted to say to you something about the real function of literature in relation not to the public, but to the author himself. That function should be moral. Literature ought to be especially a moral exercise. When I use the word

moral, please do not understand me to mean anything religious, or anything in the sense of the exact opposite of immoral. I use it here only in the meaning of self-culture—the development within us of the best and strongest qualities of heart and mind. Literature ought to be, for him that produces it, the chief pleasure and the constant consolation of life. Now, old Japanese customs recognized this fact in a certain way. I am referring to the custom of composing poetry in time of pain, in time of sorrow, in all times of mental trials, as a moral exercise. In this particular form the custom is particularly Japanese, or perhaps in origin Chinese, not Western. But I assure you that among men of letters in the West, the moral idea has been followed for hundreds of years, not only in regard to poetry, but in regard to prose. It has not been understood by Western writers in the same sharp way; it has not been taught as a rule of conduct; it has not been known except to the elect, the very best men. But the very best men have found this out; and they have always turned to literature as a moral consolation for all the troubles of life...

Remember, I do not mean that a literary man should write only to try and forget his suffering. That will do very well for a beginning, for a boyish effort. But a strong man ought not to try to forget in that way. On the contrary, he should try to think a great deal about his grief, to think of it as representing only one little drop in the great sea of the world's pain, to think about it bravely, and to put his thoughts about it into beautiful and impersonal form. Nobody should allow himself for a moment to imagine that his own particular grief, that his own private loss, that his own personal pain, can have any value in literature, except in so far as it truly represents the great pain of human life.

Above all things the literary man must not be selfish in his writing. No selfish reflection is likely to have the least value; that is why no really selfish person can ever become either a great poet or a great dramatist. To meet and to master pain, but especially to master it, is what gives strength. (*Talk to Writers*, 1927.)

In his Talk, "The Question of the Highest Art," Hearn begins with a discussion of love.

Certainly it is a great misfortune and a great folly to love a bad person; but in spite of the misfortune and the folly a certain moral experience comes, which has immense value to a wholesome nature. The experience is one which very few of the poets and philosophers dwell upon; yet it is the only

important, the supremely important, part of the experience. What is it? It is the sudden impulse to unselfishness. For there are two sides to every passion of love in a normal human life. One side is selfish, the other side, and stronger is unselfish. In other words, one of the first results of truly loving another human is the sudden wish to die for the sake of that person, to endure anything, to attempt anything difficult or dangerous for the benefit of the person beloved. That is what Tennyson refers to in the celebrated verse about the chord of Self suddenly disappearing. The impulse to self-sacrifice is the moral experience of loving; and this experience is not necessarily confined to the kind of affection described by Tennyson. Other forms of love may produce. the same result. Strong faith may do it. Patriotism may do it. . . .

I know that mere beauty of form may produce such emotion, though beauty of form is by no means the highest source of moral inspiration . . . Moral beauty, the highest of all, has indeed been a supreme source of unselfish action but it has moved men's minds chiefly through superhuman ideals, and very seldom through the words or acts of a person, an individual. . . .

Just as unselfishness is the real test of strong affection, so unselfishness ought to be the real test of the very highest kind of art. Does this art make you feel generous, make you willing to sacrifice yourself, make you eager to attempt some noble undertaking? If it does, then it belongs to the higher class of art, if not to the very highest. . . . When art has not this effect, it is often because the nature of man is deficient, not because his art is bad. But I do not know that any art which has existed in the past could be called the highest possible. The highest possible ought to be, I think, one that treats of ethical ideals, not physical ideals, and of which the effect should be a purely moral enthusiasm.

This is a strong dose of Hearn's morality, but let us ask: what is its gist? A negative interpretation may be the most useful. He is saying, "We are not all right the way we are." This is why all such counsels have been neglected and left behind for the nearly century's duration since he wrote. He was not alone in his thinking then, but now he speaks to us from what seems an entirely different world, for we suppose we are fine the way we are. Yet there are those who did support his outlook, although in quite different language. Obliquely, Krutch has said much the same thing. He, as we know, was a dramatic

critic for most of his life, and in one of his essays he said:

At the end of a recent [he wrote in 1962] and much admired play by Ionesco the hero proclaims that he himself, all alone if necessary, will refuse to turn into a rhinoceros. That is a good beginning. But what is it that he intends to remain? Just not being a rhinoceros isn't enough.

