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THE PROBLEM-SOLVERS

FOR some time now, the Harvard sociologist, Daniel Bell, has been predicting great changes in the relationships of human society because of the increasing dependence of economic processes upon careful planning instead of trial and error. Writing in the Summer 1967 issue of the *Quarterly* of the California Institute of Technology, Bell said that the future governing class in the United States would be a professional elite. Only highly trained persons would be competent to deal with the decisions required at this level. While new problems would emerge, there would be, he then thought, a substantial gain. "The norms of the new intelligentsia, the norms of professionalism, are a departure from the norms of economic self-interest which guided a business civilization."

In *The Coming of Post-lndustrial Society,* Dr. Bell's latest book, he returns to this theme, suggesting that "alternative futures" can be anticipated by computer simulations, with crucial choices made at the governmental level, although the resulting programs may be carried out by the private sector. A review in *Business Week* (June 23) provides this summary:

> In effect, Bell believes we are witnessing the end of classical liberalism, that durable 18th century invention of John Locke and Adam Smith. No longer will our system be based on individual choice. No longer will we rely on the invisible hand to transform those choices into social welfare. Instead, Bell says, we are moving to a "communal ethic." We will consciously choose our goals and priorities through the political system, rather than the free market.

The reviewer wonders whether the American people will be willing to accept "the intellectual hierarchy that is inevitable in a knowledge society," then outlines other problems that are likely to frustrate even the best intentions of professional planners:

> The system will demand order and planning, yet people will increasingly seek to express their individuality in forms of hedonism. In the heyday of industrial capitalism no such tension existed because the prevailing life style stressed hard work frugality, sobriety, and delayed gratification—all of which met the technical demands of mass production. But capitalism's very success in creating a mass consumption society, Bell believes, has made pleasure and possessions ends in themselves. Today capitalism is justified not by the legal rights of ownership or the spiritual uplift of work, but by its ability to raise standards of living.
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> In sum, the Protestant ethic is dying, and no new moral value is in sight to reconcile individualism with the communal demands of the post-industrial society. "The lack of a rooted moral belief is the cultural contradiction of the society," Bell writes, "the deepest challenge to its survival."

Writing in this year's Summer *American Scholar,* Bell sees still other problems haunting the future. Technology has altered the scale of human activities, maximizing power and extending its control, with vastly disturbing effects. War has already become counter-productive from any point of view, and the limit to the natural resources of the world challenges the conventional idea of "progress." The cities of the mass society grow increasingly intolerable. The kind of progress we know about and the goodness of life we long for are at cross-purposes. Then there is the question of speed:

> It is possible that we are reaching that limit of scale in technological terms. In the last century, we have increased our speeds of communication by a factor of 10^7, our speed of travel by 10^2, our speeds of computer operation by 10^6, and our energy resources by 10^3. But all exponential growth reaches an asymptote, the ceiling limit where it levels off. In terrestrial speed, there is a natural limit of 16,000 miles an hour, since any higher speed throws a vehicle out of the earth's orbit. With aircraft we are questioning whether we should go above supersonic speed because of the danger it might present to the

> earth's atmosphere or to human noise tolerance on the ground. In communication around the world we have already approached, in telephonic, radio and television communication, "real time," and the technological problems are primarily those of expanding the number of bands of communication to permit more and more people to enjoy that use.
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> In a fundamental sense, the space-time framework of the *Oecumene*—the whole world—is now almost set. Transportation and communication bind the planet as closely today as they did the Greek polls of twenty-five hundred years ago. The major sociological problem created by that technology is what happens when all segmentation breaks down and a quantum jump in human interaction takes place. How will we manage when each and every part of the globe becomes accessible to every person?

It is almost as hard to follow Dr. Bell, here, as it was to follow Dr. Einstein out into space with his two clocks travelling at different rates of speed. The clock projection may be "logical," but we can hardly imagine it happening. But it helps to remember that when Dr. Bell speaks of how the whole planet is now bound together as closely as the Greek polls of Pericles' time, he also means what an unknown wit meant when he said that Stalin was only Genghis Khan with a telephone. This is called the "conquest" of space and time.

It sounds rather progressive to say that, with the coming change, we will "consciously choose our goals and priorities through the political system, rather than the free market," but if you read the papers these days you begin to wonder whether *anything* of importance should be entrusted to our political system. And on the question of the moral improvement Bell once hoped would result from decisions made by an intellectual elite, other voices should be heard. The track record of intellectuals in government has not been impressive during recent years. There is this comment by a student of cultural history, William Irwin Thompson:

> Many of the intellectuals now are so hungry for order that they would be willing to see the end of democracy and some new kind of Napoleonic order coming in. Arnold Toynbee, in his recent book *Surviving the Future,* says that as far as he can see we have a choice between a world federal state with an Alexander at the helm or nothing—annihilation.
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> I think that the intellectuals will be the first people to make an accommodation to the new power structure. As long as they can have their elitist sense as professors and computer scientists, they will be quite happy in an aristocratic management system. They don't stand to lose that much. Thus the ones who cry the loudest for freedom might not be all that much in favor of it. (*Time,* Aug. 21, 1972.)

