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INDUSTRIALISM: A DIAGNOSIS

IN pursuit of cultural self-consciousness through the 1 study of literature, Seymour Betsky, who has taught in America and now holds the chair of American Literature at the University of Utrecht, contributes a brief essay, "Towards a Critique of Industrial Culture," to *Tract* No. 15, a periodical edited by Peter Abbs and published by The Gryphon Press, Llanon, Ceredigion, Dyfed, U.K. (Single issues of *Tract* are a little more than a dollar in American money, and an annual subscription is £2—or about $4.00, if the pound happens to remain where it is for a while.)

Prof. Betsky writes to encourage study of American culture by men of letters. By "culture" he means "nothing more or less than [a] total way of life, the very quality of living at a particular time." It represents what people most deeply believe in, and the vision resulting from that belief.

> According to that vision, the culture makes implicit assumptions, so taken for granted that they rarely surface in a way that encourages us to interrogate them *as* vision, unless seriously endangered. . . . It employs distinctive means to gain its ends, and so transforms its total environment, human and non-human, accordingly. A culture's vision, then, tells us what it lives for and dies for, what it conceives to be the good life and the good death.

Prof. Betsky finds reason to think that present industrial culture is doomed, and his inquiry grows out of the necessity for "reshaping our present-day world." Inquiry is urgent because we are so ignorant of ourselves:

> The first questions are: "Can full human intelligence and full human sensibility achieve an adequate understanding of and a full response to, the culture of industrialism? Where can we locate that understanding and that sensibility?"
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> The answer to the first question at the present time is: "No"; the answer to the second is: "Nowhere." Thus the function of the intellectual community at the present time is to probe the reasons for so major a dysfunction, to assign accountability; and to take the first steps toward amelioration. As I have said, the process of industrialism effected either a radical or unprecedented change in every single aspect of the way of life as it supplanted a pre-industrial culture. *Yet neither American nor British industrialism built into its structure a strategy—institutional, group, or individual—whereby those informed intelligences capable of the essential task could come to know the culture itself as a culture, top to bottom.* . . . What we have, in effect, is a culture without a central intelligence, without comprehending mind, without a sense of order and control.

In a few pages Prof. Betsky characterizes industrial culture according to its behavior. Its "morality," for one thing, is based on winning, its drive is self-interest, or making a "profit." The principal virtues are toughness, ambition, and, paradoxically, teamwork. Saul Bellow has a character in *Mr. Sammler's Planet* who sums up the morality of successful industrialism as "permissible criminality," and Prof. Betsky agrees:

> We are only now beginning to assess the price paid for a "morality" which exemplifies no moral principle in the sense in which we have been accustomed to use the word. We require a new moral vocabulary, either stripped of all traditional associations where no longer relevant, or else establishing exacting terms of continuity with the past. As we shall perceive, the culture of industrialism is, in this respect, a self-deluding, lying culture, whose corrupt language has allowed it so far to have it both ways.

The "general welfare" dimension of self-interest and profitability is a higher "standard of living"—ultimately reflected in the Gross National Product. Production and sales are thus the most moral of the goals in the industrial society, and salesmanship is the means to a sanctified state.

> This has meant "Sales engineering," where experts in psychology, sociology, and economics—

> among others—provide the necessary information about audience to the decision-makers; who often translate such information into terms that Research and Development teams, or industrial designers, can understand.
>
> This has meant, above all, close cooperation with the enormous institution of advertising. In practice we must face the fact that, in America, advertising in action is the *institutionalization of lying, deceit, franc, dishonesty, and the very corruption of language which becomes, in effect, the corruption of consciousness itself.* When such a culture uses the traditional terms of "honesty," "integrity," "probity" and the rest, it is usually lying; or it has so lost touch with the characteristics of such traditional virtues that it is self-deluding.
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> Indeed, one can say that, if one adopted the standards implicit in the work of Nader and applied them to *all* items of consumption in the culture. . .—ideas, knowledge, literature, art, music, as well as all the well-known consumer's items—then one could not escape the truth that industrial culture is, in fact a culture that institutionalizes lying, deceit, fraud, and dishonesty. One can expect that the effective elite of industrial culture are men and women who practice these reverse "virtues"—lying, deceit, fraud, dishonesty—as "good for business." In such a culture, the traditional virtues—honesty, probity, precise use of language the habit of trying to tell the truth according to the better and best models for truth-telling available—simply do not pay.

