

TWO QUESTIONS

WHEN things go awry—and today they are going badly awry in many ways—modern humans (the most thoughtful among them) draw back from planning and doing, feeling it necessary to inquire into certain questions. One is "Who am I?", another, "What must I do?"

For some, there are no questions, just lamentation and prayer, but these are atavistic responses. Cries of desperation are a negation of the idea that humans are able to determine or at least modify their destiny. Crying out is a failing species of magic—a despairing invocation of unknown outside forces or powers that rule the universe. The modern humanist man, striving to use intelligence, consults his own resources. He neither cries nor prays, but asks questions of his own experience and of the science of his time. In short, he *thinks*. If he thinks well, he asks the questions whose answers will shape all other inquiries: Who am I and what must I do?

Naturally enough, we inspect the world of our experience to find the terms of self-definition. We *must* do this, one could say, but after a time we generally discover that answers so obtained do not work. Looking at the world may be necessary for numerous practical purposes, but it also places obstacles in the way of self-understanding. In a rather remarkable book, *The Origin of Consciousness in the Breakdown of the Bicameral Mind* (Houghton Mifflin, 1977), Julian Jaynes, who teaches psychology at Princeton, speaks of this difficulty in his Introduction, giving an example of the barriers erected by scientific solutions:

How often in our frustrations with trying to solve the mysteries of mind do we comfort our questions with anatomy, real or fancied, and think of a thought as a particular neuron or a mood as a particular neurotransmitter! . . . Here we have an animal—make him a man if you will—here he is on

the table of our analysis. If he is conscious, it has to be here, right here in him, in the brain in front of us not in the presumptuous inklings of philosophy back in the incapable past! And today we have at last the techniques to explore the nervous system directly, brain to brain. Somewhere here in a mere three-and-a-half-pound lump of pinkish-gray matter, the answer has to be.

All that we have to do is to kind those parts of the brain that are responsible for consciousness, then trace out their anatomical evolution, and we will solve the problem of the origin of consciousness.

After a brief account of the complexities of this approach, Mr. Jaynes finds a delusion in its assumptions—"one that is all too common and unspoken in our tendency to translate psychological phenomena into neuro-anatomy and chemistry."

Even if we had a complete wiring diagram of the nervous system, we still would not be able to answer our basic question. Though we knew the connections of every ticking thread of every single axon and dendrite in every species that ever existed, together with all its neuro-transmitters and how they varied in its billions of synapses of every brain that ever existed, we could still never—*not ever*—from a knowledge of the brain alone know if that brain contained a consciousness like our own. We first have to start from the top, from some conception of what consciousness is, from what our own introspection is. We have to be sure of that, before we can enter the nervous system and talk about its neurology.

This psychologist also rejects the assumption that consciousness is located or confined in the head:

Let us not make a mistake. When I am conscious, I am always and definitely using certain parts of my brain inside my head. But so am I when riding a bicycle, and the bicycle riding does not go on inside my head. The cases are different of course, since bicycle riding has a definite geographical location, while consciousness does not. In reality,

consciousness has no location whatever except as we imagine it has.

What does "consciousness" mean for this author? So far as we can tell, it means the kind of self-awareness that makes possible a dialogue with oneself. It is for him a synonym of self-consciousness. Much in this book turns on this distinction. What we do without direct attention is not an expression of consciousness. Consciousness, as he uses the term, is that state of being in which we act deliberately, knowing that we act.

This, we gather from Mr. Jaynes, is what we are—each one of us: We are conscious deliberators. He also has a theory concerning the appearance or intensification of self-consciousness, involving inner dialogue and rational self-determination, as a great change in man which ushered in modern times. This theory is too involved in a special vocabulary to be noticed here, yet notable about it for our purposes is the extraordinary freedom of mind it suggests. To speak of using introspection as the source of primary knowledge about consciousness—about ourselves—is a plain declaration of emancipation from past assumptions about the nature of being. Indeed, it is just such statements which make it obvious that we live in an interval of sudden changes in basic thinking, making the present, as Dickens put it, the best of times and the worst of times. It is the worst of times because, when the structure of familiar beliefs about the world and human beings gives way, Whirl becomes king for a great many people. Wild guesses seem shrewd insights to those who have no disciplined habits of thought. The old restraints, however mistaken or partial in their foundations, were still restraints, and now they are gone. But it is the best of times for those who recognize that new maps of human possibility can be drawn and circulated among others of like mind.

The Origin of Consciousness is a fine example of the use of this freedom. It shows what liberated self-consciousness is capable of making

out of the materials of psychological history when used in combination with introspective research. The example of a free mind at work is far more valuable, in a time of great cultural uncertainty, than a set of plausible conclusions based upon assumptions that are rapidly losing their stability.