Daniel Bell is not the only observer who has predicted a future in which technological experts will have control. Four years ago, Emmanuel Mesthene, director of the Harvard Program on Technology and Society, spoke of the failure of ordinary people to keep up with the technocrats trained in computer science. He saw no resolution for the dilemma made by the "rising tension between the expert technicians in government and those who want a direct voice in public policy but who are not equipped with the necessary science-based analytical skills." He nonetheless contended that technology has created a society with so much material diversity that it provides far greater freedom of choice than people have ever had before. (Actually, you can buy anything but a good environment, peace and quiet, and an acceptable education for your children . . . if you have the money.)

There is general agreement on this technical capacity. Teamwork in research for the application of science in technology has made it possible to plan in any direction. Distinguishing the present from the days when progress depended upon the discovery by single brilliant men of new ways of doing things—men such as Watt, Faraday, or Edison—Vannevar Bush, former director of the Office of Scientific Research and Development, has said that we are now able, in technical terms, to make whatever we like or want.

As he put it:

> The point is that the presence of a host of versatile, cheap, reliable gadgets, and the presence of men who understand fully their queer ways, has

> rendered the building of automatic devices almost straightforward and routine. It is no longer a question of whether they can be built, it is rather a question of whether they are worth building.

So we have all this capacity, but the implication of Daniel Bell's study is that we are reaching "limits" on every front of technical development, as well as creating an order of problems that may not have democratic solutions at all.

Is there a sense in which problems become insoluble because of the way in which they are formulated? It is natural enough for problems to be defined in terms of whole populations and nations, or even the world, but this usually makes them into political problems, and when you look at the measures adopted by political authority to solve or control them, you wonder again about Dr. Bell's conception of the society of the future.

Take for example air pollution, which Sheldon Novick discusses at some length in *Environment* for last May. He begins by saying that a sixth of our gross national product goes into cars, trucks, gas, oil, insurance, highway construction, etc., every year, and about a fifth of all the wage-earners in the country work directly or indirectly "to support the automobile." The internal combustion engine moves all these cars and other vehicles, and as a result pollution is becoming extreme. Novick says:

> The auto is the largest single source of air pollutants in most cities; in Washington, Los Angeles, and other areas without heavy industry, the auto and the power plant are almost the only sources of air pollution.
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> Because of these well-known circumstances, efforts to reduce air pollution now heavily involve various devices to dean up the internal combustion engine which powers cars and trucks. Federal legislation imposes limits on car manufacturers which will require a 90 per cent reduction in the release of auto pollutants by about 1976. Because no effort is being made to impose basic alterations in automotive technology, however, the effectiveness of this legislation is often questioned. Virginia Brodine has pointed out that present regulations, if effective will result in a maximum reduction in air pollution from autos of between 80 and 93 per cent of current highs, although not until the year 1990. Beyond that time, the increase in auto numbers will lead again to gradual worsening of air pollution. Effectiveness of the federal law cannot be taken for granted however. We have reported several times that even present federal emission standards have not been met by most of the new cars tested by the state of California and that, more recently, many car owners have been intentionally disconnecting control devices which reduce performance along with emissions. An Auto Club of Missouri clinic reports that about one quarter of new cars have been so altered. By 1975, auto pollution control devices may increase the price of each car by several hundred dollars.
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> While the auto manufacturers cry that regulations are too strict, legal limits may in the long run do little more than prevent worsening of air pollution. It is not clear whether any substantial improvement can be expected.
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> This gloomy picture is a result of our exclusive reliance on the internal-combustion engine, which is inherently a dirty device. . . .

That is the "big picture." A report from Canada, on another page of the same issue of *Environment*, makes an interesting contrast. In this article, Fradley Garner tells about a Canadian family doctor who happens also to be a practical engineer. Without statistics to discourage him, he built a battery-driven vehicle that is pollution free. "I wanted to show," said Dr. Peter Quandt, "that such a vehicle is completely practical for most city driving." Its description supports this claim:

> If this fiberglass-bodied three-wheeler were run 30 miles a day . . . the power would cost $1.50 to $2.00 in Canadian dollars a month, he estimates. A jumbo charger in the vehicle can be plugged into any 110-volt outlet. Plugged in overnight in the offpeak periods for generating stations, the car would be fully charged by next morning.
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> It can run about 100 miles at 40 miles an hour, according to the Edmonton general practitioner, who quotes surveys to the effect that more than 95 per cent of all auto trips are less than 50 miles, and the average local trip is just 7.3 miles.
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> Young Dr. Quandt sees the electric car—whether his or some other—as the compromise answer to the pollution probem in big cities. "We

> cannot continue to use the internal-combustion engine in our city centers,, he insists. Yet he feels that outlawing the automobile is hardly the answer.

