

RELIGION, ART, AND SCIENCE

MATURITY is characterized by the capacity to resolve contradictions in behalf of wise decision. Since it is commonly conceded that maturity is rare, that partisanship is common, and that the conflicts between partial views and differing interests largely shape the human environment and govern many personal decisions, it must be admitted that the knowledge or wisdom suggested by "maturity" is not what we call "public truth." It is real, but not demonstrable, save in its beneficent effect. The wise man brings undefinable factors of insight to his decisions. Sometimes he is able to explain them to the satisfaction of others, but often not. Collective growth in wisdom is certainly desirable, but we don't know how it is achieved or even if it is possible. We don't even know how to "teach" maturity to individuals—whether young or old—although we have occasional records in biography of the thought and action of individuals who seemed to have a maturing influence on others. At root this is of course the old Platonic question: Can virtue be taught?

The inquiry is so far-reaching that we need to subdivide its application in order to begin. How does the question emerge in cultural development? Well, a broad division may be made between practical activities and serious wondering about purpose or meaning. We call these divisions science and religion. Here we shall consider science and religion rather abstractly and in ideal terms. Religion, then, is concern for the meaning of life, and science the discipline which discovers how things work. It seems obvious that these two inquiries ought not to be separated, but equally obvious that in fact there are and must be ways in which they are separated. The role of maturity is to get them back together again—in the right order and without loss of the value of their differences.

This duality, or something very like it, runs through every aspect of life. In art it is inspiration versus technique. In science it is intuition versus verification. In scholarship it is insight versus documentation. In enterprise it is managerial sagacity versus rational procedure and attention to detail. We could go on to show by example that this duality is present in everything we do, each pole somehow informing the other, preserving the balance required by actual achievement. It follows that contradiction or paradox is always present when we do not "see" in advance the as yet unachieved balance; moreover, we may not be able to recognize how it was accomplished after the balance has been reached. Yet, when we are at our best, we pursue that balance above all, and try to give an account of the steps which lead to it. But we are obliged to admit that maturity can be recognized but not defined. To define maturity would be to reduce it to "science."

A present sign of the growing maturity in science—or, more accurately, of certain scientists—is the current effort to undo the attempt at reduction of all truth to science, which of course adds value to the truth of science. Recognition of the limits of a particular way of knowing increases the validity of what is truly known by that means, since the distortion, the partisanship, is gone.

In the *American Scholar* for the autumn of 1979, Victor F. Weisskopf, who teaches physics at M.I.T., compares science and art as ways of knowing, or exploring. Why not compare science and religion? He chose art, he explains, because, historically, religion has defaulted in its task of giving an acceptable account of meaning. In a time when religious ideas or teachings are positive and strong, art remains the handmaiden of religion. This is especially evident in the art of the East. In a monograph on Indian art, W. Norman

Brown said: "Sculpture was not meant to be a reminder of a human being or of an apotheosis of man, but of something abstract, spiritual in its reality beyond apprehension by the senses, an ocular reference to universal knowledge that might somehow become comprehensible to humanity."

A passage by Lafcadio Hearn on faces in Japanese art gives confirmation and shows, also, how science may illuminate the meaning of a work of art. In this essay (in *Gleanings in Buddha Fields*) Hearn wrote:

The higher art, the aspirational art (whether Japanese or old Greek), is . . . essentially religious by its method.

Where the scientific and aspirational extremes of art touch, one may expect to find some universal aesthetic truth recognized by both. They agree in their impersonality: they refuse to individualize. And the lesson of the very highest art that ever existed suggests the true reason for this common refusal.

What does the charm of an antique head express, whether in marble, gem, or mural painting,—for instance, that marvelous head of Leucothea which prefaces the work of Winckelmann? Needless to seek the reply from works of mere art critics. Science alone can furnish it. You will find it in Herbert Spencer's essay on Personal Beauty. The beauty of such a head signifies a superhumanly perfect development and balance of the intellectual faculties. All those variations of feature constituting what we call "expression" represent departures from a perfect type just in proportion as they represent what is termed "character";—and they are, or ought to be, more or less disagreeable or painful because "the aspects which please us are the outward correlatives of inward perfections, and the aspects which displease us are the outward correlatives of inward imperfections." Mr. Spencer goes on to say that although there are often grand natures behind plain faces, and although fine countenances frequently hide small souls, "these anomalies do not destroy the general truth of the law any more than the perturbations of planets destroy the general ellipticity of their orbits."

