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Commentary

As a public service,
THE LAUCKS FOUNDATION —

from time to time calls attention to published material that might contribute toward clarification or understanding of issues affecting world peace.

The accompanying reprints constitute Mailing No. 30.



Eulah C. Laucks, President
Post Office Box 5012
Santa Barbara, CA., 93108

November 16, 1981



Concerned physicists

Dear President Reagan:

We are writing to you because of our grave concern about the possibility of nuclear war. Since Albert Einstein's letter to President Franklin Roosevelt in 1939 the physics community has been deeply involved in the development of modern weapons systems. However, because of the rise in international tensions, we believe that it is timely to press more strongly than ever for vigorous efforts to stem the growth of the world's nuclear arsenals.

It has been over 35 years since these weapons were used, and a generation of Americans has grown up with only indirect evidence of the awesome presence of these weapons. Many people have grown complacent in their feeling that they will never be used, and have grown accustomed to living with foreign policies of the superpowers based on threats of mutual destruction.

As physicists we are acutely aware of the power of these weapons and yet we believe that increasing the world's nuclear arsenals adds nothing to, indeed perhaps detracts from, the security of the major powers. We also believe that it has been conclusively demonstrated that nuclear weapons are fundamentally different from conventional weapons, and require different modes of thinking. If we are to learn anything from history, it is that development of new weapons and bigger

arsenals by either the United States or the Soviet Union inevitably leads to similar developments by the other side which further undermines the security of both nations.

Accordingly we feel that the greatest legacy your Administration could leave for the future peace, security, and prosperity of the United States, would be to help halt the arms race in which we are presently engaged. We feel it should be a matter of utmost priority for your Administration to begin this process immediately. We also believe that the Soviet Union should find it in their interest to participate in these efforts and that a policy based on compromise, communication and fairness can succeed. If the international scientific community, which has always promoted free exchange of ideas and open discussion, can aid you in attaining these goals then we are at your service.

We know that your Administration has inherited many problems, and that there are many threats to the peace and prosperity of the American people. Surely, among these, nuclear destruction poses the most awesome threat of all.

Thank you for your attention to our request. We pledge our support in any efforts you may make in this regard. We would be pleased to have the opportunity to present our views to you in person.

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*Nobel laureate

Bishop: 'I am becoming a pacifist'

Special to the National Catholic Reporter
Kansas City, Mo.

THE NUMBER of U.S. bishops who are issuing statements in opposition to nuclear weapons is increasing. Among them is Bishop Michael Kenny of Juneau, Alaska. His statement, which acknowledges that he is "becoming a pacifist," is reprinted with permission from the July 24 *Inside Passage*, Juneau diocesan newspaper. It follows:

I am an American . . . a citizen of the United States.

I believe in the ideals upon which our country was founded . . . that all men and women are created equal and endowed by their Creator with certain inalienable rights: life, liberty and the pursuit of happiness.

I support our constitution and those laws which promote the common good and protect individual rights.

I respect our system of government which allows for an orderly and democratic process to establish good laws and abolish bad laws.

I accept the responsibility that I have as a citizen to make the U.S. a better land.

I recognize that there are many countries in this world which do not allow anywhere near the same measure of freedom enjoyed by our citizens.

Finally, I am willing to do all in my power to preserve, protect and defend the U.S. by word, by example, by force of reason and persuasion.

But I will not fight for my country. I will not kill for this country. I am categorically opposed not only to the *use* but to the *possession* of nuclear weapons, because to possess them is to run the risk of using them; and there is no way on God's earth that we could ever justify the mass and indiscriminate slaughter of human life that would result.

More and more I find myself in opposition to all military power. I am becoming what in common parlance is called a *pacifist*.

The direction I am going is personal to me. I have no intention of asking anyone to come with me. Nor do I in any way wish to impugn or condemn those who have been or still are engaged in what they consider the honest and necessary defense of their country. But I am anxious that people understand why I as a bishop am taking the position I am taking.

It is not political logic, it is not historical evidence that primarily move me. I am becoming a pacifist because I am striving to *learn of Jesus* who is "gentle and humble of heart." The more I learn of him, listen to his words and understand his life, the more clearly I see nonviolence as the only course for one who would be his follower.

"Love your enemies." "Turn the other cheek." "Those who take to the sword will perish by the sword."

On the night before his own death when the forces of evil came to destroy him, he told Peter to put up his sword of defense. "Do you not think that I can entreat my Father and even now he could furnish me with 12 legions of angels."

Jesus came to conquer the world, to vanquish the forces of darkness and evil. He had at his disposal all the powers of nature and divinity. But the only weapons he used were of the Spirit — gentleness, patience, compassion, forgiveness, love. This love brought him to the cross and apparent defeat. "I, if I be lifted up, will draw all men to myself."