Another writer who denies that remaining what we are is good enough is Ortega y Gasset. In 1939, in a lecture given at Buenos Aires, after distinguishing between animals and humans—the animal lives only in the external world; he does not withdraw within himself and make decisions about what he ought to do—Ortega declares that we humans are by no means finished products, but notably incomplete:

. . . these two things, man's power of withdrawing within himself from the world and his power of taking a stance within himself are not gifts conferred upon man. I must emphasize this for those of you who are concerned with philosophy: they are not gifts conferred upon man. Nothing that is substantive has been conferred upon man. He has to do it all for himself. . . .

Man humanizes the world, injects it, impregnates it with his own ideal substance and is finally entitled to imagine that one day or another, in the far depths of time, this terrible outer world will become so saturated with man that our descendants will be able to travel through it as today we mentally travel through our own inmost selves—he finally imagines that the world, without ceasing to be the world, will one day be changed into something like a materialized soul, and, as in Shakespeare's *Tempest*, the winds will blow at the bidding of Ariel, the spirit of ideas.

I do not say that this is certain—such certainty is the exclusive possession of the *progressivist*, and I am no progressivist, as you will see. But I do say that it is possible. . . .

Far from thought having been bestowed upon man, the truth is—a truth which I cannot now properly argue but can only state—that he has continually been creating thought, making it little by little, by dint of a discipline, a culture or cultivation, a millennial effort over many millennia, without having yet succeeded—far from it—in finishing his work. Not only was thought not given to man from the first, but even at this point in history he has only succeeded

in forming a small portion and a crude form of what in the simple and ordinary sense of the word we call thought. And even the small portion gained being an acquired and not a constitutive quality, is always in danger of being lost, and considerable quantities of it have been lost many times in fact, in the past, and today we are on the point of losing it again. To this extent, unlike all the other beings in the universe, man is never surely man; on the contrary, being man signifies precisely being always on the point of not being man, being a living problem, an absolute and hazardous adventure, or, as I am wont to say: being, in essence, drama! Because there is drama only when we do not know what is going to happen, so that every instant is pure peril and shuddering risk. While the tiger cannot cease being a tiger, cannot be detigered, man lives in the perpetual risk of being dehumanized. . . . Each one of us is always in peril of not being the unique and untransferable self which he is. The majority of men perpetually betray this self which is waiting to be, and to tell the whole truth our personal individuality is a personage which is never completely realized, a stimulating Utopia, a secret legend which each of us guards in the bottom of his heart. It is thoroughly comprehensible that Pindar resumed his heroic ethics in the well-known imperative: "Become what you are."

Put briefly, Ortega's contention is that being human is an achievement, not an endowment. Morality, then, is the order under which the achievement is made possible. But morality alone will not accomplish it. Achievement results, as Ortega says, from discipline and acts of the will—a succession of such acts, persisted in. That is why, in MANAS, there is such frequent recommendation of biography, where we find the exercise of the will to be the shaping influence of human life, the architect of that Utopia referred to by Ortega.

For modern man these all seem alien ideas. And we in America, we have been followers of an opposite gospel, the teaching that self-interest is the law of life, that we are here to get, not to give. Once again we find reason to quote John Schaar's "Reflections on Authority" (in No. 8 of the *New American Review*):

At the time of the founding, the doctrine and sentiment were already widespread that each individual comes into this world morally complete and self-sufficient, clothed with natural rights which are his birth, and not in need of fellowship for moral growth and fulfillment. The human material of this new republic consisted of a gathering of men each of whom sought self sufficiency and the satisfaction of his own desires.

