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THE HEALTH OF THE STATE

VERY nearly all we know of the work of Randolph Bourne is found in his writings published in magazines between 1915 and 1919, mostly in opposition to America's participation in World War I. He wrote for *The Seven Arts*, *The New Republic*, of which he was an editor, *The Atlantic Monthly*, and *The Dial*, contributing some three hundred pieces to these and other journals, until his death from influenza shortly after the Armistice in 1918. Born in 1886 of aristocratic parents, he was, as Carl Resek puts it, "a brilliant and precocious student" and attended Princeton until his family's funds ran out, then worked as a pianist for vaudeville shows and an accompanist for silent movies. He also worked in factories, saving enough money to put himself through Columbia University, where he had John Dewey, James Harvey Robinson, Charles Beard, and Franz Boas among his teachers. He was a strong advocate of the ideas of William James and a champion of John Dewey's thinking until Dewey's stance on World War I made Bourne his critic.

Why go back to Bourne now? Because of the brilliance of his critical analysis of war and the integrity of his mind. In one of his articles he wrote:

> All good writing is produced in serene unconsciousness of what Demos desires or demands. It cannot be created at all if the artist worries about what Demos will think of him or do to him. The artist writes for that imagined audience of perfect comprehenders. The critic must judge for that audience too.

Note should be taken of the fact that in childhood Bourne was stricken by a disease which—as the editor of the collection of his wartime writings, *War and the Intellectuals* (Harper Torchbook, 1964), Carl Resek, says—"left him with a double curvature of the spine and eventually retarded his growth." A birth injury had disfigured one side of his face and other writers sometimes made much of these limitations, but, as Resek puts it—

> In fact, Bourne never allowed himself or his friends to linger on the subject and the deformity influenced his life much less than naturalistic writers assumed. He engaged in a variety of sports, especially such as gave his healthy legs exercise. He skated, climbed, played tennis and above all hiked. With his fiancée he once walked from New York to Provincetown.

Best known, perhaps, of his writings *is* the essay "The State" of which he completed only the first draft before he died. Here is an early paragraph in its thirty-nine pages, illustrative of the power of his prose:

> War is the health of the State. It automatically sets in motion throughout society those irresistible forces for uniformity, for passionate cooperation with the Government in coercing into obedience the minority groups and individuals which lack the larger herd sense. The machinery of government sets and enforces the drastic penalties, the minorities are either intimidated into silence, or brought slowly around by a subtle process of persuasion which may seem to them really to be converting them. Of course the ideal of perfect loyalty, perfect uniformity is never really attained. The classes upon whom the amateur work of coercion falls are unwearied in their zeal, but often their agitation, instead of converting, merely serves to stiffen their resistance. Minorities are rendered sullen, and some intellectual opinion bitter and satirical. But in general, the nation in war-time attains a uniformity of feeling, a hierarchy of values culminating at the undisputed apex of the State ideal, which could not possibly be produced through any other agency than war. Other values such as artistic creation, knowledge, reason, beauty, the enhancement of life, are instantly and almost unanimously sacrificed, and the significant classes who have constituted themselves the amateur agents of the State are engaged not only in sacrificing these values themselves but in coercing all other persons into sacrificing them.

A little later he adds:

> On our entrance into the war, there were many persons who predicted exactly this derangement of values, who feared lest democracy suffer more at home from an America at war than could be obtained for democracy abroad. That fear has been amply justified. The question whether the American nation

> would act like an enlightened democracy going to war for the sake of high ideals, or like a State-obsessed herd, has been decisively answered. The record is written and cannot be erased. History will decide whether the terrorization of opinion, and the regimentation of life was justified under the most idealistic of democratic administrations. It will see that when the American nation had ostensibly a chance to conduct a gallant war, with scrupulous regard to the safety of democratic values at home it chose rather to adopt all the most obnoxious and coercive techniques of the enemy and of the other countries at war, and to rival in intimidation and ferocity of punishment the worst governmental systems of the age.

Bourne's point is that, in his day, the nation could easily be made to submit to the intoxications of the State. One reason for quoting him is to dramatize the fact that this is no longer true. Something has happened to public opinion in the forty years since World War II was brought to a close by atomic explosion. This gives full meaning to Bourne's clear distinction between the nation and the State.