As long as things go well, the leaders of industrialism are happy to wear badges of achievement, but when they begin to go wrong responsibility quickly becomes anonymous. After all, if you have been basing your success on the impersonal principles of the Law of the Market, an upset is not *your* fault. And if the morality of bribe-givers in business is up for examination, economic historians are eager to point out that making presents to customers has been going on at least since the sixteenth century, when "the British East India Company won duty-free treatment for its exports by giving Mogul rulers 'rare treasures'." Recently, a former Secretary of State, defending the Lockheed company, argued "that if the whole truth were known about what it did to secure orders from certain foreign governments, the orders could well be cancelled, the company ruined, and the $200 million in loans the government has made to keep Lockheed afloat would be lost for good." It is pointed out that business activities abroad now account for 15 per cent of the American GNP, 30 per cent of the profits of American corporations, and maintain ten million Americans in jobs. So, the prohibition of bribe-giving is said to present "the American businessman operating abroad with a seemingly cruel dilemma." If he doesn't give bribes, foreign companies will get all the business.

Is there any other level for discussion of this issue? Apparently not. Our multinational companies, it is said, constitute an American presence abroad and are instruments of the nation's power, and therefore its "security," which should not be jeopardized by "home-bred notions of business morality." What are the canons of morality? Security and economic wellbeing. "It would be far better," say two knowledgeable writers in the *Los Angeles Times* (Oct. 5), "if reform could be coordinated with other countries and with international organizations." Those people abroad insist on graft, and our companies will lose out if they don't do what everyone else is doing.

What then of responsibility for these views? Prof. Betsky holds "the vision itself of constantly improving 'living standards'" responsible, and since virtually all Americans embrace that vision, we are *all responsible.* But a special responsibility attaches, he thinks, to those who hold decisive positions in industrial culture—the people, that is, who get and accept the credit for industrial success. He may be right in this. Bank presidents doubtless have more responsibility than bookkeepers and mechanics. But bank presidents and corporate board members are far more thoroughly indoctrinated in the "vision."

Where did the "vision" come from, and why was it so persuasive?

And what, on the other hand, gives authentic morality persuasive power, and what has destroyed its authority?

One way of shaping the beginnings of answers to these questions would be to look at the major architects of the "vision" Prof. Betsky finds so much at fault. The "bad boys" are easy to list, since they have been called to account many times during the past fifty years. But they are not only bad boys; they are also the heroes of the Enlightenment. A partial list would include Bacon, Galileo, Descartes, and Locke. Why should we call them bad boys? Because their intellectual activities, so ardently pursued as an emancipation of the mind of man, created a universe without any inward reality—without, indeed, any justification or basis in human beings for moral principles. They hardly realized they were doing this. What was the source of their enthusiasm? The feeling that the time had come to make a new beginning—to leave behind the world of scholastic speculation, of fruitless logic-chopping and sterile moralizing. We know what Galileo said. He used the tools of mathematics to measure the motions of matter, and he said that this was better than turning the pages of old books. What was measurable, he maintained, was real. Then came Newton. As Whitehead puts it (in *Nature and Life,* University of Chicago Press, 1934):

> Newton's methodology for physics was an overwhelming success. But the forces which he introduced left Nature still without meaning or value. In the essence of a material body—in its mass, motion, and shape—there was no reason for the law of gravitation. . . . By introducing stresses—in particular the law of gravitation—instead of the welter of detailed transformations of motion, he greatly increased the systematic aspect of Nature. But he left all the factors of the system—more particularly, mass and stress—in the position of detached facts devoid of any reason for their compresence. He thus illustrated a great philosophic truth, that a dead Nature can give no reasons. All ultimate reasons are in terms of aim at value. A dead Nature aims at nothing.

Descartes confirmed this outlook, making an absolute separation between mind and matter, declaring mind to be out of bounds for investigation, and turning matter, all bodies and physiological processes, over to the mechanists for analysis and explanation. This separation, Whitehead declared, "has poisoned all subsequent philosophy." Lewis Mumford spells out the charge in *Pentagon of Power:*

> In effect, Descartes elevated the scientist into an absolute lawgiver, not of course in his individual capacity, but in his collective role. By turning man into a "machine made by the hands of God," he tacitly turned into gods those who were capable of designing and making machines. As long as those powers were extremely limited, as they indeed remained until the present century, this yearning for godlike powers did little harm. . . . Nevertheless he had little use for any other principle of explanation than that which the machine supplied; and it was this emphasis, not his discreet qualifications, that carried over into the methodology of science. "I want you to regard these functions," he wrote "as taking place naturally in this machine because of the very arrangement of its parts, neither more nor less than do the movements of a clock or other automaton from the weights and wheels, so that there is no need on their account to suppose in it any soul vegetative or sensitive or any principle of life other than its blood."

