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## Chapter 1: First Principles

*"You know, in America in 1994 we really don't have any freedom of movement. All you can do is ride up and down the road. Everything's fenced in."... East Texas cowboy balladeer Bob Campbell.*

The headlines read like a global demonstration of Murphy's Law: Anything that can go wrong, will....

"Rhine may need 10 years to recover from spill"

"Greenhouse tragedy may be coming fast, hard"

"Wheat losses may soar as Russian aphid moves west"

"Experts fear spread in U.S. of dangerous mosquito"

"NY students pack drugs, guns"

"4 million may starve in Ethiopia, U.N. says"

"Spread of ballistic missiles troubles U.S."

"School cancels exams amid suicide pact fears"

Yet there is a pattern.

Human beings neither reproduce nor evolve quickly, so they have survived and prospered by a strategy which consists, at least in part, of avoiding one another. In modern Western history, when conditions became intolerable in Europe, colonists left for the New World. The process had been going on for generation after generation. It stopped only recently, when Earth's frontiers filled up late in the nineteenth century.

## Enclosure

Take a look around. Unless you are looking straight up, virtually everything you see is owned by a corporation. Do you really own your home? Do you get to live in it free? Not only do all the things you see belong to corporations, but social roles belong to them as well. It used to be, and not so long ago either, that a high school education was adequate to begin an apprenticeship in many careers. You could run for public office without owning a mint or selling your soul. The leading roles are not as solidly cast as they were in, for example, the Middle Ages in Europe, but a little time will certainly yield more progress in that direction if we get too comfortable with this thing called enclosure. That's the term we have adopted to describe the surrounding and walling off, literally or figuratively, of a resource. English law gave the term its meaning when, in the last century, that country concluded its

transition from agriculture based on tenant farming to the cultivation of huge, consolidated holdings with (many fewer) hired hands.

The phenomenon is not new. It has existed since there have been human beings, probably since there has been life. And in humans, at least, it always produces the same effect: a conviction that no one profits except at the expense of someone else. It's like an end game of Monopoly in which there is no "get out of jail free" card, hotels are everywhere, and the sum of the assets of all players is a fixed number. For you to get a buck, someone has to give up a buck. That is the concept which has produced the expression "zero-sum game" in reference to life.

In what is now among the most teeming and threadbare parts of the world, long before this expression existed, ancient Indian communities organized themselves around a core that included a "chief inhabitant", who was judge, cop and tax-gatherer; a bookkeeper who kept the accounts; a boundary man, who guarded the access to the village; the water overseer, managing the irrigation works; a Brahmin who conducted religious services; a smith, a carpenter, a potter, a barber, a schoolmaster, and a few others (perhaps a poet, for example). If the population increased, the surplus founded a new community on the pattern of the old one, on unoccupied land. A modern community is far more complex, consisting, as it were, of a fusion of many simple communities, with many cooperating individuals in the same occupation. When the cooperation turns to competition in a zero-sum environment, however, it is time for a new community. And in the absence of a frontier, the village model breaks down instead of duplicating itself. That's what we are seeing today, enclosure that may well be called terminal.

You can find examples of terminal enclosure everywhere in the world today, but the best are in undeveloped countries like Bangladesh, a bite out of India's northeastern arm between China and Burma. Its population density is 2,000 per square mile, third-highest in the world after Singapore and Hong Kong, but that's not the Bangladeshi problem. Their problem is that, while the land is fertile, 60 percent of the inhabitants don't own any of it.

The dispossessed do have a choice, and many of them take it. Seeking a better life, tens of thousands of settlers move their families to tiny silt islands in the Meghna River delta. Where the river empties into the Bay of Bengal, it deposits sand and silt washed from the Himalayan headwaters of the Ganges and the Brahmaputra, which water India. In contrast to their lives on the mainland, the settlers have rice and often fish to eat. They build huts thatched with palm leaves. They ferry fresh water from the larger islands. And they give their islands idyllic names. Sonaimuri means "Gold Cove" and Sonadeep is "Island of Gold". Nijhumdeep means "Island of Silence." Most of the islands are only a few feet above sea level.