His aim was the abolition of the State in behalf of the life of the nation. As he puts it:

> It cannot be too firmly realized that war is a function of States and not of nations, indeed that it is the chief function of States. War is a very artificial thing. It is not the naive spontaneous outburst of herd pugnacity; it is no more primary than is formal religion. War cannot exist without a military establishment, and a military establishment cannot exist with a State organization. War has an immemorial tradition and heredity only because the State has a long tradition and heredity. But they are inseparably and functionally joined. We cannot crusade against war without crusading implicitly against the State. And we cannot expect, or take measure to ensure, that this war is a war to end war, unless at the same time we take measures to end the State in its traditional form. The State is not the nation, and the State can be modified and even abolished in its present form, without harming the nation. On the contrary, with the passing of the dominance of the State, the genuine life-enhancing forces of the nation will be liberated. If the State's chief function is war, then the State must suck out of the nation a large part of its energy for its purely sterile purposes of defense and aggression. It devotes to waste or to actual destruction as much as it can of the vitality of the nation. No one will deny that war is a vast complex of life-destroying and life-crippling forces. If the State's chief function is war, then it is chiefly concerned with coordinating and developing the powers and techniques which make for destruction. And this: means not only the actual and potential destruction of the enemy, but of the nation at home as well. For the very existence of a State in a system of States means that the nation lies always under risk of war and invasion, and the calling away of energy into military pursuits means a crippling of the productive and life-enhancing processes of the national life.

At issue, for Bourne, is the almost "mystical" authority of the State, especially in time of war. He holds that democracy is essentially in conflict with Statism, and examination of history proves him right. Can we have, then, a Stateless world, so long as war, as he shows again and again, is "the health of the State"? What is it in human nature which gives the idea of the State its obsessive character? These are the questions serious peacemakers are obliged to answer. If they evade them they are wasting their time with side issues.

But meanwhile the public at large has become much less susceptible to the persuasions of the State when it comes to the prospect of war—which today is inevitably nuclear war. The ease with which the State and its servants and enthusiasts are able to infect an entire country with passionate loyalty to the State and the warlike intentions of the State has been much diminished by considerations which are very nearly obvious to all. After World War I a great number of people were able to see that the "war to end war" accomplished nothing of the kind, that both Europe and America were worsened instead of bettered. The Western world was not long in recovering its sanity after the war. The peace movements grew in number and strength throughout the West. Yet the crimes of the Nazi government enabled the leaders of other countries to precipitate another great war, once more in the hope of cleansing the world of an infamous but powerful regime. But again there was failure to achieve anything but a multiplication of the sources of war-making, and all the world slowly learned or realized that there is absolutely no ground for hope that a peace worth considering can be accomplished

through nuclear war. Today even military men are frequently heard on the side of the anti-war forces. Only childlike people are still able to believe with any heart that the State can use nuclear weapons to any constructive purpose. Nuclear war, more and more are conceding, is virtual suicide for all. This is a considerable change since Randolph Bourne wrote his essay in 1918, yet lending greater force to his argument.

In order to emphasize the reality of this change and its importance, we quote from Mark Sommer's Epilogue to his book, *Beyond the Bomb*, issued by Expro Press in 1985. He said in this concluding chapter:

> The effort to endure a perpetual condition of abstract terror has wrought subtly profound changes in the psyches of those living in this first generation since the birth of the Bomb. In what ways has the presence of nuclear weapons changed our hearts and our minds? There is a growing literature that seeks to describe and analyze these effects.
>
> Statistical surveys reveal a profoundly contradictory relationship between Americans and their nuclear weapons, and a deep confusion about the actual thrust of current governmental policy. A recent survey conducted by the Public Agenda Foundation and Brown University's Center for Foreign Policy Development traces a remarkable shift in public attitudes toward the Bomb in the years since its invention. In 1949, 59% of those surveyed believed it was "a good thing that the atomic bomb was developed. . . . The atomic bomb, for all its power, was not viewed as a reprehensible weapon or something that might, one day, be used against us. . . By 1962, however . . . the Gallup survey revealed that American's thinking had undergone a radical change: now nearly two in three Americans (65%) had come to believe that the development of the bomb was a 'bad thing'."
>
> While twenty-nine years ago only a quarter of the public (27%) believed that "mankind would be destroyed in an all-out atomic or hydrogen bomb war," by 1984 an overwhelming 89% believed that there could be no winners in such a war and that both sides would be destroyed. Most startling of all is the public's perceptions of the future: 75% of women and 78% of persons under thirty believe that "if we and the Soviets keep building missiles instead of negotiating to get rid of them, it's only a matter of time before they are used. . . . Nearly 40%—and half of those under thirty—say that all-out nuclear war is likely within the next ten years." At the same time a sizeable minority believes that "the U.S. should lead the world out of the nuclear arms race by unilaterally reducing our stockpile of nuclear weapons" (43%), while 33% believe that "by 1990 it should be U.S. policy *never* to use nuclear weapons."

