Harnessed nuclear fission can provide mankind with bountiful, inexpensive energy to serve a large number and variety of goals, from the desalinization of oceans and watering of deserts to the melting of polar ice and traveling in outer space. Unleashed, it is the most devastating explosive, one that could destroy civilization. In this sense, the problem of war today is an ultimate expression of a much more general social problem: the disintegrating effect that new means, that new technological inventions and related institutional innovations, can produce in a society. Time and again the introduction of more effective means to serve men’s goals has undermined these very goals, their relations with other men, and their commitment to whatever god they worship. Unwilling to return to the stone age—in fact, unable to return since the knowledge to produce new means would remain even if those newly introduced were eliminated—man must find better ways of controlling his technology and his fate. Otherwise, he will be the servant, if not the victim, of the means he created to improve his lot.

The danger of the “irrationality of rationality,” as Max Weber referred to this dilemma, was first encountered in depth when the introduction of modern means of production (or industrialization) threatened to subject the relations between man and man to the blind forces of the market and deprive the worker of control over the fruits of his work. The same danger was encountered in the study of bureaucracies, where rules and regulations, intended to increase the efficacy and justice of government ministrations to the citizen-clientele, became a new source of estrangement, of Kafka-like labyrinths in which the needs of citizens were distorted and disregarded rather than served.

This chapter is an outgrowth of research at the Institute of War and Peace Studies of Columbia University.
The advent of nuclear technology has brought the "threat of means," the loss of control, to its apex: rather than endangering man's privacy, freedom, or happiness, nuclear arms endanger the basis on which such values are predicated—his very survival. The means of warfare, from bow to bomber, have been vehicles of power to serve goals ranging from religious to sacrilegious, from glory to banditry. Whatever their ends, whether legitimate or illegitimate, moral or immoral, these means of violence potentially served those who wielded them; as a means to an end, weapons "worked." But a continual increase in the effectiveness of weapons has undermined this means-ends relationship. The mass possession of nuclear bombs and missiles has created a situation where the possible gains of war hardly justify the losses the use of modern weapons would entail.

The number of Americans who died in World War I was 126,000, in World War II it was 397,000. In a statement before the House Armed Services Committee in 1965, Secretary of Defense McNamara stated that if the United States spent an additional 25 billion dollars in the next five years for fallout shelters and antimissile defenses, and if the attacker waited an hour after launching his initial nuclear attack on our military targets before striking our cities (in McNamara's words, "an unlikely contingency"), "only" 41 million Americans would be killed. If the attack on cities came at the same time as the attack on military targets, 78 million, or every third American, would die, without the additional expenditure of 25 billion dollars, 71 out of every 100 Americans would die. There are already weapons in stock, a single one of which has a greater yield than the total amount of explosives dropped on Germany and Japan in World War II. The specter of a doomsday machine that would leave no survivors at all has been raised. This would be the ultimate subversion of human goals by human means, the complete loss of man's control over his destiny.

Nuclear War: A Real Threat?

Is nuclear war a real threat? Does not the very existence of nuclear weapons deter such a war? Will not the very enormity of nuclear devastation keep the leaders of the United States and the Soviet Union from triggering such a war? Is it not a "certainty that the deterrence policy would continue to work" to carry out the threat? Social scientists have long questioned. Drawing on their studies, it is clear that even if no countries could be attacked, there are many weapons might be lost and the war to which they are necessary. Man has yet to design a mechanism, administration, or whatever ways in which a mechanical failure, unauthorized use.

Mechanical Failure

According to a study of the nonmilitary group, a dozen major incidents or United States and oversea had to jettison a 24-mega bomb in a field without either complex devices and strict firing of nuclear weapons equipped with six interlocks to be triggered in sequence to rushed to the North Carolina accident they found that the fall! Only a single sw detonating and spreading

Unauthorized Use

The danger of unauthorized use of nuclear weapons has now been raised. This would be the ultimate subversion of human goals by human means, the complete loss of man's control over his destiny.

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1 On the varying goals of warfare, see Alfred A. Vagts, A History of Militarism (New York: Norton, 1937).
policy would continue to work so that it never would be really necessary to carry out the threat of nuclear retaliation? 1

Social scientists have contributed significantly to answering these questions. Drawing on their knowledge of man and society, they have pointed out that even if no man would deliberately unleash a Götterdämmerung, there are many ways in which control over nuclear weapons might be lost and a war might be initiated unintentionally. Man has yet to design a foolproof control system, whether of production, administration, or war. It is generally recognized that there are four ways in which a war might be started unintentionally: mechanical failure, unauthorized use, miscalculation, and brinkmanship.

**Mechanical Failure**

According to a study of the accident problem made by an independent, nonmilitary group, nuclear weapons have been involved in about a dozen major incidents or accidents, mostly plane crashes, both in the United States and overseas. In one of these incidents, a B-52 bomber had to jettison a 24-megaton bomb over North Carolina. The bomb fell in a field without exploding. The Defense Department has adopted complex devices and strict rules to prevent the accidental arming or firing of nuclear weapons. In this case, the 24-megaton warhead was equipped with six interlocking safety mechanisms, all of which had to be triggered in sequence to explode the bomb. When Air Force experts rushed to the North Carolina farm to examine the weapon after the accident they found that five of the six interlocks had been set off by the fall! Only a single switch prevented the 24-megaton bomb from detonating and spreading fire and destruction over a wide area. 2

If a nuclear bomb should suddenly turn an area of the United States into a radioactive desert, this might well be viewed as an enemy attack and lead to "retaliation." This, in turn, would lead to retaliation by the other side, which might result in full-scale war.

**Unauthorized Use**

The danger of unauthorized use of weapons will be with us as long as the social sciences have not developed selection instruments that allow screening of persons who, under pressure, might use the arms they have access to, in violation of their orders. During one year

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alone, 1959, the United States Air Force, for example, discharged men on grounds of disability; one-fourth of this number were released because of psychotic disorders, psychoneurotic disorders, or anxiety reactions. Since it is not possible to detect all the potential psychotics or psychoneurotics in the armed services, it is conceivable that eventually one such person might break through and reach a release mechanism, either by commanding the opening of the safety device or by feeding the system false information that would bring about a triggering by authorized personnel.

Unauthorized action might be undertaken also by people who are not "disturbed." According to an Associated Press message from Saigon dated September 7, 1965, a Marine unit used tear gas in a clash with the Viet Cong at the Batangan Peninsula.

The spokesman said the commander of the Marine battalion involved was said to have called for the use of tear gas on his own authority.

The spokesman said the commander may not have been aware of policy [then in effect] against the use of tear gas or any other gas in Viet Nam.

**Miscalculation**

The danger of war by miscalculation by an authorized person, probably even greater than that of war by accident or unauthorized action. One major mistake by any one of the sides, President Kennedy warned, and there will be "150 million fatalities in the first eighteen hours." The student of history can hardly expect each government in command of nuclear arms to avoid, over a long period of time, making one major mistake. Such a mistake might well be the acting on the basis of insufficient or wrong information, as, it is argued, was the case the first time an atomic bomb was dropped on human beings.

The issue is a complicated one. At least a score of books have been written on the decision to drop the bomb. There are also several accounts by various persons who participated in the decision, including President Truman. By and large, the participants tend to justify the decision.

Independent experts, while not all critical of the decision, tend to suggest that the decision was based on a mistaken assumption that more use of military might would be necessary to compel Japan's surrender. Actually, at least according to several authoritative accounts, it seems that the main barrier to Japan's surrender before the

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Discharged by the draft or released from military service typically were those who, in the opinion of the medical profession, were released as physically or mentally unemployable. The atmosphere created by the draft was conducive to the maintenance of the status of the emperor, following surrender. The last Japanese soldiers to be released were those in the capital, Honshu, and the island of Kyushu. They were also subjected to a post-war examination of their health and mental condition by medical authorities. The decision to release them was made by a civilian medical board and was based on the assumption that their continued presence in Japan would create a feeling of insecurity among the Japanese people.

The dropping of the atomic bomb on Hiroshima was symbolic and sociological. The Japanese government was forced to maintain the status of the emperor, following surrender. The dropping of the second bomb on Nagasaki was not an attempt to destroy the Japanese military, but to demonstrate the United States' determination to prevent further Communist aggression. As the Japanese military was the key symbol of the society, one of an importance that few societies, even those of a modern Western democratic society find hard to compare, Japan was willing to continue to fight, rather than give up its symbol. In retrospect it seems, according to some authoritative statements by American experts, that the 1945 bombing of Hiroshima and Nagasaki "made no essential contribution to Japan's surrender about a last battle." 

More recently, the United States government decided to bomb North Vietnam. Not all the considerations that went into this decision are a matter of public record at this point. But an authentic glimpse can be gained from the published statement of General Thomas S. Power, the Commander in Chief of the Strategic Air Command from 1961 till 1964, i.e., till just a few months before the bombing actually began:

Let us assume that, in the fall of 1964, we would have warned the Communists that unless they cease supporting the guerrillas in South Vietnam, we would destroy a major military supply depot in North Vietnam. Through radio and leaflets, we would have advised the civilian population living near the depot of our ultimatum and of the exact time of our attack so that civilians could be evacuated. If the Communists failed to heed our warning and continued to support the rebels, we would have gone through with the threatened attack and destroyed the depot. And if this act of "persuasive deterrence" had not succeeded, we would have threatened the destruction of another critical target and, if necessary, would have destroyed it also. We would have continued this strategy until the Communists had found their support of the rebels in South Vietnam too expensive and agreed to stop it. Thus, within a few days and with minimum force, the conflict in South Vietnam would have been ended in our favor. Beyond this, we would have gained immeasurably in prestige and in the credibility of our determination to prevent further Communist aggression against our allies. 

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This was obviously a miscalculation of what air power could do. A much larger strike could also be similarly misdirected. This we would know, as in the case of Hiroshima and North Vietnam, only in retrospect—that is, if we remain able to engage in retrospection.

Miscalculation seemed less likely when the nuclear powers consisted of only the United States, the Soviet Union, and Britain. The recent addition of members and aspirants to the nuclear club makes a nuclear war seem more likely. The stakes of a nuclear gamble are different for countries that have intense emotional commitments in disputed territories, such as West Germany, United Arab Republic, India, or Pakistan, and for countries that are overpopulated and impoverished, than for the established, wealthy, and reasonably contented nuclear superpowers. The larger the number of countries with access to nuclear arms, the less likely that the cooler heads will prevail. This leads us to the fourth danger of unintentional war, brinkmanship.

**Brinkmanship**

The essence of brinkmanship strategy is an attempt to gain concessions from the other side by threatening nuclear war without actually expecting to have to engage in it. The strategy has often been compared to the "chicken" game played by hot-rodders, in which two cars race down the center of a road toward each other; the first driver to turn his car away from the collision course loses the contest and is labeled a "chicken." Obviously, the more committed a driver is to victory, the more reckless he will be; the more often the contest of wills is engaged in, the more likely that both drivers, their cars, and all their occupants end in ruins. A typical example of superpowers engaged in brinkmanship is the 1962 Cuban crisis. The Soviet Union positioned missiles in Cuba, probably miscalculating the American response. The United States imposed a naval blockade on Cuba, deploying American ships to intercept Soviet ships that were sailing toward Cuba. The fact that both sides prevented, at the last moment, a confrontation on the high seas and that the United States gained the removal of the missiles should not obscure the fact that the Soviet's initial act and the American response involved leaning for over the nuclear brink.

The recurrent point introduced by this examination of the four ways in which the nuclear balance of power might be unbalanced is that military machinery is a set of means designed and staffed by men, it is, hence, basically susceptible to human error. But, before we can confront the question: How can error be triggered uncritically? we must have claimed that nuclear first and author C. P. Snow; then, at the most, ten years, soon, we shall be saying this as responsibly as the probability of disaster." On the other hand, current preparations seem to see as acceptable that achieves this invulnerability through a hundred of starting a war aeroplane is to last for decades, this preparation cannot be particularly comfortable. Americans under 35 who would For the over 40 million Americans, the future looks even dimmer.

An intermediary position holds the uncertainty. Still, there is no reason that war cannot erupt; however, nuclear war, one must note that situations, probabilities of events that new the probability do take place, and whether all mankind, are at stake, that one must concern oneself even arms: cause or symptom?

The observers see the main source of themselves, especially the now, man can regain control of the development of weapons. "The increase of armaments produce consciousness of strength, and perhaps these effects. On the one strength of other nations and

* Sorensen, Kennedy, pp. 700 ff.

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ld. As we would in retrospect, consider the question: How likely is the war system to trigger nuclear war unintentionally?

