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TWO LAWS, UNRECONCILED

NOT long ago a man with life-long interest in well-designed low-cost housing and preference for "architecture without architects" remarked that things are in pretty bad shape when an ordinary American finds it difficult to acquire a decent piece of land and almost impossible to build a house on it himself. He was right, of course. For the past thirty years there has been a trend away from owner-built homes, and a multiplication of unimaginative, monotonous tract houses, packed together as closely as the building code allows. Inflation has pushed the price of land out of reach for many people, and taxes have become confiscatory in some areas. The cost of conventional building materials such as lumber is almost prohibitive, except for recycled stuff which, although having various advantages, requires about twice the labor that fresh-cut green lumber involves. Ingenuity can sometimes overcome these obstacles, but the building codes in areas close to metropolitan centers are repressive of innovation in both design and the use of unorthodox materials, with the result that only the rich can afford to build these days, and they of course hire a contractor.

The worst thing about this situation is the increasing dependency of a once-resourceful people upon specialists and manipulators of various sorts, which results from not being able to act for themselves. Relying on others gets to be a habit, one that is hard to break.

We have come a long way from "the American, this New Man," whose talents Crèvecœur celebrated in 1783. As Arthur M. Schlesinger remarked in his famous essay on this subject, the background of diverse experience which frontier life gave to the first American farmers provided "an unexcelled training in mechanical ingenuity." They and their descendants became "a race of whistlers and tinkers, daily engaged in devising, improving and repairing tools and other things." They had, as Emerson put it, "the power and habit of invention in their brain." They brought some traditions with them from the Old World, but in America they were continually confronted by situations to which no tradition applied, and they had to learn to do practically everything for themselves. They gained universal "know-how" and were proud of their resourcefulness. As Schlesinger says:

> Thus versatility became an outstanding American attribute. In public affairs the common man agreed with President Jackson that any intelligent person could discharge the duties of any governmental office. He had an abiding suspicion of the theorist or the "scholar in politics," preferring to trust his own quick perceptions and to deal from day to day with matters as they arose. In his breadwinning pursuits the American flitted from job to job in marked contrast to the European custom of following permanent occupations which often descended from father to son. The most casual scrutiny of the *Dictionary of American Biography* discloses countless instances reminiscent of John Marshall and Francis Makemie in colonial times. Thomas Buchanan Read, born on a Pennsylvania farm, was in turn a tailor's apprentice, grocer s assistant, cigar maker, tombstone carver, sign painter and actor before he became portrait painter, novelist, poet and Civil War officer. Another personage is listed as "ornithologist and wholesale druggist", another as "preacher, railway president, author,", and still another as "physician, merchant, political leader, magazine editor, poet, and critic. The wonder is that, despite such a squandering of energies, they could yet gain sufficient distinction in any phase of their activities to be recalled by posterity.

Amplifying Emerson's praise of American ingenuity, a contemporary, T. L. Nichols, in a book on the middle years of the nineteenth century, asked:

> Would any one but an American have invented a milking machine? or a machine to beat eggs? or machines to black boots, scour knives, pare apples,

> and do a hundred things that all other people have done with their ten fingers from time immemorial?

In *The Idea of Progress in America, 1815-1860,* Arthur Ekirch looked back on the same period, showing how securely the doctrine of material progress was identified with the vigorous Protestant religion of the time. In 1841 a Christian minister, speaking in Baltimore, declared trade to be "the great means of civilizing and improving mankind" and he contended that the merchant after profits and the general leading his army were "equally the instruments in the hands of a higher Power of ministering to the gradual improvement of the world." Manifest Destiny was already in the air. "All nations," said a writer on the Prospects of America in 1857, "are to come under the sway of our principles, but never are they to pass under any yoke." Americans would conquer, but "not by the sword." The material progress of Anglo-Saxon genius would open the way to the Christian missionary movement, and all nations would be evangelized, a Presbyterian minister announced in 1843. A Christian essayist spoke glowingly of the diffusion of civilization by commerce, bringing habits of industry to savage tribes. Another Presbyterian clergyman, Robert Baird, grew ecstatic in contemplation of the benefits of science and invention, hailing the arts of printing "that multiply the Word of God literally with every minute." Thus were the inventions of science strengthening religion.

Robert Walker, who was to be Secretary of the Treasury under Polk, as a young man published a spirited reply to Carlyle's critique of mechanism and the dominance of mechanical philosophy, suggesting, in 1831, that the machine was an earthly reflection of divine powers. "When we attempt to convey an idea of the infinite attributes of the Supreme Being," he said, "we point to the stupendous machinery of the universe." Carlyle blasphemes, since technological progress is evidence that man is learning to fulfill the divine plan. The machine will bring abundance to mankind, and the elimination of drudgery would make possible the flowering of spiritual acquisitions in all men. Apparently, Lynn White, Jr., does not exaggerate when he says that "modern science was born in a matrix of Christian theology," and that "modern technology is at least partly to be explained as an Occidental, voluntarist realization of man's transcendence of, and rightful mastery over, nature." For the American advocates of technology in the nineteenth century, machinery and trade were the appropriate means for the realization of an enlightened and universal Christendom. It seems, when you think about it, that Americans made hardly any other claim to virtue.