Mark Sommer takes note of the fact that in American public opinion, there is a growing divergence between the views of technological experts and citizen opinion. Conceivably, the experts have allowed themselves to become more susceptible to the propaganda of the State, and are misled by the technical aspects of their knowledge. To be an "expert" is almost automatically to differ from ordinary people in one's opinion, but in this case, Mark Sommer stresses, the public needs to convince itself that it knows as much as the experts concerning nuclear war. The experts often have delusions of grandeur:

> While the Public Agenda survey indicates that Americans have been growing gradually disaffected with the Bomb over the years since its invention, several significant groups spanning the social spectrum appear to remain wedded to the nuclear faith. The engineers and technicians, politicians and ,publicists of the nuclear establishment together constitute what some observers have called a self-appointed "nuclear clergy" guarding the secrecy and sanctity of the Bomb. Theirs is generally a sophisticated and secularized belief structure, notable for its well-groomed appearance of rationality and objectivity. Despite mounting evidence of its deleterious effects, they remain exponents of "hard tech," the technologies of centralized power, resource exploitation, and unbounded destructiveness. As public attitudes have gradually shifted away from uncritical acceptance of nuclear weapons and energy, supporters of the Bomb have restyled their rhetoric to include the now obligatory expressions of abhorrence, but most remain loyal to the faith. Nuclear weapons are a manifest evil, they argue, but a necessary evil so long as the other side has them.

No matter how learned and knowledgeable an expert may sound, the rule that should be applied in this case was given by Jerome B. Wiesner, former president of M.I.T., in the August 1985 issue of the *Bulletin of Atomic Scientists:*

> It is often suggested that secret information exists that would argue against a nuclear freeze or a test ban or some other logical arms-limitation measure. But there are no secrets on the vital issues that determine the course of the arms race. Each citizen should realize that on such critical issues as what constitutes a deterrent and how many nuclear weapons are enough his or her judgments are as good as those of a president or secretary of defense, perhaps even better since the layperson is not subject to all of the confusing pressures that influence people in official positions. It is important for citizens to realize that their government has no monopoly on wisdom or special knowledge.

It is time to return to Randolph Bourne and his hope of getting rid of the mythic power of the State over people's minds and loyalties. How can this irrational force be eliminated from the common life? Even the rejection of nuclear war, as made clear by the surveys quoted by Mark Sommer, reveals a kind of acceptance of State power, since so many people, especially the young, seem convinced that the world is fated to be destroyed in a nuclear war, sooner or later. This seems evidence that the coming generation does not look forward eagerly to the challenge of taking charge and putting an end, as democratic citizens, to the possibility of making a nuclear war, but that they expect the war to come over their heads. They have, in short, no expectation of changing the looming horror which lies ahead by democratic means, since they no longer have faith in the political process by which out country is supposed to be governed.

Bourne shows that foreign policy makes necessary the retention of State power by an American President, taking Woodrow Wilson as his example.

> The American President himself, the liberal hope of the world, had demanded, in the eyes of the world, open diplomacy, agreements freely and openly arrived at. Did this mean a genuine transference of power in this most crucial of State functions from government to people? Not at all. When the question recently came to a challenge in Congress and the implications of open discussion were somewhat specifically discussed, and the desirabilities frankly commended, the President let his disapproval be known in no uncertain way. No one ever accused Mr. Wilson of not being a State idealist, and whenever democratic aspirations swung ideals too far out of the State orbit, he could be counted on to react vigorously. . . . For the last stronghold of State power is foreign policy. . . . Diplomacy is a disguised war, in which States seek to gain by barter and intrigue, by the cleverness of wits, the objectives which they would have to gain more clumsily by means of war. . . When it fails, the recourse is immediate to the military technique whose thinly veiled arm it has been. A diplomacy that was the agency of popular democratic forces in their non-State manifestations would be no diplomacy at all. . . . Unified control is necessarily autocratic control. Democratic control of foreign policy is therefore a contradiction in terms. Open discussion destroys swiftness and certainty of action. The giant State is paralyzed. Mr. Wilson retains his full ideal of the State at the same time that he desires to eliminate war. He wishes to make the world safe for democracy as well as safe for diplomacy. When the two are in conflict, his clear political insight, his idealism of the State, tells him that it is the naïver democratic values that must be sacrificed. The world must be made safe for diplomacy. The State must not be diminished.

