

TWENTIETH CENTURY PANTHEISM

THE debt of the twentieth century to science is very great. However much human life may have suffered distortion from the emphasis of science on technology and physical advancement, the work and the thought of men who study the forces of nature have had the effect of restoring a feeling of reverence for natural reality. This we may call the Pantheism of the twentieth century. It is not, of course, a simple "nature worship" such as was common among many ancient peoples, but is rather a somewhat abstract idea, growing out of the perceptions of a handful of eminent men—men like Arthur Eddington, James Jeans, Albert Einstein, Erwin Schroedinger, Max Planck, and a few others.

Pantheism, when not a logical conclusion deduced by metaphysical reasoning, seems usually to be a sublime mood of mature intelligence, bespeaking an irresistible intuition that a radical unity of life or being pervades all things. It is the feeling conviction which some philosophers have justified by the "axiom of internal relations"—that a common reality unites the infinitely graded diversities presented in experience. Because this is a *feeling*, and not a mere speculation, there is also the certainty that human beings participate in this unity, that they are integral expressions of the great Self of life and substance. It is a thing difficult to put into words, and here, perhaps, we have an intimation of the highest role of the arts—to serve as mediator between man's intuitions and his life of articulate expression. Unlike the theologians, whose concern is with the utopian aspect of religion—the artist is a devotee of the eternal now. Save when he turns critic, or cynic, the artist celebrates the unchanging divinity in things. He is like a man who wanders to some far-off place, and there, in a moment of collaboration with the unconscious intent of Nature, suddenly feels the rhythm of universal being pulsing through him. The world and all in it—its sorrows and its wickedness, its refuse and its waste, its rare instants of beauty, its intervals of grandeur and nobility—all this becomes a symphony of affirmation to his inner ear. Every thing in nature gains sentient voice for him, at a level of communication which soars high above the rational, yet denies nothing of the longings of the mind

for independent dignity and individual expression. Rather, indeed, the premises of rational men have their highest derivation from these communications of the spirit. So, the artist, drinking at this same fountain of inspiration, learns to speak in the tongues of nature. He makes his work into a fane of life, and the world marvels and reveres. He does not await "salvation" or "evolution." No "tomorrow and tomorrow" blights his sense of the changeless significances which flood and ebb and flow through the kaleidoscopic patterns of existence. As far back into time, worlds and even universes hence, as the mind can reach, those meanings were declaring themselves, like movements in the grand fugue of eternity. Nor is there anything that the future may add to this ineffable harmony, unless it be through the endless novelties of self-consciousness, as life rises into the discrete forms of existence and as mind shapes the stuff of life into mirrors which reflect the drama of birth into self-knowledge.

The glory of pantheism is that it affords to every individual a place of importance in the scheme of things. He, like everything else in existence, has a work to do, a role to perform. He is a colleague with the rest of life. As an expression of the One Self, he cannot be diminished or made greater than he is. There are no relativities for the universal aspect of our being—we *are*. Without moving, we can dip ourselves into the sea of parentless being which is ourselves. The timeless roots of existence wind through our being even as they uphold the vault of heaven and define the order of the galaxies. We may walk through a meadow and find the sympathies of life all about us, or through a dusty street and see another aspect of the universal metabolism. The tortured scene of battlefields discloses the anguish of life at war with itself; the twisted degradation of those sick in mind and heart brings yet another vista of the unending struggle of the psyche to become free. So that even in the worst of everything, there is a kind of peace the peace which arises from the knowledge that the tragic and the painful are essential elements of life, out of which arise new forms of perception. The movement goes on continually; the rains come as surely as the hot tears;

roots will gnarl as surely as muscles bulge and rend; the grotesqueries give way to beauties which seem to remember the agony that freed their form of the trivial and inscribed the signature of conscious perception upon them.

Strangely enough, it is the West which has evolved the foundation for this patient view of human experience. If you pore over the philosophic essays of men of science, you will find numerous expressions of an æsthetic pantheism which is content with this intuition of reality. It is as though the dreamy acceptance of things as they are, so long a prerogative of the Orient, had been transplanted around the world and made to incarnate in the West. How shall we reconcile this profound resignation with the straining and striving of the West after conquest—conquest of every sort, of lands and riches, of suffering and disease, of poverty and want? It cannot be done, of course. The West is inconsistent.

But there is a reason for this inconsistency. A man can be a pantheist without stirring up the cloudy atmosphere of theological and social theory. Pantheism is a philosophy for reflection, but it is seldom a guide to action. How does deity behave? Ask this question and you are launched into the bitterest of debates. If you want an angry controversy with Rome and Moscow both, offer a theory of natural right and wrong. No wonder the moral neutrality of æsthetics, the dispassionate calm of pantheism, are seldom violated. When a mystic leaves the bosom of the infinite to mingle with the crowd, he has to risk the backlash and resentment of those who pillow their heads on more turbulent resting places. When an Einstein speaks out to advise a hunted man to fear nothing, to refuse to behave like a hunted man, he invites the condemnation of all manner of theologies and sociologies. For this is the hazardous step of the philosopher. This is his return to the cave, to tell to those who live in a dark cavern about the light that shines outside. This is the son who leaves his father to walk among men and instruct them in the meaning of life. Who will believe him? Who can agree with so disturbing a notion of how men ought to behave?

