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### Moral Disintegration

*The soundest strategy in war is to postpone operations until the moral disintegration of the enemy renders the mortal blow both possible and easy.*

—V.I. Lenin

Brig. W. F. K. Thompson has contributed three articles, entitled "Why we are losing World War III", to the London *Daily Telegraph* (Jan. 13, 14, 15, 1976). These articles largely put into the form of a contemporary commentary on current events analyses and anticipations published in *The Australian Social Crediter* in 1946, and republished with an Introduction and added notes, but otherwise without alteration, as a booklet, *The State of the World*, in 1967.

Brig. Thompson writes (Art. I): "With strategic nuclear forces balancing those in the United States; with conventional forces which, after allowing for the hostility [?] of China, are more powerful than defensive need can justify, forces moreover enjoying advantages in Europe over those of Nato not only in numbers, but also in disposition, structure and training; with the recent conversion of her naval and air forces from a defensive to an offensive role: and with ample and powerful internal security forces, Russia has established a very firm base from which to pursue World War III and threaten a general shooting war World War IV . . . ."

" . . . It has been truly said that 'the role of the Red Army is to stand ready to shake the tree when the rotten fruit is ripe to fall'."

Brig. Thompson also refers to Solzhenitsyn's much publicised opinion that the West has already lost this World War III, but himself takes "a less pessimistic view though the omens are not good." But he concedes that the USSR already has military superiority. His remedy is rearmament, both military and moral — particularly by the U.K. We consider this to be out of the question: no Power that has gained military and strategic superiority, to which the only answer on the military plane would be nuclear holocaust, is going to sit idly by while that superiority is eroded by its 'enemies' — see quotation from Lenin above.

We are of the opinion that Solzhenitsyn's role in all this should be carefully considered. His reiterated view, given maximum publicity in the 'Liberal' media, that the West has already lost World War III, and his exposure of the 'decadence' of Capitalist society, fits well with the theme of moral disintegration. "You only have yourselves to blame", he seems to be saying.

On another level, moral disintegration is being fostered by governmental and other agencies through scares concerning pollution, over-population, and results of technological advances, and the safety of food-stuffs and pharmaceuticals.

The only answer with a remaining chance of success, in our opinion, to the terrible threat which hangs over us is exposure of the total Conspiracy which underlies this threat; together with

rectification of the financial system to eliminate inflation which is the jet-propellant of disintegration, and the prevention of penalised unemployment as a mechanism of coercive government. (See *Freedom and Inflation\**).

We republish the 1967 Introduction to *The State of the World\**; and follow this with an article from *The Review of the News* (Jan. 7, 1976) exposing some fallacies ecological and other propaganda.

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In 1945 it must have appeared to most people that with victory war was done with, and that when its ravages had been repaired, an era of peace and prosperity would dawn. Who was left to make war?

The late C. H. Douglas, however, from the very beginning had seen the war as merely one frightful incident, like the First World War and the Great Depression, in a long-term and continuing policy of which the culmination was to be a World Government of a world police-state. He recognised the existence of an occult government, largely identified with the Money Power as organised internationally, but spreading its tentacles increasingly into national governmental organisations through such agencies as Fabian Socialism,<sup>1</sup> the London School of Economics, penetration of universities, and control of the media of communications. Of the inner core master-minding these huge events he wrote: "They care no more for the immolation of the peoples of a continent than for the death of a sparrow".