Such cars are durable. Electric milk delivery vans in England, the report says, "have been known to run more than a 100,000 miles, and their motors then only have needed a change of brushes."

The point of telling about Dr. Quandt's three-wheeler is that he illustrates the resourcefulness of individuals—a factor which cannot possibly get into "big picture" accounts of social and human. problems. We too easily overlook the diverse and fertile talents of "ordinary" human beings when we consider only the diagnoses and predictions by scholars and futurists who extrapolate from past and present trends in large populations. There is also a tendency to ignore one of the massive effects of recent technological development—the waste and weakening of the individual's resourcefulness through removal from his reach of the means of personal solution of problems. Nothing unpredictable, like individual inventiveness, can be tolerated by advanced technological planning. More than one modern critic has pointed out that machines and appliances are now constructed in ways that make it practically impossible for the owner to fix them himself when they get out of order. You can't repair or replace a broken part, but must purchase a complete unit. Further, some of the new building materials and occasionally the building codes make it difficult for people to build their own homes. A point is reached in this march toward dependency where little difference remains between a consumer and a victim. What Ivan Illich calls a "radical monopoly" has taken charge. You may be "free" to buy a great variety of things, as Mesthene says, but you are compelled to buy them; an individual life of improvisation and self-reliant adaptation no longer fits with the ways of the established society. (You could say that never before has "dropping out" been made to appear so attractive to so many people.)

It will be remembered that in *The Technological Society* Jacques Ellul called modern "technique" a "blind logos" that enslaves human beings. Objecting, Daniel Bell complains that Ellul nowhere discusses "how man must live without technique." This ignores Ellul's distinction between *tools* and technique. The tool, he says, is the servant of its user. It does not require an elaborate servicing system to make it work. Tools, therefore, do not distort either the natural world or the nature of man. In contrast, as a constellation of systems, technology generates its own artificial necessities. Ellul waxes eloquent, declaring that where technology rules, "natural necessity, in fact, no longer exists." Continuing, he says:

> It is technique's necessity, which becomes the more constraining the more nature s necessity fades and disappears. It cannot be escaped or mastered. The tool was not false. But technique causes us to penetrate into the innermost realm of falsehood, showing us all the while the noble face of objectivity of result. In this innermost recess, man is no longer able to recognize himself because of the instruments he employs.

How do we distinguish between tools and-technical systems? No doubt the borderline is fuzzy, but the poles are clear enough. A man *user* tools but he *tends* systems. The tool is made to respond to human intentions. In systems, men respond to the requirements of an elaborate and interdependent network of coordinated machines. Systems are "scientific" in Ortega's sense of having purpose and developmental directions of their own, quite different from human purposes and needs. When human interest and value are made to rely wholly on the operation of the system, men become the slaves of these independent technological ends, which are now claimed to be prerequisites of all human good.

This analysis makes both Illich and Schumacher allies of Ellul. For Illich campaigns for a return to human beings of the tools they need to manage and better their own lives, and Schumacher contends that the developing nations

as well as dependent populations everywhere need a simple, tool-like technology which suits their needs, their resources, and their existing capacities. For Illich, the basic tool of life is the learning process, which ought not, he insists, to be the private domain of a licensed caste of specialists.

Human ingenuity armed with the right tools can always do better than the system, in terms of authentic human values. Ralph Borsodi showed this long ago in *Flight from the* City. And much more recently, in *A Landscape for Humans*, Peter van Dresser provided wholly acceptable plans for the human and ecological reclamation of a large area and population—northern New Mexico—by projecting the substitution of the intelligent use of tools of various sorts for the ruinous technological systems that are making a virtual wasteland of some beautiful country.

It is quite possible to argue that the scholars and analysts who measure human achievements and potentialities in the terms of systems and organized controls are using a conceptual language which leads, as we are now beginning to see, to self-defeat. The technocrats are no longer problem-solvers, but problem-creators. Today's problem-*solvers* are ingenious and resourceful and often very stubborn individuals. The symptoms of our ills have their statistical dimension, to be sure, and the massive, nationwide and even planetary extent of contemporary disorders makes it difficult to avoid thinking only in large, institutional terms. But the solutions may still be individual, no matter what stopgap measures are required during the time that must pass while people slowly become aware that only personal action, personal inventiveness, and personal responsibility can deal permanently with what has gone wrong. And it may be pointed out that the corporate action of a large number of personally responsible individuals is almost the practical opposite of corporate action taken over their heads, in the face of public indifference and even devious popular resistance to outside control.