One may disagree with Randolph Bourne, but not refute his argument. And this takes us to the recognition of how far-reaching must be the changes or reforms that are required for the actual making of a durable peace. Getting rid of the State is the first step, and that would obviously require the organization of modern society into much smaller units, much more responsible units, made up of far more responsible citizens. No legal devices or political arrangements can take the place of such changes, which go to the very roots of human nature.

Yet the circumstances of the modern world, now coming into the awareness of ordinary people, are pressing us toward decisions of this sort. Bourne has given us the necessary insight to see this, and writers like Mark Sommer, who are now in increasing number, are providing us with the unmistakable facts. Together, insight and current history give us the only means of putting an end to war. Involved is the elimination from human nature of the weaknesses and susceptibilities which make us vulnerable to the obsessive power of the State.

REVIEW
SOME ACTUAL PEACEMAKERS

WE have long been persuaded that among people who naturally practice the psychology of peace, little or nothing will be said about either peace or war. Their concerns are about other things—matters which represent the sort of life which has left behind the bitterness and exploitation that brings about war. For illustration we take the contents of the Summer 1986 issue of *Raise the Stakes,* a journal issued three times a year by the Planet Drum Foundation in San Francisco, devoted to Bioregionalism, the way of thinking carried on by "the growing number of people exploring cultural, environmental, and economic forms appropriate to the places where they live." Prime mover in the work of the Planet Drum is Peter Berg, a teacher and writer who has been active in this way since 1974.

What is the keynote of bioregional thinking? A caption in Berg's article, "Growing a Life-Place Politics," in the Summer issue of *Raise the Stakes* puts it briefly: "Restore natural systems, satisfy basic human needs, and develop support for individuals: those are the most fundamental requirements for sustainability and should be the goals of watershed-scaled bioregional politics." Ideology, office-seeking, and the attainment of power play little part in "bioregional politics," so that it is hardly politics at all in the common meaning of the term. Berg begins his discussion by raising questions which illustrate bioregional thinking:

> Ask city dwellers where their water comes from, for instance. Most will answer with something like "The faucet, of course. Want water? Turn the tap handle." So it seems, especially if your life has been spent mastering survival in apartment buildings. But the faucet is only the last place water was, not where it came from. Before that it was in the plumbing, and before that in the mains. It got there from a reservoir, and from an aqueduct connected to a storage lake. "So tell me the name of the lake and I'll know where the water really comes from." Finding out the name and, even better, walking on the shore of that lake is definitely a start toward acquiring a sense of care and gratitude. But even that lake is just another place where water was. It got there as runoff from rain or snow that fell from clouds. Where do clouds come from? Evaporated from ocean water? Two weather systems meeting? Whatever forces are involved in making any particular cloud, the source of every particle of water in it remains a deep mystery. If anything can be said about the ultimate state of water, it is probably that it doesn't begin or end anywhere but is constantly recycled through one form and location to another.

Berg continues with this elementary sort of affirmation:

> We all live in some geographic place. And here's the accompanying mysterious and very critical situation: the places where we live are *alive.* They are *bioregions,* unique life-places with their own soils and land forms, watersheds and climates, native plants and animals, and many other distinct natural characteristics. Each characteristic affects the others and is affected by them as in any other living system or body. And bioregions are all different from each other. Not just "mountains," but Appalachian Mountains or Rockies. Not just "river valley," but Hudson or Sacramento.
>
> People are also an integral part of life-places. What we do affects them and we are in turn affected by them. The lives of bioregions ultimately support our own lives, and the way we live is becoming crucial to their ability to continue to do so. . . .
>
> What's the practical response to knowing that we share in the lives of bioregions? If what we do degrades them, how does that fit with our concepts of social responsibility and reciprocity? What is a life-place politics?

Here we go to another article in this issue of *Raise the Stakes,* a discussion by Roy Rappaport, an anthropologist at the University of Michigan, of what would be involved in restructuring the ecology of cities. Ideally, he says, a city is an adaptive social organism which reacts to its surroundings by adjusting to changing conditions. Yet our cities do not react very well. Their adjustments are hardly intelligent in a great many cases.

> But it may even be questioned whether American cities are the sorts of entities to which the term *adaptiveness* applies. We should not conclude from the fact of city limits, the existence of city governments and services and the presence of large numbers of inhabitants that cities are coherent systems. They are not. They are only slightly organized heaps.

