SLICK 'EMS, GLICK 'EMS, CHRISTMAS TREES, *and* COOKIE CUTTERS:

NUCLEAR *language*

and how we learned to pat the bomb

*Listening to the language of defense intellectuals
reveals the emotional currents in this emphatically male discourse.
But learning the language shows how thinking can become abstract,
focusing on the survival of weapons rather than the survival of human beings.*

by Carol Cohn

MY CLOSE ENCOUNTER with nuclear strategic analysis started in the summer of 1984. I was one of 48 college teachers attending a summer workshop on nuclear weapons, strategic doctrine, and arms control that was held at a university containing one of the nation's foremost centers of nuclear strategic studies, and that was co-sponsored by another institution. It was taught by some of the most distinguished experts in the field, who have spent decades moving back and forth between academia and governmental positions in Washington. When at the end of the program I was afforded the chance to be a visiting scholar at one of the universities' defense studies center, I jumped at the opportunity.

I spent the next year immersed in the world of defense intellectuals—men (and indeed, they are virtually all men) who, in Thomas Powers's words, "use the concept of deterrence to explain why it is safe to have weapons of a kind and number it is not safe to use." Moving in and out of government, working sometimes as administrative officials or consultants, sometimes in universities and think tanks, they create the theory that underlies U.S. nuclear strategic practice.

My reason for wanting to spend a year among these men was simple, even if the resulting experiences were not. The current nuclear situation is so dangerous and irrational that one is tempted to explain it by positing either insanity or evil in our decision makers. That explanation is, of course, inadequate. My goal was to gain a better understanding of how sane men of goodwill could think and act in ways that lead to what appear to be extremely irrational and immoral results.

I attended lectures, listened to arguments, conversed with defense analysts, interviewed graduate students throughout their training, obsessed by the question, "How *can* they think this way?" But as I learned the language, as I became

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more and more engaged with their information and their arguments, I found that my own thinking was changing, and I had to confront a new question: How can *I* think this way? Thus, my own experience becomes part of the data that I analyze in attempting to understand not only how "they" can think that way, but how any of us can.

This article is the beginning of an analysis of the nature of nuclear strategic thinking, with emphasis on the role of a specialized language that I call "technostrategic." I have come to believe that this language both reflects and shapes the American nuclear strategic project, and that all who are concerned about nuclear weaponry and nuclear war must give careful attention to language—with whom it allows us to communicate and what it allows us to think as well as say.

I HAD PREVIOUSLY encountered in my reading the extraordinary language used to discuss nuclear war, but somehow it was different to hear it spoken. What hits first is the elaborate use of abstraction and euphemism, which allows infinite talk about nuclear holocaust without ever forcing the speaker or enabling the listener to touch the reality behind the words.

Anyone who has seen pictures of Hiroshima burn victims may find it perverse to hear a class of nuclear devices matter-of-factly referred to as "clean bombs." These are weapons which are largely fusion rather than fission and which therefore release a higher quantity of energy not as radiation but as blast. Clean bombs may provide the perfect metaphor for the language of defense analysts and arms controllers. This language has enormous destructive power, but without the emotional fallout that would result if it were clear one was talking about plans for mass murder, mangled bodies, human suffering. Defense analysts talk about "countervalue attacks" rather than about incinerating cities. Human death, in nuclear parlance, is most often referred to as "collateral damage." While Reagan's renaming the MX missile "the Peacekeeper" was the object of considerable scorn in the community of defense analysts, the same analysts refer to the missile as a "damage limitation weapon."

These phrases, only a few of the hundreds that could be

chosen, exemplify the astounding chasm between image and reality that characterizes technostrategic language. They also hint at the terrifying way the existence of nuclear devices has distorted our perceptions and redefined the world. "Clean bombs" as a phrase tells us that radiation is the only "dirty" part of killing people.

It is hard not to feel that one function of this sanitized abstraction is to deny the uncontrolled messiness of the situations one contemplates creating. So that we not only have clean bombs but also "surgically clean strikes": "counterforce" attacks that can purportedly "take out"—that is, accurately destroy—an opponent's weapons or command centers, without causing significant injury to anything else. The image is unspeakably ludicrous when the surgical tool is not a delicately controlled scalpel but a nuclear warhead.

FEMINISTS HAVE OFTEN suggested that an important aspect of the arms race is phallic worship; that "missile envy," to borrow Helen Caldicott's phrase, is a significant motivating force in the nuclear buildup. I have always found this an uncomfortably reductionist explanation and hoped that observing at the center would yield a more complex analysis. Still, I was curious about the extent to which I might find a sexual subtext in the defense professionals' discourse. I was not prepared for what I found.

I think I had naively imagined that I would need to sneak around and eavesdrop on what men said in unguarded moments, using all my cunning to unearth sexual imagery. I had believed that these men would have cleaned up their acts, or that at least at some point in a long talk about "penetration aids," someone would suddenly look up, slightly embarrassed to be caught in such blatant confirmation of feminist analyses.