Such writers might be taken as rather provocative examples of "who we are." They actively demonstrate that we are centers of consciousness engaged in deliberating about our consciousness and trying to understand it. We are not merely selves, but selves with awareness of self. This is our true being and nature, indicating, one may think, the work we have to do. Ortega put the necessity (and obligation) of conscious selves with rare clarity in *Man and Crisis*:

Man, every man, must at every moment be deciding for the next moment what he is going to do, what he is going to be. This decision only he can make; it is not transferable; no one can substitute for me in the task of deciding for myself, in deciding on my life. When I put myself in an other's hands, it is I who have decided and who go on deciding that he will direct me, thus I do not transfer the decision itself, but merely its mechanism.

For when each of us asks himself what he is going to be and therefore what his life is going to be, he has no choice but to face the problem of man's being, of what it is the man in general can be and what it is that he must be. But this, in turn, obliges us to fashion for ourselves an idea, to find out somehow what this environment is, what these surroundings are, this world in which we live. The thing about us do not of themselves tell us what they are. We must discover that for ourselves. But this—to discover the self of things and of one's own being, the being of everything—this is none other than man's intellectual business, a task which is therefore not an extrinsic and superfluous addition to man's life, but a constituent part of that life. This is not a matter of man's living and then, if it falls out that way, if he feels some special curiosity, of busying himself in formulating ideas about the things around him. No, to live is to find oneself forced to interpret life. Always, irresistibly, moment by moment we find ourselves with definite and fundamental convictions about what things are and what we ourselves are in the midst of them; this articulation of final

convictions is what molds our chaotic surroundings into the unity of the world or a universe.

Ortega, Mr. Jaynes might say, here gives a precise account of modern man. The inquiry into self, the quest for "identity," is the great theme of the present, in part because, perhaps, we have been *forced* to think about these things by the pressures and malfunctions of the times. Because life seems to be going bad, we must learn to interpret it.

In other ages, interpretation and guidance were left almost entirely to the gods. Mr. Jaynes calls Homer to witness. The protagonists of the *Iliad*, he says, "have no will of their own and certainly no notion of free will." Moreover—

The beginnings of action are not in conscious plans, reasons, and motives; they are in the actions and speeches of gods. To another, a man seems to be the cause of his own behavior. But not to the man himself. When, toward the end of the war, Achilles reminds Agamemnon of how he robbed him of his mistress, the king of men declares, "Not I was the cause of this act, but Zeus, and my portion, and the Erinyes who walk in darkness: they it was in the assembly put wild *ate* upon me on that day when I arbitrarily took Achilles' prize from him, so what could I do? Gods always have their way." And that this was no particular fiction of Agamemnon's to evade responsibility is clear in that this explanation is fully accepted by Achilles, for Achilles also is obedient to his gods. Scholars who in commenting on this passage say that Agamemnon's behavior has become "alien to his ego," do not go nearly far enough. For the question is indeed, what is the psychology of the Iliadic hero? And I am saying that he did not have any ego whatever.

This was also the contention of Plato, who wanted the Greeks to accept the responsibility of having independent souls, to become more than reflexes of commands from Olympus. Modern western rationality dates from Plato, and the breakdown of the bicameral mind—the mind directed mantically, not rationally—is a Socratic triumph, although only in form, not yet in substance. The gods, when they were in charge, shaped human life in a heroic mold, but man thinking for himself, the modern man who no

longer feels divinely inspired obligations, became engrossed in the construction of acquisitive societies.

What, then, are we? According to Socrates and Pico della Mirandola, we are self-made souls, and Ortega agrees. Through self-consciousness, Mr. Jaynes might add, we make ourselves. But what then should we *do*?

This is the difficulty with abstract, formal knowledge. *We* are not abstractions, moving in ideal paths sketched out from intellectual calculations. We are very much in the world, dwelling in particular places, and often feeling ourselves to be prisoners of intolerable constraints. Yet the sun still comes up in the morning, and the day is there to be used.

Well, does anyone really know what he should do?

For considering answers to this question we must fall back on the resources of biography. Early in *The Farther Reaches of Human Nature* A. H. Maslow proposed that if we are wondering what we ought to do, it seems sensible to look at what the best of humans have done with their lives. "The Good Specimen," he says, serves as "the Chooser for the Whole Species." He develops this idea:

If I ask the question, "Of what are human beings capable?" I put this question to this small and selected superior group rather than to the whole of the population. I think that the main reason that hedonistic value theories and ethical theories have failed throughout history has been that the philosophers have locked in pathologically motivated pleasures with healthily motivated pleasures and struck an average of what amounts to indiscriminately sick and healthy, indiscriminately good and bad specimens, good and bad choosers, biologically sound and biologically unsound specimens.