Both Greek and Japanese art recognized the physiognomical truth which Mr. Spencer put into the simple formula, "*Expression is feature in the making.*" The highest art, Greek art, rising above the

real to reach the divine, gives us the dream of feature perfected. Japanese realism, so much larger than our own as to be still misunderstood, gives us only "feature in the making," or rather, the general law of feature in the making.

Thus we reach the common truth recognized equally by Greek art and by Japanese art, namely, the non-moral significance of individual expression. And our admiration of the art reflecting personality is, of course, non-moral since the delineation of individual imperfection is not, in the ethical sense, a subject for admiration.

This is the sense in which art has been the handmaiden of religion, providing visual symbolism of some aspect of transcendental realization. What happens, then, when religion or the religious life of people suffers a decline? Prof. Weisskopf says:

Whenever the mythologic and religious fervor begins to weaken, art tends to separate from these realms and acquire an independent role, replacing myth and religion to an increasing extent. It continues to create realization of ideas and emotions that are important and significant in the culture of the time, although they may no longer be derived from a myth or a religion. Then it is art that serves as a powerful synthesizer of human experiences of the day, presenting to us messages of joy or sadness, greatness or meanness, beauty or terror, salvation or torture, that cannot be transmitted in any other way. Two periods of separation between art and religion are well known: one is that of the Hellenistic-Roman art; the other is our own period, which started in the Renaissance and in modern times has resulted in an almost complete separation.

Prof. Weisskopf's article is intended to show that religion and art embody holistic meanings—a sense of the sense of things—and that science, too, gives a deep sense of meaning, but in a different way, a particularized and more limited way, and he suggests that art and science are "complementary," providing insights into different aspects of reality. But the art he speaks of here belongs largely to the past. Present-day art, cut off from the nourishment of philosophic religion, fails in its role of providing holistic insight into meaning. Its inspiration, except for a few strong and intuitive souls, has been lost. And the holistic

aspect of science affects only the few. As Prof. Weisskopf says:

The grandest creations and achievements of art and science serve as inspirational sources only to a small minority of humans; their values seem to be not suitable for a wider spread. The large majority cannot get meaning, sense, purpose from these sources. . . . Perhaps the greatest problem of our day is that this craving is no longer fulfilled by the conventional religions and that there is nothing to replace them.

The kind of meaning that science provides to its perpetrators has not proven to satisfy this craving, even though everybody is fully aware that we live in an age dominated by science and technology. On the contrary, this awareness is tied to a large extent to practical applications, among which the military ones and the destructive effects of technology on the environment play an important role. The scientific insights into the greatness and unity of the universe, in the large and in the small, have not penetrated much into the minds of the people. This is probably the fault of the scientists who do not try hard enough to transmit the elation they feel at the peak moments of their work. They are too much immersed in their narrow specialties and do not sufficiently seek to express the deep connections their insights have provided.

He adds, however, that perhaps "the great ideas of science are not suitable to inspire outsiders with any true elation." This leads to another question: Couldn't there be a way of practicing and teaching science that would not isolate so severely from the rest of mankind the few who pursue scientific work?

Is modern art any more effective? It now seems mainly an expression of desperation:

It reflects a frantic search for some kind of meaning by trying to go in many hitherto untried directions. We observe an outburst of new ways and forms of expression. From time to time, indeed, something really great and beautiful is created but, more often than not, what we see are the results of wild experimentation for the sake of being different from what has been done before. Perhaps this frantic search is a symptom of a lack of sense and meaning. Perhaps it is a method to arrive at a meaning.

Many of the creations of contemporary art, especially in literature, deal with the tragedy and the

depth of our lack of purpose and meaning. In this effort our art is powerful, heart-rending, and deeply depressing.

Earlier in this article, Prof. Weisskopf describes the departure of science from the holistic approach to human experience, then shows what he means by the holistic aspect of science itself:

The tradition of holistic approach to the totality of human experience suffered an important change with the birth of natural science in the Renaissance. A new era began. Instead of reaching for the whole truth, people began to ask limited questions in regard to the natural world. They did not ask questions such as, What is matter? What is life? What is the nature of the universe? Instead they asked, How does the water flow through a tube? How does a stone fall to the earth? What makes the blood flow through the veins? What happens if you rub two objects against each other? The general questions were shunned in favor of the investigation of separable phenomena, where it was easier to get direct and unambiguous results.

We know what happened as a result. We learned how to do things. Our external life was transformed. "The renunciation of immediate contact with absolute truth," Prof. Weisskopf says, "the detour through the diversity of experience paid off." And then, as a sort of bonus, certain holistic meanings became apparent in the basic symmetries in nature, throwing light on the structure and order of things. The writer comments:

The holistic character of scientific insights differs greatly in character from that of myth, religion, and art. First of all it does not directly include what we commonly refer to as the human soul, our feelings of awe or desolation, our ambitions, our convictions of right or wrong. It includes only the physiological phenomena accompanying these realities.