His very *defeat* became his *victory*.

It is my conviction that Jesus asks his followers to go the same way of peace and total reliance on God. "I am the Way. . . ." "If you would follow me, take up your cross and come after me." "The one who would save his life will lose it, the one who loses his life for my sake will save it." "Blessed are they who suffer persecution for justice's sake, for theirs is the kingdom of heaven."

The early Christian community lived out Jesus' way. For 300 years our ancestors in faith humbly submitted to cruelty, deprivation and death. Like lambs they saw themselves and their children led to the slaughter. Yet their *defeat* became their *victory*.



KENNY

"The blood of martyrs is the seed of Christianity."

All that I say above are not easy words! They are not easy for many to hear or understand. They are not always easy for me to say. But then, I am not so sure that Jesus is all that easy for us to understand.

"Father, I thank you that you have hidden from the learned and clever what you have revealed to the merest children. . . . None knows the Son truly, except the Father. . . ."

It is my humble and heartfelt prayer that in this awesome question of war and peace as in so many other issues, the Father will reveal to us what flesh and blood do not — the way of Jesus.

ELIHU FEIN

The sacred weapons

In 1946, a book by a group of Yale University scholars, entitled *The Absolute Weapon*, defined the concept of deterrence which was to become the cornerstone of our nuclear strategy. In this book, edited by the late Bernard Brodie, it was stated that "the first and most vital step in any American security program in the age of atomic bombs is to take measures to guarantee ourselves in case of attack the possibility of retaliation in kind. . . . Thus far the chief purpose of our military establishment has been to win wars; from now on its chief purpose must be to avert them." The Soviet Union at that time was expected to have nuclear capability in five to ten years.

Since that time, our nuclear policy has been geared to achieving nuclear weapons systems awesome enough and effective enough to assure the Soviets that any nuclear strike on their part would wreak unacceptable damage upon them by us. But as the Russians achieved increasingly sophisticated nuclear weaponry, our initial nuclear superiority came to be questioned. The role and meaningfulness of superiority with regard to nuclear weapons became an issue in military thinking about ten years ago, and it was accepted that nuclear superiority in the sense of being able to win in a nuclear exchange was an unrealistic and unattainable goal.

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The term "strategic sufficiency" was introduced to define the achievement of a stable deterrence.

It is generally believed that this balance of terror between the United States and the Soviet Union is the fundamental reason why there has been no conflict between the two superpowers. Yet the balance of terror has been maintained at ever increasing levels of nuclear sophistication and stockpiling. While the SALT process has continued, arms buildup has made determination of strategic sufficiency more difficult.

The superpowers justify additions to their burgeoning arsenals in terms of their perceptions of nuclear imbalance. The history of the past three decades of providing for strategic sufficiency and/or deterrence lends realistic pessimism to thoughts of an end to nuclear weapons growth.

From their inception, it has been recognized that nuclear weapons are a special class which changes the lexicon of warfare. Policy has been to develop weapon systems which are not intended for use but only as a threat to prevent our enemies from using theirs against us. Since our enemies must have the same set of perceptions, we seem to be developing increasing nuclear strength on the grounds that by so doing peace will be maintained. The interpretation of our nuclear policy has become as specialized a science as the production of the weapons themselves. From the point of view of the public, arguments about deterrence

involve intellectual specializations beyond general comprehension, just as the weapons require a highly scientific understanding to comprehend how they work and their destructiveness.

Mystery and awe surround the weapons and the policies connected with their deployment. The mystery is heightened by the fact that the weapons, not meant to be "used," are developed and kept in special places forbidden to us. We do realize, however, that because of their potential destructiveness, they are connected with our national survival. These objects, by their mystery and awesome capabilities, must hold us in thrall. They seem to have a sacred aura, attended to as they are by a special caste—the military, scientists, politicians and political theorists—whose pronouncements concerning the philosophy of deterrence may be identified as a new theology. The weapons impart to government, which develops and keeps them, a kind of godhead.

Here may lie the true reason for apparently unstoppable nuclear proliferation. With all the secrecy that attends nuclear weaponry, they have really become, in the hands of governmental priests, the sacred objects of our civilization, since they can determine the life or death of our society. Nuclear weapons are being developed with a kind of religious fervor, in which worship of these objects is sought from our society. Their presence evokes many primitive attitudes toward the god-king of government and we are held subject to its awesome powers.