This was the "morality" with which we started, it being fortified by two of the collaborators in the making of the modern "world-view," Charles Darwin and Adam Smith. Darwin declared for survival as the fundamental motive, and Smith added that survival was available only through systematic selfinterest. By reason of the social disasters which came as a result of this dog-eat-dog philosophy, the nineteenth-century reformers added the rights of man to our requirements, but failed to show how these rights could be guaranteed save by the nation-state. So, in the twentieth century, the teachers of morality have turned all the old principles around, declaring their opposites to be the foundation of good human behavior. The language these "reformers" use is of course a bit dressed up. In last summer's American Scholar Christina Sommers, a teacher of ethics at Clark University, makes this report:

The movement to reform moral education has its seat in the most prestigious institutions of education. Its theories are seldom contested, and its practice is spreading . . . One gains some idea of the new moral educators from the terminology they use. Courses in ethics are called "values classification" or "cognitive moral development"; teachers are "values processors," "values facilitators," or "reflective-active listeners"; lessons in moral reasoning are "sensitivity modules"; volunteer work in the community is an "action module"; and teachers "dialogue" with students to help them discover their own systems of values. In these dialogues the teacher avoids discussing "old bags of virtues," such as wisdom, courage, compassion, and "proper" behavior, because any attempt to instill these would be to indoctrinate the student. . . . The result is a system of moral education that is silent about virtue. . . .

The student of values classification is taught awareness of his preferences and his right to their satisfaction in a democratic society. . . . The values classification theorist does not believe that moral sensibility and social conscience are, in significant measure, learned by reading and discussing the classics. Instead Simon [Sidney Simon of the University of Massachusetts School of Education] speaks of the precious legacy we can leave to "generations of young people if we teach them to set

their priorities and rank order the marvelous items in life's cafeteria."

As a college teacher coping with the motley ideologies of high school graduates, I find this alarming. Young people today, many of whom are in a complete moral stupor, need to be shown that there is an important distinction between moral and nonmoral decisions. Values clarification blurs the distinction. Children are queried about their views on homemade Christmas gifts, people who wear wigs, and whether or not they approve of abortion or would turn in a hit-and-run driver as if no significant differences existed among these issues.

Alarm, if that is a strong enough word, is surely in order. One hopes that there will be more expressions of it by other teachers who share Christina Sommers' feeling of responsibility.

Finally, then, what is morality? We can find little or no fault with saying that morality means the fulfillment of our responsibility as humans. It depends, therefore, on what and who we think we are. We have had from Hearn and Krutch and Ortega some account of what they think a moral intelligence does simply because he is a human, and one could add Socrates to the list of "authorities" on this question. Morality defines what we owe to others as human beings. It is the study of obligation. It is fulfillment of the Promethean heritage, to speak of it accurately if somewhat grandly.

"Rights," we might add, do not exist except as derivations of fulfilled responsibility. They are conventions we agree upon, but will not be really possible except as we realize the Utopia we keep hidden in the bottom of our hearts, or as we bring to earth the pattern of the ideal city which Socrates said, in the *Republic*, is now "laid up in heaven."

REVIEW MODELING, DRAWING, PAINTING

A BOOK that we have received for review from England—*Rosegarden and Labyrinth*, on art education, by Seonaid M. Robertson—we are resolved to write about in sections, sometimes here, sometimes in "children," in order to share with readers more than one review can accomplish. The publisher is the Gryphon Press, 38 Prince Edwards Road, Lewes, Sussex, U.K., and the price is £4 in paperback. This book first appeared in 1963 and its present availability will please a great many readers. In her introduction to the present edition the author says:

I myself feel much less lonely now than when I wrote this book. Driven to question all values by the harsh climate many people, especially the young, are reaching out towards a new and more deeply rooted life. Tentative, often confused, occasionally "wayout," nevertheless very genuine, this new spirit is finding expression not only in marches and little magazines, but in rites and festivals, in meetings, in yoga and in meditation, and above all in the profound yearning to give our children and young people more firm hold on the eternities of the human spirit. In all this the arts play an absolutely vital role. "Art is to give man a taste here and now of the eternal."