The holistic character refers to the unity of natural phenomena outside our "souls."

This seems an entirely just account of the holistic aspect of scientific discovery or progress. Science also provides a vast array of physical and biological analogies which might endlessly

illustrate the invisible structures of a mythic and metaphysical religion, if we had one. But we don't have one, and we can't beg, borrow, or steal one. Philosophic religion is something that has to be grown.

Prof. Weisskopf gives this summary of the status quo:

The decay of a sense of meaning and the increase of cynicism in our culture have also contaminated the community of natural scientists and have shaken their conviction in various degrees for various members of that community; but there is still a good deal of belief in the purpose and meaning of their collective work. I cannot help feeling that they represent a "happy breed of man" among so many others who grapple with the problems of meaning, sense, and purpose.. ..

Do we find a similar fervor and sense of purpose among other groups? Surely we do. We find it among those who are devoted to creative, artistic activities and among those who try to improve the social fabric of our times in many different ways. However, they face a much greater challenge. The problems of natural science are much less messy and much less interwoven with the complexity and fragility of the human mind. It is much easier to perceive an underlying order in the flow of natural events if human behavior is excluded.

The decay of previously existing sources of meaning, sense, and purpose—such as myth and religion—has left a big void in our bellies, a void that craves to be filled. Every human craves for a meaning and a sense to his existence. The answers to these cravings must by necessity be holistic. They must embrace the totality of human experience and endow it with luster and light.

Here, surely, is represented maturity in the scientific outlook. There is a corresponding maturity in the work of those who study the fruits of religious inquiry—in, say, the writings of Huston Smith and the books of Wilfred Cantwell Smith—and we can find a similar maturity emerging in other callings, such as the writings of Maslow in psychology, and the more recent work of Jacob Needleman. How do we identify true maturity? Concern for the common good seems the most conclusive sign, when it appears in persons of manifest capacity. This quality

pervades Victor Weisskopf's *American Scholar* article and becomes forthright in his closing paragraphs. Here, after speaking of those few who are able to find sustaining inspiration in science and art, he says:

For the others among our fellowmen—and that is the vast majority—the burden is much heavier. Our material and spiritual world is in disorder and in danger of destruction. The great insights and elations of science, as well as of art, have not much impact on most of the people because these values are not connected with the ground swell of meaning that permeates the collective mind. But among the younger generation there are many signs and portents of a mounting craving for sense and purpose and for the dignity of the individual. This ground swell appears in various forms; some are constructive, some are destructive. There are promising efforts to improve the social and spiritual climate; there are cults and semi-religious sects. All too often some of these cults and sects have led to a misconceived mysticism and to a concentration on the inner self without the necessary relationship to society. Maybe there will come a day when scientific and artistic meaning will combine and help to bring forth that ground swell of meaning and value for which there is so great a need. The growing awareness of this need is in itself an important element that brings people together and creates common values and even elations. There is always hope—for hope.

Conceivably, it would help to stop thinking of this longed-for synthesis in terms of the institutionalized forms of religion, science, and art. Their isolated and separate expressions in society may be a collective mistake and a continuing barrier to understanding ourselves. After all, every human is at once a seeker for meaning, a practical problem-solver, and a craftsman who knows something of symbolic representation. We begin life with these capacities and they might be more symmetrically developed if our conceptions of religion, science, and art were more closely identified with these resources in every one of us. We could start out by asking: Which is "real"—real in the sense of being primary—moral experience or physical experience? If we as individuals are able to get our priorities in the right order, and keep them there, we might

dissolve more than half of all our troubles, while those which remained would become manageable.

Science gives order to physical experience—or to its objective elements, since the important order, which is our way of relating to the world, must come from ourselves. The order we make of our relationships grows from philosophy—our ideas of meaning, intuitive or traditional, and their reasoned elaboration. We design and move through our relationships, then, by the light of philosophy. The function of science comes into play when a man says to himself, "I want to know more about *that* relationship—what its parts are and how they work." Art enters spontaneously in response to the desire to shape and adorn our visible circumstances with signs of symbolic meaning that delight and instruct.

Today nearly all our institutions are top-heavy from loss of meaning. It seems a great mistake to let what may be their isolating and distorting habits define for us the meaning of our lives.

