IMPLICATIONS OF PROLIFERATING ADVANCED WEAPONRY

Nuclear, Biological, Chemical, Missile, Conventional, and Naval Forces

Proceedings from an Annual Meeting Symposium
19 February 1991 ▪ Washington, DC

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Moderator's Remarks

When this session was organized over a year ago, the committee tried to anticipate international events. We did not anticipate, however, that it would be as timely as it is.

In addition to the critical problems of proliferation of emerging technologies, we will discuss possible arms control and conflict resolution measures.

The key is to recognize that this is an inherently multinational problem. Unfortunately, in the United States, it tends often to be discussed only as a supplier problem, that is, as a problem of industrial country policy.

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ELISA HARRIS

My remarks this morning concern chemical and biological weapons proliferation. You are probably more familiar with the chemical proliferation than with biological, but it is important to talk about both. I will begin by sketching the broad outlines of the problem. Then I will turn to measures for stemming the spread of both types of weapons.

Iraq's chemical and biological weapons programs have, of course, been the focus of much of the recent concern about proliferation. There are, however, a number of other countries that have similar programs that will have to be dealt with long after the Iraqi threat has been eliminated.

Eleven countries, in addition to Iraq, have been publicly identified by U.S. Government officials as having chemical weapons programs. These include Israel, Syria, Iran, Libya, Egypt, Ethiopia, Burma, China, North Korea, Taiwan, and Vietnam. Like Iraq, six of these same countries have also been publicly identified by U.S. officials as having biological weapons programs. These include Syria, Iran, Libya, China, North Korea, and Taiwan. This overlap is important, because it suggests to me that stemming chemical weapons proliferation may help us prevent the further spread of biological weapons.

The chemical and biological weapons programs in these countries have a number of common traits. First, they are cloaked in secrecy. There are no debates in parliaments or national assemblies over funding for chemical or biological weapons production. Indeed, many of the facilities are portrayed as legitimate civilian enterprises. In addition, there is high security at the relevant sites, including, in some cases, elaborate measures to protect them against air attacks.

Finally, foreign suppliers have played a critical role in the establishment of these programs. Most of these countries would not have been able to get their programs off the ground without outside assistance such as chemical precursors, facilities and equipment for producing agents, and laboratory quantities of infectious materials.

Let me focus for a moment on the chemical programs. The countries I have mentioned are believed to be working primarily with two types of agents: mustard and nerve, although there are also reports of interest in cyanide-based compounds and other agents.

Various delivery means have been discussed in relation to these programs, including artillery, rockets, bombs, and in the cases of Syria and Israel, ballistic missile warheads. As far as Iraq is concerned, it is looking less likely that it is capable of delivering agent *effectively* by missile, though Iraq clearly was working to marry up these two technologies before the outbreak of the current war.

Today, almost all of these countries have indigenous production programs created largely

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with the help of outsiders. Some of these countries may, however, have previously received small quantities of chemical weapons or related assistance from other possessors.

The Soviet Union, for example, has been reported to have played a role in the programs in Egypt, Ethiopia, Libya, North Korea, Syria, and Vietnam. Egypt is reported to have provided chemical weapons to the Syrians in the early 1970s. And the Syrians are reported to have helped the Iranians with their chemical program.

On the biological side, the agents mentioned most frequently are typhoid, cholera, and anthrax, the last of which has been of particular concern. There are, of course, certain limitations associated with using diseases in warfare. For example, there is a delay of anywhere from hours to days from the time an individual is exposed to a biological agent on the battlefield and when he or she exhibits symptoms. This necessarily limits the battlefield utility of biological agents and suggests that such agents are most useful in strategic circumstances.

The delivery means for biological agents are never specified in the open literature. However, because of the possibility of infecting one's own forces, long-range systems, such as bombs that can be dropped from aircraft, would appear to be most practical.

As with the chemical programs, the biological programs are indigenous in nature. The proliferators are doing their own R&D and production, with the help of foreign suppliers. The problem here, of course, is that the same technology used for producing vaccines or penicillin can also be used to produce biological warfare agents. This means that any country with a pharmaceutical industry has an inherent capacity to produce biological agents. Not weapons, because weaponizing the agent is complex, but the wherewithal to produce the agents is widely available.

Let me now turn to measures for halting proliferation. I believe that we ought to have two goals in mind when thinking about stopping the spread of these weapons. The first is to inhibit their acquisition. The second goal is to inhibit the use of those weapons which already exist.