He explains:

> The physical features, primarily buildings and their locations, of a city can largely be accounted for by activities that take place within them. But much of the activity that takes place in a modern city such as New York has little or nothing to do with the city as a social entity. The banks, insurance companies and oil companies that have their headquarters in New York are not subsystems of nationally or internationally dispersed systems. Local manufacturing and transportation facilities are centers of far-flung distributive networks. They are merely *in* the city. They are *of* the city only by geographical accident. The city, then, is hardly a system, let alone an adaptive system. It is, rather, the focus of innumerable systems all of which have purposes of their own. These purposes, which have considerable effect upon the shape of the city, may have little or nothing to do with the well-being, however defined, of the city as a whole. . . . the physical characteristics of contemporary cities are largely the outcome of decisions made by innumerable private individuals for reasons, usually narrowly defined, of their own. Needless to say, it is only fortuitous when these private, short-run reasons coincide with long-term ecological requirements and the interests of society as a whole.

The important thing to notice about this analysis is not only its accuracy, but also its unfamiliarity. We have only recently begun to apply moral intelligence of this sort to our urban problems. And no reader needs to be told how difficult it will be to alter the thinking of those who decide what they will do, from the pursuit of personal acquisition to consideration of the needs of the city as a social organism and of "society as a whole." While difficult to understand by reason of its extreme abstraction, Roy Rappaport's discussion is as complete as circumstances permit and is very much worth a careful reading. In fact, this seems true of all the articles in *Raise the Stakes.* They reflect the kind of thinking now being done by people who have graduated from endless debate about the issues of war and peace. A single copy of this journal costs $2. Write to the Planet Drum Foundation, P.O. Box 31251, San Francisco, Calif. 94131.

We now return to Peter Berg's article, in which he says:

> A bioregional politics originates with individuals who identify with real places and find ways to interact positively with the life-web around them. Involving close-by watershed neighbors creates a "social-shed." This seed group is and will remain the most important unit of bioregional political interaction.
>
> Several social sheds of neighbors working on a wide variety of different projects (co-ops, community gardens, renewable energy, bioregional education, recycling, and many others) can easily join together to form an organization for the broader local community. In effect, it would be a watershed council, rightfully claiming representation for the closely shared place itself. A watershed council is the appropriate forum for directly addressing present inhabitory issues and also for setting new objectives that are based on the principles of restoring natural systems, meeting human needs and supporting individuals. It can effectively contend with the closest institutions of government (town, city and county) to secure positions. These established governments may be arbitrary units in bioregional terms, with unnatural straight-lined borders or control over a patchwork of different natural geographies, but their policies hold for parts of real-life places and must be dealt with while the council presses for eventual self-determination in the watershed.

More broadly, Berg asks:

> Is sustainability really necessary? Rather than reviewing all the colonialist, resource-depleting and environmental horror stories of the twentieth century that continue in the present and which without opposition will definitely extend in a compounded form into the next century, let's simply look at who we want to be. Do we want to degrade ourselves by participating in the degradation of humanity and the planet? And don't both of these processes begin where we live? *Un*sustainability simply isn't a lifesome alternative. Struggling for sustainability is necessary if we want to achieve it, like freedom.

He concludes by repeating some home truths:

> More environmental agencies won't ultimately relieve our situation. They would only be further appendages of a political core that is welded to industrialism itself. We need a core based on the design of Nature instead, from watershed to bioregion and continent to planetary biosphere. Is it self-defeating to avoid established governments other than immediately local ones? Not if we want to anticipate a society whose direction already lies outside those institutions. We need to uncover and follow a natural design that lies beneath industrial asphalt.

COMMENTARY
AN ENGLISH PROJECT

THE schools in England are getting larger and larger, just as they have in the United States, but fortunately teachers, who are responsible for the results of their work, are finding explicit reasons to object. The inside cover of the September/October *Resurgence* is devoted to a Manifesto by teachers in England. While bookkeepers and theorists argue in behalf of the elimination of small schools—and for a minimum of 1300 pupils—the small schools, those that are left, continue to prove that their work is effective, but this seems to be ignored by the administrators. Meanwhile the effect on the young of large schools becomes more and more evident. The manifesto says:

> With bigger size, what is visible in school—buildings, facilities, the range of subjects, success at the top—becomes more impressive. But, as time has gone by, other effects of size have been felt such as bureaucracy, ill-discipline, and strained relations between teachers and children, between teachers and parents and between the school and the community. Its negative influence also becomes visible from time to time in truancy, vandalism, violence—the behavior only of a vehement minority, sensationalized in gossip and the media. More widespread among the silent majority is a feeling that much of schooling is marking time and can lead to a sense of personal insignificance and failure. Many young people, dismissing the school as an inflexible institution where they matter little and learn less, become altogether alienated from the values enshrined in the school.