And now, a hundred or a hundred and fifty years later, what do we say?

Let us see what, under the beneficent rule of technological system, has happened to our resourcefulness, our flexibility, and even our inventiveness. In *Environment* for June, the editor, Sheldon Novick, muses on the announcement by the auto-makers of Detroit that they "are unable to meet federal standards for air pollution control by 1975." He says:

> When General Motors, which is bigger than Holland, says it *can't* think of a way to cut car exhausts, a great blow is struck against the honor of American ingenuity. Every bright high school student seems to be developing a clean auto engine, and undergraduates have been building and racing them for so long the novelty is gone. But the giants of Detroit have struggled mightily and have been overcome.

Is it time to "socialize" General Motors and turn it over to the undergraduates and kids in high school? Or would that spoil *their* ingenuity? Mr. Novick muses on:

> The electric power companies say they can't think of a way to remove sulfur dioxide from their smokestacks. One St. Louis utility has tried a simple system, but the pipes keep getting clogged and the company apparently can't find a way of unclogging them.
>
> The oil companies can't find any oil, and when they do most of it winds up on a beach in Louisiana.

> The chemical companies can find no way of making detergents except by wrecking waterways or poisoning their customers; the food companies are unable to carry a product from farm to breakfast table without losing most of its nutrition along the way and without adding a pharmacopeia of toxic materials; the highest technical achievement of our railroads seems to have been the golden spike which completed the first transcontinental line, the paper companies argue that removing ink from wastepaper is roughly comparable to the invention of perpetual motion and about as likely to be achieved, coal mine operators are still wrestling with the safety devices of the sixteenth century.
>
> I am getting tired of being asked, "Why can't a country that sends a man to the moon collect its own garbage?" The question I would like answered is this: "How in the blazes did a country which puts industrial waste in its drinking water ever manage to send a man to the moon?"

We used to wonder how the editor of *Environment* could read his own paper every month without getting tired of it all. Well, he can't.

The trouble is, the doctrine of economic and technical progress which started out as patriotic, good business, and Godly, too, has been so deeply believed in for so long that it may take, as Lynn White, Jr., suggests, a religious revolution to get a truer faith going. Nothing is so successful in the defiance of facts as a well-organized and properly endowed religion, and how else can we explain the terrible consistency which provokes Mr. Novick's embittered complaints?

However, it is only fair to point out that something more than established dogma (profit is more important than anything else) blocks the way to intelligent action by the auto manufacturers. In *Small Is Beautiful,* E. F. Schumacher makes extensive use of Galbraith's analysis of the history of the Ford Motor Company in *The New Industrial State.* Briefly, the Ford company was set up in June, 1903, with an initial cash investment of $30,000. The first car reached the market four months later, in October. The Ford factory then employed 125 people. But today, if Ford decides to put out a new model, *years* of just getting ready are required. Preparation for making the Mustang took three and a half years. The engineering and styling cost $9 million, the tooling up to $50 million. What had happened in the sixty years from starting the company to making the Mustang? There was a vast increase in the time it takes to put a car on the market, and a vast increase, also, in the capital investment required. And there was a vast *decrease* in manufacturing flexibility. Those are three important items of change. From *Small Is Beautiful:*

> Galbraith comments "Had Ford and his associates (in 1903) decided to shift at any point from gasoline to steam power, the machine shop could have accommodated itself to the change in a few hours." If they now try to change even one screw, it takes that many months. Fourth, increasingly specialized manpower, not only on the machinery, but also on the planning, the foreseeing of the future in the uttermost detail. Fifth, a vastly different type of organization to integrate all these numerous specialists, none of whom can do anything more than just one small task inside the complicated whole. "So complex, indeed, will be the job for organizing specialists that mere will be specialists of organization. More even than machinery, massive and complex business organizations are being tangible manifestations of advanced technology." Finally, the necessity for long-range planning, which, I can assure you, is a highly sophisticated job, and also highly frustrating.
>
> Now what is the upshot of all this? The upshot is that the more sophisticated the technology, the greater in general will be the foregoing requirements.