REVIEW INSTEAD OF COLLAPSE

AN American edition of James Robertson's *The Sane Alternative* (reviewed in MANAS for Oct. 4, 1978) is now available. The publisher is the River Basin Publishing Co. (Box 30573, St. Paul, Minn. 55175) and the price (paperback) is \$4.95. This book combines vision and direction in behalf of a "sane, humane, ecological future" with thorough-going analysis of the framework of the status quo. It distinguishes between necessary and constructive compromises and do-nothing apathy. It shows the need to recognize that social and moral change involves varying rates of progress and sometimes round-about paths, by reason of the differences in the way people conceive both their own and the common good.

It is comparatively easy to be a pure-hearted Utopian, but very difficult, sometimes, to discern movement toward the ideal in people who insist on going step-by-step. The old story of the tortoise and the hare has application here. Mr. Robertson offers as much good sense to the tortoises as he has for the hares among us. Interestingly, the American Revolution—the only really successful one in the eighteenth century, according to Hannah Arendt—was well equipped with both hares and tortoises. Paine was a hare, one of the best, and John Adams a tortoise, again one of the best. A good hare is able to understand the value of the tortoises, and vice versa. *The Sane Alternative* is a realistic study of the processes of this mutual reconciliation.

Hazel Henderson writes in her introduction to the American edition:

The Sane Alternative was an instant success when it appeared in Great Britain, and all of us on this side of the Atlantic who are involved in building what I have called "the emerging counter-economy" will find it indispensable. This book is a rare combination of important new theory about the transformation of industrial societies and their value systems, with practical guidance and organizing information that will enable small groups of citizens

to learn for themselves and teach others about the historic changes that are now taking place.

Concerning the existing economy, which Robertson calls the "official" or "formal" economy, Hazel Henderson says:

It is the economy of institutions and corporations, of government agencies and social services; and it is characterized by bureaucratic efforts to make all citizens dependent on it, to provide "full employment," and to centrally manage the society from its capital city (whether London, Washington, Brussels, or Ottawa). We are beginning to see that centrally managed state capitalism is not so very different from centrally managed state socialism. Both suffer from similar problems: overgrowth of bureaucracy; energy shortages and scarcity of raw materials; ecological disruption; excessively conceptual governing based on illusions created by too highly aggregated statistics; and loss of feedback from citizens at the grass-roots level. Their leadership is characterized by elitism with "expertise" that has become irrelevantly bound to specialized and fragmented disciplines, which have carved up the seamless web of reality into little boxes marked "economics," "engineering," "political science," and "ecology."

In contrast with this system is the "informal economy" of everyday interchanges among people in the course of living their lives—cooperative rather than competitive. This hardly noticed economy is really the foundation of our material existence, its operations so matter-of-course that their vital importance is overlooked. Hazel Henderson remarks that this unpaid work and the goods supplied without price or charge make it possible for competitive market-place activities to appear "successful." All that Scott Burns describes in detail in *Home, Inc.*, is included in this natural economy. It represents a spontaneous sanity which needs far greater scope:

As inflation erodes the cash economy, we can foresee how this decentralized "informal economy" can become our safety net and a bridge to a more viable future. We already see today's tremendous increase in more participative, locally based economic activities. Fifty million Americans belong to cooperatives; in 1977 thirty-two million grew the equivalent of \$14 billion of their own vegetables; five

million belong to self-help health-care groups; and at least five million have already dropped out of the "formal economy" by choice. In 1978, 10 per cent of all the new jobs in the U.S. economy were created by self-employment in the growing "informal economy." All of this was inevitable as the end of cheap energy and resources again made feasible and necessary the local production and consumption of goods and local efficiencies of scale.

What can be done to further this development?

Likewise, we must now combine more people with less capital and energy in smaller, flatter-structured enterprises that are run more democratically. In fact, the greatest increase in productivity will now be realized not by automating everything in sight, but by *trusting people to do a good job*. We must motivate people by giving them a piece of the action or helping them get into some of the millions of new enterprises that are now growing around the new decentralized energy technologies—solar, wind, big-mass, and passive, owner-built homes.

Hazel Henderson concludes:

We in the United States and Canada have come from the "soaring sixties" through the "stagflation seventies." We are now entering the "economizing eighties," which will be a period of belt-tightening and hard choices. If we can re-deploy our enormous assets, we can lay the groundwork for the economies of the "solar age" of the 1990's, economies based on sustained-yield productivity and renewable resources. *The Sane Alternative* is an important map for the future of all industrial countries.

This seems a just appraisal of James Robertson's work.