REVIEW
DOING THE IMPOSSIBLE

IN a review-essay in the August *Atlantic*, Wallace Stegner says:

> All of Walter Clark's novels were written from ideas, 1 believe, especially from a preoccupation with problems of good and evil within the context of the real West. He was a little like Hawthorne in knowing all the time what he wanted to say. The characters he created to say it through, whether historical or contemporary, have most of the time a solidity and realism that are altogether admirable, but if he had a weakness, it was that sometimes his ideas outran their objective correlatives, and he steered them, or talked about them, rather than let them act. Not often. And when the symbolic larger meanings emerge, as so often, directly from something as solid as a log, when we meet and recognize the substance before we are asked to look for the shadow, then I follow him with my hat in my hand. He wasn't quite like Hawthorne, trying to develop a usable past, or not that alone; he was trying rather to marry sensitivity and philosophical ideas to the half-primitive Western life he knew. He kept trying to do the impossible, and he never missed it far. . . .

This is a sort of criticism we get very little of these days. One explanation would be that there are very few writers of the stature of Walter van Tilburg Clark. Another might be that magazine editors are persuaded that current political scandals will win more attention and produce gains in circulation. But there is intellectual and perhaps moral nourishment in Mr. Stegner's review, and almost nothing of a similar quality in all the other pages of the August *Atlantic*. A long article by Norman Mailer tells about the last, tortured years of Marilyn Monroe's life; a Washington newspaper man gives what he intends to be a dispassionate survey of the Pentagon Papers trial; and Elizabeth Drew provides a day-by-day account of what happened in the Watergate affair during the month of May. The details of the Watergate affair are incredible enough, but even lying, manipulation, and bribery grow banal and monotonous when they are shown to be part of a political way of life. One of Miss Drew's asides seems sufficient comment: "Can we train people in the black arts and then control their practice of their craft?" But she also says:

> The Watergate story feeds on itself. The news and the events it is about are often part of the same process in Washington—the news is an event, affecting the next event, which is then in the news, but never, in memory, to the same degree. Skills at reading between the lines of the newspapers to determine who is leaking, and doing, what to whom are put to the test as never before. Some stories are both leaked and denied by the same person or his allies.

The reporting on the affair has become monstrously voluminous, as though some desperate vacuum had to be filled each day to maintain the quota of national disgrace. People sometimes ask: "What can we *do* about all this?" The answer is something like Francisco Ferrer's answer to the question, At what age should a child's education begin? He said, "From the moment of the birth of his grandmother." Which is to say, we can only work now to create a society or civilization less prone to the tendencies of which Watergate is the inevitable result.

We need, in short, not specific "remedies," but civilized human beings. At the moment, writers like Walter van Tilburg Clark come to mind. Clark, Stegner says, was a Westerner who grew up in a cultivated atmosphere his father was president of the University of Nevada. He wanted the West to become a part of the consciously civilized world. Early in Mr. Stegner's essay there is this illuminating passage:

> Civilization is Walter Clark's theme, the West is only his raw material. What else is the burden of *The Oxbow Incident*? That novel is a long way from being a simple reversal of the vigilante stereotype or an ironic questioning of vigilante justice. It is a probing of the whole blind ethics of an essentially false, excessively masculine society, and of the way in which individuals, out of personal inadequacy, out of mistaken loyalties and priorities, out of a fear of seeming to be womanish, or out of plain cowardice, let themselves be pushed into murder. We live mainly by forms and patterns, the novel says. If the forms are bad, we live badly. We have no problem

> telling where good and evil dwell when we are dealing with the Virginian and Trampas in Wister's book. But here you cannot tell them by the color of their hats. Neither the lynchers nor the lynched are all good guys or all bad guys. Many of the lynchers would rather not be there and have not known how to say so. The hanged men are a greenhorn, a senile old man, and a Mexican no better than he should be. . . .
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> Evil has courage, good is sometimes cowardly, reality gets bent by appearances. And the book does not end with the discovery that the hanged men are innocent and that lynch law is a profound mistake. It goes on examining *how* profound a mistake. The moral ambiguities reverberate through the town. We begin to know the good guys from the bad guys by the way they deal with their own complicity in a tragic error.

Stegner discusses Clark's other books with similar perception, admiring especially *The Track of the Cat*, and in his conclusion wonders why, like some other American writers who grew up on the frontier, Clark turned to history during his later years. This interest develops, he thinks, because the West has been made into a myth by popular writers and a need is felt to go back to actual roots. But Clark's fiction, Stegner believes, earned him a place on the "permanent shelf." Why?