Schumacher's point is that once you are used to the super-technology typified by 1963 Ford production—or today's, of any car—you *have* to work with the system to get any of its advantages:

> This is absolutely crucial for our understanding of the modern world. At this level no *creations* are possible, only extensions, and this means that the poor are more dependent on the rich than ever before in human history, *if* they are wedded to that level. They can only be gap-fillers for the rich, for instance, where low wages enable them to produce cheaply this and that trifle. People ferret around and say: "Here, in this or that poor country, wages are so low that we can get some part of a watch, or of a carburetor,

> produced more cheaply than in Britain. So let it be produced in Hong Kong or in Taiwan or wherever it might be." The role of the poor is to be gap-fillers of the rich. It follows that at this level of technology it is impossible to attain either full employment or independence. The choice of technology is the most important of all choices.

Mr. Schumacher is talking about industry, but what he says is becoming equally true of the mechanized agriculture of the United States, as may be illustrated by the operations of the Del Monte Corporation, which owns close to 41,000 acres of good land, and leases 92,000 more acres in the U.S., Canada, the Philippines, Kenya, and Latin America. According to a new paper devoted to land reform, *People* & *Land* (Summer, 1973), published in San Francisco:

> Lately Del Monte has begun shifting its asparagus operations to Mexico. There, it is possible to rent farmers even more cheaply than in the United States, to pay farmworkers 23 cents an hour and to pay cannery workers 27 cents an hour. (Though production costs in Mexico are 40 per cent lower than in the U.S., Del Monte charges the same price for Mexican-grown asparagus as for American grown.)

Last April a spokesman of the agricultural subsidiary of Tenneco, Inc., one of the largest of the agribusinesses, said at a conference held by the University of California School of Business Administration:

> The family farmer, along with mom and the flag and apple pie, is one of the cultural heritages of our nation. At the same time you find that the cottage industry that is represented by family farmers is just not capable of providing food. So there are going to be fewer farmers, and consolidation of farm activities.

Tenneco is certainly an example of "consolidation," since this super-corporation not only farms, but markets and processes many of its products. The speaker at the April conference in San Francisco—who is quoted in *People* & *Land*—said that he expected the trend toward bigness in agricultural operations to accelerate as a result of the increase in the economic power of the food corporations.

Meanwhile, at the First National Conference on Land Reform, also held in San Francisco last April, speakers gave evidence for a contrary view, pointing to increases in productivity per unit of land in several countries where land reforms involved reduction of the size of farm units. Peter Dorner described land reforms in Mexico, Bolivia, Taiwan, Egypt, Yugoslavia, Cuba, Chile, Peru, and Venezuela, although in some of these countries small farmers and cooperatives have been neglected. Lawrence Hewes, who served as a land reform aide in Japan, told of the dramatic achievements there in recent years. As summarized in *People* & *Land:*

> Prior to land reform, Hewes reported, 60 to 70 per cent of Japan's farmers were tenants, controlled politically and economically by a feudal class of landlords. In a two-year period following Japan's surrender in 1945, 80 to 90 per cent of the country's arable land was transferred to those who actually cultivated it. The average size of these units was under 15 acres.
>
> The reform program was instituted by Japanese liberals and professionals and was strongly backed by General Douglas MacArthur. Hewes, who had previously worked in the Farm Security Administration, was an agricultural advisor on MacArthur's staff.
>
> As in other countries, land reform in Japan involved more than the transfer of land ownership. A key factor was support for credit, purchasing and marketing cooperatives. Also of great assistance to the reformers were Japan's high literacy rate and the fact that the basic economic infrastructure was in place.
>
> Twenty-five years later, the effects of the Japanese land reform are notable and lasting. Productivity has risen greatly. While there has been a slight increase in tenancy in recent years, this has been "the result of voluntary choice by individual farmers and not of general impoverishment of small farmers or re-emergence of landlord power.
>
> "On the whole, the general impression is that Japanese farmers have been permanently freed of the bonds of inferior social status imposed by the former tenurial system. As a class they are reasonably prosperous. And conditions throughout rural Japan have generally improved."

Quite obviously, there is much to be said against "bigness," not only in respect to the ruthless attack on the human qualities of the rural community by industrialized farming on an agribusiness scale, but also in behalf of production efficiencies. Probably even large agricultural operations remain more flexible than car manufacture in Detroit, but it seems likely that wherever really "big" operations prevail, a controlling inflexibility of *mind* is likely to result. As the editor of *Environment* indicated, people who work at that level get to thinking that they just *can't* change their ways, since so much of what they do depends upon *not* changing so many other things they do. And those "other things" bring in the rewards in money and power.

The assumptions and processes of the present society threaten to contain human beings in a strait-jacket of *musts* and *can'ts* that should eventually lead to a renewal of some very basic questions—at root religious and philosophical questions, having to do with the nature of man and the capacity of men to decide what is good for them and good to do. If what they are doing is not good and will lead to no good, but, instead, unfits them for living self-reliant, individually fruitful and self-respecting lives, then the time has come to begin working another way. Even if it is difficult. Even if it goes against the grain of habit and established beliefs. What is the use of clinging to an established belief and system that forces us in the wrong direction, that turns human life into a pattern of rigidly confining, self-weakening, wasteful activities?