The Cuban missile crisis of 1962 is the only instance in which there appeared to be real potential for nuclear confrontation. But it is enlightening to realize that the anxiety that gripped the country for a few days was not accompanied by any

imminent movements toward using nuclear weapons either by the United States or the Soviet Union. McGeorge Bundy points out that at this moment of relatively high danger, "no one on either side appears to have come close to giving or recommending an order for nuclear action."² While all of us trembled before the godhead, the priests on this occasion did not invoke him. But the exercise was chastening, letting us feel as it did the totality of governmental power.

If nuclear weapons have become the totems of our society, their production, because they are like religious artifacts, continues under a set of forces for which the conscious logic of deterrence is a rationalization. Exegesis of nuclear policies gives little hope for arms reduction. The SALT process is confounded by the eschatology associated with nuclear weapons.

Nuclear weapons continue to proliferate as symbols of the strength of the state: their presence compels awe and inculcates feelings of individual helplessness. Though potential foreign threat is verbalized as the reason for their need, the nuclear arsenal serves to bind the domestic population closely to its all-powerful government. While some people in government may express concern, the state will not restrain nuclear growth as long as nuclear weapons development has become established as domestic ritual.

The newly announced "countervailing" nuclear strategy reinforces our awe of our governors. While adding further obfuscation to the vocabulary of nuclear destruction, the new policy does make clear a startling governmental attitude: the *state* could survive a nuclear war! No longer must the government (with its populations) offer itself for potential sacrifice. A nuclear exchange would

be limited by the presumed rationality of both sides, and would be ended, as are most military engagements, prior to the destruction of the state. That our leaders should entertain such a scenario is a measure of their priestly detachment from humanity. To think the unthinkable is a god-like prerogative, and we, the governed, can be only further impressed by the power nuclear weapons have bestowed on our leaders.

It is these totemistic aspects more than the logic of deterrence which keep us on the nuclear path. Education and knowledge can expose socially paralyzing totems, and human beings have progressed through stages of primitive darkness. Revelation of unconscious attitudes can be the first step in societal therapy. But if we are unable to realize the hidden aspects of our nuclear behavior, we may never be able to free ourselves from our fatal nuclear infatuation.

We must understand that the armed might of the state serves to impress the governed, and that this has perhaps become the most important role of *all* weaponry. The recent call to militarism shows the ready willingness of government to evoke those elements which make us tremble. Nuclear weapons, above all the other hardware of destruction, serve to give the state its divinity in this technological age. Our belief in the truth of their awesome power makes us obedient to the call of the state. The great danger is that while the government's primary concern is to secure itself *domestically*, its ritualized behavior can too easily become provocative to another government engaged in similar totemistic activities. □

1. Bernard Brodie, ed., *The Absolute Weapon* (New York: Harcourt Brace, 1946), p. 76.

2. *International Security*, vol. 3, no. 3 (1978-1979), p. 8.

Of several minds: *Thomas Powers*

THE MORAL FALLACY

NUCLEAR WAR MAKES OUR DIFFERENCES PALE

*Be England what she will,
With all her faults she is my country still*
"The Farewell"
Charles Churchill (1731-1764)

THE OTHER DAY — it was a drizzly Saturday morning — I drove up to Montpelier, Vermont, with a friend, Virgil B., to join a group of several hundred marchers completing a three-day walk from one small Vermont town, Washington, to another, Moscow. The marchers' goal is an American-Soviet nuclear weapons freeze. Since both countries are engaged in a rapid strategic arms buildup, the proposal of a freeze, seemingly a cautious one, is actually quite radical. It is the heart of a common program adopted by a wide range of peace groups who met in Washington last fall.

Virgil and I arrived just as the marchers were setting out on the penultimate leg of their walk to Waterbury, a distance of 3.2 miles. Another friend, Alan R., had been on the march with two of his sons, age seven and nine, since the beginning. As we walked along in the drizzle under umbrellas, herded well to the side of the road by marshals from the American Friends Service Committee, Alan told us his adventures of the previous two days. Several things had struck him. Whenever the group came to a likely body of water, for example, a group of young women immediately stripped and went swimming naked without apparent embarrassment. A tall, lean, good-looking man of forty or so asked him — not once, but several times — if he thought he could spot the government agents who were taking pictures and writing down names? Since this fellow admitted to a background in security work, Alan began to wonder if *he* was the agent in question.

Alan also said he now understood why

protesters all looked like unkempt hippies. After a day or two living in the open you tended to be festooned with gear — canteen over a shoulder, things stuck in your belt, a headband to keep the sweat out of your eyes, odd buttons pinned here and there, walking stick, etc., etc. But the thing which struck him most was the sharp division between the veterans who started out on the first day and the groups which joined later. The earlier groups tended toward a faint disapproval of the later, as if they didn't quite grasp what it was all about, or exhibit the proper demeanor, or share the same degree of commitment. In time, as still tardier arrivals appeared on the scene, the distinctions faded away.