Mumford speaks briefly of the decision which confronted Descartes:

> To accept the Church's monopoly of the subjective life, or to surrender it to muddled magic and vulgar superstition, was to set limits to the examination of human experience and the pursuit of truth. The inner life could not remain forever a no-man's land, where saints, gypsies, lords, beggars, artists, and lunatics had established squatters' rights and wasted precious human energy erecting an endless series of crazy, flimsy structures. In turning his back on the realities of the subjective life, Descartes rejected the possibility of creating a unified world picture that would do justice to every aspect of human experience—that indispensable precondition for the "next development of man."

Bacon, like Galileo, was disgusted by the "word-wisdom of Scholasticism." His first principle, "Knowledge is power," became the slogan of the modern world. As Windelband says:

> In this, Bacon expressed what was moving the hearts of thousands at his time, under the impress of great events. With that series of discoveries beyond the seas, where through mistakes, adventures, and

> crimes, man had at last for the first time taken complete possession of his planet, with inventions such as those of the mariner's compass, of gunpowder, and of the art of printing, a mighty change had been introduced within a short time into the greater as well as the lesser life of man. A new epoch of civilization seemed to be opened, and an exotic excitement seized upon men's fancy. . . .
>
> The essential result for philosophy in these methodical beginnings of natural research, therefore, is twofold: empiricism was corrected by mathematics, and the shapeless Pythagoreanism of the humanistic tradition was made by empiricism definite mathematical theory. These lines meet and are bound together by Galileo. (*History of Philosophy.*)

A further great step in the externalization of the nature of man came with John Locke's *Essay Concerning Human Understanding*, which, as Carl Becker says (in *The Heavenly City*), "became the psychological gospel of the eighteenth century." Why was Locke's despiritualization of the human being so welcome in those days? Becker explains:

> Its great service to the men of that time was to demonstrate that the mind owed nothing to inheritance, to "innate ideas"; everything to environment, to the sensations that flowed in upon it from the outer world. A modern critic assures us that the theory of innate ideas which Locke demolished was "so crude that it is difficult to suppose that any serious thinker ever held it." That may well be. Maybe serious thinkers are few, and maybe the world is ruled by crude ideas. What Locke aimed at, no doubt, what the eighteenth century acclaimed him for having demolished, was the Christian doctrine of total depravity, a black, spreading cloud which for centuries had depressed the human spirit. For if, as Locke maintained the mind at birth was devoid of implanted and ineradicable ideas and dispositions, was in fact no more than a blank white sheet of paper upon which the outer world of nature and human association was to write whatever of good or ill repute might be found there, why, then, the mind of man was a record made by that outer world: jazzed and discordant now that the outer world was so; a satisfying and ordered symphony when that outer world should become, as it might, what men conceived it ought to be.

Indeed, men were now taking charge, and making up pragmatic rules that they thought would work. Locke looked about and reported on human nature as he found it, proposing principles of government that the men of the New World studied and incorporated in their revolutionary program. But the long-term effect of Lockean ideas is now in evidence. As a *Nation* reviewer says, summing up the contention of a recent book:

> . . . the influence of the liberal, Lockean tradition on American social, economic and political life is manifest in our inordinate emphasis on self-interest based upon the belief that man is a private, asocial and apolitical being. . . . The liberal, Lockean tradition proposed to discard fraternity as a necessary means to human development and as a norm in everyday social and political life. . . . the liberal tradition and its stress on the competitive ethos, its concern for material power and its atomistic individualism have come to permeate all aspects of American life with disastrous consequences. . . .

Interestingly, all this was foreseen by Thomas Carlyle almost 150 years ago. In an essay, "Signs of the Times," published in the *Edinburgh Review* in 1829, he recognized the machine as both an outward reality and an inner symbol of the culture that was coming into being. He saw its threat, the control it would exercise over not only man's material existence, but his mind as well. Noting the frequent comparisons, in even his time, of human society with a machine, requiring the cooperation of all for it to run smoothly, he observed:

> Considered merely as a metaphor, all this is well enough but here, as in so many other cases, the "foam hardens itself into a shell," and the shadow we have wantonly evoked stands terrible before us, and will not depart at our bidding.

Carlyle was anticipating the progressive mechanization of human life. Discussing his extraordinary insight in *The Machine in the Garden* (Oxford University Press, 1964), Leo Marx says:

> His point is that the age is increasingly reliant upon "mere political arrangements," and that in politics, as in all else, less and less account is being taken of that which "cannot be treated mechanically." Carlyle's immediate target is utilitarianism, with its