It seems to the point to notice here that there were men—poets and essayists—who foresaw all this a hundred and fifty and more years ago. At the close of the eighteenth century, Schiller spoke of the dominion of the machine, saying that, fascinated by "the monotonous sound of the perpetually revolving wheel," man "never develops the harmony of his being, he ends by being nothing more than the living impress of the craft to which he devotes himself, of the science that he cultivates." "How," he asked, "could a complicated machine, which shuns the light, confide itself to the free will of man?"

And Carlyle, in 1829, having studied Schiller, declared:

> For all earthly, and for some unearthly purposes, we have machines and mechanic furtherances; for mincing our cabbages; for casting us into magnetic sleep. We remove mountains, and make seas our smooth highway; nothing can resist us. We war with rude Nature; and, by our resistless engines, come off always victorious, and loaded with spoils.

But now our victories are Pyrrhic, and the spoils too costly, when not tainted or tasteless, to be endured.

How is it that poets could know so much beforehand? In the midst of the bursting, nineteenth-century enthusiasm for progress, Emerson wrote:

> Things are in the saddle,
> And ride mankind.
>
> There are two laws discrete,
> Not reconciled,—
> Law for man, and law for thing;
> The last builds town and fleet,
> But it builds town and fleet,
> But it runs wild,
> And doth the man unking.

REVIEW
AMERICAN POET

IN a prettily bound little book called *A Memoir of Edna St. Vincent Millay*, Vincent Sheean has recorded his several intense memories of the American poet who died in 1950. He knew her only in her later years, but the reader will probably come to feel, as we did, that he knew her very well, however few their meetings. The present edition of the book (131 pages) is by Schocken, amiably priced at $2.95. It was apparently first issued by Harper in 1951.

What is a "memoir"? In this case it is Mr. Sheean's personal recollection of Miss Millay, a little amplified with material from other sources. A memoir is not called "biography" because it makes no attempt at a full and rounded account of its subject. After reading Mr. Sheean, however, one has the sense of needing to know no more about Miss Millay, who was, and wanted to be, a very private person. Sometimes a writer's brief glance takes in what he sees as a whole, and a feeling of completeness pervades his work, even though the words are few. This seems true of Mr. Sheean's memoir, who meant it to have this effect. Another way of feeling, thinking, and writing about a person could have an opposite, a reductive effect. Here a few words go through the subject as if a shallow finite thing, making some anecdotes recounted supply limiting definition of a human life. The person is disposed of. But Mr. Sheean is not that kind of a writer. He does not use people for small ends. His delicate portrait of Miss Millay is a memorial as well as a memoir.

The poet went to live in a farmhouse surrounded by trees, near Austerlitz, New York, in 1925, two years after her marriage to Eugen Boissevain. There she stayed quietly, most of the time, her friends mostly birds, although there were a few humans, too. She read poetry and wrote it, sometimes playing the piano, which she did well, until, one day, death overtook her at the foot of the stairs which led to her "poetry room" filled with books. She had been feeding the birds, Sheean thinks, and so, he says, "she died between the birds and the poets, for that is where she had lived, and what are life and death but forms of one another?"

A few of her poems are included by Mr. Sheean, but these only stir the reader to look for more, unless he knows her work. The writer of the memoir is more concerned with the poet than with the poems, and he quotes chiefly to add to the understanding of the human being who wrote them. He thinks that a misleading myth gave a false portrait of Miss Millay. In her second book, *A Few Figs from Thistles*, appeared the quatrain which begins, "My candle burns at both ends," and these lines, Sheean says, "were caught up and quoted, or more usually misquoted, by every jejune hedonist of the rebellious era, every girl or boy who wanted to experiment with the recently discovered benefits of alcohol, sexual experience, or simply late hours and wild talk." So Miss Millay was typed, by youngsters who probably read no more of her, as a girl who went about with vine leaves in her hair, shocking her contemporaries with an abandon that was never part of her life or her inclinations. Shock people she did, but for better reasons than the imagined ones. Her work, Mr. Sheean says, was "timeless," and the social upheaval for which she "became symbol, legend, almost standard-bearer," was outside her interest.