The crisis in pantheistic faith always comes at the point where the One ceases to be the One, reappearing as the Many. Who are all these that crowd around us?

What is their *proximate* origin and our relationship to them?

The ancients found a solution both simple and reasonable. From Pantheism they launched into Polytheism. The secondary powers, the differentiating creative activities, the multiple reality of beings and intelligences everywhere led to the doctrine that the gods are everywhere—a total of thirty-three million of them, we are told, in the Hindu pantheon. It is a doctrine far superior to Monotheism, since it avoids the mistake of assigning to "God" the qualities of being, limit, and particular activity which could not possibly attach to universal Reality. The claims of Polytheism are much more easily vindicated in the eyes of philosophy than the claims of Monotheism, for while Polytheism may fall into superstition, in the Monotheistic systems, the idea of a God who is at once "personal" and "universal" begins with an absolutely incredible proposition, and thence moves from logical blasphemy to logical blasphemy, ending in the terrible theocracies of European history. Polytheism, proposing an infinitude of quite finite deities—finite as beings, infinite only at their point of origin in the One—offers a world bursting with divine potentialities, honoring every degree of life with recognition of its spiritual ancestry.

But Polytheism is an impractical issue for the Pantheism of the twentieth century. It is, we may say, too remote from the mood of contemporary theories of causality. The West, once it decided to rid itself of the mind-alienating "will of God," found no choice except to go back to the primitive materialism of the Greek Atomists and Lucretius. Western philosophers sought ideological safety in the simplistic theory that all is made up of atoms and the void. The bounding, bouncing atoms built the universe quite by chance. No intruder possessed of organizing intelligence was permitted to enter the sterile world of inert matter and blind force. The purity of materialism was jealously preserved for centuries, since only by preventing even the faintest hint of a guiding intelligence from entering into their calculations could the creators of the new scientific conception of the world defend the integrity of their discipline against a rival Creator whose first principle was the abandonment of principle, whose rule was miracle. The trouble with God's will was that it could not be discovered—it had to be *revealed*; and since the revealers were always priests, and since the

priests manifestly sought power, not holiness, it was an act of supreme piety for the scientists to deny the God of the priests. No "liberation" since has been quite so important, or is likely to be.

But today, in a world where whirl is king, we are again discovering that Pantheism needs elucidation. If, under the order of Eternity, we are God, what, under the order of the world, are we?

Our sciences are of little help, here, except in laying down one great principle—that law, natural law, is no respecter of persons. Thus, unless we take leave of the learning which has freed our minds from dogma, and has also led us, by easy stages, to that reverence for nature that gains wondering utterance from the leaders in scientific discovery, we are bound to start out with the notion that the moral law of human life is as implacably strict as the law of gravitation. We can expect no privileges.

The adjective "merciless" quickly comes to mind. But what would an efficient technician do with "mercy," supposing it emerged to confuse the coefficient of expansion in metals? He does not ask for "mercy," or exceptions, but for reliable performance on the part of Nature. He, in his way, is a creator, and to be an effective creator he must know the properties of the materials he uses. The most disastrous thing that could happen to him would be for some "wild" factor to be present in his calculations. This would destroy his science.

So the Pantheist does not look for "mercy." He looks for law, for meaning, for order in nature. Perhaps the idea of mercy has a place in the scheme of things, but not as a pious joker to play havoc with the immutable laws of nature. Perhaps mercy should be tossed back into the button-maker's mold, and brought forth again in the form of human sympathy and compassion. The emotions of self-conscious intelligence may then be expected wherever they have a natural role, and nowhere else.

Such questions as that of the Moral Law reduce themselves, finally, to the great question about the nature of man. Is he what the modern interpreters of the atomists say he is—an accidental collection of materials drawn by some mysterious process from the irrational depths of chaos, there to be returned at his death? Or is he, essentially, what other Greek

philosophers urged—a fire of mind, the matter-moving *nous*, a spirit involved in the form of material existence?

Hypothesis for hypothesis, the Platonic idea is surely as reasonable as the atomists' claim, and gains rather than loses in being reasonable, since there is no place in the atomist universe for the rational spirit itself. Why should we honor reason, the precedence of cause and effect, if the rational is not the real? Since all that we know, or believe we know, whether of affirmations or denials, is known in virtue of our claim to being rational, what more consistent doctrine than that the universe and everything in it exists as a structure in and of mind?