If we want to answer the question how tall can the human species grow, then obviously it is well to pick out the ones who are already tallest and study them. If we want to know how fast a human being can run, then it is no use to average out the speed of a "good sample" of the population; it is far better to

collect Olympic gold medal winners and see how well they can do. If we want to know the possibilities for spiritual growth, value growth, or moral development in human beings, then I maintain that we can learn most by studying our most moral, ethical, or saintly people.

Why not, then, look at some heroes? Not go back to Achilles, but find some distinguished individuals of our own time, or close to it. Achilles did what the gods commanded, and while he is accounted a hero, he made a considerable mess of things as a human being. We want as heroes, men who think for themselves, but on a scale that excites our imagination. Such an investigation calls for more than a catalog of their objective achievements. What was behind their determination? How did they accomplish what they did?

In his essay, "Power and Purity," in *American Review* No. 19 (January, 1974), John H. Schaar gets at these questions by comparing several great men of our age with the rest of us. He chooses Gandhi, Lenin, Lincoln, and Malcolm X for examples, pointing out that they *lived* their ideas, while we merely hold or have opinions. They act on their convictions; we are mostly spectators. The comparison leads to a rather harsh conclusion, but hardly inaccurate or unjust:

To an unusual degree great actors are their ideas. More of their lives are contained in, or centered on, their views. In that fascinating way, great actors have a mode of experience or selfhood and identity that is different from ours. That difference makes us uneasy, for we know that at bottom the great actor is demanding of us that we change our lives. We need defenses against that, and the condescension implied in such words as "fantastic," "simplistic," "single-minded" helps provide those defenses. To us, the actor seems too simple, and that simplicity is threatening. . . .

Consider, as examples, Joan of Arc, or Gandhi, or Martin Luther King. We know the world is too tired and too complex to respond to their simple calls. They seem childlike, and our approbation of them often smacks of the approbation we give a "good" child when he behaves nicely, in a manner beyond his years. Most foolish of all, great actors often seem willing to suffer, even to die, for their foolish views.

Nothing is sillier than that. They lack common sense and the common restraints of prudence, of family affection, of worries about economic security. There again, they can seem like children, prepared to throw away everything on a chance or a venture that has little hope of success. We would be fools to follow.

Now comes an observation that throws light on the extraordinary resources of great men:

Very many great actors think in mythic terms. They are possessed by a myth, they act within it, they see it as more real than the world that others call real. We, of course, think ourselves beyond myth: we are cool and intelligent. We know the difference between myth and reality. We know the facts. It is hard for us to understand how a man such as Malcolm X, say, can passionately believe a myth that we know to be patently false. . . .

And so, through condescension, we cut even the great down to ordinary size. We do not appreciate that great actors earn their knowledge the hard way—by asking questions and living the answers—while we earn ours the easy way—by borrowing from others, and by waiting till the case is closed, the action finished, before pronouncing on it.

In other words, by growing up intellectually we left the gods behind, but we also divorced ourselves from the heroic spirit. No epic material is offered to the poets of our day. But meanwhile a struggle which promises to have epic dimensions is already upon us, giving reason enough for the inquiries pursued by Julian Jaynes and John Schaar. Generations of rule by the norms of mediocrity—by the dull averages of behavior in a time of cultural drift—have generated responses from both nature as a whole and man in the mass that can no longer be ignored. There is now insistent reason to look more closely at what the best of men—the really "good specimens"—decided that they must do, whatever the personal cost.

Mr. Schaar's comment on the importance of the simplicity of heroic action applies to all who are still content to drift:

We do not appreciate the need for "simple" views when emergency demands response. We do not acknowledge that we too have myths. Sometimes, when we look back over our lives, we can see that we

acted on a myth, but we cannot see that we are doing that now, for if we could, then our views and beliefs would no longer be mythic. We can only see others' myths, not our own. And, finally, we cannot see that an element of the mythic mentality is probably necessary for action, because we can never know—in the meaning we ordinarily give that term—enough to assure a successful outcome.

The best men model their lives—they seem to do it by instinct—on *great* myths, while others, by far the majority, are animated by "success stories" of petty dimension. This makes the case for great literature, since myth, as Mr. Schaar suggests, fills in the blanks of our knowledge, making real action possible. We need the great myths to enrich our thought about what we must do next.