Some have claimed that nuclear war is a certainty. The British scientist and author C. P. Snow stated on December 27, 1960, that within, at the most, ten years, some of these bombs are going off. He was saying this as responsibly as I can. That is the certainty... a certainty of disaster. On the other hand, there are those who believe that current preparations are safe. The nuclear strategist Herman Kahn seems to see as acceptable "a force which is invulnerable but which achieves this invulnerability by having (every year) one chance in a hundred of starting a war accidentally." If, however, the cold war is to last for decades, this probability of one in a hundred per year cannot be particularly comforting to the approximately 100 million Americans under 35 who would like to live at least to retirement age. For the over 40 million American children under ten, this prospect would look even dimmer.

An intermediary position holds that nuclear war is not likely, much less a certainty. Still, there is no reason why, if the cold war continues, the threat of nuclear war cannot erupt; however low the estimated probability of nuclear war, one must note that such estimates are unreliable, as are probabilities of events that never occurred, and that events of low probability do take place; and when the lives of hundreds of millions, not all mankind, are at stake, the potential disaster is so ominous that one must concern oneself even with events that are unlikely.

Arms: Cause or Symptom?

Some observers see the main source of danger in the existence of arms themselves, especially the new thermonuclear weapons. In this view, man can regain control of his fate by reasserting his control over the development of weapons. Arms races follow their own logic. "The increase of armaments that is intended in each nation to produce consciousness of strength and a sense of security, does not produce these effects. On the contrary, it produces a consciousness of the threat of other nations and a sense of fear," wrote the British

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1 For a more detailed treatment, see the author's Winning Without War (New York: Doubleday-Anchor Books, 1965), pp. 159-69.
Foreign Secretary, Sir Edward Gray, at the outbreak of World War I. But every nation that arms for its own security is simultaneously an "other nation." Arming for security often leads to arming for defense by the "other nation." The defensive intent of arms built up by the other nation is rarely so regarded by the first nation. It rather sees in the other's new arms evidence of its hostile intent; the first nation often sees no alternative but a new rush of armaments—for security. Hence, one major approach to the prevention of war is to reduce armaments. If the nuclear genie could somehow be returned to the bottle, the main new danger of war would be eliminated. If military armaments could be entirely eliminated, it is argued, there would be no war.

An opposing view suggests that arms are chiefly the symptoms of deep-seated conflicts. If there were no hostile motivations, people would not produce arms; even if there were triggers, they would not pull them. The people of Canada do not fear American nuclear bombardment. "War starts in the minds of men," says the charter of UNESCO. Curbing arms, it is said, is like treating only the symptoms of disease, without identifying and treating the illness. The treatment is unlikely to be successful, and if successful, other symptoms will soon break out elsewhere. Disarmament, if ever achieved, will be followed not by peace, but by rearmament. What is needed is a treatment of the underlying conflicts of ideology and interest, the clash of powers.

A third position seems more tenable. This one conceives of arms as both a symptom and a contributory cause that must be treated. The malaise that results in the arms race and wars is a deep one, basically, it expresses man's willingness to treat his fellow man as an object rather than as an objective, to the point of turning him into a perishable utensil. The complete cure of this malaise requires providing the social foundations for a world community, since only members of a community treat each other as goals and not merely as means. If such a global community can be built at all, it will surely be a long process; meanwhile, mankind might destroy itself. The world society in the nuclear age is like a patient who is running a high fever; until we determine and treat the sources of this fever, some measures must be taken to reduce the fever itself if the patient is to

Carubani & Zan for defense, the first nation for security, and to reduce arms to the bottle, military arms no war.

The military services, as a rule, demand larger defense budgets, for their curtailment, the military's power, prestige, and—to a degree—income are affected by the size of these budgets. Most industries set up or extended to serve the military can turn elsewhere for their business, but the shift involves, at least, the costs and pains of transition. Congressmen are known to lobby against the closing of military bases in their districts, and since each district has a congressman—and many at least one military installation—it is hard to sustain a broad reduction of arms without evoking some political resistance. This holds not simply for missile sites or naval yards. The production of nuclear warheads in the United States was continued beyond the point of need, as estimated by most military experts, in part because congressmen whose states had employment problems feared deeper unemployment. On top of these extrinsic interests in production of arms come the intrinsic pressures to continually expand the military system, for the building of one component generates call for others. Bombers are of little use without runways. Runways are of little value if they are not protected from bombardment. The commanders of the bomber fleets have to be sheltered. Thus, armed systems tend to produce some extrinsic and intrinsic pressure for their expansion. Hence, when a point is reached where the original reason for the building up of armaments might have declined or disappeared, special efforts are still required if arms are to be reduced. Simply treating the original causes will not suffice.

Finally, armaments contribute to the potentiality of war through psychological consequences. Arms buildups express and magnify hostilities; arms reductions tend to indicate efforts to move toward accommodation. For instance, the abrupt resumption of the testing of thermonuclear bombs by Russia in 1961, after a three-year mora-

For a good review article of various approaches to the "symptoms and disease" question, see Philip Green, "Alternatives to Overkill: Dream and Reality," Bulletin of the Atomic Scientists (November, 1963), pp. 23-27.


torium on such testing, was taken by the United States as a hostile and aggressive act. The 1963 Soviet-American agreement on partial cessation of thermonuclear tests, though of limited disarmament value, was hailed as heralding a new period in East-West relations. In other words, arms reductions can be used to create the atmosphere in which the "treatment" of the deeper causes of war can be better achieved in much the way that reducing the fever of the patient enables him to survive long enough for antibiotics to take effect.\(^{18}\)

**Prevention of War: Three Approaches**

There are many proposals for preventing war, but behind all of them lie three basic approaches, each containing a treatment plan for armament and a conception of the kind of political world necessary to provide the conditions under which the peace can be preserved. The approaches differ in their estimates of the dangers confronting the world today and the need as well as the ability to shift to a different world order. Arms control is, comparatively, the most optimistic approach in evaluating the present world and most pessimistic in estimating the changes that can be realistically expected in the international system. (It is the approach reviewed first below, and its conception of the future is most like the conceptions guiding the policy-makers of today.) General and complete disarmament (GCD) is most pessimistic about our ability to survive in an armed world and most optimistic about our ability to drastically change international political institutions to fit our needs and desires.\(^{19}\) Arms reduction is an intermediary position that seeks, through reversing the upward spiral of armament, a gradual transition from the world of arms now (with or without arms control) to a world without arms. In short, arms control seeks to make arms safe; GCD seeks safety from arms; arms reduction—a safe transition from one to the other.

Advocates of arms control, we shall see, expect international relations to continue to be guided by some conception of balance-of-power; GCD requires a world authority and a world community; and arms reduction provides a new and community might grow.

**1. Balance of Power and Arms Control**

Some of the phrase "balance-of-power," especially as it is used by strategists in the war between power refers to an interval to maintain their independent equilibrium of power. Many more central regulatory authorities have been established as a result of conditions against the aggressor was either deferred from or the odds against success were so great that it became manifest, found that other one would then wage war to gain seen as a temporary and limited way to ensure conditions where no one would dominate the others.

A balance-of-power system is one to a system of full competitive assumption that no universal equivalent of the assumption must be realized, its profits, can be realized, its limits, are extrinsic to the fact that it is an institution.

Throughout history, from the time of Italy, numerous interstate treaties form a balance-of-power system functions not its limitations in the context of sociological factors in international politics, without extrinsic institutions and other conditions for the maintenance of a favorable during the minor presence of a general war from an alliance among several states. Diplomats, and there were few

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\(^{19}\) Much confusion is caused in discussion of this vital subject by not keeping carefully separate the end state of a process and the process itself or its various stages. Both are often referred to as "disarmament." This allows opponents of reduction of arms to oppose this by pointing to some danger involved in a step of complete disarmament. To avoid this problem, we shall refer to the end state as "general and complete disarmament" (GCD), as official United States documents do, and to the process leading to GCD as "disarmament."
as a hostile act on partial grounds, value, and community. In other where the achievement of a world, it enables him behind all of the dangers can be perceived and most expected is the first below, actions guiding the movement (GCD) and world arms reduction to the upward world of arms races. In short, safety from arms power. The international system of balance-of-power and community; the arms reduction provides the time in which a world authority and community might gradually be developed.

1) Balance-of-Power and Arms Control

Although the phrase "balance-of-power" seldom appears in a for-purpose dispatch or memorandum, it has for centuries guided policy-makers and strategists in the world's capitals. As a historical concept, balance-of-power refers to an international system wherein states maintain their independence through the establishment of a central regulatory authority; rather, the balancing of power between states occurred as a result of shifting alliances in time of peace and coalitions against the aggressor in time of war. A would-be aggressor was either deterred from initiating hostilities by perceiving the odds against success were unfavorable, or, seeking to expand power to a point at which it could unbalance the system and gain predominance, found that other states unwilling to tolerate such a move would then wage war to maintain or restore the balance. War was seen as a temporary and limited phenomenon, something necessary to insure conditions where no one state or group of states could attempt to dominate the others with impunity.

A balance-of-power system in international relations is thus comparable to a system of full competition and laissez faire in economics. The assumption that no universal political authority is necessary is equivalent to the assumption that economic units, each seeking to maximize its profits, can be relied upon to generate a desirable state of affairs, without extrinsic mechanisms of control.

Throughout history, from the time of the Greek city-states to Renaissance Italy, numerous interstate systems have been studied as approximating a balance-of-power system. An examination of how a balance-of-power system functions is valuable both for an understanding of its limitations in the contemporary context and for the exploration of sociological factors in international relations.

The conditions for the maintenance of a balance-of-power were partially favorable during the nineteenth century, as attested to by the absence of a general war from 1815 to 1914. Military power was divided among several states. Diplomacy was conducted by skilled diplomats, and there were few ideological impediments to inter-
fere with the freedom of statesmen to take their country from one
coalition into another on the basis of shifting power relations. The
relative strengths of competing states could be calculated with rea-
sonable accuracy. War was seen as a method of implementing pol
but there was a consensus that its objectives should be limited and
should not include the destruction of an enemy state, as yesterday’s
enemy might be tomorrow’s ally. Important makeweights in the bal-
ance must not be destroyed if conditions of equilibrium were to be
preserved, and for this a peace of reconciliation—not alienation—
was essential. Great Britain as an island power played the role of balance
adding its weight to the weaker side when the threat of preponder-
ance arose. Most important, perhaps, the European states that dom-
inated world politics shared a common interest in preserving the sys-
tem itself, since they saw this as the best method of preserving the
independence of each of its members and their domestic regimes.

A classical example of a balance-of-power system at work is pro-
vided by the Congress of Vienna, where the statesmen of Europe
in 1815 to achieve a settlement to the chaos brought by the Na-
pician wars. The French domination of the Continent had finally been
ended through the military success of a great coalition led by Englia
and including Austria, Russia, and Prussia. This coalition was form-
to reestablish the state system and restore the European balance. The
work of the statesmen meeting in Vienna was facilitated not only by
such objective political factors as the relative equality in power terns
of their respective states and the ease with which reciprocal com-
pensation in territorial rewards could be arranged, but also by the
relative sociological homogeneity. They shared a comparable ide-
ological outlook based upon the acceptance of monarchy and dynas-
tic legitimacy, an aversion to popular democracy, and a generally con-
servative political orientation. They were of the same social class
spoke a common language (French), and had long experience in deal-
ing with their diplomatic counterparts. They had more in common
with each other than with the masses of the people in their respective
states. These social and cultural conditions, together with the shared
interest in the restoration of the state system, contributed to the rel-
tively moderate peace terms imposed upon the defeated power, France.
An indemnity was extracted and there was a period of military occu-
pation, but with a Bourbon king restored to the French throne (and see

— Inis L. Claude, Jr., Power and International Relations (New York: Rand’s

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The benefits of Talleyrand's skillful diplomacy) France was almost immediately readmitted to the councils of the Great Powers.

Since World War I, however, the sociological conditions required by a balance-of-power system have undergone erosion, and in an accelerated degree. Power relations among states are no longer characterized by even a rough equality. Diplomacy has often passed into the hands of amateurs chosen for their political reliability. An age of radically opposed ideologies has supplanted the earlier periods of consensus. Statesmen under pressures of public opinion, are no longer free to make policy apart from the demands of their peoples. War is no longer seen as an alternative policy means but as an unprecedented disaster to be avoided. The statesmen no longer share a common outlook, less often speak a common language, and do not agree on either the nature of the status quo to be established or how long or in what ways it should be preserved. In contrast to the period of 1815-1914, the period since 1914 is characterized by great political and sociological heterogeneity and has been marred by two world wars.