I was wrong. There was no evidence that such critiques had ever reached the ears, much less the minds, of these men. American military dependence on nuclear weapons was explained as "irresistible, because you get more bang for the buck." Another lecturer solemnly and scientifically announced, "To disarm is to get rid of all your stuff." A professor's explanation of why the MX missile is to be placed in the silos of the newest Minuteman missiles, instead of replacing the older, less accurate missiles, was "because they're in the nicest hole—you're not going to take the nicest missile you have and put it in a crummy hole." Other lectures were filled with discussion of vertical erector launchers, thrust-to-weight ratios, soft lay downs, deep penetration, and the comparative advantages of protracted versus spasm attacks—or what one military adviser to the National Security Council has called "releasing 70 to 80 percent of our megatonnage in one orgasmic whump."[1]

But if the imagery is transparent, its significance may be less so. I do *not* want to assert that it somehow reveals what defense intellectuals are really talking about, or their motivations; individual motives cannot necessarily be read directly from imagery, which originates in a broader cultural context. The history of the atomic bomb project itself is rife with overt images of competitive male sexuality, as is the discourse of the early nuclear physicists, strategists, and members of the Strategic Air Command.[2] Both the military itself and the arms manufacturers are constantly exploiting the phallic imagery and promise of sexual domination that their weapons so conveniently suggest. Consider the following, from the June 1985 issue of *Air Force Magazine*: Emblazoned in bold letters across the top of a two-page advertisement for the AV-8B Harrier II—"Speak Softly and Carry a Big Stick." The copy below boasts "an exceptional thrust-to-weight ratio," and "vectored thrust capability that makes the . . . unique rapid response possible."

Another vivid source of phallic imagery is to be found in descriptions of nuclear blasts themselves. Here, for example, is one by journalist William Laurence, who was brought by the Army Air Corps to witness the Nagasaki bombing.

> Then, just when it appeared as though the thing had settled down into a state of permanence, there came shooting out of the top a giant mushroom that increased the size of the pillar to a total of 45,000 feet. The mushroom top was even more alive than the pillar, seething and boiling in a white fury of creamy foam, sizzling upward and then descending earthward, a thousand geysers rolled into one. It kept struggling in an elemental fury, like a creature in the act of breaking the bonds that held it down.[3]

Given the degree to which it suffuses their world, the fact that defense intellectuals use a lot of sexual imagery is not especially surprising. Nor does it, by itself, constitute grounds for imputing motivation. The interesting issue is not so much the imagery's possible psychodynamic origins as how it functions—its role in making the work world of defense intellectuals feel tenable. Several stories illustrate the complexity.

At one point a group of us took a field trip to the New London Navy base where nuclear submarines are homeported, and to the General Dynamics Electric Boat yards where a new Trident submarine was being constructed. The high point of the trip was a tour of a nuclear-powered submarine. A few at a time, we descended into the long, dark, sleek tube in which men and a nuclear reactor are encased underwater for months at a time. We squeezed through hatches, along neon-lit passages so narrow that we had to turn and press our backs to the walls for anyone to get by. We passed the cramped racks where men sleep, and the red and white signs warning of radioactive materials. When we finally reached the part of the sub where the missiles are housed, the officer accompanying us turned with a grin and asked if we wanted to stick our hands through a hole to "pat the missile." *Pat the missile?*