Our very language is a vast conglomerate of terms drawn from natural processes—created by metaphors more than by any precise knowledge. Myth and metaphor supply the substance of all we know, or feel that we know, since they put working meanings in the place of simple ignorance. Julian Jaynes shows this to be the case:

Even such an unmetaphorical-sounding word as the verb "to be" was generated from a metaphor. It comes from the Sanskrit *bhu*, "to grow, or make grow," while the English forms "am" and "is" have evolved from the same root as the Sanskrit *asmi*, "to breathe." . . . Of course we are not conscious that the concept of being is thus generated from a metaphor about growing and breathing. Abstract words are ancient coins whose concrete images in the busy give-and-take of talk have worn away with use.

Mr. Jaynes adds this interesting comment:

. . . if we ever achieve a language that has the power of expressing everything, then metaphor will no longer be possible. I would not say, in that case, my love is like a red, red rose, for love would have exploded into terms for its thousands of nuances, and applying the correct term would leave the rose metaphorically dead.

Similarly, we shall need myths for our larger sense of meaning—since myths are complex metaphors of the lives we may live—until we succeed in embodying the godlike in our conscious existence. The best men, the gold

medalists at life, give evidence of how this can be done, or rather be begun. But they will still need to use metaphor in speaking to us.

REVIEW

PROJECT: SELF-DEFEAT

To say that modern man has outgrown war is by no means to suggest that there will be no more war. This would be a nonsensical assertion in the present. Yet there is much evidence to indicate that vast numbers of people regard war as futile, pointless, and as wrong as any collective human activity can be. Even while future military activities are planned and prepared for, the most intelligent among those who do the planning, and who will be involved, are like men led through an incomprehensible maze by the reflexes of an uncontrollable habit.

The revulsion against war became evident in the West after World War I. The feeling is fully recorded in books such as Nitti's *The Decadence of Europe* (1923), *The Malady of Europe* (1923) by M. E. Ravage, Caroline Playne's *Neuroses of the Nations* (1925), and Norman Angell's *The Fruits of Victory* (1921). The periodical literature of that time was even more impressive in its rejection of war. Three articles in the *Atlantic Monthly* for May, 1920, deserve frequent rereading even today: by Sisley Huddleston ("The Human Spirit in Shadow"), Paul Rohrbach ("German Reflections"), and Guglielmo Ferrero ("The Crisis of Western Civilization"), with a second part of Sisley Huddleston's contribution in the November issue. This English journalist was not speculating, he saw what the war had done:

Turn where one will, one finds only that the war has worsened mankind. Those who speak of the heroic virtues which are born on the battlefield, which spring, like the Phoenix, out of the ashes of war, are uttering the most stupid claptrap. The dominion of darkness has spread over Europe, and a slimy progeny of cruelty, of bestiality, of insensibility, of egoism, of violence, of materiality, has crawled into the light of day—a noisome brood, of which it will be long before we can dispossess ourselves.

Writing in the *Atlantic* for January, 1942, Raoul de Roussy de Sales attempted to explain

why the French succumbed so readily to the Nazi advance in World War II:

Given the mentality of the Western people, their ideas of war, and the education they had received during the twenty years that separated World War I and World War II, there was no possibility for them to accomplish overnight the fundamental transformation from pacifism to full war-mindedness that was necessary to meet the crisis. They behaved like a man who has fallen into the water and who struggles desperately to reach the shore, but whose frantic efforts will not prevent him from drowning if he does not know how to swim.

In effect, de Sales was saying that the French were too civilized to defend themselves effectively against the brute strength of the Germans. A more inclusive truth, however, might be that, as Thomas a Kempis said long ago, while all men want peace, only a few men want those things that make for peace.

Unfortunately, such searching observations are either found unpalatable or regarded as a change of subject. Most of the widely read literature on war is still concerned with the horror of mass killing and its dehumanizing results. Only Gandhi and a few writers following his lead have deliberately focused on the things that make for peace, and their appeal has been limited to intellectual and religious minorities, although growing in strength, year by year. Meanwhile, most of the books on war published in the West are those presenting effective evidence that war is now an anachronism. A fine volume of this character is *The Face of Battle* (1976) by John Keegan. Mr. Keegan is a man in his mid-forties who has never been in a battle, but has lectured to the cadets at Sandhurst (Britain's "West Point") about how battles are fought, or should be fought, for the past fourteen years.

What is the purpose of this "training" of the young men who will be officers in the British Army?

That aim, which Western armies have achieved with remarkably consistent success during the two hundred years in which formal military education has

been carried on, is to reduce the conduct of war to a set of rules and a system of procedures—and thereby to make orderly and rational what is essentially chaotic and instinctive. It is an aim analogous to that—though I would not wish to push the analogy too far—pursued by medical schools in their fostering among students of a detached attitude to pain and distress in their patients, particularly victims of accidents.