> He consistently tried to make the past, including the spiritually healthy but limited past of the displaced Indians, relate to the present. He repudiated the machismo that won, and half-ruined, the West, but did not repudiate its energy. He wanted it reinformed with spirituality, art, respect for the earth, a knowledge of good and evil. He wanted it to become a true civilization, not a ruthless occupation disguised as a romantic myth.

For a writer to exert a civilizing influence on his times, much more is required of him than missionary fervor. The influence, one could say, must be spontaneous; it will be good only because it is *not* by design. Civilizing qualities need the form of unpremeditated art; like delight in the beautiful, like pleasure in finding nobility in unexpected places, and like the quiet, humming enjoyment of the playfully humorous, these qualities are almost casual side-effects in the lives of people who have some depth of purpose.

A life is one thing, the spirit or vision which animates it something more. A civilized community honors that "something more." In one of her novels of New England, Mary Ellen Chase tells the story of an English Methodist parson and his family who come to the United States while the children are still young. He is to fill a pulpit in Maine. This book, *The Lovely Ambition* (Signet), was written years ago but it has themes we hunger for today. The preacher takes his helping vocation very seriously and sometimes involves his family in projects they find hard to bear. But they adjust and cooperate, even in what seem at first follies.

On one of these occasions, the parson's wife, Mrs. Kimball, is explaining to her housekeeper helper that her husband wants to bring home for a visit with the family one of the patients in a mental institution where he is a part-time chaplain. (Once a month he goes to the hospital to be with the patients, since the doctor in charge feels that his warmth will have a healing effect.) The housekeeper, Mrs. Baxter, already has her hands full running the large household, and when Mrs. Kimball speaks vaguely about the importance of having a "dream," she says:

> "I haven't had too much occasion for dreaming dreams in my life, but I hope I know better than to mock at folks that do. Well, go on with this queer dream of the parson's."

One of the children, who tells the story, continues:

> "That's just it," my mother said, her voice trembling. "It is a dream, and I know it. It's only another of his lovely ambitions which he's had all his life. But if it's cruel to shatter ambitions and dreams . . . which belong to the real world, then it must be even more cruel to tear them to pieces when they're in the world of one's faith, in the place where one really lives. I'm saying it very badly, I know, Mrs. Baxter, but my husband is always somewhere in an ideal world which just plain, ordinary people like you and me can't reach. He just doesn't see evil and confusion and selfishness, or if he ever does, he thinks we can all make things perfect or at least less imperfect, if we

only believe we can. It's absurd, of course! but I suppose that's why we love him as we do.

"It's a kind of obligation as well as merely a dream. Maybe it's even a dedication—I don't know, though I've lived with it all these years. So now perhaps you can see, Mrs. Baxter, that if I tell him he can't try to help these people and that he's just as mad as they are with his impossible hopes and longings to make the world better and happier—well, I don't—really—think—I can."

Mrs. Baxter rose nobly to the occasion; and the patients did come, two or three of them, with somewhat remarkable consequences for both themselves and the family.

The preacher's wife has patience with her husband, honoring the splendor of his dream, and she finds that good things, if not the dream's fulfillment, happen as a result. And Mr. Stegner forgives technical flaws and improprieties in Clark's stories that he would object to in a student's work, because of what Clark manages to accomplish:

I keep remembering that one of Walt's abiding intentions was to naturalize subtlety, sensitivity, spirituality, modulated and even ambiguous ideas in his realistic Western setting. He chose not to be limited, like some photographic naturalist, by the verbal and spiritual vocabulary of probability. So far as I am concerned, it is legitimate if he gets away with it. He does.

COMMENTARY
INTERMEDIATE TECHNOLOGY DEFINED

SINCE we have several times reported that E. F. Schumacher's book, *Small Is Beautiful*, was to be published in this country by Harper & Row, we should now pass along the information, acquired from Harper's, that this book will not appear until about Christmas, when it will be issued as both a hardback and a Harper Torchbook (paperback). We do have a copy of the English edition by Blond & Briggs, but plan to review the American one for the reason that it will have an introduction by Theodore Roszak. Meanwhile, since this week's lead article makes reference to Dr. Schumacher's theme of intermediate technology, we quote from him the following explanation of its importance:

> As Gandhi said, the poor of the world cannot be helped by mass production, only by production by the masses. The system of *mass production*, based on sophisticated, highly capital-intensive, high energy-input dependent, and human labour-saving technology, presupposes that you are already rich, for a great deal of capital investment is needed to establish one single workplace. The system of work *production by the masses* mobilises the priceless resources which are possessed by all human beings, their clever brains and skilful hands, *and supports them with first-class tools.* The technology of *mass production* is inherently violent, ecologically damaging, self-defeating in terms of non-renewable resources, and stultifying for the human person. The technology of *production by the massed*, making use of the best of modern knowledge and experience, is conducive to decentralisation, compatible with the laws of ecology, gentle in its use of scarce resources, and designed to serve the human person instead of making him the servant of machines. I have named it *intermediate technology* to signify that it is vastly superior to the primitive technology of bygone ages but at the same time much simpler, cheaper, and freer than the super-technology of the rich. One can also call it self-help technology to which everybody can gain admittance and which is not reserved to those already rich and powerful.