The year 1946 ushered in a period of bipolarity: the European Great Powers of the past were wholly overshadowed by two continent-sized superpowers, the United States and the Soviet Union. A true balance-of-power system was precluded by the bipolar division of power. There were no third, fourth, and fifth powers who could be counted upon to prevent either superpower from gaining absolute dominance. Despite this new development, the old idea of balance-of-power continued to guide statesmen and strategists who molded the relationships between the two superpowers and their camps: the two superpowers were to "balance" each other.

By the early 1950's there was added to the already bipolar pattern the element of nuclear bipolarity. Armed with massive nuclear weapons that were increasingly rendered invulnerable to attack by shielding and concealing devices, neither side could rationally launch a war against the heartland of the other since massive nuclear retaliation was likely to follow. The initiation of nuclear war, it was argued, meant national suicide. In this sense, the two nuclear giants "balanced" each other. But, since the balance was achieved not by the actual use of strategic weapons but through threats of their use, the system has come to be described as one of deterrence, or, more colloquially, as a balance of terror.

While the Communist camp might still have desired to extend its hold, and the Western alliance to "roll" it back, neither side dared to engage in anything but marginal skirmishes—and even these were
undertaken with great caution—since an unexpected development could trigger an all-out nuclear war. Many American strategists in the 1950's and early 1960's believed that the balance-of-terror system could be prolonged indefinitely, although they favored eliminating especially hazardous conditions through limited arms-control measures (as we shall see), increasing conventional forces that would allow a military alternative to using nuclear weapons, and foregoing policies of nuclear brinkmanship.22

It should be emphasized that even before the advent of nuclear weapons and even when the political and sociological requisites existed, the balance-of-power system could not be relied upon to preserve peace. What this system did was not to prevent war but make major wars less devastating and minor wars less frequent. When hostilities occurred, procedures existed for restoring the balance and thus, a state of peace. The object of war, as we have seen, was not the destruction of the opponent but a form of sanction that was intended to keep the system—and all its major members—operating. Under balance-of-terror conditions, however, where the total destruction of an opponent is technically possible, a fear of retaliation is relied upon to deter a nuclear attack. But whereas a rational statesman would not initiate a nuclear war, it is questionable whether even nuclear weapons would deter a Hitler of tomorrow any more than the fear of conventional response deterred the Hitler of yesterday. In addition, because of the unprecedented and continuing peacetime preparations for war and the instantaneous impact of modern arms, there is no longer any time cushion between a major mistake and a major war. The enormous destructive capacity of thermonuclear weapons means that even a single breakdown of the balance-of-terror system would be one too many. Moreover, in a time of conflicting ideologies, where competing socioeconomic regimes seek not limited triumphs but each other's elimination, an international system with no margin for error and relying on the rational behavior of all of its participants is a hazardous one.

Increased recognition of these factors, coupled with the apparent inability of states to agree upon disarmament, has generated interest in proposals for arms control—that is, efforts to reduce the probability of war and to limit its scope should it occur. It is a much less encompassing and fundamental approach to the problem of war than the general and complete disarmament, but also a much less demanding.

The arms-control policy neither aims nor expects to eliminate all nuclear missiles in principle, it precludes the abolition of large national military establishments. It is largely a trimming operation—one that seeks not to change the existing international system, to make the balance of terror system less dangerous instead of attempting to institute another system.

There are many arms-control proposals. Some are measures each side can introduce unilaterally. For instance, the United States installed electronic locks on its strategic missiles, which do not allow its Minuteman missile silos to be opened unless a coded position emits a coded signal intercepted by the lock. This reduces the possibility of local unauthorized action or the targeting of nuclear arms by local civilian groups. The United States government hopes that the Soviet Union has taken similar precautions at its missiles but has seen little sense in postponing the introduction of this and other unilateral arms-control measures until the Soviet Union first agreed to reciprocate.

Other arms-control measures are bilateral. One such measure was introduced in 1963, when a teleprinter line, popularly known as the hotline, was installed to provide a direct communication link between Moscow and Washington. Should, for instance, an American take his bomber on an unauthorized attack toward the Soviet Union, the United States is expected to alert that country and help stop down the plane.

A well-known multilateral arms-control measure is the 1963 treaty banning the testing of nuclear weapons in the atmosphere, in space, and under the seas. The treaty has less value than often claimed: nuclear military experts believe that the United States and the Soviet Union had tested as many devices as were necessary to test before the test ban was signed; the Big Two have continued to conduct—probably even increased—their underground testing; and parties are free under the treaty to withdraw upon three months' notice if new testing in now forbidden areas is in their "supreme interest." China was not prevented from testing atomic weapons in the atmosphere by the treaty.

There have been more encompassing arms-control proposals, in particular those before the Committee on Foreign Relations, U.S. Senate, 88th Congress, First Session. Nuclear Test Ban Treaty, page 3, letter to the Senate by the State Department.

cluding one that suggests a “freeze” of strategic weapons, that is, agreement between the major powers not to produce additional long-range missiles, strategic bombers, and nuclear warheads. Another arms-control plan calls for some reduction of armament. For a time, some experts favored the bomber bonfire plan, according to which number of bombers of both sides would be brought together in a neutral spot and burned under joint supervision.

These various arms-control plans, however, are not meant to, and cannot, lead to the elimination of the instruments of warfare, even if these proposals were implemented, which most are not. Actually, the underlying assumption of these measures is that national governments will continue to rely on large national military establishments to protect their security. One might ask, “Why large military forces?” Could security not be maintained if all states would cut their arms in half, or even by nine-tenths, as long as the cuts are proportional, since the key is the comparative, not the actual, amount of armament? But the strategists of arms control emphasize that it cannot lead to large arms reductions because of the “principle of high numbers.”

The discussion about nuclear disarmament has revealed the paradoxical fact that there is a certain safety in numbers. And this is true even if both sides scrupulously observe an agreement to limit nuclear weapons or the means of delivery. Instability is greater if each side possesses 10 missiles than if the equilibrium is stabilized at, say, 50. For an attack which is 50 percent successful when the defender has 10 missiles leaves him one—or a number hardly likely to inflict unacceptable damage. An attack of similar effectiveness when the defender possesses 500 missiles leaves 50—perhaps sufficient to pose an unacceptable risk in retaliation. And of course it is technologically more complicated to destroy such a large number. Reduction of number is thus not an infallible remedy. A very small and vulnerable retaliatory force may increase the danger of war by encouraging the opponent to risk surprise attack.

It follows that stability is greatest when numbers are sufficiently large to complicate the calculations of the aggressor and to provide a minimum incentive for evasion but not so substantial that they deter control.25

Thus, the policy of arms control may be capable of limiting the arms race, but abolishing armaments is not its purpose. It seeks to ensure the balance-of-terror, not to shift to a different system of security. Arms control, at best, reduces the probability of nuclear war under certain circumstances, might reduce the probability of war. It does not, however, remove the underpinnings of the balance-of-terror system. As long as the balance is unbalanced are still open. The less well-defended and mechanical accident might bring about an end of arms control were effected, there is a danger of escalation, or a technological breakthrough, which might catch us at least as much as in an unbalanced situation.

To demonstrate this point, let us examine an arms-control system that strives to “stabilize” arms race conditions, since it is traditionally the case of arms race conditions, since it is traditionally the case that one side might enjoy a more effective nuclear war is reduced, the larger the premium on conventional wars might seem. And, once again, the arms-control system to prevent an escalation of such a war to the-use of nuclear weapons. There is no assurance that after both sides of arms the losing side would refrain from using weapons, which would unleash, hypothetically, the brink of a nuclear war. It is true that East-West clashes at conventional level, in Korea and in Vietnam, have not resulted in nuclear blows. But in each case the threshold rose to the nuclear level. This does not mean that the nuclear threshold will tend to fall over the edge, but merely that the brink is 100 megatons of nuclear warhead衍生核战争带来的安全危险。
weapons, that is, additional long-range warheads. Anotherament. For a time, according to which a brought together in a war. It does not, however, remove any one of the major short-comings of the balance-of-terror system. All the ways the system might unbalanced are still open. The lesser dangers of unauthorized accident and mechanical accident might be somewhat reduced if a wide plan of arms control were effected, but the danger of miscalculation, escalation, or a technological breakthrough (discussed below) are with us at least as much as in an uncontrolled arms race.

To demonstrate this point, let us examine the difference between an arms-control system that strives to "stabilize" only nuclear armaments by improving the balance) and one that attempts to control nuclear and conventional armaments. A nuclear arms-control system (which the one most frequently discussed) intends to make the deliberate发动 of nuclear war even less reasonable than it is under uncontrolled arms race conditions, since it would diminish whatever numerical "superiority" one side might have. In the early 1960's, the United States had at least four times as many long-range missiles as the Soviet Union, but this ratio was not considered to be a significant military advantage. They were produced largely because the United States expected the Russians to produce more, and when this turned out not to be the case, resistance to unilateral arms cuts prevented their curtailment. Psychologically, however, reducing "advantages" in number of arms—let us say, in the number of long-range missiles—has a stabilizing value: it makes the temptation to try to get away with a surprise attack less likely.

But the gain is accompanied by a danger. The more the two sides come to recognize that they have stalemated each other's nuclear might, the larger the premium on conventional means of warfare. The more effectively nuclear war is ruled out, the more feasible conventional wars might seem. And, once initiated, there would be little in the arms-control system to prevent strong pressures toward the escalation of such a war to the use of tactical, then strategic, nuclear arms. There is no assurance that after a major battle with conventional arms the losing side would refrain from resorting to some nuclear weapons, which would unleash, in all likelihood, a response in kind. It is true that East-West clashes have thus far stopped on the conventional level, in Korea and in Vietnam, and have not escalated to nuclear blows. But in each case the sides have come close to escalating to the nuclear level. This does not imply that each drive to the brink will tend to fall over the edge, but only that sooner or later one might, and the brink is 100 megatons high. By its very nature, the security derived from nuclear arms control might well turn out to be...
illusionary without conventional arms control, just as illusionary as the false security of auto seat belts to the driver speeding along narrow roads.

Arms-control systems that encompass both nuclear and conventional arms (including subconventional armaments such as those used in guerrilla and counterguerrilla warfare) are extremely difficult to effect for technical reasons that need not be discussed here. But even if such controls were ever successfully introduced, the opposing sides would find themselves in military straitjackets without having treated the ideological and political sources of the conflict. For the West, this would mean having to tolerate revolutions in a large number of countries, even if they are Communist-inspired, financed, and engineered, as long as no outside armed intervention occurred. For Communist countries, it would spell the end of armed support for what at least some still consider "just" wars—"wars of national liberation." If hostility is not reduced, both sides would probably channel large parts of their military budgets to secret research efforts to try to achieve technological breakthrough or to find a weapon that would give them a strategic advantage. Among the weapons already under consideration and toward which the superpowers are investing heavily are antimissile missiles, to halt a retaliatory strike following an attack (the breaking out of the mutual deterrence system); a nerve gas to suddenly incapacitate mentally the other side; and various forms of viruses and bacteria to spread epidemics in an enemy's country.

Since an encompassing arms-control system would not allow piecemeal advances, only a weapon that would provide a swift and an all-or-nothing advantage would be "useful." (Most experts doubt that a strategic advantage could be gained in this way, but both sides are trying for one anyway.) Tying the hands of the opposed sides without treating the sources of their conflict, without providing supervision to keep them from preparing a blow behind each other's back, and without disarming them, would put a premium on all-out war. In short, most arms-control systems only skirt the problem of war and do not attempt to come to grips with it. Those that do confront the question of prevention of war do it in a way that, if successful, would completely stalemate the sides without providing an international force to safeguard freedom and justice, and if they fail—they might produce the most devastating war, an all-out strike. In short, arms control seems hardly enough to maintain security, whatever its other virtues may be.

sory as the falling narrow roads and conventional arms those used in the cold war are difficult to either side. But events are determined by opposing sides and the opposing side having treated them as the fall of Rome in 1945. For the West, it was a large number of French, English, and Germans. For the Soviet Union, it was a much larger number of people, especially in the East. As a result, the West's armament in the early stages of the Cold War was much larger than in the East. In short, a strategic balance had been achieved.

The disagreement over verification is deeper than it might seem. A sudden "break" in the negotiations in Geneva, or a generous give and take in the mood of a détente, is likely to remove it, as it serves as a convenient front to conceal the fear in which disarmament is held by most big and small powers. Governments have shown again and again a gnawing fear of being left "naked," exposed to an attack by another nation, following clandestine violations of a disarmament treaty or international use of arms retained for police purposes. Moreover, it must be noted, in a disarmed world a small country like Cambodia would have to fear an attack by a large country like China, even when the attackers were armed only with pitchforks and empty rice bowls.