The measures for achieving these goals are not mutually exclusive. Arms control measures are central for dealing with the problem, but other measures are needed if we are to deal effectively with the proliferation of these weapons.

One such measure is export control. By this I mean a concerted effort by the United States and other suppliers to deny proliferators the materials they need to make chemical or biological weapons. Since 1984, when it was revealed that Iraq was producing its own chemical weapons based on Western assistance, there have been national efforts to control the trade in precursors, the substances used to make chemical warfare agents.

Also in 1984, the Australians began to try to coordinate Western export control policies. The informal group they formed is known as the Australia Group. Twenty countries now participate in the group. Last year it moved beyond controls on precursors, agreeing upon guidelines for chemical weapons production equipment. the group is currently considering guidelines on materials related to the development and production of biological weapons.

In addition to controlling biological weapons-related materials, the Australian Group needs to broaden its membership to include the Eastern European and developing countries, like India and Brazil, that could serve as alternate suppliers.

Sanctions must also be part of our nonproliferation policy. By this I mean national and multilateral commitments to punish both the suppliers and the actual users of chemical and biological weapons.

In October 1980, President Bush vetoed a bill which would have imposed mandatory sanctions on countries that use these weapons and on companies that help them develop these capabilities. The following months, the president issued an executive order which embodied some of the elements of the proposed legislation.

There was, however, one important difference between the President's executive order and the vetoed legislation: the president's executive order was not mandatory in character. He could decide to waive sanctions, while the congressional bill required the sanctions to remain in place for a period of twelve months.

Assistance constitutes yet another part of a nonproliferation strategy. By this I mean national and multilateral commitments to come to the assistance of victims of the use of chemical or biological weapons. There are both humanitarian and pragmatic reasons for providing such assistance. Medical assistance, such as antidotes and antibiotics, will help to mitigate the suffering of those subjected to these types of weapons. Never again should a country attacked with these weapons be ignored by the international community, as was the case with Iran during the Iran–Iraq war.

Other types of assistance, such as protective equipment, may actually help inhibit the use of

chemical or biological weapons by denying the potential user many of the military benefits that it would gain from such use. Of particular importance here are gas masks which are very effective in reducing the military utility of these weapons. The idea of direct or indirect military assistance to the victim of these types of weapons must also be considered.

Finally, arms control measures must be at the center of our efforts to halt the spread of chemical and biological weapons. Three types of arms control measures are potentially relevant. The first is regional arms control. Given that the proliferation problem is essentially concentrated in two regions, Asia and the Middle East, it may be possible to make progress in controlling these weapons on a regional basis.

A regional approach would begin with consultations among the countries in the regions that have these weapons or are contemplating developing them. These consultations may initially have to be carried out through third parties, such as the United States or the United Nations.

This would be followed by the exchange of information about respective programs and by visits to relevant sites. The ultimate goal would be the elimination of both chemical and biological weapons from the entire region. An interesting model for this is the rapprochment between Argentina and Brazil in the nuclear area.

Whether it is in fact possible to achieve limits on chemical and biological weapons in a region such as the Middle East, where there are such serious underlying political problems, is unclear. I cannot say that I am terribly optimistic.

A second possibility, with more promise, is that of strengthening existing agreements. Two instruments are relevant. The first is the 1925 Geneva Protocol, which bans the wartime use of chemical and biological weapons.

There are, of course, no provisions in the Protocol for verifying compliance. However, over the course of the past decade, the UN General Assembly has given the Secretary General the authority to investigate violations of the protocol. During the Iran–Iraq war, the Secretary General sent investigative missions to the Middle East, sometimes more than once a year. Those missions were able to confirm the use of chemical weapons. Additional steps should be taken to strengthen the investigative authority of the Secretary General.

The other relevant agreement is the 1972 Biological and Toxin Weapons Convention (BWC), which prohibits the development, production, and possession of biological and toxin weapons. The BWC also has an article which prohibits assistance to other countries in developing biological or toxin weapons. This means that if a country directly or indirectly provides material to another country for a biological weapons program, the supplying country may well be guilty of violating the Convention.

I would not want to suggest that the Centers for Disease Control violated the BWC by providing laboratory quantities of West Nile fever to Iraq, or that the German companies that provided biological material to Iraq had violated the BWC. But states parties need to be reminded that they have undertaken a legal obligation not to provide such assistance. Transfers that contribute to national biological warfare programs must not continue.