In Waterbury, about noon, the marchers all filed into a local church where they were to be addressed by a Russian arms control expert, Yuri Kapralov, who had been sent by the Soviet embassy in Washington. Originally he had been scheduled to speak in Moscow at the end of the walk, but at the last moment the State Department declared Moscow off-limits for Russians. The marchers were all damp from the drizzle and the church was crowded, hot, and steamy. Kapralov was a youngish man with black horn-rimmed glasses and a good command of English despite a pronounced accent. He clearly knew the language and issues of strategic arms debate in Washington but his talk skirted most of the details and centered on Russia's desire for arms agreements, its equanimity with the idea of a freeze, and its vivid memory of the horrors of World War II. After his talk he answered questions from the audience. Most of the questions were friendly, although a few offered Kapralov an opportunity to defend or justify the total absence of independent peace groups in Russia — an opportunity he, for the most part gracefully, declined.

Before it was over Virgil was visibly squirming in his seat. I asked him what he thought. "Slick propaganda," he said. "He just turned the audience around his finger. It made me sick." Questions had been piling up in his mind: What about Sakharov? What about Afghanistan? What would happen to Poland if we had no theater nuclear forces in Europe? Kapralov's every friendly word — skirting all the difficult questions — just made Virgil madder and madder. He had been going through a period of intense melancholy, common to people when they first begin to think hard about nuclear weapons. He had been seeing things with new eyes — the cities which might be destroyed, the green earth which might be poisoned, his own children who were hostage in a global confrontation. But when Kapralov stuck to those very things, the vagaries of peace, it made Virgil mad.

I ONCE SPENT THE better part of a year trying to figure out why the Arabs and the Israelis could not make peace. My technique was to read history, paying close attention to the details. I started with Theodor Herzl and the beginnings of the Zionist movement, when Palestine was often described as a kind of unpeopled wasteland. I spent a lot of time on the 1920s and '30s, when Britain began to think better of the Balfour Declaration. The infamous White Paper, limiting Jewish immigration at the very moment of Hitler's rise, and the intrigues of the Grand Mufti of Jerusalem, seemed especially significant. I followed the postwar diplomatic maneuvering which led to British withdrawal and UN support for an independent Israel. I did not neglect the massacre at Deir Yassin or the bombing of the King David Hotel. And so on and so forth through all the wars, the rise of the Palestinians, the UN resolutions and the various peace initiatives, down to the present day. Finally I went to the Middle East and spent six weeks talking to people — not famous people but not quite ordinary people either, passionate partisans for both sides.

From this exercise I learned one useful thing — nobody is right. There is no single thread of justice. You can't add up

all the violence, the honest and dishonest acts, the atrocities and heroic sacrifices. The history of the place is not a history of wrongs and rights — something you can judge — but a history of two entities in collision. Each defends itself. One question overrides all the others: who gets to call Palestine his own?

Q.: *What about Poland, Hungary, Czechoslovakia?*

A.: What about Guatemala, Cuba, Chile, Indonesia, Iran?

Q.: *What about Afghanistan?*

A.: What about Vietnam?

Q.: *What about Hafizullah Amin?*

A.: What about Ngo Dinh Diem?

Q.: *What about Masaryk?*

A.: What about Lumumba?

Q.: *What about Sakharov?*

A.: What about Martin Luther King?

Q.: *What about the kulaks?*

A.: What about the Negroes?

Q.: *What about the purges, Gulag, Lubyanka, Siberia?*

A.: What about Dresden, Hamburg, Hiroshima, free-fire zones, Agent Orange?

Q.: *What about the SS-20?*

A.: What about Pershing, GLCMs, SLCMs, ALCMs?

Q.: *What about fifty thousand tanks in Eastern Europe?*

A.: What about the neutron bomb?

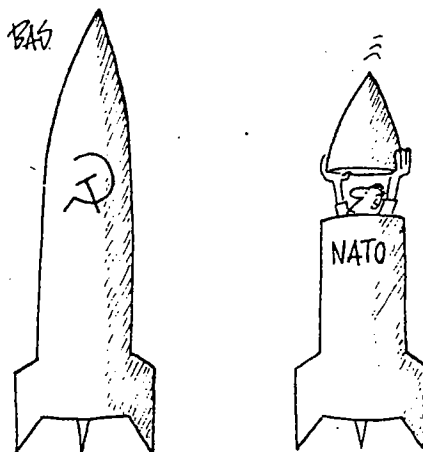
Q.: *What about world revolution and the triumph of Communism?*

A.: What about "the last best hope of mankind"?