The teacher-authors of the manifesto hold that in smaller, humanly scaled schools, there is more personal contact between teachers and pupils and good relationships are established. More active learning becomes possible without the elaborate structures of a large school, and the individuality of a student's rhythm of learning can be fostered and respected in a small school. Education for social responsibility in a small school begins at an early age because pupils can be given a say in decisions affecting them without resort to cumbersome consultation procedures. Parents also have more of a say in the conduct of the school and often become involved in helping with the teachers' work. And discipline is easier to establish and maintain because of closer contact between teachers and children.

For these and other reasons, the manifesto challenges the claim that "efficiency" and "economy" are sufficient reason to close the small schools and to justify large ones.

CHILDREN
. . . and Ourselves
READING FOR THE YOUNG

GOING back in our file of copies of *Rain*, the quarterly published in Portland, Oregon, by the Center for Urban Education, and reading through the 64 pages of the issue for last Spring, we began to wonder: How many of the high schools in the country have this paper in their libraries, accessible to students? Do any *public* high schools have it?

Not all students would be interested, of course, but if the magazine were lying around on a reading table, a few, being curious, might pick it up and read enough to get an idea or two about good ways to spend their future lives. High school students are old enough to think about this, and *Rain* is filled with material bearing directly on possible opportunities for an interesting and useful life work. Take for example the interview by Michael Philips with Richard Munson, author of *The Power Makers* (Rodale Press), and founder of the Solar Lobby.

In his interview, Philips asks questions which give the background, current status, and the future prospects of small power generation. Munson begins by saying:

> There really has been a revolutionary change in the electricity business. These independent power producers, who as you say a few years ago were dismissed as a bunch of backyard tinkerers with limited potential, are now a multibillion dollar industry. Hundreds of new companies and entrepreneurs as well as some of America's biggest businesses are now involved in this. The change, I think, results because of two causes. The most obvious is economics. That is, the cost of electricity from utility monopolies has gone through the roof, particularly for those utilities that have been building nuclear power plants that have gone over budget. Therefore, it's given entrepreneurs, who think they can generate electricity cheaper than the utilities, a wonderful opportunity to try their hand.
>
> The second is a law that was passed back in 1978 by Congress when they were trying to encourage the development of alternative technologies. That law, the Public Utility Regulatory Policies Act, or PURPA, allows an entrepreneur to sell electricity back to the utility company. At the time that it was debated and passed, oddly enough the electricity companies overlooked it entirely and lobbied on other issues, I think arrogantly believing that no one other than a utility engineer could possibly build an electricity generator and run it. Lo and behold, the law was passed, President Carter signed it, and a bunch of independent power producers began to build their own electricity generators and approached the utilities monopolies and said, "I'm here. Let's sign a contract. I want to sell you electricity." The utilities basically panicked, and filed a series of lawsuits which finally reached the Supreme Court in May of 1983, and the Court unanimously upheld the law.
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> So I think the combination of economics and Congress saying that indeed some form of competition on the electricity market would not only encourage the development of alternative technologies but be good for the consumer as well. I think those two things have really given the push to independent power producers.

Asked why electricity rates have been soaring lately, Munson said:

> The primary cause is overbudget power plants. In the 1950s and 1960s the electricity utilities thought that they needed a lot of power and that the best way to supply that was through a lot of nuclear reactors. They greatly underestimated what the cost would be. There is a great deal of debate as to who is to blame for cost overruns that are sometimes as high as fifteen times over the original budget. Utility executives like to claim that it's the fault of a bunch of crazy environmentalists and regulators who forced a series of new regulations on them that were all quite costly. And there's some truth in that. There's no denying that after the Three Mile Island nuclear accident there were a series of new regulations to try to assure that the reactors were as safe as possible. And they did cost money.
>
> *Forbes Magazine* however, in a cover story last year admitted that they had been wrong in blaming the environmentalists and regulators, and said that the real blame for over-budget reactors has to be laid at the feet of utility managers themselves. They called the U.S. nuclear program the largest managerial disaster in U.S. business history. The problem, I think, is that utility managers for so many years have been monopolists. That is, they have been the only ones allowed to generate and distribute electricity. As a result of that, they've had no incentive to innovate, and I think they've had no incentive to keep costs under control. Sure, it hurts

> when the cost of a nuclear reactor goes five times over what it's supposed to be. But they also can pass the costs on to consumers, so it doesn't really hurt them at the bottom line.
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> Therefore, I think the rise of independent power producers and the rise of competition is a real step in the right direction for consumers and for the electric utility industry itself, because that introduction of competition will provide the accountability that's been lacking over the past several years.