Like the Geneva Protocol, the BWC does not have verification provisions, though there has been an effort over the past several years to strengthen the convention through confidence-building measures. At the last review conference in 1986, a number of confidence-building measures were adopted. These related to the exchange of data on research centers and laboratories and on outbreaks of infectious diseases, the publication of research results directly relevant to the convention, and the promotion of scientific contacts, especially among scientists working in biological defense programs.

These confidence-building measures have had mixed results. At the next review conference, in September 1991, there should be an effort made to evaluate their success, modify them, if need be, and expand upon them to create additional "transparency." Greater transparency in national biological defense programs, in particular, will give countries more confidence that others are not engaged in activities that contravene the convention.

Ultimately, it may be possible to actually add verification provisions to the Biological Weapons Convention, though this clearly must await the completion of the chemical treaty and its verification provisions. In the meantime, states parties must encourage wider adherence to the convention, especially among countries in the Middle East. Iraq, Egypt, and Syria signed that convention but never deposited the instruments of ratification, and are thus technically not states parties. Israel is not even a signatory. A concerted effort needs to be made to bring all of these countries into the convention.

That brings me to the most important nonproliferation measure, the Chemical Weapons Convention. Once completed — hopefully during

the next two years — the convention will delegitimize chemical weapons by banning their development, production, possession, transfer, and use.

Under the convention, it will be easier to inhibit the acquisition of chemical weapons. States parties will undertake a binding legal obligation, as they did in the BWC, not to transfer chemical weapons or related materials to other countries. This means that the voluntary obligations to control exports that states have undertaken as members of the Australia Group will be supplanted by a legally binding treaty obligation.

Acquisition of chemical weapons will also be inhibited, because the treaty will make production and possession illegal. There will be a legal basis, which we lack today, for taking action against countries that acquire or seek to acquire chemical weapons.

The convention will ban and therefore help inhibit the use of chemical weapons. It will thus enhance the prospects of national governments and the international community taking action against future users in a way that they did not against Iraq in the 1980s.

In conclusion, let me just reiterate that all four of these measures — export controls, sanctions, assistance, and arms control — have an important role to play in preventing the further spread and use of chemical and biological weapons. Export controls and sanctions against suppliers will help prevent Iraq from reconstituting its chemical and biological weapons capabilities once the current war has ended. They will also help inhibit the acquisition of chemical and biological weapons by other proliferators such as Libya and Iran. Not only the acquisition, but the use of these weapons will be inhibited by sanctions against users, by assistance to victims, and by the strengthening and expansion of the existing regimes governing chemical and biological weapons.

ANDREI SHOUMIKHIN

The superpowers and a few others bear heavy responsibility for the events in the Gulf. When advanced technology is used, a heavy share of responsibility falls on those who produced and supplied it. But the local actors who play these games take responsibility using it, too.

Why is this happening at this point in history, when the Cold War was seemingly going away to leave the world in better shape? The first massive war that would involve several superpowers is now taking place instead.

Does this mean that similar wars are going to replace the Cold War, which, fortunately, did not lead to military exchanges between the superpowers? This may be exactly the case. Behind the backs of the superpowers, other powers were rising in importance, and their ambitions were growing.

Precisely because they were involved in Cold War rivalries, they were learning from the examples of their patrons to acquire the potential that would allow them to begin to play the role not only of "regional superpowers" but of actual superpowers.

In Kuwait, Saddam Hussein not only attempted to aggrandize himself and acquire more oil and revenue. He also attempted to gain recognition as a superpower.

All the traditional elements of a superpower are visible, primarily the advanced technologies in large numbers. He also had something that the traditional superpowers lacked before: the readiness to use his weaponry. The situation is quite different as a result.

Given the premise that the superpowers bear a heavy responsibility for what is happening, what obligations should be or should have been borne by them.

The war in the Gulf presents us with possibilities for expanding understanding and cooperation between the superpowers. It may also present us with difficulties in our nascent relations, even to a reversal in their development.

Positive and negative things were happening during the last month in the Persian Gulf that demonstrate these portentous possibilities. On the one hand, the United States and the Soviet Union came out on the same side of the political barricades in this conflict. Direct lines of communication were opened and are being sustained. There is a complementarity of actions between the superpowers in trying to find a way out of this conflict. Cooperation on diplomatic and political levels has been unique in the history of superpower relations. The relative absence of similar conflicts certainly helped.

On the negative side of the balance sheet, the interests and capabilities of the superpowers were

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out of balance. *Perestroika*, a very important element in the equation of world politics, is running into great difficulty. The war happened too early, perhaps, in the post-Cold War development of bilateral relations. The two sides are still unused to cooperation. They still have not developed the necessary rules of the game for situations of this sort. They had to learn as they were confronted with the situation.