To go on doing what he is doing, in his frame of mind, Mr. Keegan must be a somewhat detached man, for he seems personally to have outgrown war. He plainly thinks that war has become unmanageable, destructive of those who fight, to say nothing of the "enemy." He is mainly concerned with how the men who fight *feel*, and describes the methods used to enable them to fight a little longer than they would without such help. The body of the book gives close accounts of three battles—Agincourt, Waterloo, and the Somme, to show "what the warfare, respectively, of hand, single-missile and multiple-missile weapons was (and is) like, and to suggest how and why the men who have had (and do have) to face those weapons control their fears, staunch their wounds, go to their deaths."

The last chapter, titled "The Abolition of Battle," suggests that battles will cease because human beings can no longer stand the emotional strain they impose. Speaking of tank warfare, Mr. Keegan says:

It has already been grasped that to enclose men in a confined and windowless armoured box for long periods is to risk, among other effects, seriously disorientating them. It is therefore intended, when the next type of armoured personnel carrier is built, to provide a quartz peephole for every passenger, so that he shall be able to maintain some picture, however fragmentary, of where he is being taken. It is also understood that soldiers cannot be cramped and congested for long periods without losing their efficiency, and the interior of the infantry carriers are, as tanks are already, provided with means to heat food and cool drinks.

Yet one wonders whether all these measures will realize that fighting efficiency they are designed to assure? For what can they be but minor alleviations of a further impersonalization of warfare, a greater

alienation of the soldier from anything recognizably human or natural on the field of battle, a steeper reduction of his status to that of a mere adjunct to machinery, the software in the system.

From study of World War II, psychiatrists have determined that "the very first hours of combat disable ten per cent of a fighting force." What will happen, the author asks, if, as is planned, future wars will require "soldiers to remain continuously in action for periods of a hundred or a hundred and fifty hours"?

There is even talk of attempting to keep them awake for eighty hours at a stretch, using if necessary doses of one of the amphetamines as the agent; ironic if official condemnation of the private use of hallucinogens and tranquilizers in battle is to partner an official administration of stimulants. In practice, the Israelis and the Arabs on whom night-fighting equipment had been lavished, found themselves so exhausted at the end of the daylong battles of October 1973, that they relapsed gratefully into sleep as soon as darkness fell. But the NATO powers cannot count, as can all parties to the Palestinian problem, on having their wars stopped by outside intervention whenever a defeat looms. Their armies therefore must train *in* all seriousness for "the land battle in Central Europe," must learn to live for days in stifling gas-masks and clammy radiation suits (which would have to be worn as a precaution even during conventional operations), isolated inside their armoured vehicles from sight or smell of the outside world, connected to it only by disembodied voices received through their wireless sets and able to form an impression of the events transpiring beyond their carapace only from whatever fragments of fact higher authority vouchsafed to communicate.

Today, Mr. Keegan says, the planners of armies led by a military caste must look "at the economic cost of the state's effort to reform from the urban crowd or the rural peasant army whence the beaten army was drawn, a substitute for it; at its political costs also, in terms of the concessions the tax-paying classes will wring in return for financing the rebuilding, and the demands for a guarantee of their privileges the military classes will present in competition."

Where the army is levied directly on the male youth of the country by general conscription, as in the

liberal and not-so-liberal states of twentieth-century Europe and America, we should look far more widely and deeply. . . .

The young have already made their decision. They are increasingly unwilling to serve as conscripts in armies they see as ornamental. The militant young have taken that decision a step further: they will fight for the causes which they profess not through the mechanisms of the state and its armed power but, where necessary, against them, by clandestine and guerilla methods. It remains for armies to admit that the battles of the future will be fought in never-never land.

While many soldiers may accept the weapons handed to them, and try to believe in what they are told to do, the actual battle, Mr. Keegan thinks, may bring defeat to all sides. Through its own over-developed attributes, battle is abolishing itself.

If it is true that we have outgrown war, or have evolved its techniques to the point of general self-defeat, how long, one wonders, can human beings be persuaded to go through its motions?

COMMENTARY

ALIENATION AND RESTORATION

IN the column opposite John Keegan describes the role of conscripted humans as the "software" of technological war—"a mere adjunct to machinery." Modern soldiers are "isolated inside their armoured vehicles from sight or smell of the outside world, connected to it only by disembodied voices received through their wireless sets and able to form an impression of events transpiring beyond their carapace only from whatever fragments of fact higher authority vouchsafed to communicate."