Then man, as a thinking being, is to be regarded as giving rational shape to the very structure of existence. From this postulate, it is only a little, a very little, step to conceiving man as constituting within himself the principle of continuity in nature—of immortality, in fact.

These, it seems to us, are some of the possible implications of Pantheism, whether ancient or modern. Yet from these implications might be drawn still further views concerning the ordering of human life, and so evolve a workable scheme of relationships between man and his fellows, and man and nature. It goes without saying that there is nothing novel in these speculations. We offer them as provocatives, if nothing more, and for what seems the very good reason that modern thought has arrived at the halfway house of a naturally inspired Pantheism, and must now proceed to schemes of life which involve the behavior, the welfare, the destiny of individuals. We cannot live for long in a world without principles of order. The question is, what principles shall we adopt?

THE ARTS OF PEACE

WHAT with the execution of Mr. Beria and the discovery that he has been a counter-revolutionary wrecker since 1920, the presses in Russia will have to run over-time to issue new "histories" of the past thirty years in which Beria's name does not appear as one of the great builders of the U.S.S.R. Meanwhile, in the United States, the American Textbook Publishers' Association, whose members are confronted by similar if milder embarrassments, is at pains to explain that in these days it is practically impossible for textbooks to be kept "up-to-date," so that Russia, today the "cold-war enemy," is still likely to appear as "our ally" in an occasional text. All such books, of course, will have to be done over.

Perhaps we should abandon history books altogether, pending at least a ten-year period of agreement as to who our friends are, and issue mimeograph bulletins from month to month, explaining to pupils the difficulties our textbook writers are in. Or, better yet, we might copy the recent example of French and German textbook writers who, after some eighty years of angry disagreement over the ownership of Alsace Lorraine, have at last concluded that it is best simply to recite the facts of what happened without prejudice either way. How many wars must you fight in order to recognize the aimless follies of Nationalism?

REVIEW

BOW TO THE NEW YORKER

THOSE who are not regular readers of the *New Yorker* may find the Nov. 7 and 14 issues of sufficient value to obtain copies. The Nov. 7 issue begins a two-part profile by Daniel Lang, portions of which will be of great interest to MANAS readers who are impressed by the themes of Dwight Macdonald's *The Root Is Man*. Lang's profile concerns Dr. Samuel Goudsmit, senior scientist and chairman of the Physics Department at Brookhaven National Laboratory. Dr. Goudsmit, also an editor of the *Physical Review*, "a professional journal that is to physicists all over the world what *Variety* is to show people and *Scott's Catalogue* to philatelists," is an unusual man, and well worth a "profile." But it is not the "unforgettable character" motif that chiefly distinguishes the *New Yorker* profile. Mr. Lang's articles treat of the recent radical transformation of the status and role of physicists, and, briefly, through Dr. Goudsmit's eyes, suggests some of the implications which this transformation has for our culture. As Dr. Goudsmit puts it, "the hot and cold wars have so changed my profession that I can hardly recognize it any more." Here is a revealing passage:

Before the war, to hear Goudsmit tell it, physicists were a poor but happy lot. There were relatively few of them, and they kept pretty much to themselves. Those were what he calls "the string-and-sealingwax days"—an allusion to the makeshift materials with which physicists often put their rudimentary apparatus together in cramped laboratories somewhere out behind the gym on this or that university campus. Nowadays, both government and industry are pumping billions of dollars into this once impoverished profession. "It's been a shock," Goudsmit says. "We've got marvellous laboratories for basic research, which is the real love of any self-respecting physicist, but somehow we don't have the same tender affection for them that we would have had years ago when acquiring a three-hundred-dollar spectroscope was reason enough for throwing a party. Today we're given a multimillion-dollar piece of equipment, and the minute the dedication ceremonies are over, we're poring over plans for an even more powerful one. In the old days physicists gave themselves up wholly to a single-minded study of the fundamental laws of the universe. Now we feel called upon to do things of a sort we never even imagined

we'd be doing—thoroughly unscientific things. We sit down with the Defense Secretary to help him figure out his next year's budget. We brief the President of the United States on the nation's nuclear stockpile. We're at Eniwetok or Las Vegas, or we're talking with troop commanders in Europe or Japan. We teach physics to Navy officers who are going to run nuclear-powered submarines. Air Force generals used to be just newsreel figures to us, but now they're fellows we have to talk over atomic-driven planes and plan offensive and defensive tactics with."