Q.: *What about Khrushchev, "We will bury you"?*

A.: What about Sen. Richard Russell, "If we have to start over again from Adam, I want to be sure he's an American"?

THIS SORT OF THING will get us nowhere. When it is used to explain the Cold War, it is fundamentally dishonest. Political acts have moral aspects, and it is a sign of civilization to try to keep them in mind, but justice is not the motor of history. We do not oppose and arm against the Russians because they have been found guilty in a formal proceeding conducted with strict respect for the rules of evidence. Enmity between



nations is more mysterious than that. At the start of *The Peloponnesian War* Thucydides cites but rejects the popular explanation of the war, based on various crimes of Sparta and Athens. Some of these were crimes all right — especially the Athenian massacre of a recalcitrant ally — but Thucydides claims the real cause was Sparta's fear of growing Athenian power.

It is the same with Russia and America. Throughout World War II in Washington and London there was a kind of muttering undertone of hostility toward Russia, a State Department-Whitehall alarm, deep in the bowels of bureaucracy, that Stalin was no less a threat than Hitler. General Leslie Groves, the director of the Manhattan Project, once told a colleague that within weeks of taking on the job he was convinced that "Russia was our enemy and . . . the project was conducted on that basis." Allen Dulles, chief of the OSS office in Berne, Switzerland, told a friend he began to switch the focus of his concern from Germany to Russia after the battle of Stalingrad, when it became clear Hitler could no longer win. General George Patton wanted to drive right on to Russia in 1945. This was not the inevitable friction of allies but something much deeper, a Western fear of Russian size, appetite, and "backwardness" — the city-man's fear of a sullen, barbarian horde — which goes back deep into the nineteenth century. It is not anger at what Russia has done which explains the Cold War from the Western point of view, but fear of what Russia is.

The Soviet Union has indeed done many terrible things. So have we all.

Someone once said that history is the record of crimes. But war is not an instrument of judgment. It may settle things from time to time but it does not discriminate. Bigger battalions are simply bigger battalions.

ONE AFTERNOON IN 1975, in a farmhouse not far from the Sea of Galilee, I spent a couple of hours listening to a roomful of Israelis try to explain their country's failure to make peace with the Arabs. In large part they blamed themselves — they had been too confident after the Six Day War in 1967, they couldn't make up their minds about the West Bank, they were too unbending with the Palestinians, they relied too heavily on arms. It was an extraordinary performance in the act of self-criticism, the more striking after two weeks in Beirut listening to Palestinians. The Palestinians all seemed to have read the same book. They disagreed with each other about the proper form of socialism to be established in Palestine after the liberation, but on every other point they were unanimous. It appeared they were totally free of all blame in the conflict, going right back to the 1880s. It was a Jewish invasion from the beginning, the land must be returned to its rightful owners, and there was no more to be said about it.

This was purely a difference in character. It said nothing about who was on which side. The Israelis I listened to had all been in the army, had all fought in one or two wars, had all been wounded. All continued to serve 60-90 days a year on active duty, and all were ready to fight again. They judged their country, but would not abandon her. I thought about this on the drive back from Waterbury, Vermont, after listening to Yuri Kapralov skate over the differences between us and them. It had been a practiced performance all right, but what else was he to do? They're on their side, and we're on ours. Some of the things they have done stick in the craw, but what of it? Doubtless they feel the same way, and what of that? Both pale beside what we have prepared to do to each other, in the name of defense. What we have here, in short, is a case of apples and oranges.

THOMAS POWERS

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Keep militarists out of military

By THOMAS E. BLACKBURN

TOO MANY PEOPLE who don't want to be militarists leave themselves without a defense policy. You are stuck with history even if you are not a historicist, and we are stuck with a military even if we are not militarists.

Are we ever stuck with a military! During the past 10 years, we have spent an average of \$150 billion or so a year to buy one. During the next five years, if the Reagan administration can make its magic money mirrors work, we'll average another \$300 billion. That would sure buy a lot of school lunches.

Anyhow, if we have a military, we ought to have a military policy. I've been working on one, but, as usual, my leaders in Washington are no help. In fact, they are going about getting a military policy exactly backwards, if you ask me.

The first thing they did was what would be the last thing I would do, figure out what it will cost.

They decided how much money they wanted to spend first. Then they thought about how to spend it. That's like walking into the supermarket and telling the manager you have \$200 to buy a week's worth of groceries for yourself, and what would he suggest? You can bet he wouldn't suggest macaroni and cheese, and your final bill would be more like \$201 than \$50.