The book is about teaching clay modeling, drawing, and painting to children and adolescents. Of children, whom she has taught for many years, she says:

With a pencil or a crayon in his hand the very young child scribbles and obviously enjoys the movement as much as the marks on the paper. It has been recognized that the resulting scribbles gradually take on a coherent form or consistent relationship of the parts. Each element in his visual "vocabulary" is denoted by a formula, often called a "schema," adopted by the young child or untaught adult, to represent a class of objects. This the child uses much as he does a word, sometimes practicing it for its own sake and producing it every time he wishes to indicate a man or a house, or a tree. The first schema for a man or woman (usually undifferentiated at this stage) is often an oval with two dots for eyes and extended mouth, with single lines attached for arms and legs. This schema soon changes for one which

differentiates head from body, which may now be represented as roughly oval, square or triangular to which arms and legs (and eventually) fingers and feet are added. Then, often abruptly, he adopts another schema elaborates that, and discards it in turn. The additions or elaborations made are not necessarily those which are derived from acuter visual apprehension, they are not advances toward a visual image. The first intellectual grasp of the fact of fingers may result in fingers as long as the arm, or "many" fingers may be represented as seven or nine, not necessarily the same on both hands! The schema may be elaborated in a purely decorative way, as in filling in the whole of a triangular body with nonrepresentational patterns, or executing the hair with flourishes of curls while naming a straight-haired person. So the schema first put down to indicate an idea may also be a shape elaborated for its own sake.

The writer relates developments in the world of painting to the teaching of art, noting that when the Post-Impressionists were finally accepted, gifted art teachers revolted against teaching drawing as "technique," and that this resulted in a break-through to "a wider range of adolescent art."

However, many well-meaning but confused teachers continued to look for the sort of work which came naturally to young children, instead of extending the experience of adolescents in ways appropriate to their own stage of development. In secondary schools the churning out of "decorative compositions" on abstract themes, e.g. Power, Music, or of remote and so supposedly "imaginative" subjects, e.g., Life on Other Planets, Under the Sea, were a symptom of the malaise.

Then came a counter-revolution in which teachers encouraged semi-technical studies of motor-cars and aeroplanes (with the expressive element essential to art cut to a minimum) or by a course on "commercial art" such as posters, showcards and arranging shop-windows. "This led to a slick advertising style and to concentration on the artificialities of inflated needs created by clever advertising." Is this, the writer asks, really the attitude of mind we wish to encourage in adolescents?

Then there was a further counter-revolution bringing a return to careful observation. Seonaid Robertson comments:

While this is admirable, they had often, I think, in a wholesome revolt against slovenly selfexpression, put too great an emphasis on the products, the drawings or paintings themselves, rather than on the quality of the experience the children were. having, and the great numbers of children's art exhibitions were also a symptom of this emphasis. I believe that while such studies from observation have a great place in adolescent education, they are not an end in themselves. I suspect an extreme reliance on drawing from observation is related to a sense of insecurity in the teacher: the visible appearance of things is something stable to hang on to. . . . There is another school of thought which went so far as to say in effect, "The only thing we can teach children is technique, so let us concentrate on the basic studies of form, color mixing, tone, et cetera, which are the grammar of our art, and leave feeling and imagination out of it. Such a point of view brought a much needed discipline to the training of young professionals of all kinds in art schools, and may form some part of the serious study of art by adolescents, but it was unfortunately elevated almost to a religion by some of its adherents. . . .

Therefore, I see the actual work to be done in the art "lesson" as an alternation between the expression of direct spontaneous feeling (when this is aroused by some incident in life outside the art room, or by the deliberate presentation of something within it calculated to surprise or delight) with "studies," more objective, deliberately undertaken exercises to explore the possibilities of the medium, to perfect some technique of representation, or to become familiar with the workings of nature in a more analytical way, for instance how bodies are articulated, how trees grow, how crystals are structures. Since this book is concerned with class teaching, it is necessary to remind ourselves that this alternation would ideally, of course, take place in a different cycle for each child. One will be bursting with something to say at the moment when another is heavy and uninspired. Not even children can guarantee to be creative at 11:25 every Thursday morning. This is, of course, a strong argument for having a large enough art room open at all possible hours, with a reasonable degree of independence for adolescents in the use of their time.

There is considerable delight in reading a teacher who is so on top of her subject as this one is—who recognizes the alternatives in both ends and means and chooses one or the other deliberately, for reasons she is able to give. She knows what she is doing, yet is quite aware of how much more there is to know, so that the reader does not feel distant from her.