The scholarly love for abstract theory which used to motivate most physicists is apparently being blown aside by the appeal of a profitable career. Goudsmit notes that the bright young career-men of physics—most of them still under twenty-five—seem to be little disturbed by either past or prospective wars. Lang quotes Goudsmit on this point:

"All these young fellows grew up with the war and some of them were in it. By and large they seem to have been less disturbed by it than the older men. They give you the impression they're just trying to get ahead. Of course, I realize it's not their fault that they weren't around in the old days, but I can't help wishing they'd stop acting as though the profession had always been the way it is now—if only out of respect for old men like me. Lord, the expensive equipment they expect! I gulp at some of the vouchers I'm called on to sign out at Brookhaven. Right now, it seems, everybody there wants a new type of oscilloscope that sells for thirty-five hundred dollars. Someone walked into my office the other day and complained that he had to share the one we'd got for him with another researcher. These new machines do make the work easier, but that doesn't keep me from wondering if, in the long run, it's best for everyone to own a Cadillac. Oh, well, I'm probably in my dotage.

"Several of the young physicists I've seen going off to watch bomb tests at Eniwetok or Las Vegas were as jaunty about it as if it were a holiday excursion," he says. "Some of them attended as 'observers.' Congressmen who witness the tests are given the same label, and as far as contributing to the success of the tests is concerned, I have a hunch that one set of observers is about as valuable as the other. When the young men get back—and other oldtimers tell me they've noticed this, too—they're full of jolly little reminiscences about going swimming in the Pacific near dangerously radioactive reefs, and the foulups in the military's air shuttle, and that time out on Eniwetok when a workman spent a whole day

carefully painting a dummy structure that was blown to bits the next morning. You rarely hear them so much as mention the terrible potentialities of the weapons they've seen in action. Maybe their small talk is a form of escapism, but if that's so, why don't my contemporaries talk the same way? Rabi, Bacher, Oppenheimer—a detonation leaves them awed and anxious."

So Macdonald's "tightly routinized and mechanized society," grinding on apart from or without any human values, makes its presence felt among a class of men it would not even ordinarily notice. Like other top-ranking physicists whose collaboration made the A-bomb possible, Goudsmit thinks in terms of moral responsibility. He did considerable pondering, for instance, after the abrupt discovery that the bomb had gone off without any knowledge on his part that the event would take place. He was then in Berlin on a special government project and was appalled by the fact that he had had nothing whatsoever to say about the use of the bomb, however often he might have been consulted about techniques of achieving nuclear fission. He then realized that "much more was in store for physicists in the years ahead."

The second half of the Goudsmit profile (Nov. 14 *New Yorker*) is more in the nature of a personal autobiography. But here, too, the reader is encouraged to reason that if men like Goudsmit *made* the bomb only men like Goudsmit should decide what to do with it. Then there is his attitude on teaching and education in general, and above all, his complete disinclination to pontificate. His objection to the bright young physicists of the present and future is not that they lack sufficient respect for the judgment of older generations, but precisely the opposite. *They* are content with the *status quo*, more so than some of the older men. And this, when things should be the other way around, seems ominous to Goudsmit:

A scientist can do useful work all his life, but if he is to carry learning one big step forward, he usually does so before he is thirty. Youth has the quality of being radical, in the literal sense of the word of going to the root. In science, as in other fields, youth seems to be the time when one is driven to examine the roots—the basic assumptions of everything that has previously been accepted. Obviously, if one hits on something through this approach, it may well be outstanding. After a scientist passes his creative peak, it seems to me the

most useful thing he can do is teach the status quo to youngsters, who may then attack it with all their irreverent curiosity and so perhaps arrive at fresh knowledge. Teaching gives older scientists the same satisfaction as parenthood—the sense of self-renewal.

Having already mentioned Macdonald, we might add that he has an excellent review in the Nov. 14 *New Yorker*. We now know what a philosophy professor acquaintance of ours meant when he called Macdonald a *belle-lettrist*. For here it is clear—as it was in Macdonald's devastating analysis of the Britannica edition of *The Great Books*—that Macdonald writes from a rich classical background. In this case, the "Revised Standard Version" of the Bible is on the dock, and Mr. Macdonald asks it many embarrassing questions. His observations eventually build a strong case for the King James version, as against RSV. In his summary Macdonald comments:

Why this itch for modernizing anyway? Why is it not a good thing to have variety in our language, to have a work whose old-fashioned phrases exist in the living language, to preserve in one area of modern life the old forms of speech, so much more imaginative and moving than our own nervous, pragmatic style? As it enriches us to leave beautiful old buildings standing when they are no longer functional or to perform Shakespeare without watering his poetry down into prose, so with the Bible. The noblest fane must be trussed and propped and renovated now and then, but why do it in the slashing style of the notorious Gothic "restorations" of Viollet-le-Duc? In any event, I think the Revisers exaggerate the difficulty of K.J.V. Almost all of it is perfectly understandable to anyone who will give a little thought and effort to it, plus some of that overvalued modern commodity, time. Those who won't can hardly claim a serious interest in the Bible as either literature or religion.

Macdonald doubts that the RSV will ever become "the world's" Bible, but if it should, he feels that "what is now simply a blunder—a clerical error, so to speak—will become a catastrophe. Bland flavorless mediocrity will have replaced the pungency of genius. And if the salt have lost his savor, wherewith shall it be salted? That is to say (R.S.V.): if salt has lost its taste, how shall its saltness be restored?"