The assumption seems to be that World War III is going to be like Monopoly. All we have to do is get hotels on the Boardwalk and Park Place and wait until the shoe or the hat of the other guy lands there.

World War III suggests another thing that's wrong with the way the planners are planning. Their best brains are stuck on the least important stuff, B-1 bombers, MX missiles, Stealth and like that. We already have all that stuff in the Triad (that's a technical term, chum). The Triad lets us wipe out any enemy (oh, say, the Soviet Union, for example) once by air, once by land and once by sea. We can wipe them out three times in case they think of a way to defend themselves against one or two of the ways we can wipe them out.

When CBS tried to figure out what would happen if an A-bomb hit Omaha, it came out with more burn victims than we have hospital beds for. That's all I need to know about that. World War III, and it's all over, baby. Nancy and her friends could never roll enough bandages for the big one.

Thomas Blackburn is an editorial writer for the Trenton (N.J.) Times.

For 30 years, we have done little but procure (that's a technical term meaning "spend an arm and leg for") nuclear weapons, which we have never used. If we do use one, it's bye, bye Miss American Pie. Meanwhile, we haven't been buying the dull kinds of things we might need, like helicopters that work and rifles that shoot.

That, by the way, explains Vietnam. It wasn't that our troops were "denied permission to win," as the old movie phrase has it. We lost in Vietnam because we never got a fit between our slippery war aims and the weapons we had to achieve them. We fought with what we had: B-52s flying 4,000 miles to drop bombs on riflemen. Now, that would not have occurred to Rube Goldberg. We were set to fight the Soviet Union but not the Viet Cong. Still are.

If I seem to be making this sound too simple, you ought to read, or try to read,

BLACKBURN



the defense intellectuals. They make it sound like calculus.

The defense intellectuals gave the world "C cubed I," sometimes written "C cubed," with the "I" dropped. When you find out what the "I" is, you won't believe it has anything to do with the rest of it.

"C cubed I" is going to get what the nuclear weapons don't get out of the new procurement budgets. It doesn't get much attention in the press because most newspapers don't have type that will stick a little "3" up in the air behind the "C." But if we solve all the "C cubed I" issues, it will be theoretically — theoretically — possible to play a war from the Pentagon the way the ballpark organist plays the mighty Wurlitzer.

"C cubed I" is shorthand for "Control, command, communication and intelligence." And that is shorthand for giving the Joint Chiefs as much control over the battlefield, via satellite and computers, as Bobby Fischer had over a chessboard.

In theory.

In practice, there is always what Karl von

Clausewitz called "friction." What he meant was that, just as the bread always lands jelly-side down, it always rains on your attack, or the reinforcements show up at *Nauheim* when you need them at *Bad Nauheim*.

When I was in the army, which is more than a lot of defense intellectuals ever were, we went on maneuvers in Germany (this was during the big war — the cold one) under the leadership of our company commander, whose code designation for the exercise was "Bullet Six." We were parked by the side of the road one day wondering where Bullet Six had gone to, when the radio crackled with a message to another unit: "You may move. Bullet Six has lost his convoy."

The message so discouraged a West Point lieutenant, who had seen but not believed Bullet Six for several months, that he quit the army and went to work for an oil company the day the maneuvers ended.

What had happened was that our leader, as usual, had ants in his pants and had driven off. At the moment the radio was reporting he had lost his convoy, he was up to his Jeep's axles in some German farmer's field, several miles away. A whole company sat by the side of the road while Bullet Six spun his wheels.

Bullet Six finally thumbed a lift to his convoy, but then he couldn't find his Jeep when he went out with a wrecker to look for it. We lost a whole day of maneuvers recovering one Jeep. All of which caused a still-anonymous wag to post on the orderly room door the following:

Little Bo Peep has lost his Jeep,
And doesn't know where to find it.
We're losing a war, but he's looking
for
His Jeep and the trailer behind it.

When the "C cubed I" generals start playing their computers in the Pentagon, do you know who will be at the end of their worldwide communication system? Some Bullet Six up to his axle in mud.

So the militarists spend first and think later, sink billions into weapons they had better the hell not use and buy expensive electronic systems to link them to Bullet Sixes. What we need are fewer accountants and more poets. Maybe then we would have a defense policy we could live with — and one that could be paid for without resorting to magic money mirrors.

War is too important to be left to militarists and defense intellectuals. Non-militarists with a defense policy are sorely needed. Quickly.

Nuclear energy is a moral matter

By ALBERT L. BLACKWELL

ITS USES are matters of life and death. Its disposal propels our imagination toward eternity. Thus plutonium gives rise to issues of religious dimensions. And I believe that religious categories, in particular the categories of sin and evil, are appropriate to our national debate over the production, handling, uses and disposal of this beguiling element.