Continuing with this explanation, Dr. Schumacher remarks that any third-rate engineer can increase complexity, while it takes flair to make things simple again. And this capacity does not come easily to people who "have allowed themselves to become alienated from real productive work, and from the self-balancing system of nature, which never fails to recognise measure and limitation."

> Any activity which fails to recognise a self-limiting principle is one of the devil. In our work with the developing countries we are at least forced to recognise the limitations of poverty, and this work can therefore be a wholesome school for all of us in which, while genuinely trying to help others, we may also gain knowledge and experience how to help ourselves.

In another paper Dr. Schumacher says:

> The idea of intermediate technology does not imply simply a "going back" into history to methods now outdated, although a systematic study of methods employed in the developed countries, say, a hundred years ago could indeed yield highly suggestive results. It is too often assumed that the achievement of western science, pure and applied, lies mainly in the apparatus and machinery that have been developed from it, and that a rejection of the apparatus and machinery would be tantamount to a rejection of science itself. This is an excessively superficial view. The real achievement lies in the accumulation of precise knowledge, and this knowledge can be applied in a great variety of ways, of which the current application in modern industry is only one. The development of an intermediate technology, therefore, means a genuine forward movement into new territory, where the enormous cost and complication of production methods for the sake of labour saving and job elimination is avoided and technology is made appropriate for labour-surplus societies.

Already, he says, there is a great deal of intermediate technology in use, with excellent examples of it in both developing and advanced countries. Yet there is also much ignorance of its advantages. Why?

> It is simply that brave and able practitioners of intermediate technology do not know of one another, do not support one another, and cannot be of assistance to those who want to follow a similar road but do not know how to get started. They exist, as it were, outside the mainstream of official and popular interest.

Machinery catalogs and institutional arrangements for dispensing aid show "an insurmountable bias in favour of large-scale projects on the level of the most modern technology." What is needed is popular education in the meaning and possibilities of intermediate technology, with numerous practical illustrations of how it works and could be made to work.

CHILDREN
. . . and Ourselves
LANGUAGE AS CLOTHING

WHEN Daniel Fader, who wrote *Hooked on Books*, asked for an inner city school in Washington, D.C., as a place where he could continue an experiment in teaching English, they tried to give him nineteen schools, arguing that anything good ought to be done in a big way. He was stubborn and insisted on working in only one school. So they gave him Garnet-Patterson Junior High School. Then, when he said there wouldn't be any "tests" to prove the value of his program, they were bewildered:

> Was I suggesting that we not test "English in Every Classroom" in a serious and professional way? Indeed I was, I replied. Why bother with testing when success is guaranteed? What program could fail with class size greatly reduced and bad teachers eliminated? Given good teachers and small classes, even the most witless program would be likely to register measurable success.

So he saved the system all the money that would have been spent on tests. What else he did is reported in *The Naked Children*, published by Macmillan and Bantam (1972). His object was practical literacy He wanted these twelve-, thirteen-, and fourteen-year-old ghetto children to be able to read and speak intelligently. He did help them, but he also found out some things that are often ignored by teachers and school administrators, and may continue to be ignored. One is that effective classroom education is not the magic key to literacy. "However we may regard the classroom and literacy, it is time we realized that significant portions of the impoverished community now regard both as deadly enemies of their self-regard and self-preservation." What good are "approved methods" of teaching in a situation like that?

In one case, Dr. Fader found his youthful career as a pool hustler the secret of success. Cicero, a boy whose uncle owned a pool room, worked nights and slept late in the morning, making his school attendance so irregular he couldn't expect to be promoted. After Fader acquired a few allies in the adolescent community, he managed to meet Cicero (known as "Sis") at his uncle's place, and then the other children began waking him up in the morning so he could get to school on time. Fader's interest in the boy was infectious. Cleo, the girl leader of Fader's small "gang," helped to fix Sis a breakfast of hot food, which was better for him than beer.