COMMENTARY SCIENCE AND SCIENTISTS

IF further evidence were needed that "scientists are human," the articles in this week's issue would easily suffice. The discussions in both Review and Frontiers illustrate how the institutionalization of science betrays its high purposes. The young physicists who are able to be "jaunty" while watching atom bomb tests are captives of their profession, not its creators and guardians. The bright young men of research have suddenly become important military assets. Yet theirs is a borrowed glory, deriving from preferred position in the military hierarchy. Their peculiar intellectual agility qualifies them as the most expert destroyers the world has ever known, and so, as Dr. Goudsmit indicates, they hobnob with generals, gossiping lightly about experiments which are literally dress rehearsals for incalculable slaughter of mankind.

Is this really the practice of *science*?

Then there are the eager prosecutors of the "scientific" war against the pests which harass our vulnerable and debilitated agriculture. It is strange how *war* seems to be the primary motif of so many of our theories of progress. We must war against the teeming germs of disease, we must poison the pests which threaten to consume our crops. Like the managers of the ghoulish society in Orwell's *1984*, our administrators busy themselves with determining the degree of lethal dosage we dare use enough to destroy the pests, but not enough to destroy ourselves. Here, too, the practice of technology has come a long way from the primary inspiration of science. Apparently the momentum of a destructive psychology blinds these "experts" to any other approach.

A bit of authority seems to go to the head of some scientists almost as quickly as it overtakes interpreters of the "divine will." But what we need to remember, perhaps, before we become too indignant, is that we, the people, have

permitted both these usurpations. We have been all too willing to delegate decisions to prestige-bearing institutions.

Above all, we need to realize that institutions, since they embody only the routines which result from discovery, can never transmit the genius and the inspiration which brought them into being; and, this being the case, they will always supply a less-than-human solution for human problems. It is in this direction, we think, that the science of the future must direct its attention.

CHILDREN ... and Ourselves

HAVING, in the past, devoted considerable space to the accomplishments of Progressive educators, it seems in order to notice a critical volume, *Quackery in the Public Schools*, by Albert Lynd. Mr. Lynd is no Allen Zoll, the professional neo-Fascist opponent of everything that emanates from Teachers' College, Columbia, but he does find reason to rake some of the Columbia Progressives over the coals. Yet the book is more than a partisan, anti-Progressive tract. It will not be easy, we think, for anyone who has read Lynd's book to refute the charge that "quackery" is abundantly present in some of the more pretentious versions of "Progressivism."

Chapter One, "Education by Incantation," exhibits some of the jargon used to "promote" the "New Education":

The New Education, it seems, is *living, vital, life-related, dynamic, bold, gripping, throbbing, creative, adventurous, rich, significant, forward-looking, thrilling, constructive, child-centered, onward-going, growth-oriented*, and of course, *democratic*, with the variant *democratizing*. The Old Education was *dead, passive, meager, traditional, abortive, impotent, static, retrogressive, subject-centered, moribund, inorganic, stale, flat, backward-looking, autocratic, Prussian, Alexandrian, bookish*, and (on my oath!) *intellectualized*.

Since everybody is agreed about the goodness of good words and the badness of bad words, one learns from these litanies little about the logic of the New Education except that it may rescue his child from the horrors of intellectualization. They do suggest that much of the energy of the movement is consumed in mere incantation.

An "Educationist," in Mr. Lynd's vocabulary, is not the same thing as a teacher. The "Educationist" may, indeed, be a teacher—even be a very good one but, *as* "Educationist," he often becomes a propagandizer, if not a politician. He hopes to ride the wave of the future, and is wonderfully impressed by his role in leading education away from classical forms of training.

Like other politicians, this "educationist" is apt to be extravagant in expression and careless in thought. Unlike John Dewey, the most influential "father" of Progressive Education, this sort of educationist is not much of a philosopher. (Here we must say Amen to Mr. Lynd. Many self-styled Deweyans seem never to have read or understood their mentor—nor would Dewey understand some of the prattle which Lynd terms "incantations.")

Dr. W. H. Kilpatrick, emeritus of Teachers' College, who long ago took over leadership in the world of professional Educationism, is generally regarded as Dewey's most famous interpreter. Mr. Lynd considers this reputation undeserved. The charge is not that Mr. Kilpatrick stands for anything evil, but that he substituted commonplace sentiments for intelligent discipline, both in his writings and in discussion with the hundreds and thousands of enthusiastic teachers who have come to him for training. (However, what we should like to have Mr. Lynd grant, and what we will attempt to point out next week in connection with a publication issued by the "Educationists," is that some of the failings of "Progressivism," as a movement, can be traced to an untutored enthusiasm for Psychology—a common ailment, these days. Actually, few teachers—and few of the rest of us—know enough about human nature to be good psychologists. In this area, Dr. Kilpatrick, for one, can be made to appear something of a fool, and Lynd delights in the task. Kilpatrick's real trouble, it might be said, is that he tries to be a psychologist without first becoming a philosopher.)