As we rejoice in such promising signs, it seems advisable to remind ourselves of the dimensions of the task which lies ahead. From a statement issued by a conference of the World Order Models Project held at Poona, India, in July, 1978, we take some extracts on "The Perversion of Science and Technology." The following is one summarizing passage:

To cater to the wasteful "needs" and unnecessary privileges of a rich minority of the world's people, millions of previously independent farmers and artisans are being driven from their land and

displaced from their normal livelihood on a scale that makes the ravages of historical colonialism look pale in comparison. To illustrate:

Traditional fishermen of South Asia are being forced out of their occupations by mechanized trawlers which catch shrimp and other marine delicacies for the well nourished peoples of the industrial world. The indiscriminate methods of the mechanized trawlers are leading to declining fish stocks, and thus to a decline in protein consumption among those who have virtually no source of protein other than fish. And this in spite of the evidence found that traditional fishing activities are economically defensible, ecologically sound, and employment-generating.

To feed the insatiable demands of the machines of the industrial nations and the equally insatiable desire for foreign exchange among Third World elites hungry for imported luxuries and armaments, large areas are mined and undermined, forests destroyed, fields flooded, rivers silted, and farmers and tenants displaced from independent sources of income and livelihood.

In the name of earning foreign exchange through tourism, where millions of poor need housing, scarce resources are being diverted to construct ten and fifteen-story hotels.

By the same logic, "surplus" food and meat are being exported while children remain malnourished. Transnational corporations also contribute to infant mortality and disease by actively promoting "modern" bottle-feeding in place of "old-fashioned" breast-feeding. The compelling drive to sell products made possible by modern technology, regardless of whether they serve any real social need necessitates colonization of the mind itself. High-powered advertising is used to "hook" some of the most deprived people of the world on senseless consumer goods, so that a head of a family may spend a large fraction of his earnings on Coca Cola while his children starve. (*Bulletin of the Atomic Scientists*, January, 1979.)

This broad indictment has the support of much painstaking research, some of which has been noticed here in book reviews. In the chapter, "A Shift of Paradigms," James Robertson considers an aspect of change—one well understood by Paul Goodman—which is often neglected, especially by impatient hares. In a section headed "Decolonization," Robertson says:

People who continue to work in the institutionalized and professionalized structures of society—as politicians, civil servants, businessmen, industrialists, bankers, scientists, teachers, doctors, planners, trade unionists, and so on—have a vital part to play in the coming transformation of society. But they must decide which side they are on. . . . Are they simply coasting along in their comparatively privileged position? Or are they ready to commit themselves to work for a sane, humane, ecological future? Do they recognize that, as Ivan Illich has said about scientific discoveries, their expertise can be used in two different ways, and are they prepared to choose the second? . . . Are they prepared to use their skills, their experience and their position to enlarge the range of other people's' autonomy? Are they prepared to give away their own relative superiority?

There are already signs of professional people trying to develop an enabling role rather than a dominating one.

A conscious, organic balance of hares and tortoises will be needed to accomplish change that does not have to be preceded by devastating collapse.

COMMENTARY

ANATOMY OF MARXISM

THE reference to Marx and Engels in this week's "Children" gives pertinence to calling attention to an article by Murray Bookchin in the Summer 1979 (Vol. 13, No. 3) issue of *Our Generation* (\$2.00—3981 Boulevard Saint-Laurent, Montreal H2W 1Y5). In this discussion Bookchin, an anarchist thinker, justifies calling Marxism a "bourgeois sociology" by identifying the assumptions it shares with Capitalist economic analysis, leading at best, for socialists, to bureaucratically ruled state capitalism. While this is no new criticism, Bookchin goes on to show that Marx, by adopting the nineteenth-century mechanistic conception of natural law, ignored the moral roots of human life. Humans become mere "objects" subject to the play of economic forces according to laws Marx had deduced by a selective interpretation of history.

Bookchin points out that the ancient Greek conception of law as applied to humans was ethical in content:

Hellenic thought as a whole distinguished "men" from animals by virtue of their rational capacities. If a "mode of production" is not simply to be regarded as a means of survival but a "definite mode of life" such that "men" are *what they produce and how they produce* (*The German Ideology*), humanity, in effect, can be regarded as an instrument of production. The "domination of man by man" is primarily a *technical* phenomenon rather than an *ethical* one. Within this incredibly reductionist framework, whether it is valid for "man" to dominate "man" is to be judged mainly in terms of technical needs and possibilities, however distasteful such a criterion may seem to Marx himself had he faced it in all its brute clarity. . . . If capitalism is the historic means whereby humanity achieves the conquest of nature, the techniques of bourgeois industry need merely to be reorganized to serve the goals of Socialism. If ethics are merely ideology, Socialist goals are the product of history rather than reflection and it is by criteria mandated by history that we are to determine the problems of ends and means, not by reason and disputation.