Pretty awful, we think—a really insane situation. Yet a curious parallel to this artificial existence is emerging as an actual choice by a considerable number of people. Reporting on the frenzied sectarianism of the "Born Again" movement (in the *Saturday Review* for Sept. 19 of last year), Dwayne Walls notes:

The airwaves abound with radio and television "ministries." Their impact on the greater religious and secular culture is difficult to measure, but their devotion to one particular ministry is not. It can be seen and counted in the enormous sums of money contributed regularly to the hundreds of minister-personalities who abound in the broadcast media. . . . Given the trends in American life, it is reasonable to conjecture that "church religion" might ultimately be replaced by disembodied voices and faces on radio and TV sets. The Jesus movement, with its demonstrated affinity for pop culture, would be right at home in such a setting.

Twenty years ago, William Barrett generalized such developments as the psychological accompaniment of technology. He said in *Irrational Man* (Doubleday, 1958):

The last gigantic step forward in the spread of technologism has been the development of mass art media of communication: the machine no longer fabricates only material products; it also makes minds. Millions of people live by the stereotypes of mass art, the most virulent form of abstractness, and their capacity for any kind of human reality is fast disappearing. If here and there in the lonely crowd (discovered by Kierkegaard long before David

Riesman) a face is lit by a human gleam, it quickly goes vacant again in the hypnotized stare at the TV screen. When an eclipse of the moon was televised some years ago, E. B. White wrote in the *New Yorker* that he felt some drastic turning point in history had arrived: people could have seen the real thing by looking out of their windows, but instead they preferred looking at the *reflection* of it on the screen.

Regarded in this light, the spreading movement toward voluntary simplicity becomes an intuitive response to the requirements of sanity. Little by little, we are beginning to *know* what we must do.

CHILDREN

. . . and Ourselves

SOME SOCIAL STUDIES

GOOD items for report here are materials which make one wish they could somehow reach all the young of school age. Ordinarily one thinks of Switzerland as a land of lakes, Alps, bankers, and watch-makers where, in the summertime, rich people go to ski. But in these days of unwieldy, costly, and arrogant government, another attainment of the Swiss is worth knowing about: for centuries they have practiced decentralized democracy. If "social studies" in the schools can be made issue-oriented, then an article in the (British) *Ecologist* for last December, on the way the Swiss manage their affairs, would certainly help to start some thinking.

The writer, Hans Tschäni, begins: "It is impossible to examine Switzerland's political life without at once encountering the three key phrases," which are—Federalism, Direct Democracy, and Communal Autonomy. The Greeks, we are told, practiced direct democracy. In the early years the United States was a confederation, and a contemporary American historian now looks back at that time with admiration. One has written a book about it (*America Confronts a Revolution* by William Appleman Williams). But communal autonomy seldom thrives except under the lax rule of ineffectual central governments.

The Swiss, however, have managed to exemplify all three of these conceptions of social order. Mr. Tschäni says in preliminary summary:

Each of the 25 cantons that compose the Swiss Confederation has an independent democratic existence; every year there are two or three referenda, which lay domestic issues before the whole populace and keep the party machinery in motion; and in around 3050 communes, where clubs and societies provide a rich social life for the local people, the idea of communal autonomy has survived despite all hostile influences.

In its basic political structure Switzerland is not significantly different from other Western federal states: at the lowest level there is the *Gemeinde*, the commune; next comes the canton; and at the summit stands the central state, called in Switzerland the *Bund*, or *Bundestant*, which is responsible for foreign policy, for the maintenance of the constitution, and for the army, and hence is the ultimate authority in matters of war and peace. It is in the elaboration of this basic structure that the Swiss have taken a path of their own, in accordance with their particular needs. Because of their strong political traditions, it was a matter of necessity for the Swiss to develop their own form of federalism, but they have been able to make a virtue of this necessity. Their success in extending the procedures of local decision-making to the functioning of the *Bund* as a whole has enabled them to keep direct democracy alive side by side with parliamentary democracy; and further they have managed to preserve many of the benefits of the commune as an autonomous body. In all this, the Swiss were fortunate in that, from the first, the communes and small communities of the Swiss valleys were viable and vigorous entities. In the creation of Switzerland, what had to be "organized" was only a small number of cantons (by Napoleon) and the *bund* itself (by the nineteenth-century Liberals). The communes, constituting by far the greater part of the elements of the state, had arisen through a natural process of growth, and finally it required only pressures and influences from outside to bring about the transformation of these small independent communities, after centuries as neighbors, into a united confederation. . . .