The state of the world has grown steadily worse since 1945, and appears now to be on the brink of explosion. And the evidence of conspiracy, once in the main largely conjectural, is now abundant, clear, and readily available. In these circumstances, it seems worthwhile to re-publish without alteration, but with added notes, a review of world affairs published in *The Australian Social Crediter* in March and April, 1946, since the essential thesis remains unimpaired, and fore-sight is more convincing than hind-sight. As well as factual material, this article contains projections, which on the whole have proved accurate, but, not surprisingly, inadequate. The emergence of Israel as a State in 1948<sup>2</sup> was not foreseen, nor "aid to underdeveloped countries", the "population explosion", the chaos in Africa, the conquest of China, the wars in Asia, the gradual decay and dissolution of India. But the connections between these

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large events, all implicit in the phrase "the immolation of the peoples of a continent", have become ever more apparent, and have been discussed from time to time in articles in *The Social Crediter*, some re-published in pamphlet form.<sup>3</sup> More important, hard evidence of conspiracy, which can now largely but not wholly be identified with the activities of international Communism, has become available in the form of eye-witness accounts, exposure by former Communist agents, and the results of Congressional and other enquiries in the U.S.A.

The negro riots in the U.S.A. were planned, as part of the strategy of a Communist world take-over, as long ago as the 1920s;<sup>4</sup> their actual promotion at this time is a strong indication that the culmination of conspiracy is close. There are other indications.

It should be evident to anyone who follows the news that President de Gaulle has consistently promoted Communist objectives.<sup>5</sup> The most important result has been the effective neutralisation of NATO. It has recently been reported that the USSR is building up supplies in East Germany, thus preparing the way for a "settlement" of the German "problem"—probably merely by ultimatum, since West Germany now lies like a nut between the crackers of East Germany and de Gaulle's 'neutrality'—"Europe from the Atlantic to the Urals".

The Middle East, the strategic centre of the world, is under the virtual control of the USSR, via Israel. The position is that intervention by "the West" is virtually impossible, because over twenty years of intensive propaganda have made the threat of nuclear war both credible and unthinkable. The no-win war in Vietnam is conditioning the peoples of continents to the futility of war; and under cover

of these developments Communism is consolidating its gain and grip in the essential strategic areas, and denying them to "the enemy". If Europe falls, either under ultimatum, or as a result of a lightning war as rehearsed in the Middle East, the Mediterranean would immediately become a Russian lake. Asia is in ferment, India is collapsing; and there is near civil war in the U.S.A. The USSR is alleged to be overtaking U.S.A. nuclear superiority, and to have deployed an anti-missile system; China is alleged to have the hydrogen bomb (made in Russia?). The U.S. Secretary of Defence refuses to deploy an anti-missile system. There is already talk of a U.S. withdrawal from forward bases in the Pacific to islands nearer home.<sup>6</sup>

The stage is thus set for a shattering world crisis, in which, because the threat of nuclear annihilation is credible to the people of the U.S.A., a surrender to World Government, in the first place by the Communists, already in control of the UN *organisation*, might appear inevitable.

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### THE EIGHT SURPRISES

by John J. McKetta

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■ On March 27, 1973, I heard Garner Ted Armstrong say over the television: "There is no way you can have any optimism for the continuation of life on this earth because of the pollution, over-population, and results of technological advances."

It disturbs me that there are so many purveyors of gloom talking about the hopelessness of our future.

There is an entire spectrum, from zero to infinity, of views and actions on almost any problem. Let's take the pollution problem, for example. We all know there are still some companies and cities who put toxic gases and liquids into our air and streams. It's almost unbelievable that many of our

large cities still discharge raw sewage, or only partially treated sewage, into our streams. Both industry and the cities should immediately be forced to stop these flagrant violations.

On the other extreme we have those people who wish to have distilled water in the streams and zero particulates in the atmosphere. These are impossible concentrations and could not be attained even if we had no people on earth. The answer, obviously, is a situation somewhere between these two extremes.

Just like most of you, I am a family man. My lovely wife and I have four wonderful children. It is my wish that they (and I) have clean air to breathe

and clean water to drink — not distilled water nor absolutely pure air. But I do want them to have odorless, non-toxic, clean air, and clean water. I believe we still have a great deal of environmental work to do in the U.S.A. I believe, however, that extremism is bad on either end of the spectrum.