How did Seonaid Robertson get all this balance and insight? That, too, comes through in the chapters on her actual teaching experiences, which are simply reports on what she did in this class, what in that, how the children responded, and what worked well and what didn't. There is theory of a sort in the book, but the writer is no theorist. She is without doctrine although she has deep conviction, and instead of running together a series of neat abstractions she tells you what happened in a certain class. She loves and loved the children and they came to love her, although they probably concealed it pretty well. The love showed in the eagerness they had to be in her class. We can think of only one book on art education that has the same qualities—On Art and Learning by Robert Jay Wolff, the chapters of which appeared in MANAS (in "Children") over a period of about a year (1969), and were later made into the book published by Grossman Publishers in 1971.

Her book is mostly made up of one wonderful story after another. Toward the end she tells about a twelve-year-old girl, Phyllis, "a rather pale, plump, cockney lass of mediocre intelligence, who obviously got pleasure from paint splashing and had a sense of color and a natural gift for getting down quick impressions." Phyllis had trouble finishing anything that presented problems. One time she went to the Tate Gallery and forthwith fell in love with Cézanne. Lazy, slap-dash Phyllis, captured by "one of the most precise and persevering of all the modern masters"!

The aspect of Cézanne's work which fascinated her was the way in which he represented threedimensional form by changes of color so that one sees the curved plane swinging away round a limb or a tree by the variation of color rather than by tone, as had been the practice of most of the post-Renaissance painters. Now Phyllis was a girl of limited intelligence and very little experience of art, and she grasped only this one facet of the complex art of Cézanne—but this fascinated her.

In the first art lesson after this visit she set up for herself in the art room—as these children were accustomed to do if they wished—a group of oranges on a plate. In painting the oranges she tried to show the shape of the sphere by varying the color and she put it on with careful dabbing strokes. She did this with concentration. To persist in this over the whole painting was more than she was capable of, and the dish and table cover are treated more in her former style and the background is filled with a rather facile decoration. But she *had* filled in the background and covered the whole sheet, which she had not done up till this time.

The story goes on, telling how Phyllis learned and applied more and more from her session with Cézanne, and how what she learned was adopted to her own adolescent development. The writer then turns to another child and his work, and describes how the boy went with his parents to a Chinese restaurant, and how it came out in a painting, a transfigured "Baroque cathedral." This is surely a book worth reading.

COMMENTARY THE CAUSE OF SECTARIANISM

IN this week's lead article, on page 1, Lafcadio Hearn is quoted as saying, "When I use the word moral, please do not understand me to mean anything religious." Hearn's childhood was oppressed by a narrow tyranny in the name of religion, which accounts for his desire to separate the moral from the religious, and explains, no doubt, the similar feeling on the part of a number of writers. While the heart of religion is never sectarian, religious organizations seem always to develop sectarian tendencies, sometimes going to extremes, as in the case, during the Middle Ages, of the Holy Inquisition with the rack and the stake as symbols of its modes of "persuasion." aggressive atheism which began in the eighteenth century would be almost impossible to understand were it not for the quarrels, crimes, and oppressions of religious organizations.

Yet Hearn, we should note, was lifted to heights of inspiration by his study of Buddhism in Japan. This may be because Buddhism is probably the least given to sectarian divisions, of all the great religions of the world, and the most philosophical in its metaphysical development.

What is "sectarianism"? It is, we may think, the resort to peculiar beliefs more for security than anything else. A light is thrown on this question in this week's review, by Seonaid Robertson. In speaking of the changes in the way art is taught to children, she tells how art teachers, coming under the influence of great movements in painting, adopt certain principles, but then make rules out of the discoveries involved and apply them to the point where a sectarian spirit rules, eventually leading to abuses which must be corrected; and then the corrections, in turn, having also become rules, amount to abuses. The author of Rosegarden and Labyrinth, however, while making use of these tendencies, never submits to them, and so is able to point out their "sectarian" result.

When does an idea or a mode of action become sectarian? The answer may be, when it no longer requires self-justification, when it can no longer bear comparison with other ideas. We are all doubtless somewhat sectarian without knowing it. The continuous liberation of ourselves from our biases seems the only remedy.