The tyranny implicit in this reading of human experience should be obvious enough. The *fact* of the tyranny is well known; Bookchin shows its theoretical inevitability:

What is significant in this subversion of the ethical content of law—indeed, this subversion of dialectic—is the way in which dominion is elevated to the status of a natural fact. Domination is annexed to liberation as a precondition for social emancipation. Marx, while he may have joined Hegel in a commitment to consciousness and freedom as the realization of humanity's potentialities, has no *inherent* moral or spiritual criterion for affirming this destiny. The entire theory is captive to its own reduction of ethics to law, subjectivity to objectivity, freedom to necessity. . . . Hence domination can be challenged not in terms of an ethics that has an inherent claim to justice and freedom; it can be challenged—or validated—only by objective laws that have a validity of their own, that exist behind the backs of "men" and beyond the reach of ideology. This flaw, which goes beyond the question of Marx's "scientism," is a fatal one, for it opens the door to domination as the hidden incubus of the Marxian project in all its forms and later developments. . . . A politics of "liberation" emerges that reflects the development of advanced capitalist society into nationalized production, planning, centralization, the rationalized control of nature—and the rationalized control of "men." If the proletariat cannot comprehend its own "destiny" by itself, a party that speaks in its name becomes justified as the authentic expression of that consciousness, even if it stands opposed to the proletariat itself. .

Bookchin's analysis fits perfectly with Michael Polanyi's searching conclusion:

Marxism embodies the boundless moral aspirations of modern man in a theory which protects his ideals from skeptical doubt by denying the reality of moral motives in public life. The power of Marxism lies in uniting the two contradictory forces of the modern mind into a single political doctrine. Thus originated a world-embracing idea, in which moral doubt is frenzied by moral fury and moral fury is armed by scientific nihilism. (*The Tacit Dimension*.)

CHILDREN

. . . and Ourselves

"SO DOES YO' HOGS"

A READER has supplied us with an "alternative" anthology of literature intended for use by college students—*Counter-Tradition: The Literature of Dissent and Alternatives*. (Basic Books, 1971), edited by Sheila Delany. It has in it such interesting pieces as John Milton's defense of divorce, Shelley's brief for Atheism, and Patrick Henry's objections to the Constitution. There is Plutarch on the slave revolt led by Spartacus, an account of the Waldensian Heresy, and Froissart's report on Wat Tyler's Rebellion. Paine, Blake, Mary Wollstonecraft, and Carlyle are other contributors. More recent writers are Robert Jungk, Malcolm X, and R. D. Laing. Sampling of the Marxist tradition begins with the *Communist Manifesto* and ends with Ho Chi Minh, with extracts from Debs, Trotsky, and Mao Tse-Tung in between.

Objecting to the restriction of readings to what are identified as Establishment Classics, Sheila Delany explains her purpose:

There is, though, a tradition of opposition to the values of official culture. What makes opposition traditional is not only direct influence, like that of the Old Testament prophets upon Blake and Carlyle, or of Marx upon William Morris and Mao Tse-Tung; nor only common sources, such as the New Testament, which influenced medieval heretics, fifteenth-century revolutionaries, and the Digger Gerrard Winstanley. It is traditional simply as a habit of mind and a social force constantly present in history, always with us (as Jesus said of the poor) and (like the poor) revolutionary in its implications if not always in its outright statements. The impulse to oppose cultural norms appears as inarticulate revolt, as social criticism, as vision, as ideology, as completed revolution; it may spring from logic, disillusionment, or the experience of oppression. In short, it is part of the continuing dialectic of history, as much a part of our cultural heritage as what it opposes. What I mean, then, by "counter-tradition" is not "that which opposes tradition," but the "tradition which opposes."

Besides constituting an intellectual tradition, the pieces in this volume also form a literary corpus of excellence and rhetorical variety.

The intent of the anthology is sharpened by a paragraph in the foreword by Louis Kampf:

The official literary tradition, as Sheila Delany points out in her Introduction to *Counter-Tradition*, has been established to serve the social objectives of elites. So we teach our students to absorb Matthew Arnold's attitudes toward the "populace" as literature, but we rarely encourage them to read Marx and Engels, who spoke so much more directly on behalf of the oppressed. *Culture and Anarchy* is literature; *The Communist Manifesto* is not. Here, finally, in *Counter-Tradition*, is a long overdue and invigorating alternative to the official (and deadening) version of the past which still dominates freshman studies in our colleges. This collection incites us to get into the habit of studying what really matters *to us*—and that is the beginning of a real education.