We're all deeply concerned about reports of the destruction of our environment as a result of technological recklessness, over-population, and the lack of consideration to the preservation of nature. As Chairman of t' National Air Quality Commission, I have to read great volumes of technical literature on this subject. I've turned

up a lot of evidence that I'd like to share with you.

### Surprise One

#### Is the oxygen disappearing?

My first surprise concerns the air we breathe. You may have read that we are seriously depleting the oxygen in the atmosphere and replacing it with toxic gas, like carbon monoxide.

Throughout my formal education I was taught that the oxygen in our atmosphere is supplied by green plants using the process of photosynthesis. It is known that plants take in carbon dioxide and, through activation by sunlight, combine  $\text{CO}_2$  with water to make starches and cellulose, and give off oxygen. In this way the whole chain of plant and animal life is sustained by energy from the sun.

When the vegetable or animal materials thus produced are eaten, burned, or decay, they combine with oxygen and return to the carbon dioxide and water from whence they came. We all know this. So — what is the big surprise?

Surprise Number One is that most of the oxygen in the atmosphere *doesn't* come from photosynthesis. The evidence is now overwhelming that photosynthesis is clearly inadequate to have produced the amount of oxygen that is present in our atmosphere. The reason is that the amount of oxygen produced by photosynthesis is just exactly enough to convert the plant tissue back to the carbon dioxide and water from which it came. In other words, the net gain in oxygen due to photosynthesis is extremely small.

The oxygen in the atmosphere had to come from another source. The most likely possibility involves the photodissociation of water vapor in the upper atmosphere by high energy rays from the sun and by cosmic rays. This process alone could have produced (over the history of the earth,  $4.5 \times 10^9$  years) about 7 times the present mass of oxygen in the atmosphere.<sup>2,11</sup>

The significance of this scientific information is that the supply of oxygen in the atmosphere is virtually unlimited. It is not threatened by man's activities in any significant way. If *all* organic material on earth were oxidized, it would reduce the atmospheric concentration of oxygen by less

than 1 percent. We can forget the depletion of oxygen in the atmosphere and get on with the solution of more serious problems.<sup>7</sup>

Some of the people (who are filled with gloom and believe we have no future) blame our apparent demise on the Judeo-Christian ethic that it is God's will that man exploit nature for his proper ends. They believe we have overdone our exploitation. Others recommend that we turn the clock back 2,500 years and revert to the life style of druidism. Many, many people express a disdain for science and mistrust in technology in general.

The same people say our automobiles are no longer a wondrous method of freeing man from his immobility, but instead cars have become terrible polluters and ultimately piles of junk to desecrate the landscape. Electricity, which has been the most convenient form of energy ever available, has fallen into disrepute. The utility that produces electricity is viewed as an evil organization of the Establishment whose objective is to create new radiation hazards with nuclear power plants, cut down trees, stick poles into the ground, and pump smoke into the air to poison all of us.

It's a gloomy picture indeed. But I've found out this outlook is not justified. This is what I'd like to talk to you about. I hope you'll understand that I'm speaking as one who understands elementary science and engineering and not as an emotional supporter of any particular "side" of ecology. Some of the facts I will mention may surprise many of you. I can assure you that my conclusions are supported by evidence that is difficult to interpret in any other way. They may be verified by anyone who wishes to do so. A bibliography follows.

### Surprise Two

#### Carbon monoxide will kill us all!

As you know, the most toxic component of automobile exhaust is carbon monoxide. Each year man adds 270 million tons of carbon monoxide to the atmosphere. Most of this comes from automobiles. The scientists are concerned about the accumulation of this toxic material because they know that it has a life in dry air of about 3 years.

For the past several years, monitoring stations on land and sea have been measuring the carbon monoxide content of the atmosphere. Since the ratio of automobiles in the northern and southern hemisphere is 9:1 respectively, it was expected that the northern hemisphere measurements would show a much higher concentration of atmospheric carbon monoxide. The true measurements show, however, that there is no difference in CO amounts between the hemispheres and that the overall concentration of CO in the air is *not* increasing at all. In fact, they've found higher concentrations of CO over the Atlantic and Pacific oceans than over land, where the cars are!