To get down to specific criticisms by Mr. Lynd, Kilpatrick, it appears, favors chucking any effort to master the principles of mathematics or language, unless it can be made sufficiently "joyful" and "creative." He "begrudges the time it takes to master a language," for instance, and argues: "If it could be done quickly and easily, and if they could begin the study of literature or whatever else they plan to do with the language,

my objection would not be so strong." One of Kilpatrick's disciples thought he was scoring quite a point against language study when he remarked that "the greatest philosophers of whom we have record, the ancient Greeks, were educated on a curriculum consisting largely of music and physical education." Lynd replies:

I do not know what relevance that may have to the modern study of foreign languages. The ancient Greeks did not study other languages because their cultural situation was unique; with the rise of Rome, educated Romans learned Greek for the same reason that educated Americans learn European languages today. But the interest here is in that remark about the education of the "greatest philosophers." Of course music and athletics were prominent in Greek education, but the statement above would be very misleading for any reader who did not know, for example, what "music" included for Greek youth. Where did Plato get his knowledge of mathematics? Where did he get that very intimate knowledge of Homer and so many other poets whom he quotes? Where did he get that philological lore which he displays in the *Cratylus*? And how did the Sophists, whose activities are so fully described by Plato, get so many clients for their courses in matters unrelated to music or physical education? One could ask, too, where Aristotle got his vast learning. Greek education included subjects closely related to those which the New Educationist wants to throw out of our schools.

In Mr. Lynd's chapter on the history of Progressive Education, two passages seem particularly pertinent. The first, concerned with Pestalozzi, provides the author's view of Progressivism:

The classical tradition in education assumes that there are certain fundamentals of ethics and aesthetics—although there is considerable room for argument over just how much they cover—and that these are understood chiefly by man's intellectual faculty. Pestalozzi preferred the Rousseauian sentiment which exalts feeling and instinct over intellect, "nature" over formal thought. Modern educational theory is even more vehemently opposed to the classical "fundamentals," but it substitutes for the intuitions of Rousseau the data of a psychology related to the philosophical pragmatism of Professor Dewey.

Although the most consistent Deweyites reject the romanticism of Rousseau, the influence of Pestalozzi is still felt in American education. In many of the rhapsodies which one reads about the New Education, the words are Deweyan, that is, they are formally "scientific," but the music is frequently a medley of Rousseau and Pestalozzi. It is detectable in a tone of anti-intellectual emotionalism, and in an undertone of mysticism about the "natural."

The next passage is not really integral to Mr. Lynd's theme, but illustrates the author's genuine respect for John Dewey—a respect he cannot find in equal measure for Deweyan interpreters such as Kilpatrick. After pointing out how easy it has been for Progressives to counter every objection to "Educationism" by charging that the critics seek to revive a reactionary system and are thus opposed to "academic freedom," he shows that it is equally ridiculous to *attack* Progressives on the ground that they tend in a "Communitic" direction. Lynd writes:

Dewey is not a Marxist. His philosophy is quite inconsistent with the "dialectic" of Marxist theory. Nor can Dewey, with his views of human nature and conduct, share the Marxian expectation of extensive social change primarily through political or revolutionary action. For many readers of Dewey, the transfer of the Russian people by revolution from one tyranny to another is striking confirmation of the accuracy of his analysis of the social psychology of habit.

Dewey has no truck with Communism. His philosophy is so definitely hostile to the Marxian orthodoxy of Lenin and Stalin that the efforts of an occasional reactionary pamphleteer to link him with Communism are the work of malice or ignorance. Dewey is opposed to the Soviet enterprise because he is philosophically opposed to all absolutes, and most vehemently to those which furnish pretexts for the curbing of freedom. His views are clearly on record, and more: the Communists devoted to him their bitterest invective when he undertook in 1937 the leadership of an enterprise devoted to exposing the Stalinist frameup of Trotsky. Whenever I hear Dewey referred to as a "red," I recall with amusement the shrill words of a young colleague on a university faculty, one of those academic fellow travelers who flourished during the 'thirties, as he angrily denounced "Dewey the Red-Baiter."

We have seldom seen a clearer explanation of the distinction between Deweyan "radicalism" and Communist "radicalism"—written in this case, by one of the "neoclassicists" rather than by a "Progressive." And since Mr. Lynd demonstrates his ability to write well and think lucidly, when he tells us that a lot of the classical material drummed into his ears during his own youth was good for him, we find it a little hard to talk back.