Plutonium is something new under the sun. Until 1941 this element existed only in traces associated with natural uranium deposits. Quantities of plutonium first came from the nuclear piles of World War II's Manhattan Project. At the beginning the amounts were small. Physicist Enrico Fermi is quoted as saying that in 1941 the world's supply of plutonium reposed in a matchbox in his desk drawer. It is no longer so.

Today hundreds of tons of plutonium have accumulated from nuclear weapons programs and nuclear power generation. It is dispersed throughout the biosphere as a consequence of fallout from nuclear weapons testing and the two nuclear detonations over Japan. It is stockpiled in government repositories and deployed in the current arsenal of nuclear weapons. And it is bound up with other radioactive elements in spent fuel assemblies being held in cooling pools at nuclear power reactors.

Plutonium is a heavy metal, about four times the weight of iron. Nuclear reactors produce it as one among dozens of inevitable radioactive by-products from the fissioning of uranium fuel. Each of today's typical power reactors produces some eight kilograms (approximately 18 pounds) of plutonium every two weeks of operation, an amount that would

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comprise a sphere about the size of a large orange. Let us consider four facts about these eight kilograms of plutonium.

1. Because of its potential as fuel for the "breeder reactors" foreseen by the power industry as the next step of nuclear development, plutonium's value approximates that of gold. Eight kilograms would bring perhaps \$100,000. Plutonium is therefore a tempting target for theft and sale on an international black market, requiring security conditions comparable to those at Fort Knox. Monetary value, however, is not the chief security consideration.

2. Plutonium is also valuable as a material eminently suitable for the construction of nuclear weapons. Eight kilograms of plutonium are sufficient for a nuclear device comparable to the bomb that destroyed Nagasaki. Government records released under the Freedom of Information Act disclose that as of the end of 1976, 8,000 pounds of plutonium and bomb-grade uranium were unaccounted for in the United States, enough for the construction of hundreds of clandestine nuclear weapons. Primitive nuclear bombs are not difficult to build. Thus the mere claim of a terrorist group to have a nuclear weapon, supported by a small sample of plutonium, would probably suffice to blackmail any governmental authority that received it.

3. A sample of plutonium could suffice as a blackmail threat even if no explosive device were claimed, in fact, for plutonium is a radiological poison of pernicious toxicity. By weight plutonium is 20,000 times more deadly than cobra venom or potassium cyanide. Microgram quantities can induce lung cancer. In theory, eight kilograms (eight billion micrograms) would suffice to kill every person on our planet.

4. Most poisons can be rendered harmless by chemical processes. As every home canner knows, for example, deadly botulism is rendered harmless

by 15 minutes of boiling in the presence of air. The radiological toxicity of plutonium, however, persists through all chemical alterations. If I die of plutonium-induced cancer and my body is cremated, I yield up my plutonium through the smokestack into the biosphere where it may kill again, and this toxicity persists for 250,000 years.

How long is 250,000 years? Confronted by such a figure, most of us are like the old-timer asked if she had seen Halley's Comet in 1910. "Yes," she replied, "but only from a distance." Like the old-timer's sense of astronomical space, our sense of geological time is usually somewhat vague. Our imaginations require comparisons to render such expanses accessible.

When we are told, therefore, that radioactive wastes are to be buried in areas where security can be guaranteed, we shall do well to realize that if plutonium had been stored in the Great Pyramid of Egypt, it would remain 90 per cent as lethal today as on the day when Pharaoh Cheops proclaimed, "They'll never find it there."

When we are told that radioactive wastes are to be disposed of in areas that are sparsely populated, we shall do well to realize that plutonium will remain lethal for 50 times longer than any civilization has yet endured on the earth. When we are told that wastes are to be stored in geological formations that are stable and dry, we shall do well to realize that plutonium will remain lethal for 20 times the epoch since the last ice age. And when we are told that these radioactive wastes are simply part of the cost of our energy appetite over the next few decades, we shall do well to realize that the plutonium excreta from our generation's energy diet will remain lethal for five times longer than our species *homo sapiens* has yet roamed the planet.

A quarter of a million years, then, is not time on human scale. It is time on God's scale. Our sour

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grapes of plutonium will set our children's teeth on edge, not merely to "the third and the fourth generation" of biblical prophecy, but to 10,000 generations. Indeed, since plutonium is a genetic mutagen as well as a radiological poison, our sour grapes of plutonium may set our children's teeth on edge for as long as the human species endures.