Early in 1971, scientists at the Stanford Research Institute<sup>1,3</sup> in Palo Alto disclosed that they had done some experiments in smog chambers containing soil. They reported that carbon monoxide rapidly disappeared from the chamber. Next, they sterilized the soil and then found that now the carbon monoxide did not disappear. They quickly identified the organisms responsible for CO removal to be fungi of the aspergillus (bread mold and penicillin types). These organisms, on a worldwide basis, are using all of the 270 million tons of the CO made by man for their own metabolism, thus enriching the soils of the forest and the fields.<sup>1</sup>

This does not make carbon monoxide any less toxic. But the fact is that, in spite of man's activities, carbon monoxide will never build up in the atmosphere to a dangerous level except on a localized basis. To put things in perspective, let me point out that the average concentration of CO in Austin, Texas, is about 1.5 parts/million. In downtown Houston, in heavy traffic, it sometimes builds up to 15 or 20 ppm. In Los Angeles it gets to be as high as 35 ppm. In parking garages and tunnels it is sometimes 50 ppm.<sup>6</sup>

Here is surprise Number Two — do you know that the CO content of cigarette smoke is 42,000 ppm. The CO concentration in practically any smoke-filled room grossly exceeds the safety standards allowed in our laboratories. I don't mean to imply that 35 to 50 ppm CO should be ignored. I do mean that there are so many of us who subject ourselves to CO concentrations

voluntarily (and involuntarily) that are greater than those of our worst polluted cities, including the Holland Tunnel in New York, without any catastrophic effects. It is not at all unusual for CO concentrations to reach the 100-200 ppm range in poorly ventilated, smoke-filled rooms. Incidentally, if a heavy smoker spends several hours without smoking in a highly polluted city air containing 35 ppb of CO concentration, the concentration of CO in his blood will actually decrease!<sup>10</sup> In the broad expanse of our natural air, CO levels are totally safe for human beings.

Incidentally, 93 percent of the CO comes from trees and other greenery (3.5 billion tons/yr). Only 7 percent comes from man (270 million tons/yr).

### Surprise Three

#### Oxides of nitrogen will choke us!

I have been extremely impressed by the various research efforts on the part of petroleum, automotive, and chemical companies to remove oxides of nitrogen from the products of combustion in our automobiles. I've read about the brilliant work of Dr. Haagen-Smit who showed that the oxides of nitrogen play a critical role in the chain reaction of photochemical smog formation in Los Angeles.<sup>8</sup> Oxides of nitrogen are definitely problems in places where temperature inversions trap polluted air.

But we've all known for many years that Nature, in addition to man, also produces oxides of nitrogen. The Number Three surprise (and shock) is that most atmospheric oxides of nitrogen come from Nature. If we consider only nitric oxide and nitrogen dioxide, the best estimates are that 97 percent are natural and only 3 percent are man-made. If we include nitrous oxide and amines, it turns out that 99+ percent is natural and less than 1 percent is man-made.<sup>6,9</sup>

Nature makes oxides of nitrogen in several ways. Biological action and organic decomposition produce most of the N<sub>2</sub>O and NO. In fact, the great saltpeter deposits of South America are a result of perpetual thunder storms over the Andes. Oxides of nitrogen in rain water react with minerals of the soil and end up as saltpeter when the water evaporates.

The great abundance of marine life between Antarctica and the tip of South America is also attributed to the nitrate run-off from the Andes which generates plankton growth, thus setting off a whole chain of fishes which eat each other, ending on the top with the blue whale.