In respect to "education for Democracy," of which we hear so much from the Progressives, he quotes from William H. Burton (*The Guidance of Learning Activities*) a criticism of the "traditional school." Burton strongly disapproves the traditional instruction which included in "upper grades, abstract descriptions of community organization, the executive, the judicial and the legislative branches of the government, about how to amend the Constitution. . . ." Lynd's reply to this stricture is very much to the point:

The controversy over President Truman's exercise of allegedly implied powers in the seizure of the steel mills in the spring of 1952 turned directly on abstract questions of executive, judicial, and legislative power, and related Constitutional niceties. These, according to our Educationist author, are "meaningless gibberish" in traditional schools when presented as "abstract descriptions" to the upper grades, that is to students who are close to the age when they will be voting on issues to which these abstractions are directly related. The professor may be right about some students, to whom all abstractions will be forever gibberish. But is he not talking gibberish himself if he expects any students to learn such things through "natural growth processes"? A student may exercise direct observation until his beard grows long watching the waterworks, the state legislature, and all the human and tangible manifestations of government, without grasping certain abstractions which are essential to their political meaning. Unless some strenuously "unnatural" theory is slipped into the program, however artfully it may be window-dressed for the prevailing Educational fashion through participations in mock government and the like he will never understand the political issue in the 1952 steel dispute or any dispute like it.

FRONTIERS

The Treatment of Symptoms

THE current controversy concerning fluoridization of the public water supply affords an interesting illustration of the age-old clash between "conservative" and "progressive" views, but without the familiar ingredient of politics. In this instance, it seems clear that intelligence and justice lie with the conservatives, although it by no means follows that those who resist change or new ventures are invariably "right." This particular debate is useful to consider rather for the reason that it happens to exhibit the value of conservative caution in respect to a non-political issue. It is likely, moreover, that the issue will be decided on its merits—something which is peculiarly difficult in political questions.

As is generally known, the proponents of fluoridization argue that the addition of a small amount of corrosive chemical fluorine to drinking water will have the effect of reducing cavities in the teeth, while the opponents object that this material is a poison which may, even in minute quantities, work disaster to the human organism. One critic of the proposed program, Dr. Raymond L. Girardot of the Detroit District Dental Society, has taken the trouble to review the course of similar experiments or programs. His plea is really for intelligent conservatism, although, because of the slurring use of this term in political controversy, to call him a "conservative" might be deemed unjust. He speaks of the "emotional enthusiasm" which often leads along a trail of misery and death for the human race. Medicine has not been immune to this tendency:

In the practice of medicine, expediency often demands the immediate treatment of symptoms, rather than the investigation and removal of causes. Unfortunately, we have fallen into the rut of symptomatic treatment and expend too little energy in the determination of causes. We spend a lifetime building up a background of technical learning, assets, and good will, but hardly a day in learning how to survive long enough to enjoy it.

Dr. Girardot now attacks directly the problem of dental caries or tooth decay, and the question of fluoridization as a specific remedy:

I maintain that dental caries is a symptom of imbalanced blood chemistry, which in turn is the result of certain deficiencies, and the intake of toxic substances. Acidophilus and subnormal saliva is but a segment of a vicious circle.

To attempt to reduce the index of a symptom and do nothing toward the removal of its cause is scientific nonsense. . . . All you gentlemen know from personal experience that the children whose sugar intake is high have a very high incidence of dental caries. Those who take your advice to reduce sugar intake present a healthy mouth. Dr. Bunting proved this point years ago with his experiment in an orphan asylum. Yet as an organization how much are we doing to remove the candy stands and soft drink stands from the schools?—We are doing nothing. Yet we are asked to vote for a scheme to spend \$350,000 a year for ten years, partially to reduce the damage of the above program. This is a ridiculous absurdity and unworthy even to be considered by a scientific group. In addition we are assuming the responsibility of perhaps contributing to the misery and earlier death of a large segment of our population, who are already degenerated by the nutritional deficiencies and toxicities to which modern life has subjected them.

After noting that no studies have been made of the incidence of death from hardening of the arteries or heart muscle, in those areas which already have the proposed amount of fluorine in their water, and pointing out that while all public water supply would be so treated, only 20 per cent of this water is used for drinking purposes, and the rest by industry, Dr. Girardot turns to other projects which have led to sickness and death:

Let us take processed flour as our first illustration. The Department of Agriculture permitted millers to take the devitalized starch and treat it with nitrogen trichloride. This bleached the flour and gave it the same dough quality as flour aged for six months. Besides, it could be kept indefinitely. Every insect knows by intuition that it is unfit to eat.

For some years biological experiments were conducted showing the toxic character of this flour. Finally [in August, 1949] the millers were ordered to

discontinue the "Agene Process." However, they are now permitted to use another process and it will take years to learn what this experiment will do to us.