These considerations of the scope of plutonium's threat have led me to evaluate issues associated with plutonium not only in economic, political and social terms, but in religious terms as well. In particular, I have found myself thinking in terms of the religious categories of evil and sin. These are not for me casual or even accustomed categories. I am led to them neither by an apocalyptic sense of doom nor by a Manichaen sense of self-righteousness, but rather by a sobering assessment of plutonium's threat in light of wisdom transmitted by our religious traditions.

Reinhold Niebuhr has written, in *The Children of Light and the Children of Darkness*:

Evil is always the assertion of some self-interest without regard to the whole, whether the whole be conceived as the immediate community, or the total community of mankind, or the total order of the world. The good is, on the other hand, always the harmony of the whole on various levels. Devotion to a subordinate and premature "whole" such as the nation, may of course become evil, viewed from the perspective of a larger whole, such as the community of mankind. The "children of light" may thus be defined as those who seek to bring self-interest under the discipline of a more universal law and in harmony with a more universal good.

Niebuhr's definitions of evil and of good apply to the issue before us. In the interest of a "national security" teetering in an international balance of terror, and in the interest of satisfying our energy appetite for the next two or three decades, we are producing comprehensively threatening substances, of which plutonium is the most lethal and long-lived. Our nation and our generation, it seems to me, are asserting self-interest without regard to the welfare of the whole, conceived as the entire human community including its future generations.

If the darkness of our self-assertion is to be enlightened, we must seek to bring self-interest under the discipline of a more universal good. In practical terms, this means

to me that the movement for nuclear disarmament and the disciplines of conservation and increased energy efficiency challenge our generation with the urgency of religious obligations.

If, as Niebuhr says, evil is self-assertion without regard to the whole, we may perhaps say that biblical tradition has identified sin as self-assertion without regard to our finitude. Genesis 3 roots individual sin in our desire to "be like God." Genesis 11 roots corporate sin in our attempt to construct a tower "with its tops in the heavens." Our generation is presuming to construct, not an astronomical tower with its top in the heavens, but geological waste disposal caverns with their futures in eternity. We forget that before that stretch of

"Our generation is presuming to construct, not an astronomical tower with its head in the heavens, but geological waste disposal caverns with their futures in eternity."

time is far advanced, our civilization, like Babel of old, may well be "scattered abroad over the face of the earth." Or to alternate once more from geological to astronomical imagery, let me conclude with a poem making its rounds in the national debate over energy policy:

Plutonium is spilled by fools like me,
But only God can make a nuclear
reactor 93 million miles from the
nearest elementary school.

The poem may not scan particularly well. But in my judgment both its anthropology and its theology are irreproachable.

Uranium is aptly named from "ouranos," Greek for "heaven." One need not advocate nuclear power to appreciate the heavenly prospect that President Dwight Eisenhower's 1953 announcement of the Atoms for Peace Program appeared to offer. I myself recall distinctly the 1950s claim that the controlled fission of uranium would produce electrical power "too cheap to meter."

Alas, it has not proven so. As Allen Ginsberg reminds us in his *Plutonium Ode*, the heavenly powers of uranium have turned fiendish in its demi-immortal offspring Plutonium, all too aptly named from "Plouton," the "magma-teared Lord of Hades," dispatcher of the just but inexorable avenging Furies.

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Nuclear is costly

Editor, News-Press: There is one aspect of nuclear power which the ecological demonstrators have not addressed, but which I would have expected to carry some weight with the boards of utility companies. It is probably true that there is not much risk that Diablo Canyon will blow up or contaminate the neighborhood; it is far more likely to blow up Pacific Gas and Electric (PG&E).

Nuclear energy has not proved a strikingly cost-effective source, what with prolonged down time and the recent downward revision of plant life due to irradiation fatigue in the casings. But even if it were, it is hard to think of any other industrial investment where a trifling mechanical failure can not only make the plant, and the ground it stands on, permanently unusable, but also land the proprietors in astronomical and unlimited cleanup costs.

If that were not enough, the American nuclear power industry, however well it is run, and however massive the overdesign and the precautions, is the hostage of nuclear mishaps in any reactor worldwide, from the Philippines to India's Trombay reactor. There need only be one destructive event in any reactor anywhere of sufficient seriousness to alarm the public, and continued operation of any reactor in a country where politicians respond to public concern will become politically impossible — even if it "could not happen here." In that event the investors will be left with a dead elephant on their hands, a cut in generating capacity, and millions of dollars down the tubes.

Utilities which have opted for nuclear generation have had enough trouble already with breakdowns, cost overruns, court challenges, and public disapproval — and for what? To plant an outsize bomb in their balance sheets, as I think they may now be admitting under their breath.

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