Although there were no other regional conflicts to distract their attention from this one, the situation inside the Soviet Union was reaching new levels of intensity. What happened in the Baltics is only one of the serious situations that add to the complexity of the bilateral relationship. Much will depend on how the Soviet Union develops internally.

If the new detente that is the result of *perestroika* expands and grows, then there will be better chances for getting out of this conflict with lesser complications. There will also be much better chances for creating a postwar peace in the region and the world over, including these fine proposals to limit the supply of advanced weapons from the outside.

Both sides are making strenuous efforts to tell each other that they should not fear one another. Academician Primakov, who recently went to Baghdad, is telling the Americans that they should not be afraid that Soviet diplomatic and political moves are intended to undermine the American and coalition positions in the conflict.

At the same time, Americans tell the Soviets that their possible military presence in that part of the world is not intended to undermine Soviet interests.

The dialogue goes on. It is very important. The level of understanding that will be reached will affect both the regional and the world situations.

The result of the war will be very important. It may be assessed in the traditional sense of the zero-sum game that the superpowers once played. The Soviet Union may feel threatened by any residual military presence, or security arrangements that may emerge, and may react to them negatively.

The Soviet Union has limited capabilities at this stage. However, the climate in the Arab world and elsewhere may be such that it would be easy to exploit to the detriment of the West. This has to be taken into account, as well as the ongoing dialogue — or, rather, argument — in the Soviet Union over the Soviet attitude to these events. Some say Saddam Hussein is a villain. Others say he is a hero. The reactions of of Soviet Muslims have not yet been investigated.

Although political agreements and understandings should come first in deciding the fate of arms control and arms transfers, the technical side is also important. Perhaps it can influence the political decisions that must be taken.

From this point of view, the present discussion is very important, because it demonstrates the opportunities and limitations for any arms control measure in the region. The Soviets must learn more about the technical side of this situation. But the West must learn more about the political intricacies of the internal situation in the Soviet Union.

As a result, the postwar arrangements should include the following: the vicious circle of the arms race in advanced arms should be broken.

Residual elements of Cold War influence should be used to the full with allies and clients. They must be given guarantees and sometimes even pressured into agreements.

It is very important to couple the disarmament efforts that the superpowers were and are still involved in with the disarmament efforts in the Third World.

These are both political and technical issues. But it will be damaging for regional arms control and disarmament if the superpowers come to agreements between themselves on their arms without considering what is happening in the peripheries, where their own weapons and own supply policies matter a great deal.

Another important issue is whether or not deterrence should be created to prevent those who would like to follow in the steps of Saddam Hussein from using the weapons they have at their disposal. Steps should also be taken to limit indigenous arms production.

The question of use of force should be raised in this connection. On the one hand, deterrence can be based on international agreements at the level of the United Nations or of regional organizations.

Unfortunately, theoretical deterrence is sometimes not enough. There has to be the resolve to use force if no other means of changing the situation in place is working. But the superpowers differ on the use of force.

The issue should be given the highest prominence in international discussions, especially at the United Nations, so as to come to an intelligent, civilized agreement without hiding our heads in the sand by saying that use of force is completely out of the question. As long as situations like the

Iraqi incursion into Kuwait happen, force must be legalized and considered in a civilized way.

The UN charter provides for all these things. It must be revived. New conclusions may be arrived at by the international community.

The moment when hostilities stop and reconstruction of the affected areas will begin will be important. Economics, politics, and military considerations will allow us to move ahead with serious arms control and reductions of the threat of arms.

RAVINDER PAL SINGH

The proliferation of advanced weaponry, whether nuclear, chemical, or conventional, demands that we answer certain questions.

It raises the question: implications for whom? Are there concerns viewed with greater alarm in the West, the United States, than they are by the neighbors of countries on the threshold of proliferation? If so, how have these concerns become as serious as they have? Is it because these technologies for which countermeasures have not been developed have allowed new countries the ability to penetrate Western security systems?

Recall Voltaire on his deathbed. Voltaire was known for his agnostic beliefs. A priest approached him, suggesting that he should now renounce the devil, and Voltaire, quick wit that he was, replied, "Father, I think it is too late to make new enemies."

[Laughter.]

I am not sure the world can give up the devil that it has unleashed.

Proliferation must be understood in its larger cultural, historical framework, including the Western experience of these issues. There is a need to look at the issue beyond concerns of time and space, beyond the Gulf War, and beyond the Cold War. We need to look beyond the East–West and North–South frameworks.