It is certainly a good thing to know what the *Communist Manifesto* says and to recognize the Machiavellian turn of Lenin's logic defended by Trotsky in *Their Morals and Ours*, but the tone of Louis Kampf's foreword seems to suggest that the alternative proposed by Marx alone deserves attention. This may be Prof. Kampf's deep conviction, but shouldn't students—who are at the mercy of anthologies and assigned reading—have opportunity to acquire a broader view?

One gets the impression that only writers who make readers angry qualify as contributors to the "real" Counter-Tradition. This means that a number of rather distinguished thinkers, by no means supporters of the conventional wisdom of their time, are left out. Wondering about writers we would like to encounter in such a volume, we made a little list. It includes Amiel, Simone Weil, Dwight Macdonald, Lewis Mumford, Theodore Roszak, and Wendell Berry. (If Marx is to be read, then Macdonald's *The Root Is Man* ought to have equal time. Macdonald certainly qualifies on literary grounds, and also addresses himself to issues that "really matter *to us*.")

There are nonetheless real riches in *Counter-Tradition*. Thoreau's "Plea for Captain John

Brown" should be known to all students, and anything by Kropotkin is worth reading. Mary Wollstonecraft's indictment of the "Unnatural Distinctions Established in Society" is a classic of humanist intelligence, while the speeches of Gene Debs during his trial for violation of the Espionage Act should be familiar to teen-agers and candidates for the draft. Just before his sentencing, Debs said in his speech to the court:

Your honor, years ago I recognized my kinship with all living beings, and I made up my mind that I was not one whit better than the meanest of the earth. I said then, I say now, that while there is a lower class, I am in it; while there is a criminal element, I am of it; while there is a soul in prison, I am not free.

Counter-Tradition contains material from *The Souls of Black People* (1903) by W.E.B. DuBois, another book that should be required reading today. In one place this eminent black scholar described the post-Civil War plight of the blacks in the South, explaining the origin of what has been termed the Black Belt. He wrote:

The Black Belt was not, as many have assumed, a movement towards fields of labor under more genial climatic conditions; it was primarily a huddling for self-protection,—a massing of the black population for mutual defence in order to secure the peace and tranquillity necessary to economic advance. This movement took place between Emancipation and 1880, and only partially accomplished the desired results. The rush toward town since 1880 is the counter-movement of men disappointed in the economic opportunities of the Black Belt.

Writing of Dougherty County, Georgia, where blacks outnumbered whites four or five to one, DuBois spoke of the drift of blacks to town, "leaving the broad acres behind."

Why is this? Why do not the Negroes become landowners, and build up the black landed peasantry, which has for a generation and more been the dream of philanthropist and statesman?

To the car-window sociologist, to the man who seeks to understand and know the South by devoting the few leisure hours of a holiday trip to unravelling the snarl of centuries,—to such men very often the whole trouble with the black field-hand may be summed up by Aunt Ophelia's word, "Shiftless!"

They have noted repeatedly scenes like the one I saw last summer. We were riding along the highroad to town at the close of a long hot day. A couple of young black fellows passed us in a mule team, with several bushels of loose corn in the ear. One was driving, listlessly bent forward, his elbows on his knees,—a happy-go-lucky, careless picture of irresponsibility. The other was fast asleep in the bottom of the wagon. As we passed we noticed an ear of corn fall from the wagon. They never saw it,—not they. A rod farther on we noted another ear of corn on the ground; and between that creeping mule and town we counted twenty-six ears of corn. Shiftless? Yes, the personification of shiftlessness. And yet follow those same boys: they are not lazy; tomorrow morning they'll be up with the sun; they work hard when they do work, and they work willingly. They have no sordid, selfish, money-getting ways, but rather a fine disdain for mere cash. They'll loaf before your face and work behind your back with good-natured honesty. They'll steal a watermelon, and hand you back your lost purse intact. Their great defect as laborers lies in their lack of incentive to work beyond the mere pleasure of physical exertion. They are careless because they have not found that it pays to be careful; they are improvident because the improvident ones of their acquaintance get on about as well as the provident. . . .

Now it happens that both master and man have just enough argument on their respective sides to make it difficult for them to understand each other. The Negro dimly personifies in the white man all his ills and misfortunes: if he is poor, it is because the white man seizes the fruit of his toil; if he is ignorant, it is because the white man gives him neither time nor facilities to learn; and, indeed, if any misfortune happens to him, it is because of some hidden machinations of "white folks." On the other hand, the masters and the masters' sons have never been able to see why the Negro, instead of settling down to be day-laborers for bread and clothes, are infected with a silly desire to rise in the world, and why they are sulky, dissatisfied, and careless, where their fathers were happy and dumb and faithful. "Why, you niggers have an easier time than I do," said a puzzled Albany merchant to his black customer. "Yes," he replied, "and so does yo' hogs."