The image reappeared the next week, when a lecturer scornfully declared that the only real reason for deploying cruise and Pershing II missiles in Western Europe was "so that our allies can pat them." Some months later, another group of us went to be briefed at NORAD (the North American Aerospace Defense Command). On the way back, the Air National Guard plane we were on went to
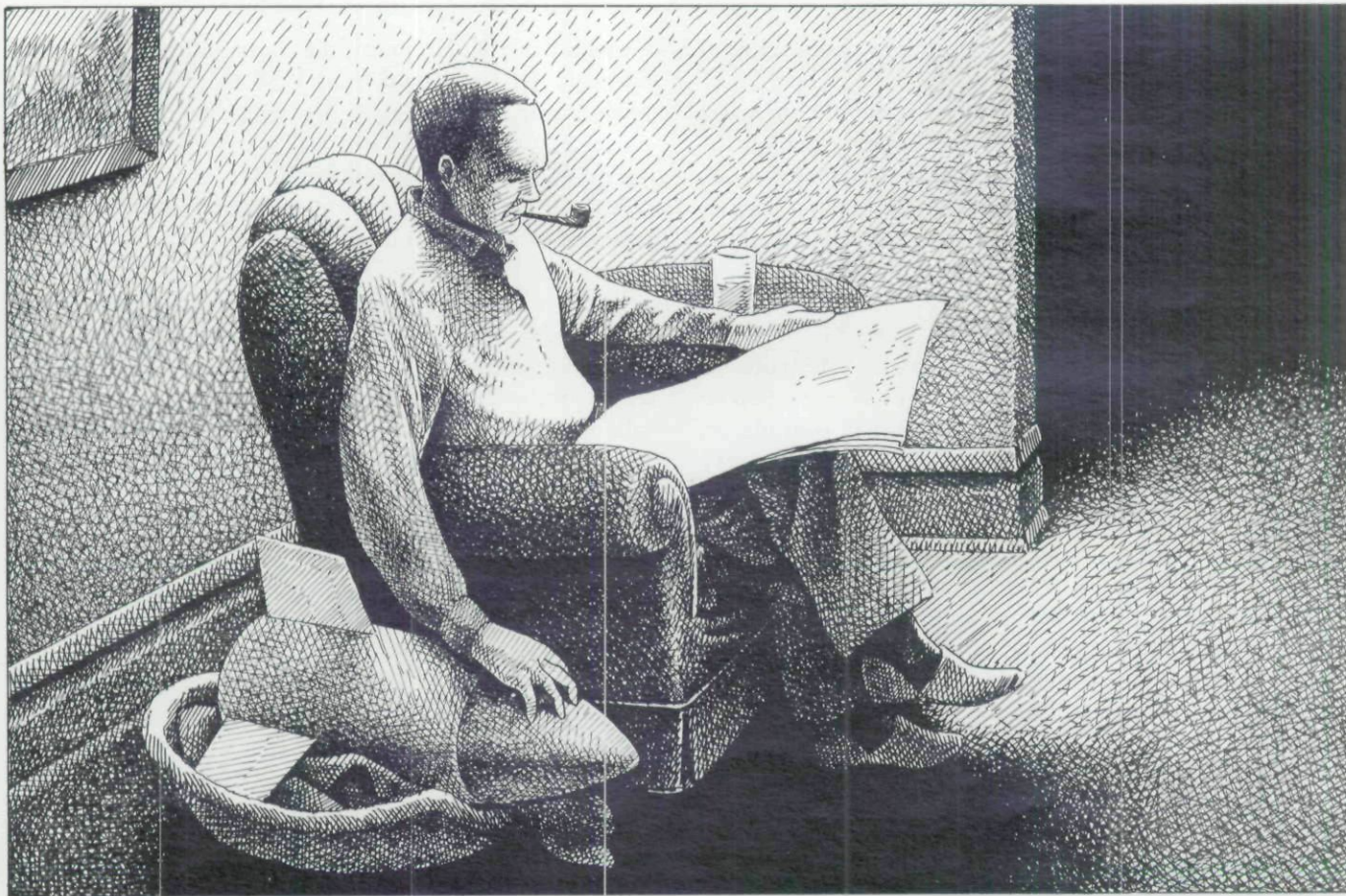
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refuel at Offut Air Force Base, the Strategic Air Command headquarters near Omaha, Nebraska. When word leaked out that our landing would be delayed because the new B-1 bomber was in the area, the plane became charged with a tangible excitement that built as we flew in our holding pattern, people craning their necks to try to catch a glimpse of the B-1 in the skies, and climaxed as we touched down on the runway and hurtled past it. Later, when I returned to the center I encountered a man who, unable to go on the trip, said to me enviously, "I hear you got to pat a B-1."

What is all this patting? Patting is an assertion of intimacy, sexual possession, affectionate domination. The thrill and pleasure of "patting the missile" is the proximity of all that phallic power, the possibility of vicariously appropriating it as one's own. But patting is not only an act of sexual intimacy. It is also what one does to babies, small children, the pet dog. The creatures one pats are small, cute, harmless—not terrifyingly destructive. Pat it, and its lethality disappears.

Much of the sexual imagery I heard was rife with the sort of ambiguity suggested by "patting the missiles." The imagery can be construed as a deadly serious display of the connections between masculine sexuality and the arms race. But at the same time, it can also be heard as a way of minimizing the seriousness of militarist endeavors, of denying their deadly consequences. A former Pentagon target analyst, in telling me why he thought plans for "limited nuclear war" were ridiculous, said, "Look, you gotta understand that it's a pissing contest—you gotta expect them to use everything they've got." This image says, most obviously, that this is about competition for manhood, and thus there is tremendous danger. But at the same time it says that the whole thing is not very serious—it is just what little boys or drunk men do.

SANITIZED ABSTRACTION and sexual imagery, even if disturbing, seemed to fit easily into the masculine world of nuclear war planning. What did not fit was another set of words that evoked images that can only be called domestic.

Nuclear missiles are based in "silos." On a Trident submarine, which carries 24 multiple-warhead nuclear missiles, crew members call the part of the sub where the missiles are lined up in their silos ready for launching "the Christmas tree farm." In the friendly, romantic world of nuclear weaponry, enemies "exchange" warheads; weapons systems can "marry up." "Coupling" is sometimes used to refer to the wiring between mechanisms of warning and response, or to the psychopolitical links between strategic and theater weapons. The patterns in which a MIRVed missile's nuclear warheads land is known as a "footprint." These nuclear explosives are not dropped; a "bus" "delivers" them. These devices are called "reentry vehicles," or "RVs" for short, a term not only totally removed from the reality of a bomb

but also resonant with the image of the recreational vehicles of the ideal family vacation.

These domestic images are more than simply one more way to remove oneself from the grisly reality behind the words; ordinary abstraction is adequate to that task. Calling the pattern in which bombs fall a "footprint" almost seems a willful distorting process, a playful, perverse refusal of accountability—because to be accountable to reality is to be unable to do this work.