Technological development in industrializing Europe had a role in furthering colonization and utilization of colonies in contesting rivals and competing powers. This is an historical fact. During this period the process of technology diffusion in the West was proceeded by an evolution of a trinity of scienticism, commercialism, and militarism.

This, to an extent, has contributed to shaping a chauvinism in European political culture. The political challenges by the South to the European domination of the colonies has provided a systematic denial of access to technologies, training, organization, and education in an attempt to marginalize the challenges.

In the postwar period, the flow of technology was allowed, if not encouraged, since it served the polarization of East–West political and economic divergences. As long as sufficient techno-military advantages were maintained to manage the Southern countries, the concerns in the North were alleviated by assurances of its possessing or developing superior countermeasures.

Continuing challenges from the Third World contributed to the evolution of certain perceptions, which tainted Western understandability of universal trends leading towards the globalization of technology. These presumptions distinguish good proliferators from bad proliferators, judging the "deficiency" of "rationality" or "responsibility" among the Third World leadership and their ability

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to subscribe to "internationally accepted norms and values."

Despotic regimes, whether military or civilian, do exist. But such distinctions were not developed in pursuit of countering proliferation. At the end of the Cold War, should such distinctions be made in the future when perceiving "new threats" which are said to be emerging in the Third World.

While the policy of containment and its counterpart, Soviet arms-aid diplomacy, promoted Third World military production and the proliferation of advanced weaponry in countries that were aligning with superpower objectives, this process was accompanied by an escalating cost of weaponry, and a brisk pace of generational changes of the weapon systems. This led, in turn, to supplier-recipient dependency.

This dependence energized the Third World's quest for technologies that would give them a way out of this spiraling dependence and provide cost-effective deterrence values.

Nuclear and chemical weapons provide the user with the flexibility, vitality, and penetration to challenge the power projection ability of larger neighbors or the superpowers.

It also provided spin-offs via the dual-use potential of nuclear energy, space research, and the chemical industry.

Without elimination of such technologies, which appears to be an idealistic goal for real world politics, proliferation controls will only slow down the proliferation process.

With the growth in population, literacy, science and technology, and R&D in the Third World, proliferators are going to increase their efforts, impervious to the alarms being raised in arms control assemblies.

If the Kuwait war drags out at an unacceptable human cost to the West, the use of nuclear weapons for conflict termination will make an instant casualty of nonproliferation.

In this regard, Vice President Quayle's statement that the United States will not rule out using nuclear weapons acquires special significance. The United States, Britain, and France have refused to undertake the no-first-use of nuclear weapons.

The nuclear contingency as a response to major regional actors that have gained advantages from technological developments will redouble the efforts of these actors. The precision, miniaturization, and utility of military systems can also facilitate the coercive diplomacy of regional actors through terrorism. Weaker entities will justify such methods as a continuation of political objectives by other means, to counter the terror inflicted by the advanced weaponry possessed only by a few developed countries.

Will the arms control approach get us to where we want to be? By rejecting equity and consistency from the conceptualization of proliferation controls, and by segregating good proliferators from bad on the basis of when they crossed the threshold, Western analysts only create a justification for a military technological gap.

If these gaps are used to gain political influence that will facilitate economic advantages globally, attempts will always be made to close them.

Looking at the proliferation of missiles and nuclear technology in South Asia in particular, is an India–Pakistan balance "unstable," even if it crosses a nuclear threshold?

Pakistan's missile program not only degrades the military advantages of Indian conventional weaponry but contributes to future systems that will counter advantages with fire power.

India, in Pakistan's perception, remains its foremost military threat. When comparisons are drawn of the relative assets, capabilities, vulnerabilities of communication links, these concerns are multiplied by the factors of traditional animosities, Pakistan's lack of depth, and the history of suspicion, threat perceptions rise to inordinate levels.

Unlike Sino–Indian threat assessments, rationality tends to give way to emotion in the context of Indian or Pakistani threat analysis. This has a special significance in light of the possibility of a nuclear subcontinent.

Pakistan's attempt to match Indian advantages in conventional fire power could only be achieved by developing a cost-effective deterrent, which leads to the pursuit of long-range missiles which can penetrate the Indian hinterland.

The China factor in South Asian missile developments is important. Beijing has assisted in the development of guidance and control systems and may sell medium-range missiles to Pakistan.