Sheean gives much space to considering the part played by birds in Edna Millay's life. We should say that the formal title of his book is *Indigo Bunting*, the species of bird which Sheean learned to identify while visiting Miss Millay. She told him he was a rude "buffalo" who frightened the birds away, and that he must have been a buffalo in some prior incarnation. Then she, Sheean proposed, had once been an indigo bunting—all blue and she agreed. Having known more than one bird-lover, Sheean is convinced that something beyond a bit of food passes

between bird-lovers and birds—some knowledge of each other that cannot be explained by ordinary means. The relationship, he thinks, is "a form of mystical experience" in which "The bird becomes for certain persons what he once was for all persons." Birds were for the Greeks messengers of the Gods, and sometimes of men. While Miss Millay did not embrace Sheean's explanation of what seemed to him her natural pantheism, and preferred Shelley, as her source for some philosophical imagery, to his suggestion of Shiva, he found profound identification with nature in her poems. "I never saw anyone who behaved more like an instinctive and unreflecting pantheist, and the fact is spread across her entire written work, from the first." After giving examples, he says:

> There are to be discerned several degrees of absorption in nature on the part of those whose writing is part conscious skill and partly unconscious projection: Edna Millay's verse shows the whole range of it, from almost unalloyed observation to complete identity. She did not like to say that all life was one, and she acknowledged with difficulty any special sensitivity of her own to other forms of life, but in her daily acts as in her writing she betrayed the awareness. It appears to me that in so doing she bore witness to an ancient kinship, not only with poets long dead, but also with island peasants and fishermen, rustic queens and oracles, lone men in the darkling wood, girls dancing in the moonlight—all those creatures of anonymous time before history began to be written, before the self-consciousness of man had concentrated the idea of divinity into anthropomorphic idols. If the learned can seek out for us, as they have done, evidences of men's belief in a spirit informing all life, with the bird as its messenger and spokesman, we can cap their learning with examples from the existence we share even in this late day we find it abundantly around us, and those who feel it are not all poets.

From this semi-scholarly note, Mr. Sheean returns to Miss Millay:

> One, however, was. Rising at dawn—or before going to bed at dawn—with her red hair flying loose and her green eyes gleaming, this gentle pagan stalked her beloved messengers, talking to them, listening to them, sitting on the ground in motionless absorption as she watched them while the first light brought into being the brave flash of their many colors, and it is not for me to say that she did not have some comprehension of what they told her, or that they in their turn did not understand her.

All along the coast of Maine the shoreline is broken by islands, and in 1945 the Boissevains, Edna and Eugen, spent a week of the summer on Ragged Island, which they owned. With some friends, Sheean came to visit them, and as they approached what looked like a pile of rocks from their motor dory, they saw an inlet and coasted toward it. Edna appeared at the top of a path leading to a little port formed of large flat stones. As she ran toward them, skipping from rock to rock, three sea gulls circled round and around her head, as though conducting her. When, finally, she reached the port, the gulls squawked briefly and flew off. All three visitors saw them. For Sheean, it was like watching some old legend come to life.

Her first poem, put together at five or six, was about birds, also her last fragment. Birds were her metaphors and symbols, "directed upon the phenomena of human life or love, but translated into another language."

> Lyrics and sonnets, long or short poems, are animated by the presence of all these feathered beasts who seem to have fluttered through her imagination at all times as through a hospitable forest, supplying her with endless petitions to a reality above and beyond the limits of human experience. When I talked of this to her she denied it, or rather said that it might be so but that she was not conscious of it—the birds were so familiar to her from her earliest days that she was never aware of any particularity in her own view of them or relationship with them. The attention she gave to them seemed to her so natural, by long habit, that even this and the consequent tameness of the untameable—as witness the sea gulls—did not seem to her much out of the way. She took it for granted and refused to think about it: which, I make bold to say, proves the existence of the integument.

Whatever understanding Miss Millay had with birds, she refused to draw attention to it, or even acknowledge it as anything "special." There is something relievingly right about this, particularly today when so many people are hinting at their

mystical or "spiritual" connections, and artfully leaving about evidence of their attunement with hidden splendors. If art, truth, and mystical insight require advertisement in order to be recognized, how shall we ever distinguish anything good or real from pretension and fraud? There could be no more effective way to drive sensible people back to a protective materialism than all the gaudy public relations devices now pressed into the service of "spiritual awakening." When Sheean asked Edna why the gulls had circled around her, she said vaguely that they perhaps knew her a little bit, since she was on the island a lot. "Then, too," she added, "I feed them." When he said he, also, fed the birds, and "You don't see any gulls circling around my head, do you?" she just laughed.

Mr. Sheean's memoir being such a little book (131 pages), we had planned to notice some others along with it, this week. But what goes fittingly with Edna St. Vincent Millay? The other books bear company more easily, and they will have to wait.

Sheean's pages about her poetry seem especially good, a friendly reading by another well-stocked mind, not a scholar's cool accounting. Too often scholars seem no more than anatomists and in a civilized community they would either put their scholarship away or leave the poets alone. Enough to say that Miss Millay revealed "relations" with earlier poets, but was always herself. Sheean tells about her speaking her poetry one day on the beach:

> As we sat there, Edna, who was sitting on a flat rock at the top of our central space, threw back her head and looked out to sea and began to say verses. I had never heard her do so before. Her incomparable voice seemed to be thrown out at the sea, not loudly at all but directly, full and deep as the salt water.

