THE EARLY summer of 1945, when I wrote Walden Two, was not a bad time for Western Civilization. Hitler was dead, and one of the most barbaric regimes in history was coming to an end. The Depression of the thirties had been forgotten. Communism was no longer a threat, for Russia was a trusted ally. It would be another month or two before Hiroshima would be the testing ground for a horrible new weapon. A few cities had a touch of smog but no one worried about the environment as a whole. There were wartime shortages, but industry would soon turn again to devoting unlimited resources to the fulfillment of unlimited desires. The industrial revolution was said to have stilled the voice of Thomas Robert Malthus.

The dissatisfactions which led me to write Walden Two were personal. I had seen my wife and her friends struggling to save themselves from domesticity, wincing as they printed “housewife” in those blanks asking for occupation. Our older daughter had just finished first grade, and there is nothing like a first child’s first year in school to turn one’s thoughts to education. We were soon to leave Minnesota and move to Indiana and I had been in search of housing. I would be leaving a group of talented young string players who had put up with my inadequacies at the piano and I was not sure I could ever replace them. I had just finished a productive year on a Guggenheim Fellowship, but I had accepted the chairmanship of a department at Indiana and was not sure when I would again have time for science or scholarship. Was there not something to be done about problems of that sort? Was there not by any chance something a science of behavior could do?

It was probably a good thing that these were small provincial problems, because I might not have had the courage to tackle bigger ones. In Behavior of Organisms, published seven years earlier, I had refused to apply my results outside the laboratory. “Let him extrapolate who will,” I had said. But, of course, I had speculated about the technology that a science of behavior implied and about the differences it could make. I had recently been taking the implications seriously because I had been meeting once a month with a group of philosophers and critics (among them Herbert Feigl, Alburey Castell, and Robert Penn Warren) where the control of human behavior had emerged as a central topic.

That all this should come together in a novel about a Utopian community was probably due to the fact that a colleague, Alice F. Tyler, had sent me a copy of her new book, Freedom’s Ferment, a study of perfectionist movements in America in the nineteenth century.* With two months to spare before moving to Indiana, I decided to write an account of how I thought a group of, say, a thousand people might have solved the problems of their daily lives with the help of behavioral engineering.

Two publishers turned Walden Two down, and Macmillan published it only on condition that I write an introductory text for them. These editorial judgments were, at the time, quite correct. One or two distinguished critics took the book seriously, but the public left it alone for a dozen years. Then it began to sell, and the annual sales rose steadily on a compound interest curve. There were, I think, two reasons for the awakened interest. The “behavioral engineering” I had so frequently mentioned in the book was, at the time, little more than science fiction. I had thought that an experimental analysis of behavior could be applied to practical problems, but I had not proved it. The 1950’s, however, saw the beginnings of what the public has come to know as behavior modification.

There were early experiments on psychotic and retarded persons, and then on teaching machines and programmed instruction, and some of the settings in which these experiments were conducted were in essence communities. And in the sixties applications to other fields, such as counseling and the design of incentive systems, came even closer to what I had described in Walden Two. A technology of behavior was no longer a figment of the imagination. Indeed, to many people it was altogether too real.

But there was, I think, a better reason why more and more people began to read the book. The world was beginning to face problems of an entirely new order of magnitude—the exhaustion of resources, the pollution of the environment, overpopulation, and the possibility of a nuclear holocaust, to mention only four. Physical and biological technologies could, of course, help. We could find new sources of energy and make better use of those we had. The world could feed itself by growing more nutritious grains and eating grain rather than meat. More reliable methods of contraception could keep

* Freedom’s Ferment, by Alice F. Tyler.
the population within bounds. Impregnable defenses could make a nuclear war impossible. But that would happen only if human behavior changed, and how it could be changed was still an unanswered question. How were people to be induced to use new forms of energy, to eat grain rather than meat, and to limit the size of their families; and how were atomic stockpiles to be kept out of the hands of desperate leaders?

From time to time policy makers in high places have been urged to pay more attention to the behavioral sciences. The National Research Council, the operative arm of the National Academy of Sciences, made one such proposal a number of years ago, pointing out that useful “insights in policy formulation” had been developed. But it implied that the chief role of the behavioral sciences was to collect facts and insisted, possibly to reassure policy makers who might be alarmed by the ambitions of scientists, that “knowledge is no substitute for wisdom or common sense in making decisions.” Science would get the facts but Congress or the President would make the decisions—with wisdom and common sense.