The Pakistan media's reaction to the 1989 Indian missile test, which demonstrated the ability to build a weapon with a range of 2,200 km, was strong. But the establishment's comment that it has a shorter range than the Prithvi, another

Indian missile, reflected a balanced assessment of threat. Perhaps the alarm in Pakistan on this issue has been tempered by the fact that Pakistan's Hatf–2 system, which is of 300 kilometers range, will be operational at around the same time as Prithvi and the sense of confidence engendered by the nuclear weapons program.

On the other hand, the Chinese response to the Indian missile has been indifference. The director of the Beijing Institute of Strategic Studies, recently asked me, "How can the Chinese be worried about the Indian program, when we did not feel apprehensive even when encircled by the American missiles in the 1950s and 1960s?" While the Americans wallow in their concern over the threats that India's Agni missile or its successors can pose to Beijing, the Chinese feel that a country as large and as populous as China will not feel threatened by the Indian ballistic missiles.

One wonders whether Western concerns about a Sino–Indian missile race are related to the Asian security equilibrium or the effects that it may have on the Sino–Soviet missile balance and, consequently, on the superpower balance.

Can a missile program like Agni remain cost-effective without being mated to a nuclear warhead? The estimated expenditure of the Indian integrated missile program ranges from $210 million to $300 million. Agni's cost, if it is in serial production, would be about $2.2 million apiece.

Although the comparison is difficult, it appears that deterrence, which can also be achieved through large forces of combat aircraft or tanks, can be had with a long-range missile capability. Missiles provide a more compelling deterrent because of their accuracies and potential against highly valued targets.

Having demonstrated a nuclear capability in 1974, India consciously chose a policy of not flaunting its nuclear capability and thus contributed to the objectives of non-proliferation in its own way. But the situation will undergo an irreversible change if Pakistan goes ahead with its nuclear weapons program.

Another factor contributing to Pakistan's nuclearization would be its prestige as the only nuclear Muslim power from Iran to Libya.

The shape that nuclear proliferation will take in South Asia will be affected by the China factor, which factors in India's nuclear calculation. As long as the Pakistani nuclear threat was not a reality, the Chinese nuclear concerns could be deferred.

What about the cost of nuclear weaponization in India? It would be appreciably less if it took advantage of the sunk costs of the nuclear energy program, and of the concept of minimum deterrence. In the absence of requirements to launch on attack, which requires sophisticated systems for target acquisition, designation, and early warning, nuclear deterrence can be relatively inexpensive. Even a delayed nuclear retaliation is an adequate deterrent.

Despite the military concerns generated by the Chinese chemical weapons capability, both India and Pakistan have refrained from developing such weaponry. The possibility of clandestine diversion of industrial chemicals by militants to insurgent groups or even radical governments needs serious and urgent attention in the subcontinent.

This important consequence of industrialization requires instituting effective controls and mechanisms to prevent theft and illegal diversion of chemicals. The Third World, including the subcontinent, will need to seek appropriate technologies, processes, and procedures for ensuring adequate safeguards.

If proliferation controls are to succeed, both conventional arms control measures and proliferation controls on advanced weaponry must be applied comprehensively and consistently, not selectively on the basis of political expediencies and commercial opportunities.

Some of the impediments to proliferation control initiatives can be managed by policy reviews in the West. There is a need to examine the effect of the American concept of forward defense and forward presence.

Only one superpower has transcontinental force projection capabilities. When combined with emerging NATO concepts of out-of-area operations and the experiences leading to the Gulf conflict, U.S. forces create pressures in the Third World to pursue cost-effective deterrents.

To what extent would such concepts succeed in deterring conventional conflicts in the Third World, rather than generating concerns and, consequently, investments in advanced weaponry and eventually engendering instability?

As long as arms transfers are retained as a major instrument of diplomacy, arms-control initiatives will proceed without the resolution of regional issues. Confidence-building measures will not provide as many solutions as many perceive they will. Unless regional issues are sorted out, confidence-building measures can provide only a little confidence and no more.

While Southern countries view advanced weaponry as interrelated military capabilities which are required for security, Western opinion tends to segregate technologies into designing specific control regimes to retain Western advantages.

There is a conceptual difference. There is a need to examine the feasibility of regional arms control measures as a consequence of regional political solutions.

But will regional arms control or the weapon free zones succeed? Can a nuclear-weapon-free-zone succeed in South Asia or the Middle East without compliance by the superpowers, which also have their naval ships with nuclear weapons on board. The understanding must include the agreement and participation of the superpowers.

Similarly, regional security structures under the aegis of the United Nations may prove to be more effective instruments for conflict resolution because of their greater sensitivity to regional issues.