The governments entrusted with the defense of their people might be willing giving up the means of national defense if there were an alternative force to guard their citizens against violence from without or from within. Better or worse, the fact is that nations are unwilling to trust each other to the degree that they will disarm without such alternative protection. "Educating them to trust each other" will surely take longer than the danger of nuclear war allows us to wait for. Hence, the quest for disarmament inevitably raises the question of where an alternative to national security will come from. The most common answer is that it would be provided by a world force. But the problems for the creation of a world force invariably raise the difficult question of who will guard the guards, i.e., who will control the control," in Donald G. Schiller, Security (New York: Simon & Schuster, 1962).

2 General and Complete Disarmament

GCD is a declared goal of both Soviet and United States foreign policy. As generally envisioned, GCD involves the elimination of all nuclear and conventional armaments, both among major and minor powers. Only armaments needed for police forces (or internal security) are to be allowed. By 1964, both the Soviet Union and the United States agreed that verification would have to be allowed if disarmament were to be carried out, but little agreement was in sight on the nature of verification measures and whether they ought to precede or follow disarmament. The United States position is that verification should precede disarmament, as its disarmament proposals call for both elimination of arms eliminated and of those retained at various stages of the process. The Soviet Union favors reduction first, verification later.

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global force? A police force needs laws to enforce. Laws need to be
instituted, interpreted, and altered, and violators must be judged and
heard by a court of appeal. The force needs a commander loyal to the
law and one who will activate the force against violators of any
country.28

The prevailing Western answer to the question of who would con-
trol a world force, a view held by the United World Federalists as well as
embodied in the official United States disarmament proposal, is that a revised United Nations or a similar world authority would control it. Such a global authority would legislate and enforce laws, establish courts and a machinery for the execution of the judgments, and be, in effect, a world government. To it the basic sociological principle of all governmental institutions would apply: work or government will function effectively only after the majority of the world’s people, at least of those who are politically active consider it legitimate, that is, in line with their basic values. A government can force some of the people some of the time, but not most of the people most of the time. Acceptance by a politically conscious citizenry is a basic requirement of stable government.

This acceptance, in turn, is based on consensus—the sharing of ideas on the nature and functions of the government. If a substantial part of the people insists that it desires a Western form of government but another part insists equally as strongly that it wants a Communist form, then there can be no government at all. If part of the citizens were to direct the world government to protect private property and political freedoms, but otherwise to stay out of their lives as much as possible, and the other part were to direct this government to nationalize property and to actively guide the citizens’ lives, there could be no shared government to do either. Differences of conception of what a government ought to do run deep. They are supported by basic values and reinforced and augmented by self-interest. For instance, those who favor government regulation of the economy and social welfare tend to have less income than those who favor a free enterprise system. Such differences of interest are as much a barrier to political consensus as lack of shared values. So far, basic differences of values and of interests have prevented the evolution of a world community and, hence, of a world government, a world force, and—all with these—the realization of disarmament.

The fact that the West has, as a rule, marshaled a majority of important votes in the General Assembly of the United Nations does not provide a solution. Within a nation, the majority has—within limits—civil and human rights—the right and the force needed to compel a minority to follow its decisions. But does a “majority” of countries have either the moral right or the force to compel a “minority” of countries to comply with its decisions? The international “minority,” Communist countries, have never agreed to join with the Western “majority” in forming a world state, and all attempts to act as if world government already exists have failed. All plans to eliminate international violence by creating a world government here and now, e.g., through revision of the United Nations Charter, will continue to fail as long as a consensus on the purpose and nature of such a government has not been reached. The United States is aware of this and wants to view its official disarmament proposal, which requires a world authority, more as a sign of good will or counterpropaganda than as a step it expects to follow. Both Russian and American plans for total disarmament are, as J. W. Fulbright, Chairman of the Senate Foreign Relations Committee, effectively put it, “an exercise in cold war fantasy, a manifestation of the deception and pretense of the new diplomacy.... There is nothing but mischief in negotiations which statesmen seriously expect to succeed. They become a forum for the generation of false hopes and profound disappointment.” 23

The Soviet Union has proposed total disarmament since 1932, and with increasing intensity since the advent of the nuclear age. The Soviet interest in disarmament, in the narrow sense of the term, might well be keen, because the Soviet Union believes it could reap several strategic gains if disarmament were carried out. In the 1950’s and early 1960’s the proportion of the Russian economy tied up by military efforts was approximately twice as high as that of the United States (about 16 percent as compared to 8 percent), although the actual sum was about the same (according to one estimate, the United States’ defense budget in 1959 was 38 billion dollars and that of the Soviet Union 37 billion). 24 Because the Soviet economy was only about half the size of the American one, the cold war required greater sacrifices in Moscow than in Washington. Also, as Russia has a full employment economy and has accumulated a great consumer demand after generations of scarcity, release of resources following disarma-

Footnotes:
13 Clinton Lectures, given at Tufts University, April 29, 1963.
14 Kilin, On Thermonuclear War, p. 502. It is difficult to get reliable figures on the Soviet GNP. Figures for neither the United States nor the Soviet defense expenditures are reliable.
ment would benefit the Soviet Union; in the United States, on the other hand, total disarmament might lead to a depression. More important, Russia believes, rightly or wrongly, that if the Western military forces were removed from the underdeveloped countries, indigenous leftist or Communist revolutions would soon take place in many African, Asian, and Latin-American states, without outside aid or Communist help.

Why then does Russia object to verified disarmament under a world government such as the United States proposes? Could the Soviet Union not expect similar gains under these conditions? Russia seems to fear that a world government might be dominated by Western ideas and votes as was the General Assembly of the United Nations in the 1950s. Such a world government might send its forces to preserve national governments against indigenous Communist uprisings. Thus, in Russia's eyes, a world government would either be disabled, as agreement could not be reached since consensus on basic values is lacking, or would serve as a Western front organization. Hence, as a rule, the Soviet Union has favored disarmament without the creation of a world force or government. (A more "sinister" interpretation suggests that the Soviets favor disarmament only if it is effectively verified, to allow it to benefit from its ability to secret support local Communist movements in third countries.)

A suggestion to put to test Communist intentions by providing a "fair," neutral world authority, a kind of international civil service, staffed by nations trusted by both sides or by chosen individuals, neglects a major sociological insight we owe to Max Weber. An ideal civil service is an instrument that, under certain sociological conditions (missing on the world level), acts neutrally, serving all governing authorities without discrimination. But every bureaucracy, Weber pointed out, requires a nonbureaucratic political head. Someone has to set the goals and establish the rules. One might add, in a more psychological vein, someone has to serve as a focus for identification that only a nonbureaucratic leader or group can provide. Identification is needed to build up and maintain the personal normative commitment upon which any government ultimately rests. The Presidency, Congressional leaders, and the Supreme Court (next to the flag and the Constitution) are the foci of identification for the average American citizen. It is through identification with them that the world government is accepted. Such unity of suffrage and values is effectively verified by the offices of the political leader, as was the case with the almost contradictory Consensus on the Holocaust. We have to be-or at least appear to be-a world community, not a series of negative coalitions. To put it most simply, only if the world is unified can it prevent or control disaster peacefully.

Arms Reduction

The arms-reduction talk of the United States and its allies may be a secret, gradual gradual na

32 This is developed in Amitai Etzioni, A Comparative Analysis of Complex Organizations (New York: Free Press, 1961), pp. 201 ff.

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government becomes concertized and symbolized, meaningful

cepted. Such identification can be built up only with bodies that

values and make decisions, not with the civil servants that

the offices of the bureaucracy. Thus, for both sociological and

logical reasons, a world force and administration will need a

ral head, and whoever provides or controls it will, in effect,

the world. The question of control cannot be circumvented.

foundation of a world government and the disarmament plans

on it, it follows, will have to await the evolution of a world

anity of sufficiently shared values and sentiments, strong enough

port the institution of a world state. No constitutional conven-

could provide such a consensus. A world charter might express

to a degree, extend whatever consensus exists, but it could not

ly its almost total absence. It is often suggested that the fear of

ar disaster provides such a consensus, but the record shows that

regularly prefer death to violation of the basic values that

meaning to their lives, and a world law compatible with mutu-

contradictory sets of values cannot, the record shows, be formu-

Consensus will have to be wider than merely the shared fear

d holocaust. World authority needs the support of positive values

must be—or at least must be perceived to be—active in the adv-

ement of worldwide welfare, justice, and human rights. It cannot

negative causes alone, even the all-important one of prevention

war. To put it differently, worldwide law and order will be main-

only if the world authority is a just one. This makes the world

authority very difficult to attain, an extremely demanding institutional

structure.

3 Arms Reduction: A Transition Strategy

The arms-reduction approach calls for a gradual transition from a

ld of armaments and balance-of-terror dangers to a world without

ar and regulation of force by a world authority. It starts as arms

rol but ends as general and complete disarmament. The main dif-

ence between arms reduction and arms control is that the first seeks

imate national military forces while the latter does not. The

ifference between arms reduction and most proposals for GCD

n the gradual nature of the former; it furnishes the time for socio-

itical processes to mature to the level needed to provide for a

able community foundation for a world authority.

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3 Talcott Parsons, "Communism and the West," in Eva and Amitai Etzioni,

Arms reduction is an arms race in reverse. Arms are to be reduced step by step, each step triggering the next.24 Initially, reductions might begin by one side, with the other then reciprocating (as in the arms buildup), but significant cuts in advance rounds must be simultaneous to gradually eliminate the deterrence system and to build an alternative system of security without upsetting the strategic balance. Thus, deterrence is maintained, even used, to move toward a world where it would be unnecessary.

Reductions must be effectively verified, and through techniques that are more acceptable to the closed Communist societies than inspections (which would involve the presence of a large number of foreigners in their countries) but that would also meet Western demands for effective verification. One such technique might be the destruction of weapons in neutral spots. The turning over of fissionable material to the International Atomic Energy Agency for peaceful uses is another. Satellite verification of the closing of bases in third countries is still another.25 American experts have pointed out that one could verify reduction of 1962-level armaments by two-thirds or more without inspection, and without undertaking any undue risks. Reduction at more advanced stages of disarmament, however, would require inspection. Even then inspection might be introduced gradually in one zone after another, to diminish the adjustment difficulties. (As insurance, both sides might maintain a force of nuclear-armed submarines, which are believed to be an invulnerable retaliation force, until the very end of the process.)

The details of such plans need not be discussed here, but seven general characteristics and problems should be commented upon. They apply to most other social control systems, not just to supervision of arms reduction.

**Risks**

To delay the initiation of arms reduction (or any other system) until a completely safe verification system is found is to delay forever for such a system cannot be designed. The question of the risks of arms reduction came up in many congressional hearings when measures as the 1963 test ban treaty suggested that the residual risks of inspection, or disarmament, or disarming, or disarming members of Congress be tested in training. Like lawsuits in which they can be used against the party, the residual risks cannot be accepted without any risk. In this case, compared to the risks of present balance-of-power systems, it is surely not without risk to retain in effect if the risks of inspection and of the dangers of survival for democracy are not high enough to justify further disarmament.

**Side Effects**

Verification—like other social control systems—has purposes. Some, like inspection, can ultimately provide additional benefits, increasing it and expanding social change inside nations. But the primary goal, to provide additional benefits, is of social change outside nations. Social change effect, however, the society must have, is of special concern. The idea of inspection as a stimulus for freedom among the leaders of Western or even the leaders of Communist countries cannot be demonstrated. It might be that the inspection would, as those involving customs inspection in the deep South, have the possible effect within international social factors has probably been demonstrated.
such as the 1963 test-ban treaty were introduced. In part, to en-
the residual risks of any arms limitation system (whether con-
reduction, or disarmament) serves the political purpose of those
ject to these programs on extrinsic grounds. In part, this en-
residual risks reflects the strong legal training and approach
en members of Congress and their almost complete lack of
training. Like lawyers, they look for loopholes and view a
which they can find some as unsatisfactory. From a scien-
point of view, the risks could be treated like laws of modern
the probability of a mistake is to be assumed, and measures
have a low probability of failure are to be preferred, as none
exist without any risks. Moreover, the relative risks of one mea-
pared to the risks of others have to be taken into account.
ent balance-of-terror system that arms reduction seeks to re-
is surely not without risk. Arms reduction seems a superi-
itive if the risks of failure of verification are smaller than the
our mere survival from the continuation of the arms race, and
the risks to freedom are less than those of a more rapid, less veri-
dismament.