The images evoked by these words may also be a way to tame the uncontrollable forces of nuclear destruction. Take the fire-breathing dragon under the bed, the one who threatens to incinerate your family, your town, your planet, and turn it into a pet you can pat. Or domestic imagery may simply serve to make everyone more comfortable with what they're doing. "PAL" (permissive action links) is the carefully constructed, friendly acronym for the electronic system designed to prevent the unauthorized firing of nuclear warheads. The president's annual nuclear weapons stockpile memorandum, which outlines both short- and long-range plans for production of new nuclear weapons, is benignly referred to as "the shopping list." The "cookie cutter" is a phrase used to describe a particular model of nuclear attack.

The imagery that domesticates, that humanizes insentient weapons, may also serve, paradoxically, to make it all right to ignore sentient human beings. Perhaps it is possible to spend one's time dreaming up scenarios for the use of massively destructive technology, and to exclude human beings from that technological world, because that world itself now includes the domestic, the human, the warm and playful— the Christmas trees, the RVs, the things one pats affectionately. It is a world that is in some sense complete in itself; it even includes death and loss. The problem is that all things that get "killed" happen to be weapons, not humans. If one of your warheads "kills" another of your warheads, it is "fratricide." There is much concern about "vulnerability" and "survivability," but it is about the vulnerability and survival of weapons systems, rather than people.

Another set of images suggests men's desire to appropriate from women the power of giving life. At Los Alamos, the atomic bomb was referred to as "Oppenheimer's baby"; at Lawrence Livermore, the hydrogen bomb was "Teller's baby," although those who wanted to disparage Teller's contribution claimed he was not the bomb's father but its mother. In this context, the extraordinary names given to the bombs that reduced Hiroshima and Nagasaki to ash and rubble—"Little Boy" and "Fat Man"—may perhaps become intelligible. These ultimate destroyers were the male progeny of the atomic scientists.

The entire history of the bomb project, in fact, seems permeated with imagery that confounds humanity's overwhelming technological power to destroy nature with the power to create: imagery that converts men's destruction into their rebirth. Laurence wrote of the Trinity test of the first atomic bomb: "One felt as though he had been privileged to witness the Birth of the World." In a 1985 interview,

General Bruce K. Holloway, the commander in chief of the Strategic Air Command from 1968 to 1972, described a nuclear war as involving "a big bang, like the start of the universe."

Finally, the last thing one might expect to find in a subculture of hard-nosed realism and hyper-rationality is the repeated invocation of religious imagery. And yet, the first atomic bomb test was called Trinity. Seeing it, Robert Oppenheimer thought of Krishna's words to Arjuna in the *Bhagavad Gita*: "I am become death, destroyer of worlds." Defense intellectuals, when challenged on a particular assumption, will often duck out with a casual, "Now you're talking about matters of theology." Perhaps most astonishing of all, the creators of strategic doctrine actually refer to their community as "the nuclear priesthood." It is hard to decide what is most extraordinary about this: the arrogance of the claim, the tacit admission that they really are creators of dogma; or the extraordinary implicit statement about who, or rather what, has become god.

ALTHOUGH I WAS startled by the combination of dry abstraction and odd imagery that characterizes the language of defense intellectuals, my attention was quickly focused on decoding and learning to speak it. The first task was training the tongue in the articulation of acronyms.

Several years of reading the literature of nuclear weaponry and strategy had not prepared me for the degree to which acronyms littered all conversations, nor for the way in which they are used. Formerly, I had thought of them mainly as utilitarian. They allow you to write or speak faster. They act as a form of abstraction, removing you from the reality behind the words. They restrict communication to the initiated, leaving the rest both uncomprehending and voiceless in the debate.

But being at the center revealed some additional, unexpected dimensions. First, in speaking and hearing, a lot of these terms are very sexy. A small supersonic rocket "designed to penetrate any Soviet air defense" is called a SRAM (for short-range attack missile). Submarine-launched cruise missiles are referred to as "slick'ems" and ground-launched cruise missiles are "glick'ems." Air-launched cruise missiles are magical "alchems."

Other acronyms serve in different ways. The plane in which the president will supposedly be flying around above a nuclear holocaust, receiving intelligence and issuing commands for where to bomb next, is referred to as "Kneecap" (for NEACP—National Emergency Airborne Command Post). Few believe that the president would really have the time to get into it, or that the communications systems would be working if he were in it—hence the edge of derision. But the very ability to make fun of a concept makes it possible to work with it rather than reject it outright.

In other words, what I learned at the program is that talking about nuclear weapons is fun. The words are quick, clean, light; they trip off the tongue. You can reel off dozens of them in seconds, forgetting about how one might interfere with the next, not to mention with the lives beneath

them. Nearly everyone I observed—lecturers, students, hawks, doves, men, and women—took pleasure in using the words; some of us spoke with a self-consciously ironic edge, but the pleasure was there nonetheless. Part of the appeal was the thrill of being able to manipulate an arcane language, the power of entering the secret kingdom. But perhaps more important, learning the language gives a sense of control, a feeling of mastery over technology that is finally not controllable but powerful beyond human comprehension. The longer I stayed, the more conversations I participated in, the less I was frightened of nuclear war.