MAHMOUD KAREM

It is a salient fact that the Middle East is one of the most sensitive regions, witnessing almost continuous military conflict and political upheaval. A deeply rooted conflict has not yet been solved. There are other intervening complicating variables that need to be addressed: the use of chemical weapons in the Iran–Iraq war; the existence of a threat of biological weapons; the proliferation of missile technology; the recent use of missiles; the capabilities of reaching outer space by one state; and the presence of supercomputers. When all these variables are integrated into the volatile configuration of the region, the setting is detrimental to international peace and security.

Having said that, we can speculate on what kind of security structure is considered by the states in the Middle East once the war is over. That structure should emerge from within and not imposed from without.

One element of the postwar security structure would be the deployment of a large Arab peacekeeping contingent. Another would be reconstruction. There is also a pressing need to address the Arab–Israeli conflict. Finally, there are weapons of mass destruction, the topic I shall confine myself to.

What constitutes a weapon of mass destruction?

Definition of Terms

In accordance with a United Nations definition, which dates back to 1948, the Commission of Conventional Armament reported to the Security Council, that weapons of mass destruction are: "All atomic explosive weapons, radioactive material weapons, lethal chemical weapons, biological weapons, and any weapons developed in the future which has characteristics comparable in the destructive effect to those of the atomic weapon or other weapons mentioned above."

This is a somewhat generic and antiquated definition, but it could be used to deal with basic preoccupations. The phraseology is neither rigid nor exhaustive. As a result it could be extended to incorporate missiles, for example.

Egyptian President Hosni Mubarak on 8 April, 1990, delivered an initiative to establish that Zone Free from Weapons of Mass Destruction in the Middle East. The three components of that initiative are compelling; they are:

- All Weapons of Mass Destruction, without exception, in the Middle East are to be prohibited, whether nuclear, chemical, biological;

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- All states of the region, without exception, are to make an equal and reciprocal commitments in this regard; and,

- Verification measures and modalities are to be established to ascertain full compliance of all states of the region with the full scope of the prohibitions without exception.

This initiative is of paramount importance since it enjoys several beneficial characteristics. It is intra-regional, takes account of the present complex configuration, cautions against the specter and the stockpiles of these weapons, and has acquired an international status.

U.S. Secretary of State Baker, before Congress, and President Mitterrand both support the Mubarak plan. Even the Iraqis, during the last Review Conference of the Non-Proliferation Treaty in August 1990 (following their invasion of Kuwait) said that they were willing to work on the basis of that initiative.

Nuclear Weapons

Countries of the Middle East suffer from a special threat emanating from Israel, a nuclear threshold country which has refused to join the Nuclear Non-Proliferation Treaty (NPT) and refused to place its nuclear activites under International Atomic Energy Agency (IAEA) safeguards. This situation creates an unstable system of psychological deterrence in the region.

Since 1974, Egypt has worked in the General Assembly of the United Nations on the establishment of a Nuclear-Weapons-Free-Zone in the Middle East, which has been a success. All countries in the region, including Israel, have supported it, since 1980, by consensus. Israel's policy in this regard is anchored in a proclamation: that they shall not be the first to introduce nuclear weapons to the region and insist on direct negotiations between the parties.

Two years ago the General Assembly requested the secretary general to appoint a group of experts to study the modalities, effects, application, and possible implementation of this particular resolution. This study has been completed and is worth reading. It contains numerous thought-provoking policy recommendations on how to implement the resolution and how to overcome some of the difficulties by isolating that disarmament initiative from the intricacies of the Arab–Israeli conflict.

The success of this initiative should be allowed to spill over into a larger area of cooperation between Arabs and the Israelis. If we approach matters positively by putting it to work, it may even expedite the process of peace in the region.

Six threshold countries remain outside the non-proliferation regime. Recent progress has engulfed five of these six countries. Argentina and Brazil have signed important nuclear cooperation agreements. India and Pakistan have ratified an agreement on the prohibition of attack on nuclear facilities. Lately, positive ideas and positions have emerged from South Africa, signaling a willingness to join the non-proliferation regime. The African front line states have reciprocated. That leaves Israel. For this reason and owing to the gravity of the situation, immediate measures must be taken to alleviate the nuclear threat in the Middle East.

Chemical Weapons

There also exists a specter of chemical weapons in the Middle East. The tragic history associated with the use of chemical weapons in the Iran–Iraq war led to a military fact: chemical weapons were not only used in this war, but were used to change its course and outcome. This is a serious violation of the 1925 Geneva Protocol prohibiting the use in war of asphyxiating, poisonous, or other gases, and of bacteriological methods of warfare.