It is true that when the behavioral sciences have gone beyond the collection of facts to recommend courses of action and have done so by predicting consequences, they have not been too helpful. Not all economists agree, for example, on how an increase or reduction in taxes or a change in interest rates will affect business, prices, or unemployment, and political scientists are no more likely to agree on the consequences of domestic or international policies. In anthropology, sociology, and psychology the preferred formulations are those that do not dictate action. A thoroughgoing developmentalism, for example, almost denies the possibility of effective action. Applied psychology is usually a mixture of science and common sense, and Freud regarded therapy as a minor contribution of psychoanalysis.

From the very beginning the application of an experimental analysis of behavior was different. It was doubly concerned with consequences. Behavior could be changed by changing its consequences—that was operant conditioning—but it could be changed because other kinds of consequences would then follow. Psychotic and retarded persons would lead better lives, time and energy of teachers and students would be saved, homes would be pleasanter social environments, people would work more effectively while enjoying what they were doing, and so on.

These are the kinds of achievements traditionally expected from wisdom and common sense, but Frazier, the protagonist of Walden Two, insists that they are within reach of a special behavioral science which can take the place of wisdom and common sense and with happier results. And what has happened in the past twenty-five years has increased the plausibility of his achievement—a community in which the most important problems of daily life, as well as certain aspects of economics and government, are solved.

Frazier’s critics will protest. What can we conclude from a successful community of a thousand people? Try those principles on New York City, say, or on the State Department and see what happens. The world is a vast and complex space. What works for a small group will be far short of what is needed for a nation or the world as a whole.

Frazier might answer by calling Walden Two a pilot experiment. Industries do not invest in large plants until they have tried a new process on a smaller scale. If we want to find out how people can live together without quarreling, can produce the goods they need without working too hard, or can raise and educate their children more efficiently, let us start with units of manageable size before moving on to larger problems.

But a more cogent answer is this: what is so wonderful about being big? It is often said that the world is suffering from the ills of bigness, and we now have some clinical examples in our large cities. Many cities are probably past the point of good government because too many things are wrong. Should we not rather ask whether we need cities? With modern systems of communication and transportation, businesses do not need to be within walking or taxicab distances of each other, and how many people must one be near in order to live a happy life? People who flock to cities looking for jobs and more interesting lives will flock back again if jobs and more interesting lives are to be found where they came from. It has been suggested that, with modern systems of communication, the America of the future may
be simply a network of small towns. But should we not say Walden Twos? A few skeletons of cities may survive, like the bones of dinosaurs in museums, as the remains of a passing phase in the evolution of a way of life.

The British economist E. F. Schumacher, in his remarkable book Small Is Beautiful,* has discussed the problems that come from bigness and has outlined a technology appropriate to systems of intermediate size. Many current projects dealing with new sources of energy and new forms of agriculture seem ideally suited to development by small communities. A network of small towns or Walden Twos would have its own problems, but the astonishing fact is that it could much more easily solve many of the crucial problems facing the world today. Although a small community does not bring out “human nature in all its essential goodness” (small towns have never supported that romantic dream), it makes it possible to arrange more effective “contingencies of reinforcement” according to the principles of an applied behavior analysis. We need not look too closely at practices derived from such principles to survey some of those which could solve basic problems in a small community. To induce people to adapt to new ways of living which are less consuming and hence less polluting, we do not need to speak of frugality or austerity as if we meant sacrifice. There are contingencies of reinforcement in which people continue to pursue (and even overtake) happiness while consuming far less than they now consume. The experimental analysis of behavior has clearly shown that it is not the quantity of goods that counts (as the law of supply and demand suggests) but the contingent relation between goods and behavior. That is why, to the amazement of the American tourist, there are people in the world who are happier than we are, while possessing far less. Inflation is said to be the most serious problem in the world today. It has been defined, not ineptly, as spending more than one has. In an experimental community contingencies of reinforcement which encourage unnecessary spending can be corrected. As for pollution, small communities are optimal for recycling materials and avoiding wasteful methods of distribution.