How have those "backyard tinkerers" of yesterday become enterprising and often successful small-scale entrepreneurs in the generation of electricity today? They began by experimenting with alternative methods of generation, starting with "wind machines, solar cells, cogenerators, and small hydroelectric facilities." These entrepreneurs, Philips says, "are starting to change the face of the electric utility system by challenging the power production monopoly utilities have enjoyed for 60 years." They used their heads and began to innovate, while the utility managers were only coasting and neglecting the possibilities of new forms of generation because they were not under pressure to solve their problems. They simply passed their losses on to the consumer. They were contemptuously indifferent to the innovators, at first, but now it begins to look as though the big utilities may eventually be only distributors of electricity to consumers—by itself a really big business, leaving the generation of power to innovative entrepreneurs who have learned to work on a small scale. Even today, some utilities still ignore what is actually happening in their industry. Munson says:

> Most, and I would say upward in the 90 per cent category of utility executives, ignore the phenomenon entirely. I have gone to utility conventions where chief executive officers of major utility companies do not know what cogeneration is. I was blown away. And most have absolutely no conception that we are talking about a multibillion dollar industry out there that's generating electricity that is not a part of the utility monopolies.

What, indeed, is cogeneration? Munson answers the question:

> The cogenerator is that machine which basically produces both heat and electricity by burning a single fuel. They are now used in applications as small as McDonald's Restaurants, Holiday Inns, and things of that sort. And there are some prototypes that are being used for individual residences where you burn natural gas, peach pits, waste, whatever, and supply the heat and electricity required for your home. Indeed you can find numerous examples where they're saving a good deal of money for individual residences. The issue is whether they can make the machine maintenance-free enough so that it can be placed in somebody's basement and basically forgotten about for a year. There are many people who think that will happen.

What are other examples? They are available in a number of states—in Texas, Maine, California, Michigan, New York, Florida.

> In California, for example, three years ago, independent power producers supplied only about 100 megawatts of electricity. Today they supply about 2,200 megawatts on line. That's the equivalent of the Diablo Canyon nuclear reactors, brought on line in one fifth the time, one eighth the cost, and one thousandth the controversy. They've got another 9,000 megawatts that are under contract and under construction. When those get completed in two or three years, you're talking over 10,000 megawatts, which is 25 per cent of California's electricity, coming from independent power producers, people other than the utility monopolies. That's a revolutionary, rapid change.

Small-scale production facilities are very much in order, right now, because, with the vast increase in efficient use of power, no one really knows what the demands of the future will be, making the addition of small production units the only sensible program.

Other articles in *Rain* deal in effect with other possibilities for a constructive lifework in which imaginative high school students might be interested. But since the chances of the magazine being in the library at school are slim, it would be better to have it lying round on the table at home. *Rain's* address is 3116 North Williams, Portland, Ore., and a subscription is $18—or $12 for those with small subsistence income.

FRONTIERS

Useful Health Information

THE Public Citizen Health Research Group was co-founded in 1971 by Ralph Nader and Dr. Sidney Wolfe "to fight for the public's health in Washington, D.C., and to give consumers more control over decisions which affect their health." The organization now publishes a *Health Letter* edited by Dr. Wolfe, which is "completely independent of the drug industry, the medical establishment, and their cohorts in government agencies." It comes out every two months and subscription is $9 a year (address: 2000 P St., NW, Washington, DC 20036). We have from a reader a copy of the September/October 1985 issue which contains what seems important information, including an account of why the drugs known as "benzodiazepines" are so popular, referring to "the long list of ills and, for that matter, non-ills, that have been suggested by pharmaceutical industry advertising to physicians as reasons to prescribe these drugs."