Every few years a storm surge washes over the delta, sweeping away and drowning thousands. One cyclone in May of 1991 took 125,000 lives; 635,000 people died in the 21 years before that. They go anyway. It's not a death wish. Many of them know the danger, but still they migrate in the thousands. It's frontiersmanship under the terms of enclosure.

## The Secret of NIMH

These circumstances recall a chilling piece of research from the National Institutes of Mental Health (NIMH). Sometimes called "The Secret of NIMH", it involved a community of

Norway rats confined in a space of fixed dimensions, wanting for nothing — plenty of food, plenty of water, plenty of places to live — a rodent utopia. The research began at Johns Hopkins University in 1946 and continued into the '60s, when John B. Calhoun, then a research psychologist at the National Institutes of Mental Health, published a report of the work in *Scientific American*. What fascinated the scientist about the rats was that, confined, they developed social pathologies similar to the behavior of humans in large cities. Among the males, the behavioral disturbances included sexual deviation and cannibalism. Even the most normal males in the group occasionally went berserk, attacking less dominant males, juveniles, and females. Failures of reproductive function in the females — the rat equivalents of neglect, abuse and endangerment — were so severe that the population was reduced to a few geriatric cases who subsequently died.

## Casmalia, California

Vandenberg Air Force Base is on California's Central Coast, just up the shoreline from Santa Barbara.

Every Air Force test facility has its own rustic watering hole that pretty much defines its character. Vandenberg's was a steak house in Casmalia that drew customers from the neighboring cities of Santa Maria and Lompoc as well as Vandenberg. Way out in the country, it had great eats, sawdust on the floor and about every rocket patch, sticker, and doodad known to Man.

The area, about 60 miles north of Santa Barbara, was oil country. Casmalia had been living with that fact for a long time. The industry had managed itself more or less to

everyone's satisfaction. It had been a decade since the Santa Barbara oil spill.

Perhaps that is why no one thought twice when Casmalia Resources located its Class I toxic waste landfill there. However, in November 1984, chemical fumes began to invade the town. Residents complained of nausea, runny noses, irritated eyes, and headaches. The restaurant business dried up. The principal of Casmalia's school sent his students home.

Casmalia Resources claimed the oil fields were the source of the chemical invasion. But by December and winter rains, local photographers were displaying shots of contaminated runoff flowing from the landfill.

An air monitoring program started. A public health nurse was assigned to the school, which reopened. There were door-to-door health surveys. Soil samples were taken for analysis.

Casmalia Resources continued its operations.

Why?

Because all the other Class I disposal sites in Southern California had closed first. Casmalia was the last, and closing it too would have resulted in an epidemic of illegal, uncontrolled dumping.

## Cleaning Up Is Not Enough

Back in 1984 hardly anyone had heard of the greenhouse effect, and people who spoke of it were considered crackpots. There was no ozone hole, although at least part of the chemistry that could attack the earth's ozone layer was known. Toxic plumes from landfills, temporary storage sites, and city-

owned gasoline storage tanks contaminated ground water. "Cancer clusters" were investigated. Housing developments and playgrounds were built over buried drums of poison that had begun to leak and spread to the surface. Foundations were discovered to contain radioactive tailings from uranium mines mixed in the concrete. Cancer-causing asbestos fibers and flakes of polyvinyl chloride floated through the air of residential communities. The air pollution report became a standard feature of television weather programs. The operative word was "cleanup."