Side-Effects

Verification—like other social control mechanisms—can be used for
d variety of purposes. Some of these purposes, especially their ac-
dication, can ultimately destroy the effectiveness of verification
beat its primary goal. One indirect purpose of verification could
provide additional tasks for an international authority, thus
thening it and expanding the administrative foundations of the
ational political community. Verification can also be used to
social change inside some of the participating nations.

The social change effect, which verification through inspection is
ated to have, is of special interest to the social scientists. Those
or inspection as a lever of change believe that the presence
ousands of Western observers in free contact with the popula-
 Communist countries will have a liberalizing effect on those
ties. However, the sociological validity of this belief has yet to
emonstrated. It might be clarifying to study existing inspection
n, such as those involved in checking the quality of mink, the
ations of customs inspectors, or even the effects of “northern” FIs
in the deep South, to determine whether these systems have
able effect within intercultural contexts. The general ten-
value communication and interaction to the neglect of oth-
ological factors has probably exaggerated both Western hopes for
and Eastern fears of the influence of Western visitors on citizens of the Eastern countries.

In any event, the designer of any control mechanism must take into account that the more goals he tries to serve and the less the goals are shared by those subject to control, the greater the resistance will be to the mechanism itself. Communist societies seem slowly to be recognizing the need to verify arms reductions, but it can hardly be expected that they will favor the use of inspection for attempting de-Communization. Since arms reduction is urgent, de-Communization will therefore probably have to draw on means other than inspection.

Response

Verification has little value if the sides have no response (or sanctions) to turn to should a violation be discovered. Here there is a significant difference between intranational and international control systems. Intranational systems can rely largely on punishment of violators as a crime has been committed, since intranational violations are ordinarily less threatening to the survival of a society than most international ones, and since courts, police forces, and juries are readily available. International systems are at once more seriously threatened by violations and have fewer means of response, especially early in the development of their control systems. They must rely more on deterring a violation than on punishing the violator afterwards. The main deterrence against serious violations of arms-reduction systems is the anticipation that the other side, too, will rearm. Such a response will not punish the violator (other than in the sense that the prospects for further arms reduction would be dim, indeed, after such a violation). But after such a round of violation and response, the violator and his "victim" would be in a military position similar to that in which they were before the violation. All parties to a workable arms-reduction agreement would maintain an effective deterrent until the very end of the process, thus denying even a successful violator any significant strategic advantage. It is a general characteristic of international control systems that they are less concerned with justice (more concerned with stability than intranational systems).

Pace

The pace of arms reduction cannot be fully planned ahead of time. If each side were to carry out its initial commitment in good faith, additional reductions might be introduced at ever growing speed as tariff reductions by the members of the European Economic Community were advanced. But over details is apt to be small, and might well preserve the effector (explained) moderates the development. The need to maintain a whole, with the price of the arms are the main arms-reduction problems. The advocates are not object to the whole, are carried out. The fear of governments that arms-race and arms-race and a moment, the weapons and weapons of other arms-race must not only be reordered for the future, since it is a psychological want Toward Eff a threat to the future of us, as we disarm as we disarm is reduced. Is removed in the conduct our it is in the community of dangerous de
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...such as we dismantle ours; our fear that the bombs will be used...

...is removed in the foreseeable future...

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...dangerous devices without a function—relics of an earlier era...
era, capable of wrecking the peace we have gradually and painstakingly constructed over long years.

Our view of the future, by affecting our present anxieties, thoughts and actions, affects the future itself, since it is determined in part by what we believe it is going to be. This phenomenon has been referred to by Robert K. Merton as the self-fulfilling prophecy. This is a prophecy that, although false at the time it is pronounced, induces behavior to such an extent that the prophecy is realized. In this case, the prophecy fulfills itself by virtue of the aftereffects of its announcement. If we believe that we are proceeding toward an inevitable showdown, we will multiply our arms, strengthen our defenses, keep our finger on the trigger—actions that tend to elicit a similar response on the other side, which in turn further intensifies our preparations and, moreover, seems to justify our earlier fear. One major move in such a situation and we might produce the future we anticipated. If, on the other hand, we feel that we are working toward a world of peace, we might be able to see ways of limiting our disputes with other powers to non-lethal means.

The feeling of progress toward a set goal, the feeling of advancing step-by-step according to a detailed plan—a feeling that the momentum of arms reduction would generate—is especially supportive to the process. If nations should ever give up one kind of armament for another, according to schedule, turning tanks into tractors, soldiers into workers, military appropriations into expenditures for health, education, and research, our belief in the eventual realization of this now seems to many persons a highly Utopian state would grow.

Moreover, as military researchers are transferred to peaceful weapons factories begin to produce consumer goods, and as military appropriations are used to build schools, a large variety of new interests vested in the pursuit of peace would be created, and the very interests in the arms race would be reduced.

Ultimately, the pace of arms reduction will probably depend on the development of a world community and authority that would generate a psychological atmosphere successful reductions would generate.

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For other applications of the concept of the self-fulfilling prophecy to problems of disarmament and social control of war, see: Herman Kahn, Thinking about the Unthinkable (New York: Horizon Press, 1962), pp. 42, 52. 53.

we gradually and painfully present anxieties, thoughts, it is determined in part by phenomenon has been referred to as prophecy. This is pronounced, influence is realized. In short, the aftereffects of its occurrence tends to elicit a similar rather intensifies our preparatory fear. One major false prophecy to wc are working toward as a way of limiting our disarms.

The feeling of advancing—"a feeling that the implement—"is especially supportive of one kind of arms facts into tractors, soldiers into duties for health, economic and political prerequisites of permanent disarmament?"

Prerequisites of a World Community

1. Encapsulation, Not Conflict Resolution

The world community has to grow to provide a "capsule" to contain international conflicts and to prevent them from turning into war. Encapsulation refers to the process by which conflicts are modified in a way that they become limited by rules (the "capsule"). The exclusion of some earlier modes of conflict, while they legitimize other modes. Conflicts that are "encapsulated" are not solved in the sense that the parties become necessarily pacified. But the use of arms, at least some usages of some arms, are effectively ruled out. Many writers deny that the normative views of East and West could be reconciled, suggesting that therefore the basis for disarmament has disappeared. They see only two alternatives: powers are basically either war or friendly. Encapsulation, however, points to a third kind of relationship. Here, some differences of belief or interests, even a mutual aggressive orientation, might well continue. But states agree to limit some means and some modes of conflict, i.e., armed ones, set up the machinery necessary to enforce such an agreement. In a sense encapsulation is less demanding than pacification, since it

does not require that the conflict be resolved or extinguished, but that the range of its expression be curbed. Hostile parties are more readily "encapsulated" than pacified.

At the same time, encapsulation tends to provide a more lasting solution than does pacification. When pacified, the parties remain dependent units that, after a period of time, might again find their differences of viewpoint or interest provoked, leading to new conflict or renewal of the old ones. Once encapsulated, the parties lose some of their absolute license by being tied into a community. The community provides the sociopolitical foundations that the formation of consensus requires; this consensus in turn is the basis of the conflict-limiting rule of the "capsule."

If a transition to a world community is to occur, it must be propelling. Once a superior authority or once a world government, powerful United Nations police force is viewed as a prerequisite, authority is assumed that can impose rules on the contending parties and thus keep their conflicts limited to those channels allowed by a community. But such universal authority is not available. The search for pathways to a world community must therefore look to those conflicts in which, through the very process of conflict, the participants initiate a self-imposed limitation on the means and modes of their conflict.

2. Propelling Forces: The Limits of Communication

How may a conflict curb itself? One theoretical answer was advanced by Robert Ezra Park. He pointed out that conflict generates interaction between its parties, e.g., races; the parties come to know each other and to communicate with each other, which in turn leads to the evolution of shared perspectives and bonds, until the conflict turns into competition. (Competition is used by Park and many other sociologists to refer to a conflict that is limited by a set of rules.)

George C. Homans supports this line of analysis by suggesting that communication breeds affinity. A study by Daniel Lerner has further support to this proposition. Lerner reports that French businessmen who travel, read foreign magazines, and have contact with foreign visitors are more likely to favor the formation of a European community than are those who are less exposed to foreigners. Among the businessmen with no exposure, sentiment in favor of such a community is about two to one, while those who have had much contact with foreigners favor the community by a ratio of six to one.

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between these two groups might have been related to factors
than exposure, but Lerner shows that such variables as age,
place, socioeconomic status, size of firm, and location of firm do
explain the difference. Thus, the proposition that exposure to
others can be credited with the generation of favorable attitudes
strengthened.

The theorem that increased communication between parties is the
anism through which conflicts are encapsulated, and one that
out of the conflict itself, seems to hold more for parties that
a similar set of values and sentiments to begin with. Communi-
can make the parties aware of a latent consensus and draw on
build up agreed-upon procedures for the further limitation of
and for the legitimization of accommodation. Under these
stances, communication might also serve to work out limited
ences of interest or viewpoint, building on shared foundations.
but when the basic values, sentiments, and interests of the parties
ot compatible, increased communication may only stir incom-
ility between the parties into conflict, dispel hopes of settlement
accommodation, make the parties more conscious of the deep cleav-
that separate them, and increase hostilities. The larger the dif-
ences between the parties to a conflict, the smaller the degree of
apsulation that can be attained through increased communication.
to put it more sharply, the greater the need for communication,
less good it does.

The Effect of Various Power Constellations

For encapsulation of international conflicts that are between hostile
ites who lack shared values, the distribution of power among the
ites seems to be more important than communication. Encapsula-
seems to advance when it allows the more powerful participants
protect their positions against the pressure for reallocation of power
ning ones.

The number of actors participating in a system has often been
related to the stability of a system. The balance-of-power system seems
require at least four or five participants. Systems with three par-
ents tend to lead to coalitions, in which two gang up against the
Bipolar systems, i.e., with two participants, have been shown
particular difficulty to pacify. These highly abstract propositions

1. Daniel Lerner, "French Business Leaders Look at EDC: A Preliminary Re-
2. See Kaplan, System and Process in International Politics, pp. 27, 34 ff.

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assume that the participants have the same or similar power. An outstanding characteristic of international reality, however, is that the participants differ drastically in their power, ranging from nuclear superpowers to under-armed, poverty-stricken tribal states. The issue is further complicated by the fact that the relative power of any two nations is significantly different according to the sector of international relations under discussion and the particular matter involved. Thus, militarily, the Soviet Union is one of the two superpowers in the world; economically, it might be ranked only as being clearly second to the United States; and in the politics of the General Assembly of the United Nations, it has just three votes and controls only a few others.

A realistic model must therefore take into account the relative power of the participants relevant to the issue at hand, rather than focus only on the number of participants. Encapsulation or community-building seems to be enhanced by the transition from a relatively duopolistic system to a more pluralistic one, a process that can be briefly described as depolarization.

International relations approximated a state of duopoly between 1946 and 1956. It was in this period, the height of the Cold War, that two fairly monolithic camps, one directed from Moscow, and another from Washington, both increasingly equipped with nuclear armament, faced each other across the globe. While a number of countries were not aligned with either camp, their military and political weight was small. Such a duopolistic situation was highly unfavorable to encapsulation. The sides focused their attention on keeping their respective blocs integrated and on enjoining nonaligned countries from swelling the ranks of the opposite camp. Each eyed the other, hoping for an opportunity to expand its respective sphere of influence, while waiting for the other's collapse.

Depolarization generated a situation more conducive to encapsulation. Between 1956 and 1964, in each of the two major camps, a secondary power rebelled. There were immense cultural, economic, military, and historical differences between De Gaulle's France and Mao's China and in their relations to their respective nuclear superpowers. Nevertheless, both France and China had been weak powers, forced to follow a foreign policy formulated in foreign capitals. Both, however, under reawakening nationalism and augmenting national power, increasingly followed an independent foreign policy. Whatever the foreign affairs may take, it is unlikely that the duopoly of 1946-56 will be restored.

In any event, between 1956 and 1964 the net effect of the rebellions of secondary powers in both camps, seeking to maintain their spheres of influence, was a change in the balance of power. Seeking to maintain their spheres of influence, they set out to form alliances, the partial cessation of arms trade, and the Soviet Union tried to maintain its nuclear force, Americanization of atomic plants, and research for nonmilitary purposes. The same direction. The 1963-1 international relations approximated a state of duopoly between 1946 and 1956. It was in this period, the height of the Cold War, that two fairly monolithic camps, one directed from Moscow, and another from Washington, both increasingly equipped with nuclear armament, faced each other across the globe. While a number of countries were not aligned with either camp, their military and political weight was small. Such a duopolistic situation was highly unfavorable to encapsulation. The sides focused their attention on keeping their respective blocs integrated and on enjoining nonaligned countries from swelling the ranks of the opposite camp. Each eyed the other, hoping for an opportunity to expand its respective sphere of influence, while waiting for the other's collapse.