CHILDREN

... and Ourselves

EDUCATION OVERSEAS

THIS week we give attention to an activity of another country—Israel—that one may have heard of briefly from occasional headlines but actually knows little about. This is the Israeli program of aid to developing countries, begun some twenty-five years ago. In a recent issue of *Kidma*, Israel's quarterly journal of development, the editor, Artur Isenberg, writes:

1984 marks the 25th anniversary of the founding of the International (Development) Cooperation Division of Israel's Ministry of Foreign Affairs. During that time-span more than 27,000 trainees hailing from 112 different countries have come to Israel to attend courses in agriculture, medicine community development, labor cooperation, youth programs, administration, science and technology studies, and still others. In addition Israeli instructors have conducted courses outside Israel—in developing countries—for more than 29,000 foreign participants. And during the same quarter-century 8,700 Israeli experts went abroad on bi- or multilateral development missions or projects in spheres as different as agricultural extension services, opthalmology and youth programs.

To mark the 25th anniversary, trainees from 34 countries, currently taking courses in Israel, participated in a most appropriate ceremony in the Jerusalem Peace Forest: each of them planted a tree.

In explanation of Israel's devotion to the needs of the less developed countries, the editor quotes from Abba Eban, distinguished Israeli diplomat, a former foreign minister, who ten years ago related this anecdote:

The story is told that several years ago a visitor to Israel asked his host how Israelis, in view of their massive challenges at home, find the energy, manpower, and will for projects of assistance abroad. The Israeli host recalled the old parable of two seas fed by the waters of the River Jordan—the Lake of Genesart (Sea of Galilee) and the Dead Sea. He turned to his guest and asked why the water of the first was sweet and the second salty. His guest did not reply. After a suitable pause, the Israeli host explained the parable: the water of the Sea of Galilee is sweet because it both receives and gives water. The

water of the Dead Sea is salty and without life because it only receives water and does not give.

In the issue of *Kidma* at hand (Vol. 8, No. 2) a young Kenyan, Robert Kilonzo, tells that while a student in Friends World College he accepted a scholarship to study the water problems in Israel's arid zone, and the means used to solve them, in order to apply them to meet similar needs in the dry regions of Kenya. He had heard that in Israel farming methods for arid land "had turned desert lands into flourishing fields." He found that this report did not exaggerate and he spent a year working on an experimental farm in the Negev desert, near Avdat. As he says:

I explored the methods practiced by the ancient farmers who *harvested* water for both irrigation and domestic uses through a system of small channels and cisterns which very efficiently collected the occasional flood waters descending upon these otherwise dry areas. After completing one year at the Avdat farm, I spent six months at the nearby Jacob Blaustein Institute for Desert Research, carrying out additional investigations on the principles of run-off farming, involving artificial micro-catchment areas.

I became convinced that—provided the proportions between the catchment area and the area to be cultivated are correct—cultivation can be successfully undertaken *even with a total annual rainfall of less than 100 mm*. In the course of my work I devised a new system, consisting of a small catchment area of 250m², leading to a catchment basin covered with plastic material to prevent water loss. The system enabled us to harvest more than a cubic metre of water from as little as 10 mm of precipitation.

His object was to develop methods that could be applied in his own community in Kenya—the Katheka-Kai cooperative settlement, in Machakos. Water is scarce there and conditions have been worsened by the cutting down of nearby forests for firewood. While the population of the region is growing, employment for the young is almost nonexistent. The soil has been eroded by heavy rains which carry off topsoil. As to water:

About 98% of all the families face problems with their water supply, having no nearby source of water. Although there is a considerable amount of water within the area owned by the cooperative society, there is no distribution to members' homes,

and most of the existing arrangements relate to irrigating the coffee plantation. At least four times every day women can be seen walking a long distance to obtain water, carrying a tin of 25 litres on their backs. Aside from the strain and effort involved, this water is not of the best quality, having been pumped into uncovered tanks, in which it collects dust from the air and grows algae.