How can learning to speak a language have such a powerful effect? One answer, discussed earlier, is that the language is abstract and sanitized, never giving access to the images of war. But there is more to it than that. The learning process itself removed me from the reality of nuclear war. My energy was focused on the challenge of decoding acronyms, learning new terms, developing competence in the language—not on the weapons and wars behind the words. By the time I was through, I had learned far more than an alternate, if abstract, set of words. The content of what I could talk about was monumentally different.

Consider the following descriptions, in each of which the subject is the aftermath of a nuclear attack:

Everything was black, had vanished into the black dust, was destroyed. Only the flames that were beginning to lick their way up had any color. From the dust that was like a fog, figures began to loom up, black, hairless, faceless. They screamed with voices that were no longer human. Their screams drowned out the groans rising everywhere from the rubble, groans that seemed to rise from the very earth itself.[4]

[You have to have ways to maintain communications in a] nuclear environment, a situation bound to include EMP blackout, brute force damage to systems, a heavy jamming environment, and so on.[5]

There is no way to describe the phenomena represented in the first with the language of the second. The passages differ not only in the vividness of their words, but in their content: the first describes the effects of a nuclear blast on human beings; the second describes the impact of a nuclear blast on technical systems designed to secure the "command and control" of nuclear weapons. Both of these differences stem from the difference of perspective: the speaker in the first is a victim of nuclear weapons, the speaker in the second is a user. The speaker in the first is using words to try to name and contain the horror of human suffering all around her; the speaker in the second is using words to insure the possibility of launching the next nuclear attack.

Technostrategic language articulates only the perspective
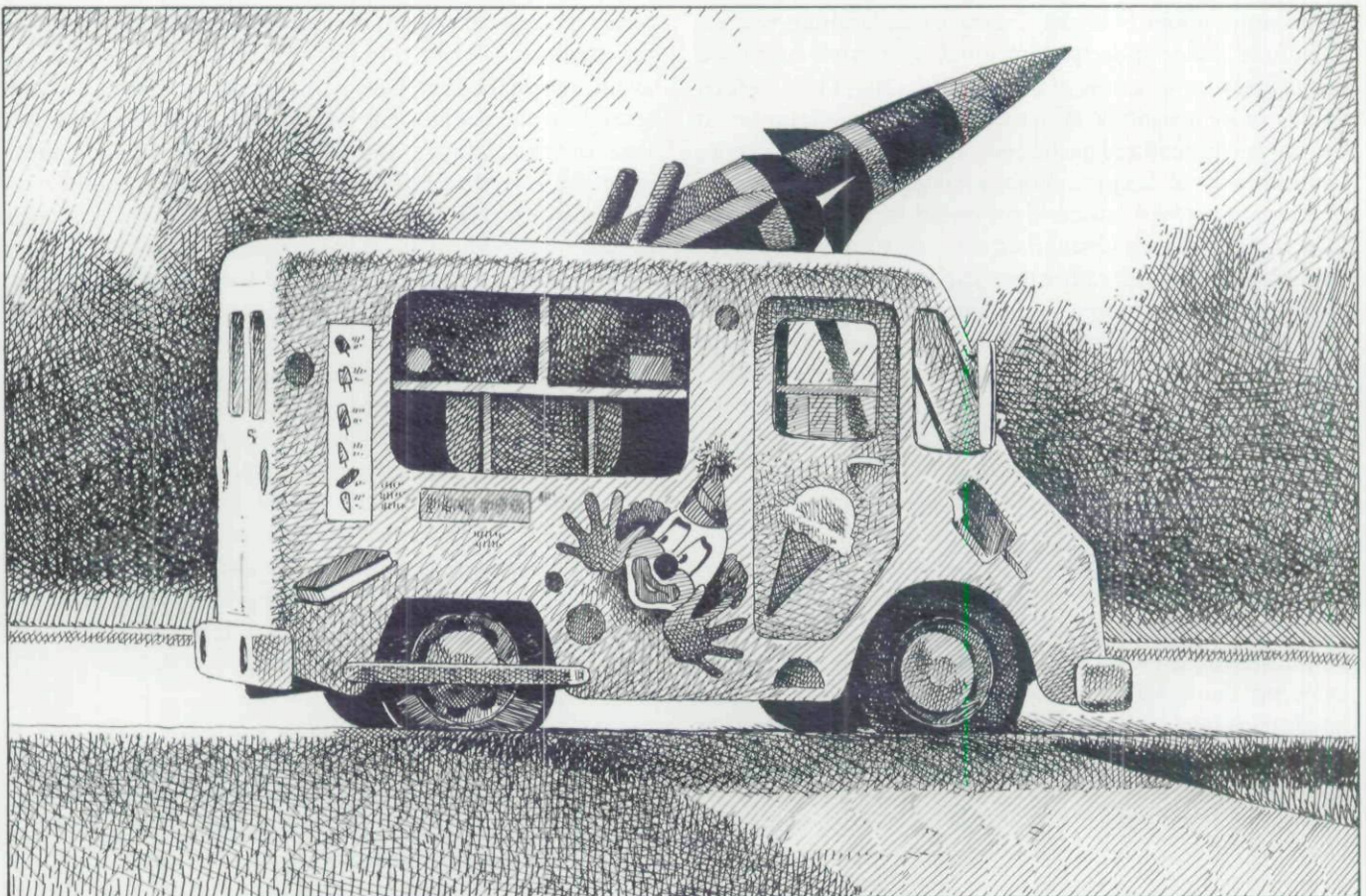
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of the users of nuclear weapons, not the victims. Speaking the expert language not only offers distance, a feeling of control, and an alternative focus for one's energies; it also offers escape from thinking of oneself as a victim of nuclear war. No matter what one deeply knows or believes about the likelihood of nuclear war, and no matter what sort of terror or despair the knowledge of nuclear war's reality might inspire, the speakers of technostrategic language are allowed, even forced, to escape that awareness, to escape viewing nuclear war from the position of the victim, by virtue of their linguistic stance.