One day Cleo asked Fader to see Sis's homeroom teacher about his improved attendance record. Couldn't he hope to be promoted, now that he came to school every day? The gang would keep on getting him up, and were helping in other ways:

> "We teachin' him," she said, almost inaudibly.
>
> "What?" I asked, meaning only to have her repeat what she had said. "We teachin' him to talk better."
>
> They were, and the results were in school and poolroom for all to hear. Dramatic changes usually reserve themselves for stage or screen. Sis's change was truer to the pace of real life—it was slow, for his tutors (and for him) it must have been painfully slow, but it was perceptible. By the first week in June he had become a boy who spoke better than anyone had a right to expect in March. In his case, better meant clearer, sometimes so much clearer that he did not sound like the same boy who had once asked me "wahshoopoo?"

Fader gave Cleo and another boy, Wentworth, a tape recorder to use with Sis.

> So long as child or adult is blocked from the sound of himself—whether by himself or by the instructor, whether in his written or his spoken language—attempted remediation of his language is hopeless. Apparent change may easily be obtained, but it is certain to be ephemeral in its effect for it will be based upon supervision rather than comprehension. The privileged child who does not hear himself may become the adult who offends the ears of his society. The impoverished child who does not hear himself relinquishes one powerful weapon for survival.
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> Sis's first reaction to hearing himself, as reported by his tutors, was a classic one: "Ain't me,"

he said, when Wentworth played his first tape back to him.

"Know how he feel," added Wentworth. "When I heard me, didn't want it to *be* me."

Sis obviously felt the same way, only he felt it in proportion to the greater pain of hearing his own mumbled and garbled speech.

Dr. Fader has thought through the question of the significance of spoken language in relation to minority groups and has come to several conclusions:

> I deny the notion that black lower-class children should not be required to learn standard English. More than that, I am willing publicly to defend the practice of teaching standard English to all children even when it is attacked on the grounds that to teach standard English is to teach middle-class values. I also believe that those who would deny the relationship between teaching the language and the values of a language community are no less dangerous than those who would forbid the black child access to the language of the dominant class.
>
> The truth is, I believe, that we inevitably teach who we are and what we value even as we teach how we write and how we speak. To deny these simultaneous reactions is to deny our existence. . . . Of course we propagandize for our way of life as we teach the language which represents it. Though we can do no less, we are not absolved from the obligation of restraint even as we proselytize. In the specific action of teaching standard English to impoverished children who speak a dialect, the required restraint can be the product of a simple sense of fair play (sometimes known as human decency, not always recognized as a necessary component in relations between adults and children) or it can be produced by an equally simple concern for the child's survival. No matter which cause the effect will be the same: No child will be required to lose himself while assuming other identities.

An example of this "restraint" occurs in the account of a last breakfast Fader had with the children under his care during the experiment. On the day he was to say goodbye to these black youngsters, he invited them to his hotel for breakfast, explaining that there were a few unspent dollars coming from his federal contract which would pay for the food.

Six wide-eyed children stared at their breakfasts and might have been staring yet had I not begun to cut and chew with obvious satisfaction.

"Gov'min' sure got a lot of money." Uncle Wiggly's comment, directed to nobody, as he watched the waiter remove our empty plates from the table.

"Worser ways to spend it." Rubbergut, laconically, from behind his third cup of coffee. Only good fortune had kept me from specifying a glass of milk for everyone when I had arranged our breakfast with the assistant manager. All six drank great quantities of coffee with their breakfast; all thought that my pot of tea or the milk I diffidently suggested were odd breakfast drinks, to say the least.

"Worse, not *worser*. Ain't no such word." The first time in nine months I had heard one child correct the language of another. Wentworth's correction of Rubbergut was gentler than Rubbergut's retort.

"Who say? My momma say *worser* and she oughta know!"

"Ain't no such word, is there?" Wentworth appealed the question to me. It wasn't an appeal I was anxious to arbitrate.

"No," I said, "there isn't." If I had learned anything in our time together, it was that equivocation was always transparent to their eyes. If you told them as much of the truth as you knew, they could usually arrange it to be bearable. Half-truths or well-meant lies were anathema, and I had to overcome my instincts in order to stop myself from dealing in them. Once having told the truth, however, charity was not only permissible, but required: "But everybody makes up words like *worser* because they sound right. That's one way we get new words in our language. Maybe someday *worser* will be in the dictionary just because so many people say it."

"But *right now* it's wrong?" Wentworth wouldn't have pushed it that far; it was Rubbergut who sensed equivocation.

"Yes."

"Anyway, I ain't gonna tell her." Rubbergut might never be president, as Snapper had said, but he would be a good man.

Dr. Fader kept looking until he located the growing tips of these children. Then he cherished the nuances in the way they grew.