> emphasis upon the proper structure of institutions. But back of that philosophy he sees the environmentalism of the eighteenth century—the view that, on the whole, external conditions determine the quality of life hence human suffering can best be attacked by contriving better social machinery. What bothers Carlyle is the easy assumption that, as he puts it, "were the laws, the government, in good order, all were well with us; the rest would care for itself!"
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> In philosophy this mechanistic spirit is reflected in the still high reputation of John Locke. "His whole doctrine," says Carlyle, "is mechanical, in its aim and origin, in its method and result." When Locke makes the contents of the mind contingent upon images flowing in upon it from the outside, he reduces thought to what is ultimately a reflex of the world "out there." To account for a man's ideas and values only, or even chiefly, by the circumstances in which he lives is, according to Carlyle, to divest his thought of will, emotion, and creative power. . . . To Carlyle the empirical philosophy is negative and quietistic. "By arguing on the 'force of circumstances'," he says, "we have argued away all force from ourselves, and stand lashed together, uniform in dress and movement, like rowers of some boundless galley." In its transactions with the world outside, a mind so conceived responds like one cogged wheel turned by another. Used in this way the image of the machine connotes loss of inner freedom even as it provides outward power. "Practically considered," says Carlyle, "our creed is Fatalism; and, free in hand and foot, we are shackled in heart and soul with far straiter than feudal chains."

Small wonder, then, that the culture of industrialism was wholly unable to "know itself." The assumptions of the "vision" were themselves absolute barriers to any sort of self-knowledge. The matter of importance, in such analyses, is to recognize that the shapers of the vision were pioneers and reformers who believed they were shutting out human weakness and evil, and then to ask what else, in the process, did they *leave* out?

Their undertakings, however impressive, were all *ad hoc*. They were redressing balances, and to do so effectively they felt they must ruthlessly discard the past. No doubt they were right in discarding some things, but in their determination to devise a "system" that would make and keep all things new and good, they were deeply in error. They studied nature and planned arrangements, but they took man simply as "given," in all his flawed confusion, and tried to build a compensatory system around him. The assumptions of that system made the moral opacities of the present.

This is a time for laying new foundations capable of sustaining radical change—a change that will not make us lose our balance in future years. Man must be returned to the center of things—but man in what terms, with what capacities, kinships, and responsibilities?

REVIEW
ENERGY ECONOMICS—AN ENCYCLOPEDIA

WILSON CLARK has written a big, big book—*Energy for Survival: The Alternative to Extinction* (Anchor paperback, 652 pages, $4.95), which ought to be on the shelf with Ed Marston's *The Dynamic Environment*, since in some ways it is an extrapolation to planetary dimensions of the lessons in Mr. Marston's book. *The Dynamic Environment* teaches basic physics through the medium of showing how a city "works"—the processes and requirements of water supply, transport, and other applications of energy in an urban society. It is a primer for all citizens. Mr. Clark's book is a primer for citizens of the world, explaining why the technological society must undertake rapid self-reform or grind to a genocidal stop before many more years.

Why do these important books have to be so big? There is a sense in which writers like Mr. Clark are deliberately setting out to reverse the "knowledge explosion." Some day, because of their work, we shall be able to have small books, again, on subjects such as energy, but that can be only when we have learned to simplify our lives, decentralize our social processes, and individualize our conception of knowledge, outlawing as not knowledge, but irrelevant detail, the elaboration of technical specialties beyond the comprehension of a single intelligent individual. For then the knowledge of how to live a harmonious, fruitful, and collaborative life will be in some sense communicable. Right now it's hardly communicable at all.

So *Energy for Survival* is a "road back" book. After you have read it—or even read at it—you may be fairly well convinced that you know what has to be done, and the mood of the book is such that one can anticipate some joy and excitement in attempting it.

The word "survival" is in Mr. Clark's title. Perhaps it ought to be, since it seems quite true that unless the human race starts to move in the direction he indicates, it can't survive. But there is a very real sense in which the people who pioneer that movement, who show the way and set the pace, will not be thinking about "survival." They will be thinking about the right way to live, finding the satisfactions in interdependence with nature and one another. In short, they won't be in flight. They will have the best rather than second-rate motives. Fearful people are nearly always locked in position. "The system," they say, "won't let us do what you say we ought to do."

The book begins with a rapid survey of the historical development of what Mr. Clark calls a "high energy" society—ours. The climax was reached during the past twenty-five or thirty years. For example, while population in America grew by 43% between 1946 and 1968, consumption of electric power in that period increased by 276%. Other significant items of growth during those years were: motor fuel consumption, 100%; manufactured plastics, 1,024%o; synthetic organic chemicals, 495%; pesticides, 217%. Commenting, Mr. Clark says:

> One notable feature stands out: The common denominator in the list of electric power, motor fuel, plastics, synthetic organic chemicals, and pesticides is that *they are all energy resources.* While it is obvious that electric power is generated primarily by fossil fuels, it is not apparent to many that plastics, pesticides, and synthetic organic chemicals are also energy resources in another form. The fossil fuel resources—coal, oil, natural gas—that are used for the production of power in our society have increasingly been diverted to the manufacture of such synthetic materials.
>
> The inevitable result of more oil and gas drilling and coal mining to supply America's economic demands for consumer products (made by and from fossil fuels) has been to build the economy on a fossil fuel subsidy. Whereas the natural products of solar energy—such as agricultural commodities ranging from foods to clothing (cotton from plants, wool produced by grazing sheep, etc.)—once served the economy, the onward rush of fossil fuel energies to society's marketplace eliminated the former solar-derived products and replaced them with synthetic substitutes (plastics, etc.), which were cheaper in