The needs of the area were plain—a better water supply and *rapid* reforestation. So, with help of various kinds from several sources, Kilonzo started a tree nursery and then talked the people living there into using the tin roofs of their houses as catchment areas and conducting the water to tanks. The tanks were made of a special sort of bricks—compressed instead of fired, with dirt and sand and cement as the ingredients. The machine for making these bricks had been introduced in Kenya ten years before, but not much used. The writer gives the details of how to make them, then says:

The water tanks we constructed had a capacity of some 7,000 litres. They rapidly filled during the first rains from October to December. In fact, we found ourselves faced with a small problem of *overflow* for which we had failed to make advance provision. We eventually solved that problem by making a run-off channel (resembling those I had come to know at Avdat!) which would water a row of *leucina* trees as well as a small plot of vegetables planted nearby.

Kilonzo concludes:

The distance from Avdat to Katheka-Kai is many thousands of kilometres, across mountains and seas and vast deserts. The heritage left by the ancients in the bleak hills of the Negev desert in the remote past and its revival and improvement by modern Israel has served as an inspiration for techniques which will make it possible for our cooperative community in Katheka-Kai to harvest bountiful rains. And it may very well help us to meet our need for greater domestic water supply, reforestation, and improved agricultural practice.

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Regional publications and newsletters are the nerves which help to bring into being the infrastructure of the organisms known as communities. A good example of how this works is the recently begun News Service announced by the Minnesota Food Association:

The Minnesota Food Association is a non-profit membership organization which works to unite the efforts of urban and rural people in order to build a sane and just food and agriculture system in our region. . . . At least four times annually, the Minnesota Food Association will publish the MFA News Service. It will consist of a variety of articles, stories and editorials addressing subjects of possible interest to people concerned with food and agriculture issues. The News Service bulletins will be distributed to community organizations and news outlets throughout the state.

One feature in the first issue of the Newsletter is a comparison of the community economics of the Spanish worker cooperative in the Basque region of Spain with the efforts and goals of the Minnesota Food Association, which has sought to do in Minnesota some of the things accomplished by the Basques. Also taken as a model is the Grupo Sociale, "a financial conglomerate in Colombia that views its private corporations as social institutions, designed to serve the interests of impoverished people." The newsletter makes this comment:

The intention, then, is to proceed along lines similar to Mondragon—MFA, the financial vehicle, conduct research, identify enterprise will opportunities, and will seek to develop them. MFA differs from the other two in that it exists in a context that lacks the cultural bonds of a Basque region or "compadrazgo" in Colombia. Without an automatic community context to work in, MFA seeks to attract and build a community of people sharing explicit beliefs—about local enterprise, about sustainable practices, about equity ownership for participants. MFA seeks also to create a community of understanding between urban and rural citizens food producers and those whose primary relationship to food is consumption. . . . In many ways, both Mondragon and Grupo can be seen as positive responses to economic problems through economic enterprise rather than through charity and social services, as is more often the case in the U.S.

It is interesting indeed to find Americans willing and eager to learn from the people of other nations overseas. The address of the MFA News Service is 1518 Osceola Ave., Saint Paul, Min. 55105. The editor is Kenneth J. Taylor.

FRONTIERS

Agriculture in India

IN the Jan. 9 "Children" we quoted a *Tilth* article by Mark Musick in which he drew on Richard Critchfield's report of India's recovery in agriculture—from a country threatened by famine to almost self-sufficiency in grains. This was accomplished, Critchfield suggested, by emphasis on food production and improvement of life in rural villages. Since Critchfield revealed an admiration for Norman Borlaug, prime mover in the Green Revolution, we asked an Indian writer, K.S. Acharlu, editor of *Gandhi Vignan*, to comment on these claims. Following is the substance of his report.

When India gained her independence in 1947, the country was on the brink of catastrophe. Floods and famine had brought destitution, hunger and disease to millions. During Prime Minister Nehru's visit to the U.S. in 1949, he stressed the urgent need of shipments of American food to avert disaster. Emergency shipments of wheat began in 1951, and in 1956, by agreement, the shipments came on concessional terms on a grant basis. (This assistance reached \$76 million in 1973.) A political reason for the aid was to enable India's struggling democracy to resist the communist challenge. Under Kennedy, in 1961, this food aid program was named Food for Peace. Meanwhile it was suggested to India that her food production should keep pace with population growth.