Before long, it had become an article of environmentalist faith that cleaning up was not enough. We had to make fundamental changes in human behavior as well. The reasons we heard about were the sweeping transformations in the atmosphere's chemistry that, for the first time, could be attributed to human activity. In 1985, British scientists discovered a suspicious "hole" in Earth's ozone layer over the South Pole. That discovery, and its subsequent verification by satellite measurements, served to attract public attention to an ecological problem of global proportions. Human beings may have accidentally started a chemical process which will eventually strip away our planet's natural protection from the sun's ultraviolet rays. The forecast was for millions of cases of skin cancer, damage to the human immune system, and irreparable harm to plant and animal life.

How ironic that Freon, a product hailed in the thirties as the first environmentally safe refrigerant, should be the cause of this grief.

The rest of Earth's atmosphere was undergoing changes, too. Its methane content had doubled in the past 500 years, a result of intensive agriculture. Its carbon dioxide content had climbed 25 percent from 1880 to 1980, partly because of industrialization. These gases, in addition to nitrous oxide from

fertilizer, and chlorofluorocarbons (CFCs like Freon), even Freon's replacement, hydrogenated fluorocarbons (HFCs), contribute to the general warming trend dubbed by the press "the greenhouse effect". In addition to coastal flooding, the greenhouse effect promised shifts in rainfall patterns and ocean currents, and a new species of storm dwarfing what we have naively called "killer hurricanes" in the past.

## Saving Our Children

No place is safe from enclosure's deadly effects.

In 1993 alone, scores of Chicago-area children died at the hands of people they knew -- their mothers or fathers, friends or relatives. Their stories appeared in a *Chicago Tribune* piece called "Killing Our Children." The paper called the motives of the killers "unfathomable." They were nothing of the kind. All it takes to understand is an appropriate frame of reference.

Fortunately, we have such a frame of reference at hand in English history and literature. Charles Dickens' Ebenezer Scrooge (*A Christmas Carol*) was fond of the phrase "surplus population," which he used to describe his neighbors. The term became popular in 1834, when English manufacturers proposed to the Poor Law Commissioners that they send the surplus population of the agricultural districts to the north so that "the manufacturers would absorb and use it up." This strategy, arising from enclosure, resulted in the abuses that created communism. Karl Marx, the political economist who was communism's chief theorist, and Charles Dickens the author were contemporaries.

Marx observed that, although the Americans had invented a stone-breaking machine for clearing boulders from agricultural

land, the English did not make use of it because of the ready availability of cheap labor. "In England," Marx wrote, "women are still occasionally used instead of horses for hauling canal boats, because the labor required to produce horses and machines is an accurately known quantity, while that required to maintain the women of the surplus population is below all calculation."

Enclosure cheapens labor. It also cheapens life. When human beings are pressed to the breaking point, they make decisions based on a premise that resembles the military concept of triage. The word triage means to pick or to cull. It is the sorting of casualties into three groups: those who can be expected to survive without help, those who will die regardless of treatment, and those who will perish unless given immediate aid. When human beings, some of them at least, think themselves in the last category, they are apt to extinguish even their offspring to preserve their lives or their sanity.

"Within the logic of triage, there is nothing sacred about human life," writes Richard L. Rubenstein in *The Age of Triage: Fear and Hope in an Over-crowded World*. As we will see in chapter 13, mothers trapped by enclosure in England of the last century reacted very much as they do virtually everywhere today, by killing their children.

Remember the rats?

## A Conflict for the 21st Century

By 1863, the massive emigration of factory workers to the frontiers of America had become Britain's saving stroke of luck, at least for the workers. Some 6 million left those shores

in a span of 25 years. That was a quarter of England's population. Wages in the old country soared.

But on March 24, 1863, the *Times* of London published a letter which became known as "the manufacturers' manifesto." It argued that the emigration of labor power from England should not be encouraged and, perhaps, not allowed. At about the same time, H. Merivale, a professor of political economy at Oxford maintained in "Lectures on Colonization and Colonies" that the wealth of a country depends on its keeping at hand a certain amount of surplus labor to throw into production at that "prosperous moment when demand is brisk." According to Merivale, "It takes...the space of a generation to replace the loss of adult labor" to emigration. As we shall see in the remainder of this book, it is not the creation of wealth that a vigorously expanding frontier makes difficult, but its concentration in a limited number of hands.