> narrow day-to-day economic terms, although crucially linked to a finite resource: the stored fuels of the Earth. . . .
>
> All the wonders of today's technology are based on the fossil fuel energies, but the sophisticated technology of high-energy American society has failed to develop a source of energy to fuel itself when the fossil fuels are depleted.

The basic point here is that we are now *used* to this sort of consumption of energy. Many of our institutions are based on continuing its increase. It is in the grain of our lives. Yet it must change. An important section of Mr. Clark's book summarizes what is slowly becoming well known: That there is a limit to this sort of economic growth—growth in consumption of irreplaceable resources of energy. Of the famous book, *The Limits to Growth*, sponsored by the Club of Rome, the writer says:

> The work has been criticized by some for drawing an apocalyptic conclusion based on too many variables that are too inexact in nature. Nonetheless, it is a valuable study because it has asked the right questions, and in attempting to answer them has raised the very real specter of the disaster that threatens at the end of the road down which the industrialized world is racing at the present time.

Many pages are devoted to two fundamental realities: one, that the cost of fuels is going to go up, and continue to go up; second, that there are far more economical ways of using fuel than those now in practice. The latter are described in some detail. The possibilities and dangers of nuclear energy are examined carefully in fifty-three pages, with ample attention to the disquieting revelations of Arthur Tamplin and John Gofman, both scientists in the employ of the Atomic Energy Commission, and to other eminent researchers who joined with them in criticizing AEC policies. A section is devoted to the immeasurable danger implicit in the breeder reactor, which uses plutonium, an element called "fiendish in its toxicity"—35,000 times more poisonous than cyanide by weight. Since nuclear fission power, Mr. Clark points out, has no future without breeder reactors, "the AEC has made development of the breeder its no.-one priority."

It is a considerable relief to go from this unnerving subject to other alternative energy sources which may be developed in the future. There are chapters on geothermal heat, tidal and hydroelectric power, and solar energy. Solar energy is discussed from two points of view: large-scale solar power plants, in contrast with decentralized uses of solar energy. Often the large-scale plans are conceived on the assumption that people will continue to live and consume energy as they do now, while the smaller, independent and local means of capturing solar energy are related to a very different mode of life. Mr. Clark's natural sympathies are with the latter course, although he gives careful attention to some of the large-scale proposals, showing their advantage over present methods of generating power. But concerning the claims for "solar bioconversion techniques applied to industrialized agriculture and organic waste sources," he says that such recommendations "are based on strictly linear thinking, which does not take into account the nature of the biological system and its pervasive synthetic fuel subsidy." His conclusion on this question:

> Instead of trying to achieve the impossible—i.e., force the natural system into the technological mold—the technological mold must be fitted back into the biological system. The contest is not whether we can create synthetic natural gas, but whether we can decentralize agriculture and recycle resources. That is the promise of solar bioconversion—the ability to recycle resources. The additional energy wrested from the wastes of a city might be used for fuel conversion to run some of the city's systems, but it can never be more than a supplement to the energy demands of the city. The energy needs of the feedlots might be supplemented by utilizing the organic wastes of the confined animals for fuel, but an infinitely better solution is to decentralize the feedlot-agribusiness system and begin the return to a more natural biological cycle.

And in general:

> The prospects for developing solar power on a large scale are indeed intriguing, but the promises and aspirations of a few scientists may be fraught with error—unintentional, but potentially disastrous in terms of social planning. The primary flaw in most proposals for harnessing solar power is that the proponents have not accurately accounted for the amount of energy required to build and maintain solar power plants.

After a long discussion of various individual applications of solar energy, Mr. Clark says:

> The application of solar energy technologies on a low-cost basis offers the most direct and logical means of harnessing sun power. In the coming years of energy and material shortages, there may well be no major effort in large-scale uses of solar energy, because there will be no sophisticated technology base in Western societies to engage in the effort, due to social disruption caused by energy and material problems.
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> Fortunately, however, there will be ample opportunities to apply the "low technology" solar energy principles, and the communard dropouts of today's high energy society may well prove to be the messiahs of the future, as their development of low-cost solar energy technologies and decentralized lifestyles will be the best survival options for a majority of citizens of today's rich nations. The wealth of today's technology is based on fossil fuels and cheap resources; and as these decline, the wealth of the future may be based on the technologies looked down upon by today's standards.