Federalism is a system which operates to the benefit of the individual, and hence also of democracy. It divides the state into smaller communities, and so makes an anonymous whole more easily grasped. As already noted, Switzerland's political system is a natural consequence of a historical process. It has its basis in centuries of experience of self-determination and self-government in communes and valley communities, and there can be doubt today that Switzerland must be federal if it is to exist at all. . . .

Swiss democracy is the outcome of a natural evolution not only in its federal structure but also in the form of the decision-making procedure. In the Alpine valleys and villages, where the Swiss learnt the communal management of common land and produce, the most important decisions were made by a general assembly of all the free citizens.

These are the general lines of Swiss self-government. The rest of the article gives detail on how it works. Any sort of education for the future (and for changes in the present) must draw on material such as appears in the *Ecologist*. The magazine should be available in every sort of school. This year it is coming out every two months. A subscription is \$9—write *The New Ecologist*, 73 Molesworth Street, Wadebridge, Cornwall, PL27 7DS, U.K.

Resurgence for last November-December—another valuable British magazine—printed an answer by Rudolf Rocker to the question, "Why Was Greece Great?" Since so much of what we admire in Western civilization had its origin in Greece, the central point of this article should be known to everyone, students especially. Here the emphasis is on cultural rather than political values, yet the basis of Greek cultural achievement is again autonomy and freedom from central control. Rudolf Rocker develops his subject in a way that encourages the reader to contrast our present arrangements with the very different ways of the Greeks:

For the Greeks, art was not a private interest of individuals, which they pursued as if it were some sort of sport, but a creative activity that was intimately interwoven with their whole social life, and without which they could not conceive existence. The Hellenes were perhaps the only people that ever understood how to make an art of living itself; at least no other people is known to us among whom the intimate connection of art with every phase of personal and social life is so clearly and impressively apparent. A community like Athens, which spent more for the support of its theater and its dramatic art than it did on the wars with the Persians, which threatened the entire political existence of ancient Hellas, is hardly conceivable to us today, in this time of state barbarity when bureaucracy and militarism absorb the greatest part of the national incomes of all so-called "civilized" peoples. But it was only in such a community that art could develop to such a height.

If one turns to observe what was the status among the Greeks of that national and political unity which is asserted to be the indispensable preliminary to the development of any kind of culture among a people, one comes to conclusions that are utterly

destructive of this view. Ancient Hellas never knew what national unity meant, and when towards the end of its history national-political unity was forcibly imposed on it from without, it was the end of Grecian culture, which then had to find another home for its creative activities. The Greek spirit simply could not endure the national-political experiment, and was gradually extinguished in the countries in which its force had poured forth for centuries.

The fall of Athens, Rocker believed, was due to her growing power after the victory over the Persians. Athenian hegemony led to greater and greater privileges at the expense of her allies, until the political motive became dominant.

This is precisely the curse of every power of whatever sort: that its holders misuse it. Against this manifestation no reform helps, no safety valve in the constitution, however farsightedly devised; for it springs from the innermost nature of power itself and is therefore inevitable. . . . Everything which seems to us base and contemptible in private life becomes—when statesmen use it—patriotic virtue, provided that success treads upon its heels. And since with the extension of power more and more economic wealth falls into the laps of its possessors, there develops a system of venality and corruption that gradually undermines all social morale, without which no community can long endure. So power becomes a terrible scourge to social life and its creative cultural forces. Even the Grecian *polis* proved no exception to this rule, and fell into inner dissolution just in the proportion that political ambition got the upper hand in it.

Moreover, it was shown then, and has ever since been constantly confirmed, that war, which hopeless fools celebrate as the rejuvenation of social life, usually affects the victor more injuriously than the vanquished. It happened thus in Athens also. Hand in hand with the luxuriant growth of a money oligarchy went the impoverishment of the lower sections of the people, the destruction of the ancient foundations of their society. On this and on her slave economy Greece was at last to wreck herself.

A little later came conquest by Alexander of Macedon. "The former citizens of free cities became subjects of the unified national state, which directed all its forces to reducing every manifestation of social life to the dead level of its political purposes."

FRONTIERS Tensions of the Times

A REFLECTIVE discussion of present-day agricultural technology (in *NCAT Briefs* for January) points out that while there have been great gains in productive efficiency, "the results in a human and an ecological sense seem very costly." The writer, Isao Fujimoto, explores the relation between this technology and war:

When we examine the source of the current agricultural technology, we see it as closely related to technology developed for, or because of, war. For example, explosives and fertilizers go together. It was the development of the Haber process for the artificial fixation of nitrogen that enabled the Germans to launch World War I. They no longer feared being cut off from their guano nitrate supplies in Chile. Haber's process revolutionized not only war but also agriculture. With the development of nitrogen-fixing factories, the question was how this process could best be used to advantage in the post-war period. An obvious application was in farming. The study of what went into the growth of the commercial fertilizer industry, including the educational and sales campaigns, certainly deserves more attention.