Colonization prevents the formation of an industrial reserve army of the unemployed and the underemployed, reducing the dependence of workers on management. Colonization creates wealth, but it also diffuses it. And that is why, as we shall also see, established economic forces tend to resist the creation of frontiers.

It may be partly for this reason that a new breed of revisionist historian emphasizes the injustices of frontiersmanship and attempts to discredit western expansion as a positive influence on the American spirit. Indigenous Americans were slaughtered and driven off their land, but such behavior is not uniquely European.

In *Admiral of the Ocean Sea, A Life of Christopher Columbus*, Pulitzer-winning author and historian Samuel Eliot Morison reports that the people inhabiting San Salvador when Columbus discovered it, the Taino, were a fairly advanced civilization that had emigrated from South America, displacing

and enslaving a more primitive group called the Siboney. As a culture, the Taino are extinct today, made so by another civilization that knew, perhaps instinctively, what the historian Frederick Jackson Turner voiced just a century ago: that territorial expansion and cultural vitality are inextricably linked.

Turner was a history professor at the University of Wisconsin who, in 1893, first expressed this idea in an address before the American Historical Association. According to him, it was not legal tradition, not place of origin, not religious creed, not race that made Americans inquisitive, practical, inventive, restless, individualistic, and indomitably free.

"These are traits of the frontier," said Turner, "or traits called out elsewhere because of the existence of the frontier.

"What the Mediterranean Sea was to the Greeks, breaking the bonds of custom, offering new experiences, calling out new institutions and activities, that, and more, the ever retreating frontier has been to the United States directly, and to the nations of Europe more remotely. And now, four centuries from the discovery of America, at the end of a hundred years of life under the Constitution, the frontier has gone..."

The Turner thesis shot through the academic community like a bolt of lightning. It was until recently the basis for almost 90 percent of teaching about American history, and it provides penetrating insight into what America must become if it remains on its present course.

## Divide and Conquer -- Fearing Each Other

It has been almost universally accepted that human inventiveness is adaptability enough to cope with an

increasingly overburdened environment. Wishful thinking aside, it is now clear that such is not the case. Sometimes even our solutions have become problems, as with the "safe" refrigerant Freon or the "safe" disposal of toxic waste by burial.

To complete the cycle, the fear which all of this engenders could freeze us in an agony of social paralysis until all hope of recovery goes glimmering. Unlikely, you say? Our responses to fear alone have, in the recent past, cost citizens their civil rights. Consider the 110,000 Japanese Americans imprisoned in concentration camps during World War II. Consider McCarthyism, which savaged our freedoms of speech and association for nearly a decade. Now consider the possibilities when the fear is justified, for example, fear of AIDS.

The AIDS virus is a legitimate threat that invites scapegoatism targeted at homosexuals, drug users and prostitutes, whether real or suspected, especially those with minority backgrounds. The Fourth Amendment to the Constitution of the United States guarantees the "right of the people to be secure in their persons, houses, papers, and effects." Yet the need to locate AIDS victims or potential victims by means of tests, investigations, computerized files -- perhaps extending to wire tapping and miniaturized bugs -- may override the basic right to privacy.

The fear of disease in the insidious form of AIDS is only one of the fears we all face. Most of us hardly even count crime anymore, even the gratuitous violence which seems especially characteristic of drug-induced criminal insanity. It's just part of the background noise, the muted rumble of civilization crumbling. We have even come to enjoy seeing headlines that read "Crazed Mud-Truck Driver Runs Amok in Rush-Hour Traffic, Dozens Killed."

Such developments, about which people feel helpless, are enough to frighten a significant number of the weak-minded into a retreat from reason. When they cast about for the causes of their discomfort, they tend to find them on bookshelves. Authors are especially vulnerable to that kind of assault, and one would naturally expect them to take a hard line in favor of printing anything.