I suspect that much of the reduced anxiety about nuclear war commonly experienced by both new speakers of the language and longtime experts comes from characteristics of the language itself: the distance afforded by its abstraction, the sense of control afforded by mastering it, and the fact that its content and concerns are those of the users rather than the victims. In learning the language, one goes from being the passive, powerless victim to being the competent, wily, powerful purveyor of nuclear threats and nuclear explosive power. The enormous destructive effects of nuclear weapons systems become extensions of the self, rather than threats to it.

I⁣T DID NOT TAKE LONG to learn the language of nuclear war and much of the specialized information it contained. My focus quickly changed from mastering technical information and doctrinal arcana, to an attempt to understand more about how the dogma I was learning was rationalized. Since underlying rationales are rarely discussed in the everyday business of defense planning, I had to start asking more questions. At first, although I was tempted to use my newly acquired proficiency in technostrategic jargon, I vowed to speak English. What I found, however, was that no matter how well informed my questions were, no matter how complex an understanding they were based upon, if I was speaking English rather than expert jargon, the men responded to me as though I were ignorant or simpleminded, or both. A strong distaste for being patronized and a pragmatic streak made my experiment in English short-lived. I adopted the vocabulary, speaking of "escalation dominance," "preemptive strikes," and one of my favorites, "sub-holocaust engagements." This opened my way into long, elaborate discussions that taught me a lot about technostrategic reasoning and how to manipulate it.

But the better I became at this discourse, the more difficult it became to express my own ideas and values. While the language included things I had never been able to speak about before, it radically excluded others. To pick a bald example: the word "peace" is not a part of this discourse. As close as one can come is "strategic stability," a term that refers to a balance of numbers and types of weapons systems—not the political, social, economic, and psychological conditions that "peace" implies. Moreover, to speak the word is to immediately brand oneself as a soft-headed activist instead of a professional to be taken seriously.

If I was unable to speak my concerns in this language,

more disturbing still was that I also began to find it harder even to keep them in my own head. No matter how firm my commitment to staying aware of the bloody reality behind the words, over and over I found that I could not keep human lives as my reference point. I found I could go for days speaking about nuclear weapons, without once thinking about the people who would be incinerated by them.

It is tempting to attribute this problem to the words themselves—the abstractness, the euphemisms, the sanitized, friendly, sexy acronyms. Then one would only need to change the words: get the military planners to say "mass murder" instead of "collateral damage," and their thinking would change. The problem, however, is not simply that defense intellectuals use abstract terminology that removes them from the realities of which they speak. There *is* no reality behind the words. Or, rather, the "reality" they speak of is itself a world of abstractions. Deterrence theory, and much of strategic doctrine, was invented to hold together abstractly, its validity judged by internal logic. These abstract systems were developed as a way to make it possible to, in Herman Kahn's phrase, "think about the unthinkable" —not as a way to describe or codify relations on the ground.

So the problem with the idea of "limited nuclear war," for example, is not only that it is a travesty to refer to the death and suffering caused by *any* use of nuclear weapons as "limited," or that "limited nuclear war" is an abstraction that obfuscates the human reality beneath any use of nuclear weapons. It is also that limited nuclear war is itself an abstract conceptual system, designed, embodied, and achieved by computer modeling. In this abstract world, hypothetical, calm, rational actors have sufficient information to know exactly what size nuclear weapon the opponent has used against which targets, and adequate command and control to make sure that their response is precisely equilibrated to the attack. No field commander would use the tactical nuclear weapons at his disposal at the height of a losing battle. Our rational actors would have absolute freedom from emotional response to being attacked, from political pressures from the populace. They would act solely on the basis of a perfectly informed mathematical calculus of megatonnage. To refer to limited nuclear war is to enter a system that is de facto abstract and grotesquely removed from reality. The abstractness of the entire conceptual system makes descriptive language utterly beside the point.