While the food assistance was regarded as a temporary measure, some economists feel that it prolonged India's difficulty. Instead of encouraging domestic production, it increased India's dependence on "surplus food" from the U.S., weakening her own food production and also India's economic autonomy and self-reliance. Meanwhile India took steps to slow down population growth and to add modern technology to agricultural methods. Farmers were

encouraged to use tractors, artificial fertilizers, insecticides and pesticides.

As a result, food production has substantially increased. As further encouragement to apply more fertilizer, the government reduced its price, but use of fertilizer requires more irrigation, which was applied. The improvement in production was dramatic. Wheat production, which was 6,462 thousand tons in 1950-51, grew to 34,382 thousand tons in 1978-79—an increase of 440 per cent—while rice production (in the same period) gained by 186 per cent. The development was partly from increase in acreage, but mainly from greater production per acre.

Applying chemical fertilizer is one of the quickest ways to increase crop yields. Fertilizer consumption in India went from 1.1 million tons in 1966-67 to 500 million tons in 1978-79. The use of high yield varieties in both wheat and rice contributed much to the record gain.

There has been some resistance mechanization of agriculture by reason of the unemployment it causes. Moreover, India is a land of small farms—70% of the holdings are less than two hectares of land. Only 15% of the farm households have more than four hectares, but this amounts to 61% of the cultivated area. All these changes in Indian agriculture are largely the result of the work of two agri-scientists—the American Norman Borlaug and the Indian Swaminathanwho together transformed Indian agriculture, leading to the use of machinery to plough, seed, and harvest, along with extensive application of chemical fertilizer and insecticides.

Gandhi proposed a very different approach, asking for the development of autonomous and self-reliant communities. Modern technology, he said, sings only one song—increased production, more money, and profit, milking the land to the last drop. Gandhi envisioned the small farmer who believes in agriculture as a way of life. The land is a part of his family and his goal is the health of family and neighborhood, including the animals. The Gandhian method is to help people

to cultivate the small farm for subsistence and selfreliance, using simple implements easy to make and repair. If the pump is an enemy of the bullock, regard it with suspicion.

Speaking to Nai Talim (New Education) workers, he said:

The base and foundation of village industries is agriculture. The cultivator is the father of the world. If God is the Provider, the cultivator is His Hand. What are we doing to discharge the debt we owe him?

There are people who dream in terms of industrialization of agriculture and small-scale industries by large applications of steam and electricity. Gandhi warned that trading in soil fertility for the sake of quick returns would prove a disastrous policy. It will result in virtual depletion of the soil. The good earth calls for the sweat of one's brow to yield the bread of life. People may call this unprogressive, without promise of dramatic results. Yet it holds the key to the prosperity of both the soil and its inhabitants. Healthy, nourishing food is the alpha and omega of village economy. (*Harijan*, Aug. 25, 1946.)

Speaking to some Chinese, Gandhi said:

If America does not put her affluence to good use, its very affluence will ruin her. If America tries to win the friendship of other nations with the help of its money, and if China, Japan, Iran, India, or any other nation gets involved with her even in a small degree, both will come to grief. That is why I have been saying that the import of food grains is the worst kind of slavery, and if you want friendship to endure you should not seek economic aid. However rich America may be, we shall only become crippled if we seek economic aid from her. (Harijan, July 19, 1947.)

In a letter to Rajendra Prasad, Gandhi wrote:

. . . I cannot swallow the idea that mechanization should be stepped up in India and that the country should find happiness through it. Have you given thought to the possible consequences of using tractors, and pumping machines to water the fields, and trucks instead of carts to transport goods? How many farmers will become unemployed and how many bullocks will become idle? Moreover, I feel

that in the long run, the land will lose its fertility if it is ploughed with machines and tractors. People will stop keeping cattle and we shall have to import fertilizers. Even the small children get work if a peasant has a plough and tills the land himself. One person, for instance, can work on the leather bucket in which water is drawn from the well another can channel in the fields while another can be weeding. In this way each will live on the labor of each. How natural and happy village life is, while life dependent on machinery is unhappy and brings unemployment. If we wish these villages to be self-reliant, the human machine should be activated. (*Harijan*, June 27, 1947.)