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power. An outcome, is that the United States. The issue of superpower of any superpower in both camps was to draw the two superpowers closer. Seeking to maintain their superior status and fearing consequences of conflicts generated by their rebellious client-states, superpowers set out to formulate some rules binding on all parties.

A treaty of partial cessation of nuclear tests, which the United States and the Soviet Union tried to make binding on France and China as well, was a case in point. American-Russian efforts to stem the proliferation of nuclear weapons was another. Russia, in this period, and whatever technical aid it gave to Chinese nuclear research development, foreign superpowers set out to formulate some rules binding on all parties. American-Soviet negotiations to agree on a cessation of atomic plants, mainly aimed at insuring the use of research for nonmilitary purposes in third countries, pointed in the same direction. The 1963-1964 détente, which isolated Communist China and France, and the Geneva disarmament negotiations in the same years, in which these two countries did not participate, were further reflections of this trend.

These measures have in common the important characteristic that they serve the more “narrow” needs of the superpowers while they advance the “general welfare” of the world and can, hence, be presented in terms of universal values and implemented through world solutions (i.e., extend the “capsule”). For instance, the prime superpower motivation for the 1963 test treaty might well have been the purpose of the United States and Russia to remain the only nuclear powers, but it also indirectly reduced the danger of nuclear war. It was presented as if the prime motive were advancement of peace and disarmament and the reduction of fallout to protect human life. It is a familiar strategy of political interest groups to work solutions among themselves and then clothe them in the values of community at large. (However, one must not lose sight of the fact that the protection of future generations from the danger of nuclear test fallout was actually accomplished.) Indirectly, these measures affect the selection of the course of action an interest group can choose among alternative ones available and provide a common point on which similar or compatible interests of divergent powers can be harmonized and the shared community broadened.

A "Floating Vote"

Another process that has enhanced community-building is the emergence of a "floating vote," i.e., votes not permanently committed...
to any one side. The great value of the existence of a sizable floating vote for the maintenance of a political system has often been pointed out. It tends to moderate conflict among parties by making conflict less "attractive" and reducing the temper of conflict in general. As long as a significant part of the voters is uncommitted, and their support tends to be preferred to a violent (and risky) showdown, since moderation tends to appeal to the uncommitted who are, as a rule, "between" the parties of a conflict in terms of interests. It is less often recognized that the emergence of a significant floating vote supports the development of a community by encouraging encapulism. In the same period in which depolarization and the solidarity of the Eastern and Western blocsdeclined, the bipolar system was further weakened by the large increase in number of nonaligned countries. And the status of nonalignment as both the East and West increasingly recognized it as legitimate.

The growth in number and status of the nonaligned, a kind of international floating vote, made several contributions to encapsulation and community-building. Around it began to evolve the growing norm, recognition of nonalignment, which limited the co-operation between East and West in that it defined, increasingly, one sector of the international system as outside the conflict so armed means were concerned. While the norm was occasionally violated (e.g., in Vietnam and Laos), it was widely observed and the years. violations became less frequent. At the same time, reliance on nonviolent means, such as trade, aid, and propaganda, committed an increasing proportion of the investments the United States and the Soviet Union put into their efforts in third countries.44

The norm supporting nonalignment is of special interest in a study of community-building, as it does not bar conflicts but blocks out intervention by force in third countries. Peaceful appeals, in this instance, those aimed at supporting or blocking internal change in a country, such as progress toward freedom and social justice, are "allowed." This quality of the norm had a double effect: first, it forbade (quite successfully) joining of countries to a bloc, a joining that would have weakened the movement toward regulation of the conflict, and if continued would have reduced and potentially exhausted the floating vote beyond the norm left room for the expression of the ambitions of the values the sides seek to promote. In the period of moderated moderation, which is not "between" the sides to a country, countries stand to lose from peaceful competition between the United States and Russia have re-increased their budgets with the escalation of the war in Vietnam in 1965.

44 Etzioni, Winning Without War, Chapter 2. These statements refer to the 1956-64 period. Both the United States and Russia have re-increased their budgets with the escalation of the war in Vietnam in 1965.
A sizable floating vote has been pointed out by making visible the fact in gen-
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sides without violating the rules curbing the conflict, a major virtue
of encapsulation as distinguished from the conflict-resolution, or
purification. (It is not that conflict-resolution is not desirable, but it
seems more difficult to attain and especially to stabilize.)

Above all, the increase in the floating vote, like the decrease in
to the floating vote) and bargaining (to split
way a segment of the opposing party or bloc are or seem to be
more, the greater the pressure toward an armed showdown. As has
been suggested, the more constitutional or otherwise legitimate
uses of effective action are closed, the higher the pressures toward
enslavement by force.

These general rules apply with special strength on the international
level. Here the use of armed means is not considered as illegitimate
insid a national society ("war is the continuation of diplomacy
other means"). The normative bonds among the actors are weaker
hostility among the parties more encompassing. There are fewer
stitutional avenues for expression and no central force to curb
solutions" by the participants. Hence, a de-
expected increase in the "floating vote"
likely to reduce the pressure toward armed ad-
and to increase the premium on other political options, includ-

The floating vote provides a reward that shifts to the side that is
the values according to which the floating vote shifts are
the values the sides seek to promote, or at least to give the
appearance of promoting. In the period under study, the floating vote
awarded moderation, which is quite common, as it tends to be
ly "between" the sides to a conflict. On balance, the non-
countries stand to lose from an American-Soviet war but to
om peaceful competition between them for their support.
Wisdom that, between 1956 and 1964, the nonaligned
n tended to use their influence to encourage encapsulation.
also, nonaligned countries favored reduction of armaments.
and of cold war tensions, increase in the capacities, power, and status of the United Nations, cessation of hostilities in Korea and in Vietnam, and exclusion of armed interventions by superpowers in other countries.

5. Consensus Formation and Regional Bodies

Sociopolitical processes that reduce the differences of interest viewpoint of parties and that build ties among them are, in essence, community-building processes. Communities, especially if they have a government, require consensus, which in turn needs to be developed. The evolution of intermediary bodies is of special value for consensus formation. To form an effective consensus-formation structure is essential to divide the process into several levels of representation. Rather than attempting to reach consensus among all parties in a general assembly, the parties are best divided into subgroups that are more homogeneous than the community as a whole. These subgroups work out a compromise and are represented as if they were a unit on the next level of the structure in which consensus is formed. Effectiveness might require that such divisions be repeated severeral times. (In the American political system, the primaries and the national conventions and, to a degree, postelection negotiations on participation in the cabinet provide, as a rule, such a multilayered consensus-formation structure. Thus, for instance, the struggle over who will be the presidential and who the vice-presidential candidate is also a struggle over what policy the party is to face the election with. Once chosen, most segments of the party—e.g., liberal and conservative—tend, as a rule, to support the candidates and the party's policies. In the negotiations on participation in the cabinet, the party that wins an election is often given some indirect representation to enhance national support for what is a one-party administration.)

Regional organizations, communities, and blocs might serve as intermediary bodies for the international community. It would be a mistake to view each and every regional organization as a step on the road toward a world community. Regional organizations that have only sociologically marginal roles, such as the European search organization for peaceful usages of nuclear energy (CEP), tend to have much less impact than those that pool the sovereignty of several nations, as the European Economic Community (EEC) began to do.

Regional bodies intended to countervail other regional bodies, especially military alliances such as NATO and the Warsaw Treaty Organization, often retard rather than advance encapsulation of conflict; they tend to reflect, on a large scale, the features of nationalism. Economic associations also may serve as “antiblocs,” rather than as a basis for a community. For example, the British-led European Free Trade Areas was formed to “counter” the French-led EEC. Regional bodies aimed at internal improvement, such as “welfare” communities (a foundation of the EEC) or development associations (e.g., in Central America) that stress rapid economic growth or mutual assistance, are more likely to serve as intermediary layers in the process of building a world community.

Above all, only regional bodies that allow the process of upward transfer of loyalties to take place are helpful to the building of a world community. Studies of social structures as different as the American federal government and the Southern Baptist Association have shown that once a center of authority is established, it tends, under circumstances and because of factors that need not be discussed here, to grow in power, rights, and command of loyalties earlier commanded by the units, now increasingly controlled by the central authority of the rising system (as when states’ rights decline and those of the federal government grow). But a social unit can, by the use of ideological and political mechanisms, advance or retard this process. Only those units that encourage or, at least, allow the process to occur provide a sociopolitical foundation on which a world community might be erected.

The last phase of this upward-transfer process is particularly difficult to chart at this stage of our knowledge. Some crude contours of regional communities have begun to appear, and there are limited clues to their inner workings. But, failures of such communities still outnumber successes by a large margin. The nature of such upward transfer is also obscure at this stage, since the development of intermediary bodies often uses the flame of regional and bloc chauvinism to melt away some national sovereignty in favor of the regional organizations or states. Without the cold war, present efforts to form Atlantic and an east European community are difficult to imagine.

A major driving force behind attempts to form common markets in South America, in various parts of Africa, in the Far East, and elsewhere is the desire to counter actual or anticipated consequences of power, and status in Vietnam, as in other countries'.

References of interest and them are, in effect, especially if they have to be developed. Value for consensus structure it is of representation structure it is of representation. All parties in one subgroup that are. These subgroups if they were a single consensus is formed be repeated several primaries and the nation negotiations over such a multilayer con the struggle over who presidential candidate is to face the electorate —e.g., liberal and candidates and the policy net, the party that lones or to enhance sistration.) axial might serve as immutiny. It would, how organization as Regional organizations as the European reenergy (CERN) pool the sovereigntyonic Community (EEC)


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the European Economic Community.\textsuperscript{47} Progress, in short, might not be unilinear but dialectic, with units moving apart to provide the foundation for moving closer.

6. Rules and Enforcement

Another major process of community-building is the evolution of rules and agencies for their enforcement. Here there is much room for the application and development of the sociology of law. There are some obvious applications, such as the insight that one needs to wait until all the units involved are ready for progress before it can be initiated. However, other experiences warn against excessive reliance on legislation when there is only a narrow sociopolitical base. A premature and ineffectual world law might be worse than nothing at all. Laws that are not backed by effective enforcement and adequate consensus, as illustrated by the abortive attempt to instate a prohibition in the United States, breed contempt for the laws and their makers and nurture a whole breed of previously unknown criminal interests. A premature world law on disarmament might generate clandestine production of weapons and large profits tor smugglers, and thereby lead to repeal of the law, rather than to disarmament.

The concern in the study of encapsulation, as distinct from studies of intrasocietal law and controls, is not mainly with policing the existing mechanism from erosion, as much as accelerating extension and growth. Hence, the importance of formalization: implicit and “understood” rules into explicit and enforced international laws. This is neither obvious nor widely agreed upon. There are many who stress the value of implicit, unnegotiated understandings. Some “understandings” are valued by some because they can be reached without interference from dissenting allies and domestic opposition.

For instance, in 1963 the United States released a leading Soviet spy who was in an American prison; the Soviet Union, only 22 hours later, released a similarly prominent American spy who was in a Soviet prison. The State Department admitted to no Soviet-American “deal.” Probably a few weeks earlier a Western diplomat had suggested to the United States that the United States intended to release the spy it held, in nonmilitary zones (e.g., nonnuclear “clubs,” religious institutions) and the Soviet Union inquired about the health and well-being of the American. The State Department promised to make some inquiries. A few days later, he was released.


\textsuperscript{49} A similar incident is reported in Paul B. Johnson, \textit{The Soviet Military Machine} (New York: Atheneum, 1962), pp. 120 ff.
Thus the sides communicated and reached an agreement without making a "deal" that public opinion might have found distasteful. In a similar way, shortly after the Soviet Union removed its missiles from Cuba late in 1962, the United States removed its Thor and Jupiter missiles from Turkey and Italy in 1963.

There are several disadvantages in reaching agreement in this particular way, especially for community-building efforts. The danger of misunderstanding is larger, especially when matters are complex. When misunderstandings occur, they generate bitter feelings of betrayal and mistrust, which, in turn, stand in the way of future exchanges. And, to the degree that the public is unaware of the agreements, it remains uneducated and will not support more far-reaching agreements if and when those become possible and desirable. To the extent the public becomes aware that a deal was actually made, it becomes more alienated from the government and distrustful of it. And the world institutions do not gain in experience and responsibility unless implicit understandings are codified and enforced by them. This does not suggest that the path of implicit understanding should not be traveled; only that unless an enlarging flow of such traffic is directed through world institutions, they will remain the dirt roads rather than the highways of international relations.