Another time, she told one of her poems for children:

> Look, Edwin! Do you see that boy
> Talking to the other boy?
> No, over there by those two men—
> Wait, don't look now—now look again.
> No, not the one in navy-blue;
> That's the one he's talking to.
> Sure you see him? Striped pants?
> Well, *he was born in Paris, France.*

They were in the kitchen, and she suddenly began the poem, cocking her head, Sheean says, and looking about twelve years old.

> There she stood with her feet apart and her head on one side, nothing else: she was a woman turned fifty, dressed in rolled-up dungarees and a white sports shirt, and nevertheless she looked like a little girl of twelve at a party. . . . She unquestionably had a particular talent for this kind of expression, whatever it may be called. I have never seen or heard a similar phenomenon, in which the words, voice, and body all became parts of the specific single mood (so brief, too!) which she wished to transmit. It was a form of being, not of doing.

Mr. Sheean's book—so brief, too!—has in its way a similar success.

COMMENTARY
DOING THE IMPOSSIBLE

No matter what is said, it is usually possible to turn up evidence to the contrary. This week's lead refers to the decline in owner-built homes and remarks that extreme difficulties oppose the man who wants to construct a house for himself. By the time this article was in proof we found a copy of *Handmade Houses* by Art Boericke and Barry Shapiro, published this year by Scrimshaw Press in San Francisco ($12.95), made up of pictures (in color) of owner-built homes—"compact, hardy little places" created by "craftsmen making do with salvaged lumber, hand-hewn beams, adobe bricks, and redwood thatch." Boericke is a reformed builder who eight years ago began making his own place out of salvage from remodeling and demolition jobs, and "pieced together from flea markets and country dumps." Together with Shapiro, the photographer, Boericke became a missionary who illustrates his gospel with descriptions and Shapiro's pictures of dozens of these homes, some of which "were sixty miles up a dirt road and five miles further." The book is a "Better Homes and Gardens" for improvisers, inventors, and people at home in the interstices of our loose-jointed American society. You find bits of churches, ships, and old cars at home in these buildings. The design effects are sometimes breath-taking. People who build this way usually can't afford $12.95 for anything, but just in case, Scrimshaw is at 149 Ninth Street, San Francisco, Calif. 94103.

* * *

More on the book about helicopter use (see Frontiers):

Mr. Branch's study makes twenty-two findings and recommendations, which include proposals for planning, administration, and sound level control—all relating to travel by helicopter and other vertical- and short-take-off and landing aircraft. Many of the recommendations amount to rules which ought to govern regulation of this air traffic. The necessity of cooperation between local, state, and federal governments is made obvious. The past practice of city planning cannot cope with urban air travel, and immediate steps should be taken for its regulation, to avoid incalculable confusion. So far, very little thought has been given to the complexities of the impact of this kind of travel on the environment. Mr. Branch's book assembles the facts bearing on these considerations.

As Mr. Morgan says, a "tedious trail" lies ahead. We're only just started on controlling land use, and now air use shrieks for attention.

CHILDREN
. . . and Ourselves
ART EDUCATION

IT would probably be a good idea to stop calling art education art education, since its real meaning is to help people to give clear and expressive form to everything they do. The object would be to get rid of both the reification of "art" and the professionalization of the artist. Of course, making a rule not to name art art would be useful only so long as it provided a release of energies previously cooped up by restraining and isolating definition. The same thing might be accomplished through a broader understanding of the word "art" itself, although with children, as with adults, meanings are better grasped when the experience comes before the label is applied.

Words are tools for only one kind of communication. The flow of meaning comes first. An artist friend who has a deep suspicion of words recently sent us an extract from Einstein's writings, quoted by Gerald Holton in *Thematic Origins of Scientific Thought:*

> The words or the language, as they are written or spoken, do not seem to play any role in my mechanism of thought. The psychical entities which seem to serve as elements in thought are certain signs and more or less clear images which can be "voluntarily" reproduced and combined. . . . But taken from a psychological viewpoint, this combinatory play seems to be the essential feature in productive thought—before there is any connection with logical construction in words or other kinds of signs which can be communicated to others. The above-mentioned elements are, in my case, of visual and some muscular type. Conventional words or other signs have to be sought laboriously only in a secondary stage, when the mentioned associated play is sufficiently established and can be reproduced at will.