The basic research has also shown how important it is for everyone, young and old, women and men, not only to receive goods but to engage in their production. That does not mean that we should all work like eager beavers according to the Protestant work-ethic. There are many ways of saving labor, but they should not, as Frazier points out, be used to save laborers and hence to increase unemployment. Simply by dividing the total amount of wages Americans receive each year by the number of people who want jobs, we arrive at a perfectly reasonable annual wage for everyone. But that means a reduction in the standard of living for many people, which, as things now stand, is probably impossible. In a series of small communities, however, everyone would have a job because work, as well as wages, could be divided among workers. And good incentive conditions—for example, those in which people make not money, but the things that money buys—do not require what we call hard work.

If the world is to save any part of its resources for the future, it must reduce not only consumption but the number of consumers. It should be easy to change the birth rate in an experimental community. Parents would not need children for economic security, the childless could spend as much time with children as they liked, and the community would function as a large and affectionate family in which everyone would play parental and filial roles. Blood ties would then be a minor issue.

People are more likely to treat each other with friendship and affection if they are not in competition for personal or professional status. But good personal relations also depend upon immediate signs of commendation or censure, supported perhaps by simple rules or codes. The bigness of a large city is troublesome precisely because we meet so many people whom we shall never see again and whose commendation or censure is therefore meaningless. The problem cannot really be solved by delegating censure to a police force and the law courts. Those who have used behavior modification in family counseling or in institutions know how to arrange the face-to-face conditions which promote interpersonal respect and love.

We could solve many of the problems of delinquency and crime if we could change the early environment of offenders. One need not be a bleeding heart to argue that many young people today have simply not been prepared by their homes or school to lead successful lives within the law or, if prepared, do not have the chance to do so by getting jobs. Offenders are seldom improved by being sent
to prison, and judges therefore tend to reduce or suspend sentences, but crime, unpunished, then increases. We all know how early environments can be improved, and a much neglected experiment reported by Cohen and Filipczak* has demonstrated that occasional offenders can be rehabilitated.

Children are our most valuable resources and they are now shamefully wasted. Wonderful things can be done in the first years of life, but we leave them to people whose mistakes range all the way from child abuse to overprotection and the lavishing of affection on the wrong behavior. We give small children little chance to develop good relationships with their peers or with adults, especially in the single-parent home, which is on the increase. That is all changed when children are, from the very first, part of a larger community. City schools show how much harm bigness can do to education, and education is important because it is concerned with the transmission and hence the survival of a culture. We know how to solve many educational problems with programmed instruction and good contingency management, saving resources and the time and effort of teachers and students. Small communities are ideal settings for new kinds of instruction, free from interference by administrators, politicians, and organizations of teachers.

In spite of our lip service to freedom, we do very little to further the development of the individual. How many Americans can say that they are doing the kinds of things they are best qualified to do and most enjoy doing? What opportunities have they had to choose fields related to their talents or to the interests and skills they acquired in early life? Women, only just beginning to be able to choose not to be housewives, can now discover how hard it is to choose the right profession when they are young or to change to a different one later on.

And once one is lucky enough to be doing what one likes, what are the chances of being successful? How easily can artists, composers, and writers bring their work to the attention of those who will enjoy it and whose reactions will shape behavior in creative ways? Those who know the importance of contingencies of reinforcement know how people can be led to discover the things they do best and the things from which they will get the greatest satisfaction.

Although sometimes questioned, the survival value of art, music, literature, games, and other activities not tied to the serious business of life is clear enough. A culture must positively reinforce the behavior of those who support it and must avoid creating negative reinforcers from which its members will escape through defection. A world which has been made beautiful and exciting by artists, composers, writers, and performers is as important for survival as one which satisfies biological needs.

The effective use of leisure is almost completely neglected in modern life. We boast of our short workday and week, but what we do with the free time we have to spend is nothing of which we can be very proud. The leisure classes have almost always turned to alcohol and other drugs, to gambling, and to watching other people lead exhausting or dangerous lives, and we are no exception. Thanks to television millions of Americans now lead the exciting and dangerous lives of other people. Many states are legalizing gambling and have set up lotteries of their own. Alcohol and drugs are consumed in ever-increasing quantities. One may spend one’s life in these ways and be essentially unchanged at the end of it. These uses of leisure are due to some basic behavioral processes, but the same processes, in a different environment, lead people to develop their skills and capacities to the fullest possible extent. Are we quite sure of all this? Perhaps not, but Walden Two can help us make sure. Even as part of a larger design, a community serves as a pilot experiment. The question is simply whether it works, and one way or the other, the answer is usually clear. When that is the case, we can increase our understanding of human behavior with the greatest possible speed. Here is possibly our best chance to answer the really important questions facing the world today—questions not about economics or government but about the daily lives of human beings.