When rules are formalized, effective verification and response machinery are necessary. The 1954 agreements to neutralize Laos and stop arms supplies for Vietnam were supervised by an understaffed, underfinanced, ill-equipped, and—above all—a politically deadlocked commission. (Its members were India, Poland, and Canada.) In 1959, East and West accused each other of violating these agreements; the enforcement machinery provided neither a clear picture of who was the first to violate the agreements nor an appropriate response. This is a good example of how not to set up an enforcement mechanism. On the other hand, United Nations troops positioned on the Egyptian-Israeli border at the Gaza Strip in 1957 were successful in stabilizing this border, which, before that date, was highly explosive. In nonmilitary zones (e.g., Antarctica), neutral zones (e.g., Antarctic nuclear "clubs," regional security systems, and outer space areas) in which rules can be made more explicit, more encompassing, better enforced, and serve as components for a gradual evolution toward a world community.

"A similar incident is reported in detail by James B. Donovan in his Strangers in the Judge (New York: Atheneum, 1964)."
Consequences and Causes of Failures to Prevent War

We have outlined the dangers of a world armed with nuclear weapons, charged with incompatible ideologies, split between “have” and “have not” countries. We have also charted several solutions that have been offered. Some of these, even if implemented, will not assure the survival of the human race; others are so difficult to implement that whatever their virtues, they are unlikely to be tried. Finally, we have briefly examined some of the sociopolitical processes that will have to mature before a stable world authority is to become feasible. Without that authority, peace will be a precarious state resting on a delicate balance of terror or a moment of pause between disarmament and rearmament. A condition of permanent peace has been established successfully on the national level in many states through community-building; it needs now to be provided for on regional and global levels. The processes are slow and difficult, but there is reason to believe that they can be accelerated. Let us review, briefly, some of the problems raised by continued absence of a solution: how quickly shall we recover if we fail? To what degree do military institutions prevent the necessary solutions? And, what role do scientists, in general, and social scientists in particular, play in advancing a solution?

1. "Will the Survivors Envy the Dead?" (Postnuclear Recovery)

Whether the survivors of a nuclear exchange would envy the dead depends on many factors. Depending on the size of the exchange, the kind of targets selected, and the degree of prewar preparation, estimates of the chance of recovery after nuclear war range from none at all to the relatively short time period of ten years or so. Leading analyst of the possible consequences of a nuclear war has concluded that "with sufficient study we will be able to make a convincing case for recuperation, if we survive the war, and, more important, that with sufficient preparation we actually will be able to survive and recuperate if deterrence fails." 69

The speed and scope of recovery, if there is any, obviously depend on the extent of the initial damage. Theoretically, a "strike" can range from the use of one small atomic weapon (e.g., to show determination) to complete devastation of mankind. It would appear once a nuclear exchange is initiated, it will be difficult to limit it. We plan to limit the war to military targets but to spare enemy cities. I am referred to the fact that many military targets are under attack will hasten the administrative and terrorist wars would leave the peace. However, the more dispersed, the larger. Finally, although the will be to surrender... situations would rarefying. All of these reasons are likely than a small one, the damages of a large n...reestimated. In particular, we have been...staments on the subject, particularly, to be completely new. No plans for the use of nuclear blackmail. The United States is the first to use nuclear armament in a way called for the use of...tomic bombardment in the showdown with China, on the United States would seek larger appropriate...nmissiles, and, hence, on.

69 Kahn, On Thermonuclear War, p. 95.
with nuclear weapons, on “have” and “have-nots” that have been, not assure the base of military power, or, military targets are close to cities, and, hence, a city under attack will have a hard time determining which kind of attack it is being subjected to. (Attacking only military targets far from cities would leave the opponent with a major striking force.) Moreover, the more dispersed, varied, and protected the nuclear stockpile becomes, the larger an initial attack—if it occurs—is likely to be. Finally, although the national course for a country about to use nuclear weapons might be to surrender in order to spare its cities, countries in such situations would rarely react rationally. (For example, the Nazi bombing of London in World War II did not bring Britain to its knees.) All of these reasons suggest that a large nuclear war is much more likely than a small one.

The damages of a large nuclear war are often underestimated rather than overestimated. In part, this might be the case because damage assessments are often financed directly or indirectly by a military office or the Office of Civil Defense Mobilization. There seem to be no comprehensive studies by persons without normative commitments on the subject, perhaps because it is so difficult, almost inhuman, to be completely neutral about it.) Also, some seek to legitimate plans for the use of nuclear arms in the case of war. By the end of 1964, the United States had still refused to pledge itself not to be the first to use nuclear arms. Certain plans for the defense of West Berlin called for the use of nuclear weapons. Some generals favored nuclear bombardment in the case of extension of the war in Vietnam, a showdown with China, or any large-scale conventional war for which the United States was believed to be ill-prepared. Other interests seek larger appropriations for civil defense plans, from shelters to antimissiles, and, hence, need to “demonstrate” the value of such plans for the use of nuclear arms in the case of war. By the end of 1964, the United States had still refused to pledge itself not to be the first to use nuclear arms. Certain plans for the defense of West Berlin called for the use of nuclear weapons. Some generals favored nuclear bombardment in the case of extension of the war in Vietnam, a showdown with China, or any large-scale conventional war for which the United States was believed to be ill-prepared. Other interests seek larger appropriations for civil defense plans, from shelters to antimissiles, and, hence, need to “demonstrate” the value of such plans for the use of nuclear arms in the case of war.


defenses for postnuclear recovery. Still others have built their reputations on the feasibility of nuclear war, which they sustain with new projections, statistics, and war games.†

Another source of gross error are the projections made from “disaster” studies that have proliferated over the last years, often financed by interested parties. Such studies show that even a highly devastated town has been able to recover, leading to possible inference that therefore a devastated nation could. The flaw in the community example is that other parts of the same state are not damaged and national organizations move in, using their undamaged sources and undiminished federal support. As Allen H. Barton indicated in his review of studies of disaster areas, community resources are invariably limited. Leadership, manpower, and specialized knowledge are often recruited from outside the local disaster area, through agencies like the Red Cross, local branches of national corporations, and local arms of the state government, such as the National Guard.53 Obviously, after a nuclear attack on the whole country there would be no such resources to draw on since the whole fabric of the American society and, in all likelihood, that of its neighbors and allies, will be damaged.

Next to these sociological sources of underestimation of the damage of nuclear war lie other mistakes, the product of misconceived analysis. One common mistake is to assess the damage to be caused on the basis of the number of bodies to be left in the radioactive deserts of the day after the attack, as compared to those that are believed to be wandering around. Thus, sixty million dead, facile statistics show, still leave about two-thirds of America alive. Morality aside, removing a third of the population seems not too difficult. However, if we assume for a moment that this will be an attack on cities (as is usually assumed), then also destroyed will be most first- and second-class medical facilities, seats of culture, and centers of commercial and industrial activities and of national communication networks. For instance, an attack on 70 urban areas of the United States might kill “only,” as the official statistics have it, 46 percent of the population but among the dead would be 62 percent of all the physicians, 73 percent of all the architects, 79 percent of all salaried managers of


The people seemed stunned by the catastrophe and rushed about as
animals suddenly released from a cage. Some few apparently
attempted to help others from the wreckage, particularly mem-
bers of their family or friends. Others assisted those who were
unable to walk alone. However, many injured were left trapped
beneath collapsed buildings as people fled by them in the streets. Pandemonium
reigned as the uninjured and slightly injured fled the city in fearful
panic.68

Likely, for Japan, such a blow was aimed at only two cities, and not
nation at large.

This leads to the conclusion that the balance of data and socio-
logical inferences points to damage assessments larger than those
usually provided by researchers whose specializations are not in the
social sciences, but in statistics or mathematics, and who therefore

to count individuals and tons of steel and coal rather than
alive social systems.

2. The Military-Industrial Complex: Economics of the Arms Race
and Disarmament

The arms race has been explained by persons as different as C.
Wright Mills and Dwight D. Eisenhower as deriving, at least to an
important extent, neither from the nature of the international power
nor from the psychology of those exposed to it, but rather
in the nature of the society.69 The essence of this analysis is that

1. Robert A. Dentsler and Phillips Cutright, Hostage America (Boston: Beacon
1963), p. 15. The transportation equipment industry is cited.
2. Ibid., p. 65.
4. C. Wright Mills, The Causes of World War III (New York: Simon and
the arms race is promoted by business circles who reap profits directly or indirectly from weapons production. These circles include not only the arms manufacturers and those who supply them with parts and raw materials, but also America's millions of stockholders, for whenever preparations for war decline, it is said the entire American economy (and with it the economies of many industrial Western countries) suffers a recession. The Great Depression was not really overcome, it is said, until the arms buildup for World War II started. The postwar recession ended only when rearmament for the Korean War spurred the American economy. Subsequent smaller ups and downs of the economy have been related to ups and downs in tensions of the cold war. For instance, the American stock market experienced hearty rallies after the breakdown of the 1960 summit conference in Paris, the 1961 Berlin crisis, and with the 1965 escalation of the war in Vietnam. The rallies were led by "defense" stocks, but other stocks benefited as well.

Workers also benefit from the arms race. The close association between employment and international tension, unemployment and relaxation of this tension, is reflected in the following figures: in 1939, 17.2 percent of the American labor force was unemployed. The war reduced unemployment to 1.2 percent in 1944. Unemployment rose after the war in 1946 to 3.9 percent, was reduced by the Korean War to 2.5 percent, rose after this war ended to 5.0 percent by 1954 and continued to rise to 7.0 percent in 1961. In the same year, between 6,500,000 and 7,500,000 American jobs depended on defense spending. Were these jobs abolished and no others created, the United States would have the same percentage of unemployed as in 1939—about 17 percent.

No less important in explaining many international actions by the United States and its over-all strategy, it is suggested, are business investments abroad. United States foreign investments amounted to 4 billion dollars in 1959. Earnings from these investments are comparatively 60 percent higher than from investments in the United States (13.8 percent versus 8.5 percent); and much of this investment is by the powerful 100 top American corporations. It is common and followers of this line of analysis to explain specific United States foreign policy acts by reference to big business interests abroad. For example, intervention in the Middle East (e.g., in 1955 in Lebanon) is explained by the interests of various oil companies; intervention in Latin America (e.g., in Guatemala), by the interests of the United Fruit Company, whose property was nationalized by the Arbenz government, and intervention in Japan, whose proper interests are held by business circles who reap profits directly or indirectly from weapons production. These circles include not only the arms manufacturers and those who supply them with parts and raw materials, but also America's millions of stockholders, for whenever preparations for war decline, it is said the entire American economy (and with it the economies of many industrial Western countries) suffers a recession. The Great Depression was not really overcome, it is said, until the arms buildup for World War II started. The postwar recession ended only when rearmament for the Korean War spurred the American economy. Subsequent smaller ups and downs of the economy have been related to ups and downs in tensions of the cold war. For instance, the American stock market experienced hearty rallies after the breakdown of the 1960 summit conference in Paris, the 1961 Berlin crisis, and with the 1965 escalation of the war in Vietnam. The rallies were led by "defense" stocks, but other stocks benefited as well.

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the shifting line-up of friends and enemies; publicists elaborate
reasons’ for the coming war and the “necessity” for the causes of it.
They do not set forth alternative policies; they do not politically
oppose and politically debate the thrust toward war . . . . They have
generally become the Swiss Guard of the power elite . . . .

What can be done to counter these pressures toward war? Most
al analysts doubt that anything constructive can be done within
framework of capitalist society, in particular that of the United

146.
15 Harrison Brown and James Real, Community of Fear (Santa Barbara, Calif.:
or for the Study of Democratic Institutions, 1960).

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States; they believe that changing international relations must begin with a revolutionary change at home. Only when public ownership of the means of production abolishes the profit motive will the true incentive for armaments production and the arms race disappear. Only when employment is controlled by the government and not by the business cycle will the socioeconomic prerequisites of disarmament be met. To work for peace, radicals say, therefore requires working for a socialist revolution.

Liberal economists have worked out several schemes for alleviating pressures toward armament within the framework of a capitalist society. For instance, various peaceful functions are suggested for ex-armament industries: programs are recommended to keep the economy running at full speed by spending the funds saved by cuts in the military budget. Increased investment in schools, medicine, and underdeveloped countries are the favorite recommendations. In addition, as economist Kenneth E. Boulding points out, disarmament may require as much investment as the arms race, if not more, because of the cost of inspection, monitors, international armies, and international organizations. It is estimated that about 40,000 militarily trained personnel will be required to staff disarmament inspection programs alone. Programs have been suggested to retrain army officers for peaceful vocations while maintaining their salary, status, and security. For instance, military staff members might, in some circumstances, make good college teachers; and medical researchers developing nerve gas and bacteriological weapons could be used to fight cancer and mental illness. In short, disarmament, the liberal economists suggest, can be brought into line with the economic self-interests of members of the society.