FRONTIERS

Attractive Simplicities

IN a paper presented in the summer of 1972 at CIDOC in Cuernavaca, Mexico, Boaventura de Sousa Santos questions Ivan Illich's reliance on legislation to bring into being the "Convivial Society," as proposed in *Deschooling Society* and *Retooling of Society*. Conventional law, he argues, is typically used to consolidate and strengthen the status quo, rather than to liquidate existing institutions. This writer also believes that law will have a very different form in a "convivial society," and to illustrate this he describes the informal "law" practiced by the people who live in squatter settlements (*favelas*) in Brazil. (Conventional law, he points out, has proved totally unable to solve the *"favela* problem.")

In the eyes of the official legal system of Brazil, this *favela* law has no standing at all. It gains its authority wholly from the people who live by its provisions. The account of how it works is based on de Sousa Santos' experience in a *favela* of Rio de Janeiro, which he calls Pasargada, where he lived for a time. The residents of these settlements—we would call them shanty towns—elect a *presidente.* He may be a storekeeper or someone else without formal legal training. "His daily work," de Sousa Santos says, "includes many other activities besides disputes prevention and disputes settlement." How does he prevent disputes?

> Two or more members of the community interested in making a contract or entering any other type of legal relationship may come to the association to see the *presidente.* Usually the parties come accompanied by relatives, friends or neighbors some of whom will serve as witnesses. The parties explain their intentions to the *presidente,* who may then question them about the legitimacy of the contract. For instance, if the selling of a house or shack is what is involved in the contract to be made, the *presidente* will request the seller to supply evidence of his ownership. He will also question both parties about their firm commitment to make such contract and their willingness to comply with the conditions agreed upon. He may also want to obtain detailed information about the specific conditions of the contract. The intervention of the *presidente* is subjected to no specific rules and may not even take place. It depends heavily on how well he knows the parties and the property under transaction.

The parties may prepare the contract, or ask the *presidente* to do this, and then, after it is read to them, they sign in the *presidente's* presence. The residents' association has a file copy.

Disputes are settled by give and take, with the help of the *presidente.* He mediates, seeking agreement on the basis of reasonableness, not relying on legal norms. An effort is made to help the disputants to put detached impartiality in the place of partisanship. Impartiality is also their responsibility, not only a neutral third party's. There are no lawyers and no formal judges, and while these functions are performed they are not differentiated into professional specialties as in highly organized societies. Other advantages may be seen:

> Pasargada residents do not pay fees to have their cases handled by the association. They don't have to change clothes or pay for transportation, as would be the case if they were to consult lawyers or attend the court downtown. Legal arguments and documents are expressed in ordinary everyday language. When technical expressions are used they are widely known and their meaning does not have to coincide with the meaning attributed to them in the official legal system. A folk technical language, as I call it, has developed. Finally, the cases are quickly disposed of.

The residents' association has no sanctions it can apply to enforce its rulings, relying, instead, on trying to secure agreement of the parties to any decision. In summary, de Sousa Santos describes the use of "law" in Pasargada as "low-powered justice, wide distribution of legal skills, manageability, and autonomy of use."

He does not suggest that the shanty town is a "convivial society," but he thinks that this legal system, operated entirely by amateurs, has some of the qualities of conviviality. All its tools serve the needs of the people, there being no artificial needs created by the system itself.

One might say, of course, that those who live in *favelas* or shanty towns are pared-down people who can't afford any other kind of law. This is doubtless true, and may be responsible for the discovery that such community law works rather well. What then? One could argue that this simplicity is fine at a primitive level, but that modern life is more complicated. Again, this may be true, but complication is in itself no virtue, and is beginning to be recognized as often a terrible disadvantage. And one might ask in return: Shouldn't a really "advanced" society be able to achieve simplicity along with its other excellences?

Such questions can hardly be answered. There are both practical and psychological obscurities. For one thing, no one really knows what would be the optimum combination of technical with communitarian means for people choosing voluntary simplicity in their lives. This would have to be worked out through experience. Moreover, a wanted machine might prove to be something like Pandora's box—looking like a simple device but unfolding unpredictable complications when it goes into use. Finally, the simplicity which would result from majority preference would almost certainly be different from the simplicity practiced in a marginal society like the one experienced by de Sousa Santos. Both the communes of the dropout young in the United States and of the shanty towns of Brazil and elsewhere maintain symbiotic relationships with larger, technologically ordered societies. Can these really be taken as samples of how things would work for people not living on the fringes of a complex society, whether by choice or necessity?

Yet there can be no doubt about the reality of the simplicity of community law and its uses, under the conditions of the *favelas*. Nor is there any doubt about is desirability. But such simplicity would survive only among people who don't want privilege or private advantage, and who reject the social differentiations which make them possible for the clever and the strong. Which raises the same old question: Can virtue be taught?