We have hardly scratched the surface of this book, which is a veritable encyclopedia on the subject of energy and alternative energy resources. The material has been carefully researched, and is communicated in simple language. On the whole, the effect of reading the book is to feel vastly encouraged, by reason of the wealth of individual human ingenuity and resourcefulness on which Mr. Clark reports at length.

COMMENTARY
SEASONAL MUSING

CHRISTMAS EVE is for countless humans a time of the rebirth of hope—and then, of saddening melancholy. No one has expressed the hope more movingly than Walt Whitman, who ended his address to Jesus with these lines—

> We hear the bawling and din, we are reached at by divisions, jealousies, recriminations on every side,
>
> They close peremptorily upon us to surround us' my comrade,
>
> Yet we walk upheld, free, the whole earth over, journeying up and down, till we make our ineffaceable mark upon time and the diverse eras,
>
> Till we saturate time and eras, that the men and women of races, ages to come, may prove brethren and lovers as we are.

The foundation of the hope and also the occasion for melancholy have presence in Whitman's untroubled poem. Today, there seems far greater reason for melancholy than for hope. The divisions and recriminations are stronger than ever. What chance has love, we wonder to ourselves, when current history is constituted almost entirely of encounters disclosing new sorts of evil or wrong, with each encounter producing another phalanx of righteous adversaries?

Head-on encounters between Good and Evil seldom open the way to love. But there is another sort of encounter—between comprehensive understanding and past limitations—which quiets self-righteousness and generates no new antagonisms. We are thinking of two articles which deal with the conception of man modern psychology inherited from the founder of Behaviorism—John B. Watson. The articles are by Paul Creelan (in the Fall issue of *Humanistic Psychology*) and C. Weggelaar (in the September *Etc*.). These discussions do not "attack" Watson for his confining, mechanistic image of man; they understand him; they show that present-day psychology—humanistic psychology, at any rate—has *outgrown* him; and outgrown his reductive assumptions and their dehumanizing effects. Paul Creelan shows what Watson hoped to accomplish—freedom for psychology from bigoted religion. C. Weggelaar shows that in concentrating on practical action or purely physical behavior Watson ignored *expressive* behavior—behavior or speech which is addressed to consciousness, not some physical thing.

If there is anything to be learned from the present world scene, it is that love remains impotent except in the presence of understanding.

CHILDREN
. . . and Ourselves
TEACHER CENTERS

IN *Supporting the Learning Teacher* (Agathon, 1975, $10.00), edited by Marilyn Hapgood, Stephen K. Bailey says:

> Teacher centers are just what the term implies: local facilities and self-improvement programs organized and run by the teachers themselves for purposes of upgrading educational performance. Their primary function is to make possible a review of existing curricula and other educational practices by groups of teachers and to encourage teacher attempts to bring about changes.

This book is subtitled "A Source Book for Teacher Centers." The guidance and inspiration for these undertakings, some of which are independent, and some government-supported, has come from England. For reasons not altogether understood, the British people have a natural respect for teachers and, on the whole, are glad to let them use their own judgment and teach in their own ways. Vincent Rogers says in the introductory chapter:

> The British have faith in the classroom teacher as the ultimate change agent; she is the *sine qua* non of meaningful, lasting change. This, too, contrasts sharply with generally accepted strategies for change in American schools.
>
> Hand-in-hand with the development of a truly professional role for classroom teachers is the evolution of a similar role for the British "head teacher," or principal. Clearly, a good deal of the autonomy and flexibility of many classroom teachers stems from parallel freedoms and responsibilities for heads. As many Americans know, there are in England few citywide or countrywide curricular or methodological decisions made that bind all of a district's primary schools to a given procedure or set of materials. The head is expected to take the lead in these areas of his school—and most of the heads who have provided the magnificent leadership we have seen so often in Britain's finest informal primary schools have utilized their own freedom to bolster the role of the teacher as a responsible, flexible, decision-making professional.

Miss Hapgood makes Stephen Bailey her spokesman in her own introduction. He says:

> The underlying rationale for teachers' centers may be stated succinctly in terms of three interlocking propositions: (1) Fundamental educational reform will come only through those charged with the basic educational responsibility: to wit, the teachers; (2) teachers are unlikely to change their ways of doing things just because imperious, theoretical reformers—whether successions of Rickovers or Illiches or high-powered R & D missionaries from central educational systems—tell them to shape up; (3) teachers will take reform seriously only when they are responsible for defining their own educational problems, delineating their own needs and receiving help on their own terms and turf.