This realization helped make sense of my difficulty in staying connected to concrete lives as well as of some of the bizarre and surreal quality of what people said. But there was still a piece missing. How is it possible, for example, to make sense of the following:

> The strategic stability of regime A is based on the fact that both sides are deprived of any incentive ever to strike first. Since it takes roughly two warheads to destroy one enemy silo, an attacker must expend two of his missiles to destroy one of the enemy's. A first strike disarms the attacker. The aggressor ends up worse off than the aggressed.[6]

The homeland of "the aggressed" has just been devastated by the explosions of, say, a thousand nuclear bombs, each likely to be at least 10 to 100 times more powerful than the bomb dropped on Hiroshima, and the aggressor, whose homeland is still untouched, "ends up worse off"?

I was only able to make sense of this kind of thinking when I finally asked myself: Who—or what—is the subject? In technostrategic discourse, the reference point is not human beings but the weapons themselves. The aggressor ends up worse off than the aggressed because he has fewer weapons left; any other factors, such as what happened where the weapons landed, are irrelevant to the calculus of gain and loss.

The fact that the subjects of strategic paradigms are weapons has several important implications. First, and perhaps most critically, there is no real way to talk about human death or human societies when you are using a language designed to talk about weapons. Human death simply *is* collateral damage—collateral to the real subject, which is the weapons themselves.

Understanding this also helps explain what was at first so surprising to me: most people who do this work are on the whole nice, even good, men, many with liberal inclinations. While they often identify their motivations as being concern about humans, in their work they enter a language and paradigm that precludes people. Thus, the nature and outcome of their work can utterly contradict their genuine motives for doing it.

In addition, if weapons are the reference point, it becomes in some sense illegitimate to ask the paradigm to reflect human concerns. Questions that break through the numbing language of strategic analysis and raise issues in human terms can be easily dismissed. No one will claim that they are unimportant. But they are inexpert, unprofessional, irrelevant to the business at hand. The discourse among the experts remains hermetically sealed. One can talk about the weapons that are supposed to protect particular peoples and their way of life without actually asking if they are able to do it, or if they are the best way to do it, or whether they may even damage the entities they are supposedly protecting. These are separate questions.

This discourse has become virtually the only response to the question of how to achieve security that is recognized as legitimate. If the discussion of weapons was one competing voice in the discussion, or one that was integrated with others, the fact that the referents of strategic paradigms are only weapons might be of less note. But when we realize that the only language and expertise offered to those interested in pursuing peace refers to nothing but weapons, its limits become staggering. And its entrapping qualities—the way it becomes so hard, once you adopt the language, to stay connected to human concerns—become more comprehensible.

WITHIN A FEW WEEKS, what had once been remarkable became unnoticeable. As I learned to speak, my perspective changed. I no longer stood outside the impene-

trable wall of technostrategic language and once inside, I could no longer see it. I had not only learned to speak a language: I had started to think in it. Its questions became my questions, its concepts shaped my responses to new ideas. Like the White Queen, I began to believe six impossible things before breakfast—not because I consciously believed, for instance, that a "surgically clean counterforce strike" was really possible, but because some elaborate piece of doctrinal reasoning I used was already predicated on the possibility of those strikes as well as on a host of other impossible things.

My grasp on what I knew as reality seemed to slip. I might get very excited, for example, about a new strategic justification for a no-first-use policy and spend time discussing the ways in which its implications for the U.S. force structure in Western Europe were superior to the older version. After a day or two I would suddenly step back, aghast that I was so involved with the *military* justifications for not using nuclear weapons—as though the moral ones were not enough. What I was actually talking about—the mass incineration of a nuclear attack—was no longer in my head.

Or I might hear some proposals that seemed to me infinitely superior to the usual arms control fare. First I would work out how and why these proposals were better and then ways to counter the arguments against them. Then it might dawn on me that even though these two proposals sounded different, they still shared a host of assumptions that I was not willing to make. I would first feel as though I had achieved a new insight. And then all of a sudden, I would realize that these were things I actually knew before I ever entered this community and had since forgotten. I began to feel that I had fallen down the rabbit hole.

THE LANGUAGE ISSUES do not disappear. The seductions of learning and using it remain great, and as the pleasures deepen, so do the dangers. The activity of trying to out-reason nuclear strategists in their own games gets you thinking inside their rules, tacitly accepting the unspoken assumptions of their paradigms.

Yet, the issues of language have now become somewhat less central to me, and my new questions, while still not precisely the questions of an insider, are questions I could not have had without being inside. Many of them are more practical: Which individuals and institutions are actually responsible for the endless "modernization" and proliferation of nuclear weaponry, and what do they gain from it? What role does technostrategic rationality play in their thinking? What would a reasonable, genuinely defensive policy look like? Others are more philosophical, having to do with the nature of the "realism" claimed for the defense intellectuals' mode of thinking and the grounds upon which it can be shown to be spurious. What would an alternative rationality look like?

My own move away from a focus on the language is quite typical. Other recent entrants into this world have commented that while the cold-blooded, abstract discussions are most striking at first, within a short time you get past

them and come to see that the language itself is not the problem.