A little book, *Artists in Schools,* issued by the National Endowment for the Arts and the U.S. Office of Education, with text by Bennett Schiff, has in it some pictures of children dancing, part of a program provided by Bella Lewitsky for some Glendale, Calif., public schools. The children see Miss Lewitsky's company perform, then the dancers help the teachers to get the children started dancing. The point is that, looking at these pictures, you would need several paragraphs to say what is possible about the human feelings suggested in what the camera has caught of the children's movement. The imagination goes to work on the meaning behind the gestures, postures, and facial expressions. The meaning is unmistakably *there*—there so wholly and delightingly that the body of the child is "read" rather than merely seen. Apparently, dancing is something that some of these children learned quickly to do very well—their literacy came naturally, and they must have found that to be able to put feeling into fluid motion gives a sense of capacity with transfers in every direction. A school principal said of the program:

> It's interesting what it has done for the teachers. This school was quite academically oriented. The teachers were very reluctant to let go and have the children spending time on something else than the regular programs. But now they have accepted the fact that they can do many more things than they thought they could through this program. They are seeing the gains here and no one has seen any loss in the academic program they are so interested in.
>
> They are now anxious to find new ways to inter-relate the arts into the regular program. We re really ready to begin, I think, now that the program is ending.
>
> It has been so much more than the simple fun I thought was going to be its chief contribution. The playground these days is rather strange; the children are really trying things out. When they see something that impresses them, their reaction is Wow, and they try things and when they can do them they are really amazed and triumphant.

The school district dance specialist said:

> They have been able to accomplish what one individual could not, in a very strong, positive way: show creative dance, the parts, and how they are used to develop movement and to aid in a child's effort at self-expression.
>
> The kids learned that dance is something for boys and girls. They find you can express ideas

through motion, can learn more about concepts of shape, time, energy, all through movement. They have learned that movement can be used in a classroom to explore math, for example, through angles and curves; and ideas, such as weather, wind and rain, and the center of the wind.

This dance program and the programs in painting, sculpture, poetry, music, and even film-making were made possible during the 1971-72 school year through the joint sponsorship by the National Endowment for the Arts and the Office of Education of Artists-in-Schools. The artists showed and taught. A teacher in a small town in Alabama said:

> There are many examples of the kinds of effects artists in our schools have. One that remains in my mind is the little boy in third grade at the Union Springs Elementary School. This little boy was in the habit of coming to school only two or three days a month. He just wasn't interested in school period. Well, he was given some clay and he began to mold it and it came out an elephant. It was such a notable elephant that he was sent around with his elephant to other third grade classrooms to show what he had made and he was not absent from school another day. His whole attitude toward school changed from that moment.

A painter and sculptor, Larry Godwin, gives three days a week to the schools in the area. One morning an observer saw Godwin in a large ground-floor room of an elementary school, "surrounded by a ferment of 35 fifth-grade, 10- and 11-year-old youngsters." The children had been studying the changes in the arts between 1800 and 1850, and their social science teacher was working with Godwin, who had started the children on visual representation of what had happened in those years of the nineteenth century:

> Godwin and the boys and girls were up to their elbows in flour-paste-filled buckets, putting a fine layer of papier-mâché over the surfaces of dozens of C-forms made of packing-box cardboard. The forms are hollow, glued together at the edges and, after being coated with the papier-mâché, comprise a system for limitless combination of sculptural shapes.

The teacher said:

> I think most of the kids came in inhibited but now they're more relaxed and so they are able to function better in other ways. They're just more relaxed in general. . . . What I see is a general advance. I've seen quite a change in one group which was well below average. We did a comparative test of two groups, one, below average and the other, average. The below-average group had had more arts exposure than the other and their grades were about 25 per cent higher than the opposing group of brighter kids.

This was Godwin's comment:

> One of the things that amazes me is the natural ability of kids. In the mural project in Goshen we involved about 40 kids and they all did the design; they made a study of the site and they made the design conform to a scale and a lot of sophisticated designs came out that were a real surprise to me. The kids voted on what they wanted. Their selection was bold and abstract.

Among a number of impressive achievements under Godwin's inspiration, the children fabricated "a 12-foot eagle of gleaming chrome, now standing proudly in front of the Goshen school." They welded it together out of parts of 1400 pounds of chrome auto bumpers purchased from a scrapyard for two cents a pound. The eagle is the school mascot and this striking piece has had a noticeable effect on the whole community—parents, teachers and children. The art program has also helped enormously with integration—the children dance together, play together, and enter with enthusiasm into whatever the artist proposes. The principal said: "The children now enjoy coming to school."

FRONTIERS

The Prodigal Sons' New Start

BACK in 1883 a writer in the *Overland Monthly* declared that California "is in almost every respect an intensification of the American spirit . . . only more so," an opinion that has gained much rhetorical bounce in the ninety years since, its latest repetition being in an article by Neil Morgan, a San Diego columnist, in *Harper's* for September. In effect, Mr. Morgan confirms a prediction made by D. B. Lutens five years ago in his contribution to Carey McWilliams' *California Revolution.* "California will stop growing one day," he said, "because it will have become just as repulsive as the rest of the country."

Morgan reports: In ten years net migration into the state has fallen from 302,000 (1962) to 55,000 (1979). Births diminished 13 per cent in almost the same period. The state's growth—twice that of the nation for the past seventy years—is now the same as all the others. People are leaving Los Angeles County at the rate of 100,000 a year and California colleges are beginning to wonder where their students will come from.