Now, our government officials know they were wrong. . . . How many of your friends and mine are in their graves today as a result? No man knows. In one experiment every cow in a test group was killed in a six-month period by feeding them a triple dose of Agenized flour. They all died of heart degenerations. In other experiments dogs developed fits, perhaps you have friends with palsy or know children afflicted with epilepsy. Yet in the face of this knowledge you are asked to create a one-million-dollar fund to find a miracle drug for epilepsy. It is strange how scientists glue a telescope to their eyes, looking for a miracle in the rainbow, and have not the time to study the food we eat, or examine the soil under our feet.

It is only fair to interrupt this bit of justifiable rhetoric with the remark that there are *some* scientists who have for years been condemning the use of white flour, and *some* scientists very much disturbed by the depletion of the soil and the devitalization of food products. The Organic movement is an impressive result of their inquiries. But Dr. Girardot continues:

Let us take another example. It is now generally accepted that DDT is a powerful poison. Residues on fruits and vegetables must not exceed a certain amount. Still its use is not forbidden. The U.S. Department of Agriculture will file complaint against any dairy selling milk with even a trace of DDT in it. The following interesting experiment was made. Cows previously sprayed with DDT were milked, and then the barn sprayed with the milk. The milk killed the flies in the barn. No wonder the Department of Agriculture is alert for traces of DDT in milk. Can anguished parents be blamed for resenting the inability of the doctor to diagnose the strange ailment of their child?

Realizing the exigencies of war, I am not critical, but only wish to present facts. In the dire need for a tool to eliminate insect pests, DDT was largely used in the services. Now many veterans have developed liver degenerations which many think is the result of exposure to DDT. But since the war, even more powerful poisons have been developed. Their proponents are all motivated by a worthy objective. Like our fluorine advocates, their methods of cure could be worse than the disease.

It does not seem long ago that the "Sulpha" drugs were announced. At last the wonder worker had arrived, the miracle of curing everything was at hand. Many doctors have used it right and left, sometimes with a little water and no soda. Soon the trouble began. Blood dyscrasias and kidney degenerations reaped their toll. Tragic, wasn't it? . . .

Tomorrow a salesman may enter your office and hand you penicillin candy to distribute. It is not mentioned that you may sensitize a patient and thereby place him in a dangerous situation. He may suddenly need a large dose of penicillin to save his life.

Dr. Girardot now spreads a broader canvas:

Our forests were unnecessarily destroyed, and our waters carelessly polluted. Our soils were robbed of their trace minerals by depletion and erosion. Now our food supply is deficient of these minerals, which are an essential constituent of the many enzymes created by our bodies. The resulting subnormal enzymes fail to maintain the health level intended by nature. I will not list details as I merely wish to cite another instance where men did not know what they were doing. Men have further insulated nature by destroying the biologic life in the soil with chemicals, which has resulted in a hardened soil unable to absorb water. The top runoff has produced erosion, gullies and tremendous floods. Millions of acres have become barren and deserted. Death and destruction again has resulted from the acts of the few. . . .

Yet today scientific blunderers are unduly stimulating plant life to produce heavy growth which contains low protein and high sugar. This is especially attractive to insect pests, which they then try to destroy with poison spray. If you and I fail to survive the food thus sprayed it is just our hard luck. . . . I will not startle you further by describing the terrific lethal impact of sugar in our national health. Nor will I discuss the pasteurization of milk. But unless you study and achieve a method of escaping from the errors of misguided men and unless you separate the truth from the deception of those who seek your money regardless of your life, our future for health and happiness becomes very dim indeed.

Those who, a few years ago, gave attention to the reports in the press of hearings held by the Food and Drug Administration know that while Dr. Girardot's recital may seem a bit dramatic, there is ample evidence to support what he says.

We started out by calling him a "conservative." It now seems more just to call him a "radical," in the true meaning of the word—one who seeks to get at the root. Perhaps a radical ought to be thought of as a man who combines the best qualities of the conservative and the progressive. The conservative fears unmeasured and ill-considered changes, while the progressive, easily recognizing the timidity of the conservative mind and its frequent indifference to human suffering and injustice, is angered by the worship of the *status quo* and wants to be up and doing. Actually, the conservative hasn't much of a defense against progressive criticism unless he is willing to become a radical—a radical like Dr. Girardot. The real problem is that there are too few radicals.

In relation to social questions, the progressives all appear on the "right" side—they are for "labor" and the "common man," but only in a generalized way. They will support the unions and "progressive" welfare legislation, but they ignore the possibility that a new division of the surplus value produced by the Capitalist System may not touch at all the real roots of human unhappiness in the twentieth century. They are like bakers who, having used devitalized flour, pump back into their bread a few laboratory-cultivated vitamins. They are like the benevolent employers who, having made fortunes from selling the public useless or nearly useless commodities, repay the world for its generosity by giving their workers three weeks of paid vacation instead of two.

One wonders if political problems can ever be discussed with the clarity applied by Dr. Girardot to the subject of food and health.