The significance of this is that even if we are 100 percent successful in eliminating the oxides of nitrogen from combustion gases, we will still have more than 99 percent left in the atmosphere (which is produced by Nature). *Sometimes I think that Nature laughs at us.*

### Surprise Four

#### The death of Lake Erie

We've all read for some time that Lake Erie is dead. It's true that the beaches are no longer swimmable in the Cleveland area and that oxygen content at the bottom of the lake is decreasing. This is called eutrophication. The blame has been placed on phosphates as the cause. Housewives were urged to curb the use of phosphate detergents. In fact, for several years, phosphate detergents were taken off the market. There's been a change in the law since scientific evidence proved that the phosphate detergents were not the culprits and never should have been removed from the market in the first place.

Now let's look at the scientific evidence that I've been able to find on the subject. The study shows that the cause of the eutrophication of Lake Erie has not been properly defined. This evidence suggests that if we totally stopped using phosphate detergents it would have no effect whatever on the eutrophication of Lake Erie. Many experiments have now been carried out that bring surprise Number Four. It is the organic carbon content from sewage that is using up the oxygen in the lake and not the phosphates in the detergents.<sup>4,5</sup>

The real reason that the Cleveland area beaches are not swimmable is that the coliform bacterial count is too high.

Enlarged and improved sewage treatment facilities by Detroit, Toledo, Sandusky, and Cleveland will be required to correct this situation. Garbage disposal units do far more to

pollute Lake Erie than do the phosphate detergents. If cities put in the proper sewage treatment facilities, the lake will sparkle blue again in a very few years.

Incidentally, we've all heard that Lake Superior is so much larger, cleaner, and nicer than Lake Erie. It's kind of strange then to learn that in 1973 more tons of commercial fish were taken from Lake Erie than were taken from Lake Superior.

### Thermal pollution

Governor Gilligan of Ohio declared war on pollution in general and on thermal pollution in particular. Investigation of the thermal pollution problem reveals that, beyond any question of doubt, the sun is by far the greatest thermal polluter of Lake Erie. Governor Gilligan announced that he would "back legislation making it unlawful to increase the temperature of the water by more than one degree over the natural temperature." I don't know what he will do with the sun breaking the law since, as we all know, the natural temperature of Lake Erie is changed by the sun more than 40° every year between winter (33° F) and summer (75° F+). The natural life in the lake accommodates this change in great fashion, as it has for many thousands of years. According to my calculations, if we could store up all the electricity produced in Ohio in a whole year and use it exclusively for heating Lake Erie all at one time, it would raise the overall temperature of the lake less than 3/10ths of 1° F.

In terms of localized heating we must remember that we already have hundreds of power plants pouring warm water into streams and lakes. Forty of these are nuclear power plants. Evaluation of the effects of these from an ecological point of view is that "thermal pollution" is a less descriptive and less appropriate term than is "thermal enrichment." There are no species disappearing. No ecological catastrophies or problems have appeared. Some of the best fishing locations in the country are near the warm-water outlets of these power plants.

### Surprise Five

#### Is DDT killing us?

DDT and other chlorinated compounds are supposedly endangering the

lives of mankind and eliminating some bird species by the thinning of the egg shells of birds. There is a big question as to whether or not this is true. From the reading that I have done, the experiments were conducted in such a manner that positive conclusions could not be drawn from them. Even if it is true, it's quite possible that the desirable properties of DDT so greatly outnumber the undesirable ones that it might prove to be a serious mistake to ban entirely this remarkable chemical.

Many of you have heard of Dr. Norman E. Borlaug, the Nobel Peace Prize winner. He is opposed to the banning of DDT. Obviously he is a competent scientist. He won the Nobel Prize because he was able to develop a new strain of wheat that can double the food production per acre wherever in the world it can be grown.

Dr. Borlaug said: "If DDT is banned by the United States, I have wasted my life's work. I have dedicated myself to finding better methods of feeding the world's starving population. Without DDT and other important agricultural chemicals, our goals are simply unattainable."