An accurate assessment of the economic forces that serve to perpetuate the arms race is extremely difficult. It would require a book at least the size of this one to disentangle truth from half-truth and to analyze the various complications involved. It may be true, for instance, that officers have a vested interest in a military career. On the other hand, many officers are truly devoted to their country and might willingly expose themselves to the hardships of retraining for civil careers if they were convinced that disarmament is possible. Moreover, the American government did reduce sharply its military budget after World War II and the Korean War, though economists warned that this was due to recession or depression.

The details of various programs advocated to reduce resistance to disarmament by bringing about a reduction in the arms race are sometimes naive, but they indicate a need for a new and remodeled military. It is somewhat unlike the introduction of jet planes in the civilian airlines, already to the introduction of jets. It is also true that college and professional schools would relish teaching college courses in disarmament. Yet, it is true that logical and rational retraining where necessary is possible. It is true that enforcing disarmament may require considerable personnel and considerable military assembly lines can be used (for satellites and monitors), then the concern over employment would be less severe. It seems necessary to investigate the problems involved and plan programs to a peacetime economy can be extended to labor groups and industries alike. Extensive groups can be alleviated, and welfare provisions of the economy can be reduced, though not eliminated. Limitations of space do not allow discussion of the problems faced by military institutions in other societies. Yet the Soviet society and its relations to the Western world have gained much attention since the late 1950s, when the idea of a world at peace, with disarmed superpowers, was first proposed. The issue is complex and some of the details can only be indicated briefly here.

War, though economists warned that such reductions were likely to bring about recession or depression.

The details of various programs advocated to break down the anticipated resistance to disarmament by businessmen, officers, and scientists are sometimes naive, but they indicate that the situation is not beyond remedy. It is somewhat unlikely that SAC pilots would be welcome in the civilian airlines, already overstaffed as a consequence of the introduction of jets. It is also questionable whether army colonels would relish teaching college freshmen, even if the salary were satisfactory. Yet, it is true that locating alternative employment and subsidizing retraining where necessary will ease the transition.

if it is true that enforcing disarmament will, at least initially, require considerable personnel and considerable equipment for which existing military assembly lines can be used (for example, observation towers, satellites, and monitors), then the economic crisis caused by disarmament would be less severe. It seems safe to conclude that if we investigate the problems involved and plan ahead for them, the transition to a peacetime economy can be eased, the anxiety of vested-interest groups can be alleviated, and with it, resistance to disarmament can be reduced, though not eliminated.

Limitations of space do not allow discussion here of the role occupied by military institutions in other societies. The role of the military in the Soviet society and its relative weight compared to the Communist party is of paramount interest. The military in developing nations, often viewed as a major obstacle to development, is in fact sometimes the only effective force for development. Nor can we study here the effects of outside armed intervention on internal processes of social change. The number of countries in which such intervention has taken place, either on the side of the status quo or on that of social change, or both, is so large that it is almost impossible to study social change anywhere—in Tanzania, Tibet, Brazil, Vietnam, Cuba, the Gabonese Republic—without studying the role of outside forces. This is another subject unto itself.

3. The Scientist as a Disarmer

The role of scientists in public policy in general, especially foreign policy, has gained much attention since the advent of the nuclear war. At least 50 books have been written on the subject over the past few years. The issue is complex and some of the main questions involved can only be indicated briefly here.

For a good selection of essays see Robert Gilpin and Christopher Wright, eds., Scientists and National Policy-Making (New York: Columbia University Press,
One view is that the scientist should not take a position on public issues as a scientist. If he takes a position in his role as a citizen, he should carefully warn his listeners or readers that he does so in his nonscientific capacity, in order to preclude the impression that his position has a sounder foundation than that of others. Policy questions, it is pointed out, involve matters much broader than the expertise of any one scientist. And, even in his narrow specialty, there is no professional consensus on many matters. A policy statement, it is emphasized, involves evaluation, not just information—i.e., value judgment, and the scientist’s values are not superior to those of the next man.

According to the same position, the scientist has no special responsibility. He generates new knowledge and makes it available to the public. He neither claims nor commands a control of its usages. The student of the structure of the atom is devoted neither to the use of his findings for nuclear warfare nor to desalting the oceans. The student of bacteria is neither oriented to the improvement of vaccines to bacteriological warfare. The use of his findings is not determined by him. This attitude was recently illustrated when Carl Buch, an Associated Press reporter, interviewed in Cairo a leader of a group of German scientists who are reported to be helping to build rockets with which Nasser said he could hit Israel. Professor Wolfgang said: “We are not anti-Semites or old Nazis. We are just scientists doing a job.” The view that scientific pursuit is quite separate from the political goals for which the findings are used is held by many scientists.

The opposite position is that the scientist does have a special knowledge. He is an expert in his field, and there is often consensus on the basic tenets in that field. When this consensus is ignored—when fluoridation is condemned as a poison, fallout as insignificant, and DDT as harmless, he ought to speak up and do so as a scientist. Moreover, since his vocation requires some detachment and command of logical thinking, he might be able to reason relatively objectively and better than most citizens. The fact that not all scientists reach the same conclusion is not important as long as all scientists thought have access to the public and is to broaden the debate, not to delimit it. Special responsibility is derived from specialized forces that threaten the very survival of the society. It is to (as some did) warn society. And, it is pointed out, scientists as propagandists are public policy as advisers, applied research. For some scientists to refrain from participation in leaving the field open to others. Another in physics, an advocate of arms control” at Cornell, this would not keep the other in physics, an advocate of arms control” at Cornell, this would not keep the other in physics, an advocate of arms control” at Cornell, it is pointed out, involves evaluation, not just information—i.e., value judgment, and the scientist’s values are not superior to those of the next man.

Among social scientists in the United States, on the subject, the majority favor disarmament or arms reduction and only a small minority favor continued nuclear buildup. Many prominent social scientists have urged that various points against armed intervention in Vietnam, for neutralization of Vietnam, and taken a “peace movement” position; Henry A. Kissinger (The Causes of World War II and the Future); Kenneth Boulding (Conflict and Coexistence: A Program for the Future); Robert Leo (Keep Your Powder Dry); Charles P. Kindleberg (The War or Surrender); and James Ries (The End of Peace, Committee for Non-Nuclear Scientists).

To give up their contributions to the public interest, they have made several contributions to peace and disarmament. They have shown that their views have a bearing on foreign policy, especially his introduction to Arthur I. Goldberg’s The Uses of Sociology in the World (New York: Basic Books, forthcoming).
of thought have access to the public and to the decision-makers; their job is to broaden the debate, not to deliver a decision.

Special responsibility is derived from the fact that science has revealed forces that threaten the very survival of the human race. Scientists ought to (as some did) warn society of the dangers of these forces. And, it is pointed out, scientists are involved (for good or bad) in public policy as advisers, applied researchers, members of boards, etc. For some scientists to refrain from public activity would only result in leaving the field open to others. If Hans Bethe, Nobel Prize winner in physics, an advocate of arms reduction, "minded his own business" at Cornell, this would not keep physicist Edward Teller, "the father of the H-bomb" and a "hard-liner," at home on the Berkeley, California, campus.

Among social scientists in the United States who have expressed themselves on the subject, the majority seem to favor general and complete disarmament or arms reduction; some favor arms control, and only a small minority favor continued reliance on the balance-of-power system. Many prominent social scientists appealed to the public at various points against armed intervention in Cuba, for the test-ban treaty, for neutralization of Vietnam, etc., and a number of them have taken a "peace movement" position; to mention only a few: C. Wright Mills (The Causes of World War III); Erich Fromm (May Man Prevail?); Kenneth Boulding (Conflict and Defense); Margaret Mead (Keep Your Powder Dry); Charles E. Osgood (An Alternative to War or Surrender); and David Riesman (numerous articles). They are members of national boards of organizations such as Turn Toward Peace, Committee for Sane Nuclear Policy, and United World Federalists.

Aside from their contribution to the public domain, social scientists have made several contributions to peace and disarmament in their professional capacities. They have shown that certain sociological facts have a bearing on foreign policy, especially in connection with questions of peace and disarmament. For instance, an analysis of the rapid change of public attitudes toward a test-ban treaty favored only about 52 percent of the American people in July, 1963, and 81 per-

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cent when it was ratified in September, 1963, suggests that when leadership is exercised, public support for arms limitation can be won. Social scientists applied certain sociological theorems about the internal behavior of societies to the study of international relations. For instance, they have shown that just as individuals who are more similar are more likely to form a friendship group, nations that are more similar in the level of education, income, and culture are more likely to initiate successful regional communities. Social scientists have served as consultants to make social science methods, especially surveys, available for international study. For instance, the United States continually uses survey methods to probe world public opinion. Summaries of these surveys are circulated among the top decision-makers in Washington. (The Director of the United States Information Agency attends the meetings of the National Security Council.)

While the response to these surveys has occasionally been exaggerated, as was the case when the United States lost a few "predis-" points following the orbiting of Sputnik by the Soviet Union, by and large the effect of these surveys is to make the United States decision-makers more sensitive to public opinion abroad and to have a more accurate picture of it than in earlier periods, when foreign public opinion was judged only on the basis of impressions gained by American diplomats from friends and servants, reading the newspapers, and the like.

Finally, probably the most important contribution social science has made so far to the study of war and peace is its special perspective on international relations. When social scientists participated in meetings with policy-makers, the main virtue of their sociological recommendations was the repeated expression of a concern and a viewpoint that might otherwise have been neglected. Psychologists, anthropologists, and sociologists have stressed the need for a margin of safety in international systems to safeguard against the dangers of unintended and irrational behavior. Social scientists have shown that the patterns a man uses to express his distorted mind are borrowed from the society he lives in and involve the use of instruments it provides. Thus, taking the law into one's hands and the use of firearms as the ultimate instruments of social conflict are established elements of certain traditions of war. They are often celebrated on its anniversary. The easy access to lethal arms sets the American apart from most societies in one way, if the pilot of a SAC bomber armed submarine should one day decide, for instance, that he is called upon to thermonuclear warfare, he will provide him with a pattern for how to carry it out. The same holds for the Soviet Union. Similarly, sociologists have pointed out that in communication systems, the tendency to distort messages to suit the preferences of the listener due to cultural differences that exist in our communications and we on the other hand have highlighted the value of having a reliable and correct communication, even if it makes us look foolish.

Most of the points are hardly new, but the national decision-making process has overlooked, in Washington and in any country, that public opinion is composed by people with the perspectives of these considerations. The social scientist, to that end, contributes greatly until fundamental solutions can be found to maintain their self-control and their peace. However, it does not carry over the future, which means both the absence of war and the desirability of tranquility is not included in the definition of "peace". The condition of tranquility is not included in the concept of "peace" and "American-Soviet security" (1964), p. 109.

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ation. They are often celebrated on its television screens and in its history textbooks. The easy access to lethal weapons is another feature 
sets the American apart from most other civilized societies. In 
the same way, if the pilot of a SAC bomber or the commander of a 
missile-armed submarine should one day deviate from his orders, 
asking, for instance, that he is called upon to deliver America from 
President who has grown "soft" on communism, the American cul-
ture will provide him with a pattern for his action and the instrumen-
t will carry it out. The same holds for the Soviet Union and other nations. 

Similarly, sociologists have pointed out the irrationalities hidden in communication systems: the tendency to distort the content of communi-
cations to suit the preferences of the recipients and the misinter-
ations due to cultural differences that foreigners unwittingly intro-
our communications and we on theirs.12 Further, sociologists 
highlighted the value of having a third, uncommitted party to 
correct communication, even if he cannot oversee the give-
and take itself.

Most of the points are hardly new, but anyone who has closely 
monitored the national decision-making process knows how often they 
overlooked, in Washington and in any other capital, as position 
papers are hurriedly composed by people whose training has not made 
ness of these considerations an integral part of their knowledge 
perspectives. The social scientist, to the degree that he has ac-
access to decision-makers, contributes greatly to keeping the world in 
peace until fundamental solutions can be worked out, by helping 
parties to maintain their self-control and move cautiously in an 

big bombs on what has proven to be a small planet.

1 For example, Edwin H. Fedder points out: "... the Russian word mir 
means both the absence of war and the existence of a condition of 
mony. The condition of tranquility is not included in the concept of 
compromise' has no equivalent in Russian, to cite another example . . . ." 
Communication and American-Soviet Negotiating Behavior," Background, 