Instead of trying to figure out why the British have developed so well in this direction, it seems best to accept it as a fact and go on from there. One could say, of course, that *having* responsibility is a large part of developing competence, and that people who are not allowed to take responsibility will remain unsure of themselves, look for and require outside direction and support. One other consideration is the subjective side of the question—the attitudes of teachers toward learning, based on ideas about what human beings essentially are and how they grow. Bronson Alcott, for example, was utterly convinced that an old soul looked out of the eyes of even the smallest of children; he saw himself as simply a collaborator in helping that soul to take control of its situation, once again. It seems entirely possible for teachers to have feelings of this sort about the young without explaining them, even to themselves, by this kind of explicit Platonic doctrine. Psychologically, the unrationalized feeling might produce much the same effect.

It is conceivable, too, that this attitude would result from an understanding of the processes of individual growth, according to the views and explanations of Piaget. Piaget's idea that learning takes place through self-developed structures leads naturally to attention to the individual structure of a child, and to how such structures

are helped to grow. By this means it is realized that the child is a distinct, unfolding intelligence, slowly obtaining mastery over its tools of learning, by *using* them.

The creation of what is called the "open classroom" would be natural for teachers who come to think of children in this way, and who have the freedom to do what they have found to be right.

The chapter by Vincent Rogers, titled "Manifesto for Change," has this passage:

> During the time that these attitudes toward children learning, and teachers developed and took hold in Britain, a considerably different view dominated (and probably still dominates) American education. It would be difficult to be inclusive here but let me suggest the following as American attitudes, beliefs, and practices that appear to contrast sharply with British views and procedures:
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> (1) Despite talk of local initiatives and decentralization, we tend to make educational decisions on a systemwide (indeed, sometimes on a statewide) basis. We appear convinced that change can take place on a massive scale, and we still talk of "changing the schools" in Washington, D.C., Chicago, or New York. The federal government has never grasped the idea that monolithic approaches to any educational problem are seldom appropriate for all the children in a given community, and the principle of localism is simply not widely supported in the United States.
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> (2) American teachers and administrators are far more vulnerable to outside, nonprofessional pressures than are their British counterparts. The pressures may come from political groups, churches, or other special interests—as well as from the massive American education industry of textbook publishers and manufacturers of educational materials and equipment.
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> (3) We hold greatly differing views of the role of teacher and principal in our society. Teachers are not encouraged to act in truly professional ways, as decision-makers and agents for curricular change and adaptation on a local level. Therefore, many American teachers seem to lack the confidence, the positive self-image, of their British counterparts. They are often told that they are not very good—not very able—and many have come to believe it.
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> Our principals do not generally have the power to behave autonomously in their schools as do the British heads. Neither do they tend to see themselves as educational leaders; rather, they most often function as school managers, leaving truly professional decisions to those higher up in the administrative hierarchy.
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> (4) America's schools and colleges of education are dominated by essentially behavioristically oriented educational psychologists who tend to hold a rather narrow view of the learning process. American students at both the graduate and undergraduate levels are unlikely to study (unless they do so on their own) the views of Carl Rogers, Abraham Maslow, Erik Erikson, and others. Clearly, the general acceptance of such approaches as performance contracting, programmed learning, and behavior modification in our schools is evidence of the powerful influence of the behaviorists.
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> (5) Over the years we have built a vast educational bureaucracy in our schools. We have curriculum directors and coordinators, specialists of all kinds, assistant superintendents, and vice-principals, and so on. Clearly, some of these positions are staffed by very able people. Nevertheless, the overall effect has been the crippling of truly local initiative, the development of a subject-centered, atomized approach to education, and the creation of a largely authoritarian approach to the running of schools in most communities.
>
> (6) Finally, teacher education in this country seems to reflect many of the problems outlined above. . . .

There is plenty of "change" going on in education in America, Mr. Rogers says, but it is "based on quite conventional views of the purpose of schools and schooling and how children learn." It counts for little because "it does not challenge the dominant view of education."

Teacher centers are places where teachers have opportunity to develop what they need in order to make this challenge.

FRONTIERS

Diversification—in the Public Interest

UPHOLDING a lower federal court in the Monongahela Decision, the U.S. Fourth Circuit Court of Appeals on Aug. 21 ruled that the United States Forest Service had violated the terms of its basic character, the Organic Act Of 1897, by clearcutting stands of immature trees in the Monongahela National Forest in the mountains of West Virginia. The Circuit Court decision is reported and discussed by two writers in the *Sierra Club Bulletin* for October. They summarize:

> The Organic Act authorizes the sale only of "dead, matured, or large growth of trees"; requires that "before being sold (trees) shall be marked and designated", and that timber sold "shall be cut and removed." In its decision the appeals court made an extensive review of the legislative history preceding the passage of the 1897 Organic Act, and concluded: "This legislative history demonstrates that the primary concern of Congress in passing the Organic Act was the preservation of the national forests."