Tractors and tanks are close cousins if not blood brothers. The history of the Caterpillar Tractor Company shows the transfers in both directions, especially during the periods before and after three major conflicts—the two world wars of this century and the Korean War. The major shift from animal to tractor power came after World War I.

This writer continues:

In *Silent Spring* Rachel Carson pointed out that pesticide is a child of the Second World War. "In the course of discovering agents for chemical warfare, some of the chemicals were found to be lethal to insects. This discovery did not come about by chance: insects were used to test chemicals as agents of death for man." Even the first medical uses for pesticides were carried out by the military—Italian villagers were dusted with DDT to attack typhus in 1943.

The legacy of the Vietnam War is defoliants.. Herbicides are used to kill weeds on farms, but they

were the principal agents for a scorched earth policy. The ecological consequences are far reaching and long lasting, rendering recovery a horror few can gauge.

It should come as no surprise that the transfer or extension of such technology between war and agriculture produces results that are destructive, exploitative, and violent. Despite the pride that some people express in what the spirit of war can do in stimulating efficiency and production, it is also important to remember that wars are neither ecological nor humane. Some swords are not meant to be beaten into plowshares, and even if they were, they cannot disguise their destructiveness.

NCAT Briefs is a publication of the National Center for Appropriate Technology, which also issues *NCAT News*. The address is P.O. Box 3838, Butte, Mont. 59701. Interestingly—and encouragingly—Bruce L. Welch, an environmentalist with medical background, begins an article titled "The Reality of Solar Power" (in the *Nation* for Jan. 21) with these paragraphs:

There is no shortage of energy, only a shortage of initiative for making energy accessible in usable form. We are still in a position to choose our future energy sources and, hence, to shape other important characteristics of society that depend upon them. The process of making that choice and the forces that shape it are of major public concern.

Fortunately, ours is a government of contradictions, of checks and balances, so complex that it can harbor, even nurture, the seeds of contradiction to administrative intent. Candidate Carter said there would be no more nuclear power except as a last resort. Yet the thrust of the Department of Energy's emerging program is to speed up development of nuclear power while doing no more for solar energy—indeed, even less—than was done by the Ford administration. . . .

Yet, like the truth that will come out, superior technologies tend to come to the fore. Quietly, as inexorably as the sun rises, a solar electric age is being born. Acting against the major thrust of administrative policy and the inadequate advice of "prestigious" scientific committees, the Congress is paving the way. .

After a summary of the progressively reduced costs of solar cells—which convert sunlight into electricity—while the cost of nuclear installations

has climbed during the past twenty years at twice the general rate of inflation, Mr. Welch says:

A solar electric age is coming no matter what the federal administration does. The government can merely speed up or slow its coming. If we wish it to be so, solar cells for generating electricity can become cost-competitive with nuclear fission in widespread applications within little more than half the time that it takes to build a new nuclear power plant. . . . Solar cell electricity would have come into widespread use spontaneously, and much sooner, had it not been for the false promise of economic competitiveness given nuclear fission by more than a quarter century of indulgent government support of the nuclear industry. Solar technologies would develop rapidly if the government would simply withdraw all support from the nuclear industry.

In *Resurgence* for January-February, John Seymour has a high time telling how he became a cultivator of the land:

Sally and I got tired of living in a boat, went ashore, rented five acres of what was then wasteland for twenty-five pounds a year, and were driven into what people now talk of as "self-sufficiency" by reason of having so little money and being so far from a road. We found out as much about feeding oneself—and other people—from a small piece of land as we could, and I believe as much as anybody else has found out.

Seymour was a writer—still is—and he calls himself a "middle-class bourgeois dilettante playing at being Robinson Crusoe," but he found this background no obstacle. He says, moreover—

I know as many "working class" people who have taken to the land in their way and are doing it just as well as anybody else. "But you've got to have money!" shout my critics, who all feel a little guilty because they are leading such sybaritic lives themselves. Have you? I'd like you to ask my bank manager how much money I had when I bought a sixty-two acre farm in Wales. He'd tell you less than nothing—because at the time I owed him two hundred and fifty pounds. Sally and I had nothing when we bought Fachongle Isaf. All right—we've got nothing now—but at least we've managed to feed a family of four children and innumerable other people too.

John Seymour is author of *Farming for Self-Sufficiency* (Schocken paperback), a book which tells what he found out on his piece of land.