Under the title, "The Risks of Tranquility," these facts are given:

> For years, Librium (which preceded Valium), and its sister drugs—Ativan, Centrax, Dalmane, Paxipam, Restoril, Serax, Tranxene and Xanax have been the most prescribed drugs in the United States. Although many of these are no longer as popular as they once were, Americans continue to consume millions of tablets of these drugs and a newer one called Halcion every day. In 1984, for example, Americans filled 78 million prescriptions for these drugs. The peak use of these addicting benzodiazepine tranquilizers and sleeping pills was in 1975 when 91.4 million prescriptions were filled for these drugs. As the public and the medical profession belatedly learned about the addictive properties and other dangers of these drugs, the sales fell, "bottoming out" in 1982 but now beginning to rise slowly. Too little recognized is that because all these drugs belong to the same closely-knit chemical family, the benzodiazepines, they can be dangerous to your health.
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> Some benzodiazepines are promoted as tranquilizers; others (like Dalmane, Restoril and Halcion) as sleep aids. For whatever purpose they are advertised, they can be both psychologically and physically addictive and it is all too easy to get hooked on them. According to the Food and Drug Administration, in fact, 1.5 million Americans have taken one or more of these medications long enough to be in serious danger of addiction.
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> Just how long is long enough is not entirely clear. What is known, however, is that benzodiazepine addiction sends thousands of people to hospital emergency rooms each year and that it is because they have become hooked on benzodiazepines that at leust 4000 Americans annually enter addiction centers for the first time.

An editorial warning on the first page of the *Health Letter* says:

> In 1984, Americans filled prescriptions for 3.8 billion pills of these drugs. Since these prescriptions were filled by a maximum of 40 million people, this means that *The Average Number of Pills Per Person Was* (at least) *95 during 1984!!* Since many of these 40 million people only used a few pills during the year, many others must have used hundreds of pills, easily enough to become addicted. In this article, *Health Letter* reviews addiction and other dangers of these drugs, the special risks to older people, what to do if you are already addicted and how doctors are "mobilized" by the drug industry to push these legal but usually inappropriate kinds of dope to you and your friends and family.

In a brief article on "Other Hazards of Benzodiazepines," there is this further warning to women:

> If you are (or may be) pregnant, taking benzodiazepines may increase the risk of the child's having birth defects. Besides, use of these drugs near delivery has been linked to the so-called floppy baby syndrome. Infants with this syndrome are weak, suck poorly and may have serious breathing problems.

Another informative feature in this issue of the *Health Letter* is a long interview with Dr. E. Fuller Torrey, a research and clinical psychiatrist in Washington, D.C. Dr. Torrey has been researching schizophrenia for years, on the staff of St. Elizabeth's Hospital in Washington, his latest book being *Surviving Schizophrenia*, issued in paperback by Harper & Row for $8.95. In the interview he replied to questions about

schizophrenia, which he identified as a brain disease "caused by chemical abnormalities just as are certain other nervous system disorders as multiple sclerosis and Alzheimer's disease." As to its symptoms, he said:

> About three quarters of people with schizophrenia will hear voices at some time. Delusional thinking is commonplace, too. For example, the person may think a helicopter flying randomly over head is spying on him (or her). Also frequent is disjointed thinking so that the person finds it difficult to think logically from A to B to C.

Following is a summary of other statements by Dr. Torrey (by no means complete):

> Schizophrenia is not rare. One of every 100 Americans will suffer from schizophrenia during their lifetimes and there are, conservatively, about one million Americans at any one time who are actively ill with the disease. Schizophrenia is three times as common as insulin-dependent diabetes, six times as common as multiple sclerosis and 60 times more common than muscular dystrophy—all of them diseases the public is more familiar with.
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> We don't have a conclusive lab test to specifically diagnose schizophrenia. We make the diagnosis on the basis of the constellation of symptoms and the course of the disease. It's a relatively easy diagnosis to make. There are for example, very few other conditions that cause auditory hallucinations—hearing voices. There are a few borderline cases that are hard to diagnose. But even those generally can be clarified with the help of psychological testing. Treatment by psychiatrists is not essential. Many family practitioners treat it very well and some psychiatrists treat it poorly. Family support groups—and they have sprung up all across the country—are your best bet because they tend to share information about physicians. To locate a group in your area, contact the National Alliance for the Mentally Ill, 1901 Fort Meyer Drive, Arlington, Va. 22209. The outlook for recovery from schizophrenia is surprisingly better than most people think. Most people think of Aunt Tessie who's going to spend the rest of her life on the back wards of the state hospital. In fact, if you take 100 people who get schizophrenia for the first time, a third of them will recover from their first or second episode and not get sick again.

The value of this interview lies in the fact that it is a candid discussion of what doctors know and what they don't know about the disease and what families can do to help the afflicted. Dr. Wolfe, editor of the *Health Letter*, says that Dr. Torrey's book, *Surviving Schizophrenia*, "is being used almost as a bible by tens of thousands of families in which someone has schizophrenia."