Yes, but what about economics and government? Must we not answer those questions too? I am not sure we must. Consider the following economic propositions. The first is from Henry David Thoreau’s Walden: by reducing the amount of goods we consume, we can reduce the amount of time we spend in unpleasant labor. The second appears to assert just the opposite: we must all consume as much as possible so that everyone can have a job. I submit that the first is more reasonable, even though the second is defended by many people today. Indeed, it might be argued that if America were to convert to
a network of small communities, our economy would be wrecked. But something is wrong when it is the system that must be saved rather than the way of life that the system is supposed to serve.

But what about government? Surely I am not suggesting that we can get along without a federal government? But how much of it is needed? One great share of our national budget goes to the Department of Health, Education, and Welfare. Health? Education? Welfare? But an experimental community like Walden Two is health, education, and welfare! The only reason we have a vast federal department is that millions of people find themselves trapped in overgrown, unworkable living spaces.

Another large share of the budget goes to the Department of Defense. Am I suggesting that we can get along without that? How can we preserve the peace of the world if we do not possess the most powerful weapons, together with an industry that continues to develop even more powerful ones? But we have weapons only because other countries have them, and although we feel threatened by countries with comparable military power, particularly the Bomb, the real threat may be the countries that have next to nothing. A few highly industrialized nations cannot long continue to face the rest of the world while consuming and polluting the environment as they do. A way of life in which each person used only a fair share of the resources of the world and yet somehow enjoyed life would be a real step toward world peace. It is a pattern that could easily be copied, and I was heartened recently when someone from the State Department called to tell me that he thought America ought to stop trying to export the “American way of life” and export Walden Twos instead. A state defined by repressive, formal, legal, social controls based on physical force is not necessary in the development of civilization,* and although such a state has certainly figured in our own development, we may be ready to move on to another stage.

Suppose we do know what is needed for the good life; how are we to bring it about? In America we almost instinctively move to change things by political action: we pass laws, we vote for new leaders. But a good many people are beginning to wonder. They have lost faith in a democratic process in which then so-called will of the people is obviously controlled in undemocratic ways. And there is always the question whether a government based on punitive sanctions is inappropriate if we are to solve problems nonpunitively.

It has been argued that the solution might be socialism, but it has often been pointed out that socialism, like capitalism, is committed to growth, and hence to overconsumption and pollution. Certainly Russia after fifty years is not a model we wish to emulate. China may be closer to the solutions I have been talking about, but a Communist revolution in America is hard to imagine. It would be a bloody affair, and there is always Lenin’s question to be answered: How much suffering can one impose upon those now living for the sake of those who will follow? And can we be sure that those who follow will be any better off?

Fortunately, there is another possibility. An important theme in Walden Two is that political action is to be avoided. Historians have stopped writing about wars and conquering heroes and empires, and what they have turned to instead, though far less dramatic, is far more important. The great cultural revolutions have not started with politics. The great men who are said to have made a difference in human affairs—Confucius, Buddha, Jesus, the scholars and scientists of the Revival of Learning, the leaders of the Enlightenment, Marx—were not political leaders. They did not change history by running for office. We need not aspire to their eminence in order to profit from their example. What is needed is not a new political leader or a new kind of government but further knowledge about human behavior and new ways of applying that knowledge to the design of cultural practices.

It is now widely recognized that great changes must be made in the American way of life. Not only can we not face the rest of the world while consuming and polluting as we do, we cannot for long face ourselves while acknowledging the violence and chaos in which we live. The choice is clear: either we do nothing and allow a miserable and probably catastrophic future to overtake us, or we use our knowledge about human behavior to create a social environment in which we shall live productive and creative lives and do so without jeopardizing the chances that those who follow us will be able to do the same. Something like a Walden Two would not be a bad start.

B. F. SKINNER January, 1976