As I read into this matter I find that DDT has had a miraculous impact on arresting insect-borne diseases and increasing grain production from fields once ravaged by insects. According to the World Health Organization, malaria fatalities alone dropped from 4 million a year in the 1930s to less than 1 million per year in 1968. Other insect-borne diseases, such as encephalitis, yellow fever, and typhus showed similar declines. Surprise Number Five is that it has been estimated that 100 million human beings who would have died of these afflictions are alive today because of DDT. Incidentally, recent tests indicate that the thinning of bird egg shells may have been caused by mercury compounds rather than DDT!

### Surprise Six

#### We're killing off species!

Many people feel that mankind is responsible for the disappearance of the animal species. It is possible that in some instances man may hasten the disappearance of certain species. However, the abundance of that evidence indicates that he has very little to do with it. About 50 species are expected

to disappear during this century. It is also true that 50 species became extinct last century and 50 species the century before that, and so on.

Dr. T.H. Jukes of the University of California points out that about 100 million species of animal life have become extinct since life began on this planet, about 3 billion years ago. Animals come and animals disappear. . . . Surprise Number Six is that man has had nothing to do with the disappearance of millions of species that preceded him.

In fact, one of man's failures is that he has *not* been successful in eliminating a single insect species — in spite of his all-out war on pests.

### Surprise Seven

#### Man is the real polluter!

Here's the Seventh Surprise! The late Dr. William Pecora calculated that all of man's air pollution during his thousands of years of life on earth does *not* equal the amount of particulate and noxious gases from just three volcano eruptions: Krakatoa, Java, 1883; Mt. Katmai, Alaska, 1912; Hekla, Iceland, 1947.

Dr. Pecora also pointed out that Nature's "pure water" is not so pure after all. Here are a few of his examples:

1. The natural springs feeding the Arkansas and Red Rivers carry approximately 17 tons of salt *per minute*.

2. The Lemonade Springs in New Mexico carry approximately 900 lbs of H<sub>2</sub>SO<sub>4</sub> per million pounds of water. This is more than 10 times the acid concentration in coal mine effluents.

3. The Mississippi River carries over 2 million tons of natural sediment into the Gulf of Mexico *each day*.

4. The Paria River of Arizona makes the Mississippi look like a trout stream. It carries 500 times more natural sediment per unit volume than the Mississippi River.

#### Back to the good old days

Don't believe the tall tales about the happy lives that people once lived before all this "nasty" industrialization came along. Things really weren't so happy. One of my 19-year-old students once asked me, "What have all these 2,000 years of development of industry and civilization done for us?"

Wouldn't we have been happier in 100 B.C.?" I said "No, chances are 97 out of 100 that, if you were not a poor slave, you'd be a poor farmer, living at a bare subsistence level."

When people think of living in ancient times, they think of themselves as members of the aristocracy. They imagine they are sitting in the Agora in Athens listening to Socrates; in the Senate House in Rome debating with Cicero; riding on horses as knights of Charlemagne's time. They are never slaves, never peasants, but that's what most of them would be.

My wife once said to me, "If we had lived a hundred years ago we'd have no trouble getting servants." I said, "If we'd lived 150 years ago, *we'd be the servants.*"

Let's consider what life was really like in America just 150 years ago. For one thing, we didn't have to worry about pollution very long — because life was very brief. Life expectancy of males was about 38 years of age. It was a gruelling 38 years. The work week was 72 hours.

The women's lot was even worse. They worked 98 hours a week, scrubbing floors, making clothes by hand, bringing in fire wood, cooking in heavy iron pots, fighting off insects without pesticides. Most of the clothes were rags by present-day standards. There were no fresh vegetables in winter. Vitamin deficiency diseases were prevalent. Homes were cold in winter and sweltering in the summer.

Epidemics were expected yearly and chances were high that they would carry off some members of the immediate family. If you think the water pollution is bad now, it was *deadly* then. In 1793 one person in every five in the city of Philadelphia died in a single epidemic of typhoid as a result of polluted water. Many people of that time never heard a symphony orchestra, or traveled more than 20 miles from their birthplace during their entire lifetime. Many informed people do not want to return to the "paradise" of 150 years ago. Perhaps the simple life was not so simple.