I think it would be a mistake, however, to dismiss these early impressions. While I believe that the language is not the whole problem, it is a significant component and clue. What it reveals is a whole series of culturally grounded and culturally acceptable mechanisms that make it possible to work in institutions that foster the proliferation of nuclear weapons, to plan mass incinerations of millions of human beings for a living. Language that is abstract, sanitized, full of euphemisms; language that is sexy and fun to use; paradigms whose referent is weapons; imagery that domesticates and deflates the forces of mass destruction; imagery that reverses sentient and nonsentient matter, that conflates birth and death, destruction and creation—all of these are part of what makes it possible to be radically removed from the reality of what one is talking about, and from the realities one is creating through the discourse.

Close attention to the language itself also reveals a tantalizing basis on which to challenge the legitimacy of the defense intellectuals' dominance of the discourse on nuclear issues. When defense intellectuals are criticized for the cold-blooded inhumanity of the scenarios they plan, their response is to claim the high ground of rationality. They portray those who are radically opposed to the nuclear status quo as irrational, unrealistic, too emotional—"idealistic activists." But if the smooth, shiny surface of their discourse— its abstraction and technical jargon—appears at first to support these claims, a look below the surface does not. Instead we find strong currents of homoerotic excitement, heterosexual domination, the drive toward competence and mastery, the pleasures of membership in an elite and privileged group, of the ultimate importance and meaning of membership in the priesthood. How is it possible to point to the pursuers of these values, these experiences, as paragons of cool-headed objectivity?

While listening to the language reveals the mechanisms of distancing and denial and the emotional currents embodied in this emphatically male discourse, attention to the experience of learning the language reveals something about how thinking can become more abstract, more focused on parts disembedded from their context, more attentive to the survival of weapons than the survival of human beings.

Because this professional language sets the terms for public debate, many who oppose current nuclear policies choose to learn it. Even if they do not believe that the technical information is very important, some believe it is necessary to master the language simply because it is too difficult to attain public legitimacy without it. But learning the language is a transformative process. You are not simply adding new information, new vocabulary, but entering a mode of thinking not only about nuclear weapons but also about military and political power, and about the relationship between human ends and technological means.

The language and the mode of thinking are not neutral containers of information. They were developed by a specific group of men, trained largely in abstract theoretical mathematics and economics, specifically to make it possible to think rationally about the use of nuclear weapons. That the language is not well suited to do anything but make it possible to think about using nuclear weapons should not be surprising.

Those who find U.S. nuclear policy desperately misguided face a serious quandary. If we refuse to learn the language, we condemn ourselves to being jesters on the sidelines. If we learn and use it, we not only severely limit what we can say but also invite the transformation, the militarization, of our own thinking.

I have no solutions to this dilemma, but I would like to offer a couple of thoughts in an effort to push it a little further—or perhaps even to reformulate its terms. It is important to recognize an assumption implicit in adopting the strategy of learning the language. When we outsiders assume that learning and speaking the language will give us a voice recognized as legitimate and will give us greater political influence, we assume that the language itself actually articulates the criteria and reasoning strategies upon which nuclear weapons development and deployment decisions are made. This is largely an illusion. I suggest that technostrategic discourse functions more as a gloss, as an ideological patina that hides the actual reasons these decisions are made. Rather than informing and shaping decisions, it far more often legitimizes political outcomes that have occurred for utterly different reasons. If this is true, it raises serious questions about the extent of the political returns we might get from using it, and whether they can ever balance out the potential problems and inherent costs.

I believe that those who seek a more just and peaceful world have a dual task before them—a deconstructive project and a reconstructive project that are intimately linked. Deconstruction requires close attention to, and the dismantling of, technostrategic discourse. The dominant voice of militarized masculinity and decontextualized rationality speaks so loudly in our culture that it will remain difficult for any other voices to be heard until that voice loses some of its power to define what we hear and how we name the world.

The reconstructive task is to create compelling alternative visions of possible futures, to recognize and develop alternative conceptions of rationality, to create rich and imaginative alternative voices—diverse voices whose conversations with each other will invent those futures. □

1. Gen. William Odom, "C³I and Telecommunications at the Policy Level," incidental paper from a seminar, *Command, Control, Communications and Intelligence* (Cambridge, Mass., Harvard University Center for Information Policy Research, Spring 1980), p. 5.

2. See Brian Easlea, *Fathering the Unthinkable: Masculinity, Scientists and the Nuclear Arms Race* (London: Pluto Press, 1983).

3. William L. Laurence, *Dawn Over Zero: The Study of the Atomic Bomb* (London: Museum Press, 1974), pp. 198–99.

4. Hisako Matsubara, *Cranes at Dusk* (Garden City, New York: Dial Press, 1985).

5. Gen. Robert Rosenberg, "The Influence of Policy Making on C³I," speaking at the Harvard seminar, *Command, Control, Communications and Intelligence,* p. 59.

6. Charles Krauthammer, "Will Star Wars Kill Arms Control?" *New Republic* (Jan. 21, 1985), pp. 12–16.