Of particular interest is the Court's review of the history of the Forest Service:

> It is apparent that the heart of this controversy is the change in the role of the Forest Service which has taken place over the past thirty years. For nearly half a century following its creation in 1905, the national forest system provided only a fraction of the national timber supply, with almost 95 per cent coming from privately owned forests. During this period, the Forest Service regarded itself as a custodian and protector of the forests, rather than a prime producer, and consistent with this role, the Service faithfully carried out the provisions of the Organic Act with respect to selective timber cutting. In 1940, however, with private timber reserves badly depleted, World War II created an enormous demand for lumber, and this was followed by the post-war building boom. As a result, the posture of the Forest Service changed from custodian to production agency. It was in this new role that the Service initiated the policy of even-aged management [involving clearcutting] in the national forests, first in the west and ultimately in the eastern forests, including the Monongahela.

One might get the impression from this review that the forests of the United States were in no serious jeopardy until the second world war. A reading of *Breaking New Ground* by Gifford Pinchot, creator of the Forest Service (with the support of Theodore Roosevelt), will correct this opinion. In a brief but graphic account of the battle to preserve the national forests for the American people, the chapter on Pinchot in Stewart Udall's *The Quiet Crisis* (1963) gives characterizing facts:

> In his [Pinchot's] time, the Forest Service was the most exciting organization in Washington. It was more a family than a bureau. In the field, around campfires, and in his home GP discussed the next moves and gave his associates the feeling that they served on the general staff in a national crusade. A natural leader, he chose his men well gave them authority, aroused an *esprit de corps* and sent them forth to save the forests. . . .
>
> It was the Chief Forester who framed most of the ideas which became Theodore Roosevelt's conservation program. The influential White House Conference in 1908, the farsighted Inland Waterways Commission study, and the landmark report of the International Conservation Commission in 1909 were Pinchot-planned and Pinchot-executed projects.

He even got through to the lumber interests:

> The preaching of Pinchot and his men—and the public opinion they stirred up—began to penetrate the lumber industry itself. A few leaders began to wonder if Pihchot's sustained yield idea was not worth a try' and "tree farming" under private land management had a hopeful beginning.

What happened to the Forest Service? Is it simply a matter of not having men of Gifford Pinchot's caliber at the head of the agency? Is typical bureaucratic and organizational decline the explanation? Judging from the historical review by the appeals court, the conscientiousness and general excellence of the Forest Service lasted a lot longer than the initial enthusiasm and efficiency of most other agencies. No doubt we now lack public servants of the quality of Pinchot, and of Harvey Wiley, who started the Food and Drug Administration, but the ruling factor is almost certainly the pressures exerted by business

enterprise—due in this case to the shortage of timber. Even Pinchot himself might have difficulty in meeting the demands of today's conservationists. He characteristically felt responsible to the needs of industry along with his commitment to "save the forests."

Fundamentally at fault, it seems, is the isolating psychology of self-interest, always the enemy of far-sighted planning. Private interest is not public interest. Meanwhile, people do need houses, and a certain justification attaches to the lumber industry in wanting to supply the wood of which most houses are built. It does not seem to occur to very many that the watchdog method of pro tecting the public interest, combined with the adversary approach to controlling the behavior of offending industry, will not, in the long run, continue to work. It barely works now. The conservation societies and agencies which devote so much energy to keeping track of industrial depredations on the environment might also give serious attention to the entire range of feasible alternatives for industry.

What about a concerted effort to bring alternative building materials into wider use? This would save a lot of trees. The habit of general cultural alertness to such possibilities should in time change the mood of the conflict between narrowly profit-oriented industry and mission-oriented reform. Righteous antagonisms growing out of the habitual adversary approach in business, law, and government are basically opposed to imaginative solutions. Everyone lies in wait for signs of weakness in the opponent. Do such matters always have to become a mighty struggle between Good and Evil?

Well, this is the proposal of an amateur, no doubt to be quickly disposed of by experts. For example, our idea of a return to adobe brick for California homes is hardly practical, it was pointed out, because of the vulnerability to earthquakes of adobe construction. Yet there are other areas which have adobe soil and no earthquakes. The original Spanish settlers made wonderful homes out of southwestern mud. Making mud brick, incidentally, might turn out to be a splendid form of intermediate technology—within the reach and capacity of people who can no longer afford to build their own homes out of wood. Why couldn't the building codes encourage such enterprise as in the public interest?

It may be said, meanwhile, that the lumber people won't want to go into the adobe brick business. Well, they may have to. (Detroit may some day have to make something besides cars.) It's at least a business, and might be a good one. Diversification is not alien to American industry, these days. The suggestion of feasible alternatives along with the idea that everybody is going to have to change might help to lubricate the changes. Experts ought to be good at making such suggestions. We have a lot of experts.