#### Practicing witchcraft

In every age people practice witchcraft in one form or another. I used to think that the people of New England

were irrational in accusing certain women of being witches without evidence to prove it. Suppose someone accused you of being a witch? How could you prove you were not? It is impossible to prove unless you can give evidence.

It is precisely this same witchcraft psychology that is being used to deter the construction of nuclear power plants. The opponents are saying that these nuclear plants are witches and it is up to the builders and owners to prove that they are not.

The scientific evidence is that the nuclear power plants, constructed to date, are the cleanest and least polluting devices for generating electricity so far developed by man. We need electricity to maintain the standard of living we have reached. But in the eyes of the extreme environmentalists we are the witches. We should be burned at the stake.

We hear the same accusations about anti-knock lead compounds from the gasoline engine. Our Environmental Protection Agency has no evidence that there has ever been a single case of death, or even illness, from lead in the air coming from the burning of gasoline. But the environment freaks still insist that we must remove the lead from the gasoline.

To the E.P.A. we are witches — they have no evidence — no proof — we are pronounced guilty! And yet everybody knows that gasoline needs some additives to prevent engine knocks. If we don't use tetraethyl-lead we'll have to use aromatic compounds. Some aromatics are carcinogenic. We know that! The use of unleaded gasoline also uses up to 20 percent more crude oil. (Incidentally, the real reason for removing lead from gasoline was because it was suspected that lead poisoned the catalyst in the emission control unit. Now we have good evidence that it isn't the lead at all, but ethylene bromide which is the poisoner.)<sup>1,2</sup>

From what we read and hear, it would seem that we are on the edge of impending doom. A scientific evaluation of the evidence does not support this conclusion. Of course, there are some effluent problems attributed to technological activities. The solution

of these problems will require a technical understanding of their nature, and their solution will not come through emotion. They cannot be solved unless they are properly identified, which will require more technically trained people — *not less*.

I agree, as Thomas Jefferson did, that if the public is properly informed, the people will make wise decisions. The public has not been getting all the facts on matters relating to ecology. This is the reason why I am speaking out on this subject today — as a technical man and as a citizen. Some of the things you have seen here are contrary to your beliefs, but I'm willing to support my conclusions on evidence good enough for me to stake my reputation on it.

### Surprise Eight

#### We're going to live!

In summary, let me state that civilization is not on the brink of an ecological disaster. Our O<sub>2</sub> is not disappearing. There will be no buildup or poisonous CO. The waters can be made pure again by adequate sewage treatment plants. The disappearance of species is natural. A large percentage of pollution is natural pollution and would be here whether or not man was on this earth. We cannot solve our real problems unless we attack them on the basis of what we know rather than what we don't know. Let us use our knowledge and *not our fears* to solve the real problems of our environment.

There is an old axiom, the gist of which is that those who misrepresent facts are not believed when they speak the truth. We've heard many cries of "wolf" with respect to our oxygen supply, the buildup of CO, the disappearance of species, DDT, the oxides of nitrogen, phosphates in the lakes, thermal pollution, radiation effects from nuclear power plants, lead in gasoline, mercury in fish, filth in our streams, to name a few. For the most part, these cries of "wolf" have not been malicious, but have been based largely on fear, ignorance, or misinformation. The people have listened to these cries and have come running to the rescue, but when they got there they didn't find the wolves.

Let's not cry "wolf" until we are reasonably certain that we have done enough homework to know what a wolf looks like. Otherwise we may undermine our credibility and not be believed by the people when we warn them that the real wolves threaten. ■ ■

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#### Acknowledgement

Many of the concepts in this lecture are drawn from talks given by my friends, Drs. A. Letcher Jones, I.W. Tucker, and the late William Pecora.

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