Without trying to measure just how repulsive California has become, we can say that much of its bloom has been lost to commercial aggressions and to various unlovely side-effects of growth, chief of which is smog in the cities, while the rumored threat of gas rationing does not add to the magnetism of wide open spaces. But Mr. Morgan is more interested in saying something pleasant about California—he writes mainly to describe the "citizens' revolt" that he has reason to hope will be epoch-making for the state and perhaps the country. The people themselves are fighting expansion. His four and a half pages are a sprightly list of what aroused groups and communities in California have done and are doing to save their state from ruin. He says:

> One trait above all others makes California intriguing: its unique accelerating process, which appears to hasten and magnify both the good and the bad. Trends will surface sooner and swing wider in California. So if California has changed directions radically within a decade, it may be important to the rest of the nation to understand what is happening. The trend seems clear. Zero population growth approaches at a rate so rapid that demographers doubt their charts. With the virtual halt in migration to California, some sense of community emerges within a classically vagrant society that is restless, militant, and unawed by an establishment of changing faces. The proprietary concern for his setting rather more than for his society, is the mark of this new Californian. This concern places the Californian at once in the mainstream and the vanguard of the national temper.

Victories chalked up for California citizens out to save their environment by an open break with the credo of "eternal growth":

> U.S. Steel abandons construction of its waterfront skyscraper in San Francisco. Pacific Gas & Electric and other utilities agree to build nuclear power plants away from the coast. Local voters learn that development may cost more in services than it returns in revenue and vote increasing acquisition funds for parklands. The Sierra Club blocks Mineral King, the Disney resort in the Sierra Nevada. California Tomorrow stubbornly spotlights feeble, ludicrous efforts in state planning and finally offers a state plan of its own making.

This is only the bare beginning of Morgan's list, which tells of many reforms, some gained through elections and legislation, some by the stimulus felt by officials in the spreading public temper. A coastal commission is now in charge of the shore region where sixteen million people live within twenty miles of the sea. The commission has more autonomy than any other state agency and exceptional powers over land use. "Local communities," an environment attorney is quoted as saying, "are alive with action."

Senseless real estate developments are being slowed down. At Mammoth Lakes, people living in single-family cabins stopped the erection of a row of eight-story apartment buildings. Losing in the lower courts, the people won, six to one, in the California Supreme Court, setting a precedent in the restraint of developers. In Petaluma a first-

grade teacher got passed a local ordinance holding developers to a reasonable number of residential units a year. The brakes on construction are felt in many areas. Approving the slowdown, the Mayor of San Diego said recently, "Most social and political problems can be traced to land use decisions." The people who attended the first national land reform conference last April in San Francisco would agree.

Gladwyn Hill, national correspondent on the environment for the *New York Times,* thinks that the commission to regulate use of coastal lands is only a beginning. He looks forward to similar control of the Sierra Nevada, then the Central Valley, and after that the desert regions. The goal would then be an over-all state control commission. Morgan concludes:

> There does seem to be a tedious trail ahead, and California is only starting. But the accelerative process applies, and if land use controls can be implemented in California they can work nationally.

Passing from land use to air use in California, we have a brief report to make on the use of helicopters in the Los Angeles area. A recently completed study shows that there are more than 175 helistops and heliports in Los Angeles County. (A helistop is a minimum take-off and landing facility.) Although some municipalities have records of these facilities within city limits, no single governmental agency has a record of them all. There is apparently no concern about the increase of noise that will come with greater helicopter use.

Melville C. Branch, who as a member of the Los Angeles City Planning Commission wrote *Outdoor Noise and the Metropolitan Environment* in 1970, is author of the study that has just become available, *Urban Air Traffic and City Planning*, incorporating work done by graduate students and members of a program in Physical-Spatial Design at the University of Southern California. This study, contained in a large book of a hundred pages, was published by Praeger in cooperation with the Graduate Program of Urban and Regional Planning of the University. The price is $15.00.

Mr. Branch says in his foreword:

> Los Angeles is probably the best area in the United States in which to examine the present and anticipate the future of three-dimensional air travel over cities. It is the historical and geographical home of the commercial development of airplanes and a primary center today for matters relating to air and aerospace. With so much of its growth since the advent of the automobile and stretching for miles and miles of low-density development, the Los Angeles region is conscious of its extreme dependence on transportation: to date, almost exclusively the automobile. Long air-minded and with fewer than average of the inhibitions of deep-rooted tradition, metropolitan Los Angeles probably has today a more intensive peacetime use of helicopters than any other place in the world. In 1971, its four major airports—Long Beach, Van Nuys, Santa Ana, and Los Angeles International—recorded just under 2,200,000 takeoffs and landings by commercial and private aircraft of all types, a combined average of slightly over one every fifteen seconds throughout the day and night.