Ray Bradbury is America's poet laureate of science fiction. If you are a science fiction fan, and you weren't born yesterday, you probably know Bradbury's work. Now it happens that science fiction is an easy target for the censor's torch, because it tends to get into things that aren't necessarily biblical. It explores. It tests. It pushes the inside of the envelope. Still, when interviewed on the subject of censorship, Bradbury's comments took a surprising turn. He said,

"Two of my daughters have been raped. That doesn't make me feel very liberal about certain kinds of people in society, does it? A lot of the 'censorship' feeling is not so much about censorship at all, really, so much as it is a reaction to the failure of our judges and criminal system to provide some kind of fairness about victims and criminals."

Certain kinds of people in society occasionally go berserk, attacking less dominant individuals, females, and juveniles. Like rats.

An imagined decay of moral values has become the trivial explanation of everything from bad eating habits to mass homicide. Recently in Culver City, California, such fuzzy thinking allowed the assistant superintendent for instruction to remove *Little Red Riding Hood* from a first grade supplementary reading list. The book, an award-winning adaptation of Grimm's fairy tale which generations of American school children have read and enjoyed, cast wine in too favorable a light, she thought.

An aberration? Not at all. The gradual concentration of decision-making power in the hands of a few is a threat to freedom that is typical of enclosure.

There are always a few lunatics out there. When enclosure is present, they can ride the crest of public hysteria to popularity. In one instance the pastor of a non-denominational church in Dayton, Ohio circulated fliers inviting people to bring books by Moslems and Jehovah's witnesses to his book-burning event. Also to be burned: books on New Age religions, witchcraft, yoga, transcendental meditation, and Christian Science, in addition to horoscopes, playing cards and "secular albums, tapes, and bumper stickers."

"Our purpose is to rid our city — and throughout the years we'll continue to rid our city — of more satanic paraphernalia, and then we believe the Holy Spirit will have a greater freedom to flow," said the reverend, apparently oblivious to the irony of such intolerance in a "non-denominational" church.

Most people who promote censorship on moral or religious grounds are simply afraid, and not without reason. Their dread is real. The cause is sufficient. Yet the adversary of the censor is afraid, too -- afraid of opportunists and their quest for power, afraid of manipulators of fear, guilt and uncertainty, who are also real.

Each little fear, taken by itself, is in some way approachable. Diseases have telethons and promising medical research. There are eradication programs for insects. There are laws and prisons for criminals. We can collect canned goods and baskets of treats for the needy at Thanksgiving and Christmas, and we can get the feeling of having lit a candle in the darkness. But in the deepest recesses of our minds, where no amount of cheer can penetrate, reason waits to have its way. There are too many people. Some will starve. We make chemical waste faster than we can clean it up. Critical

resources are scarce enough to fall under the control of inimical interests in the few remaining areas where they are plentiful. For every cure there seem to be a dozen new diseases. The law will do nothing about crime because there is nothing it can do on a scale so vast. In our worst moments, we know that time will eventually prove that Thomas Malthus, who predicted this end in the nineteenth century, and the Club of Rome, which predicted it in the twentieth, were right.

Some of us give up, hide behind assault rifles in the deepest woods we can find, and wait for the end. Who wins then?

### Bigger IS Better

Can technology restore the earth? Almost certainly. But who will pay for it? We humans derive our wealth from Earth's resources. We can shift assets from place to place within our world. We can improve our use of some of them. But we cannot renew a single acre without using some wealth external to it.

Earth could restore a country, maybe a continent, but not without further impoverishing some other place on the earth. To benefit the entire planet will require resources from elsewhere, resources much larger than we currently possess. This statement is true even if all we demand from Earth is its natural state. That our current approach to the restoration and preservation of Earth is wrong, that our resources are insufficient for the task, should be manifest from the rate at which events are overtaking us.