This is only a fragment of what DuBois has to say.

FRONTIERS VARIOUS SIGNS

THE argument about national defense is not one we are inclined to get into, but now and then some advocate or critic puts a case so well that its implications acquire general importance. This applies to Tom Bender's review of *The Price of Defense* (New York Times Book Co.) in *Rain* for last November. This book by the Boston Study Group, Bender says, "shows pretty convincingly that the majority of our 'defense' spending is bogus—that the only real military risk our country is exposed to is nuclear missiles, and that we have admitted no possible defense against them." Continuing, the *Rain* writer gives high value to *The Price of Defense*:

It is comparable in the military area to Lovins' *Soft Energy Paths* in the energy field or Lappé and Collins' *Food First* in exposing the myths of our agricultural/food practices. Together these three books are additionally encouraging, in that they show that networks of knowledgeable and concerned people exist in every area of our culture—be it health, education, transportation, law or whatever—that can winnow through the myths of our current practices, assemble a viable vision of saner and wiser ways, and give us the basic ammunition to open up public discussion and action to refocus our activities in more benign ways.

Five years ago, Bender recalls, a group working in the office of the Governor of Oregon shocked the Pentagon with evidence that "the U.S. no longer had the energetics to support a sustained foreign war." The Boston Study Group, he says, points to a more sweeping conclusion. They demonstrate that the country's defensive strength can be improved and its provocative offensive power reduced while cutting our present military expenditures by forty per cent.

How do the Chinese deal with their energy problems? Sterling Munro, the Power Administrator of Bonneville Dam, after a tour of China, told a gathering of public service executives what he saw there. His report, condensed in the November 1979 issue of the

Newsletter of the Power Engineering Society, began:

What the Chinese have that some Americans would like us to have more of is an electric system consisting in the main of small, scattered electric generating plants. What we Americans have that the Chinese are determined to have, is a highly developed central station electric technology—big power plants and big substations that power big industry.

For the Chinese, their system sustains a population of about 950 million at a level that while extremely low by our standards, is quite high in comparison to many undeveloped nations. . . . For us, our energy system sustains a standard of living that is the envy of the world, but uses up our natural resources at a rapid pace, causing many persons—as we face the current energy crisis—to think there must be a better way. . . .

On China's long-term plan to increase electric production and consumption, Mr. Munro says:

The Chinese indicate that they have not constructed any nuclear power projects but they also make the point specifically that they have not ruled out nuclear power for the future. There was no evidence of solar technology or windmills or use of biomass or cogeneration or other renewables other than hydro, although I understand that the Chinese have four experimental projects under way and one experimental tidal project.

China, he says, plans to develop an enormous unexploited hydro potential, to increase present production of electric power by fifty times. On the use of coal and oil:

About three quarters of the thermal capacity is coal-fired and nearly all the rest oil. But interestingly, where 80 per cent of the coal mined in the United States is used to generate electricity, it is the other way around in China—only 10 to 20 per cent of China's coal production goes for electricity. The big part is used to heat homes and shops, to drive steam locomotives and for industrial purposes.

China is rich in oil but there isn't much oil-fired thermal electric capacity installed in China and there isn't likely to be a lot more. China's policy right now is to develop its hydro-power and coal resources for electricity and to develop its oil for export to earn foreign exchange.

"It is hard, of course," says Mr. Munro, "to compare an economy of scarcity with one of bounty and wasteful habits," but he adds that the study of a technology based on scarcity may be instructive on how best to use the remaining resources of the North American continent.

What is happening in Canada?

In *Environment* for November, Robert C. Paehlke reports that most of the solar installations in Canada are using designs originated in the United States—for homes, schools, institutions, and factory and commercial establishments. He adds:

But very recently the utilization of solar energy in Canada seems to be developing aspects that are distinctively Canadian. Innovation now seems to be coming in two areas: the long-term storage of solar heat and more effective utilization of wood biomass as a heat source (a forest is a living solar collector and energy storage system). Each of these emphases makes a great deal of sense for Canada. Our winters are beautiful, but long and brutal. Seasonal storage is necessary here and seasonal water or rock storage on the scale needed is expensive. Technical breakthroughs in large-scale, long-term heat storage may be on the horizon.

He concludes by saying that the real breakthrough may have reached an experimental stage on Prince Edward Island—where the New Alchemist-built Ark was installed—in the development of a home-heating-size pyrolysis, storage, and furnace system which turns wood into a more efficient fuel and produces no creosote. This is decentralizing intermediate technology. Its promise, Mr. Paehlke says, "is enormous."