The Conference on Disarmament in Geneva, which is the sole United Nations multilateral disarmament negotiating forum, is concluding a comprehensive and universal convention prohibiting the use, development, stockpiling, and production of chemical weapons. The chairman of the relevant committee, Soviet Ambassador Batsanov, has given us hope that progress will soon take place.

Ms. Harris mentioned that the universality of the proposed convention is extremely important. The developing, non-aligned, and neutral states have taken a strong stand. Egypt in particular advocates the following position:

- It is a *Conditio Sine Qua Non* that the convention be applicable to all states. For that purpose, simultaneous accession by all parties, especially in so-called "hot" regions, must be secured.

- Guarantees and sanctions are two crucial elements for the credibility and the universality of the convention. As a result, sanctions should be applied effectively and without discrimination, since this is a measure closely

intertwined with the national security of states.

- While effective verification methods and procedures are measures of paramount importance, verification should never be abused or distorted.

- The convention should not interfere with, nor inhibit the rights of parties to peaceful uses of their chemical industries.

- The Chemical Weapons Convention, from the moment of its entry into force, should prevail over all other existing international agreements covering the same turf. It is universally applicable.

- No reservations should be attached to the convention, but necessary reservations should be limited to a few confined provision.

- A non-aligned effort is under way to oppose the establishment of a non-proliferation regime for chemical weapons. Such a non-proliferation regime will create a legal instrument that lacks universality if key actors remain outside the convention.

The two-percent condition will create restrictions and thereby postpone the decision for the total elimination of chemical weapons. Subsequently, that would give certain states rights, based on their possession of chemical weapons, and would therefore create a situation of legal uncertainty on the scope and implementation of the convention. The magnitude of two percent in the stockpiles of the superpowers is alarming if juxtaposed against the stockpiles of lesser actors. Total destruction of all chemical weapons and production facilities should be unconditional so that by the end of the proposed ten-year destruction period all chemical weapons will be eliminated. The convention should, therefore, be non-discriminatory.

All the factors I just mentioned are necessary to ensure the smooth transition of the draft convention from the Conference on Disarmament, a thrity-nine member organ, to the larger body of the General Assembly where all states are represented. Last minutes surprises should be avoided. Towards that goal, a proposal to convene a special ministerial meeting in Geneva has been presented. Such a special meeting could solve pending problems.

Biological Weapons

In the Gulf War, we have all listened to repeated threats to use biological weapons. While threats and speculations reign supreme, precautions are being taken. A look at the states in the region of the Middle East which acceded to the 1975 Biological Weapons Convention reveals that only ten ratified it. Israel neither signed nor ratified it.

A Zone Free from Weapons of Mass Destruction

The rationale for the establishment of a Zone Free from Weapons of Mass Destruction in the Middle East gains topicality. All international efforts should be geared towards the implementation of the Mubarak initiative. Now is the golden time to establish such a zone and link it to the security framework that is being worked out by countries in the region.

Linkage means that a balanced treatment of all three weapons is needed. Our goal is a permanent, just, and durable peace structure in the Middle East. We cannot, therefore, simply ignore the nuclear threat in the Middle East and call for the abolition of chemical weapons alone. Some argue that nuclear deterrence encouraged other parties to resort to a chemical weapons deterrence. Chemical weapons are known as a poor man's nuclear weapon.

The Mubarak initiative strives, therefore, to replace this fragile system with an enduring one. Contractual agreements between the parties in the region could be achieved, and security based on international legitimacy under effective international verification could be worked out.

Policy Prescriptions: How to Operationalize the Egyptian Proposal

How do we proceed with the initiative and what suitable measures need to be taken towards its implementation? Some of these recommendations could be implemented immediately. Others need time and more favorable conditions. An incremental approach could be utilized. We can begin with a first phase. Later on, when more conducive conditions prevail, the remaining elements could be implemented. We should not differ on tactics as long as we agree on the basic objective: to free the Middle East from all threats of weapons of mass destruction and establish a permanent system of security that withstands the test of time.

Some of these proposals for your consideration:

- On the geographic definition of the zone, every effort must be exerted to avoid a diluted and confounding definition. Maybe a step-by-step definition is needed at the outset. We can start by concentrating on core countries. Later on, peripheral states could be invited to join.

- Since the study conducted by the secretary general on a Nuclear Weapons Free Zone in the Middle East was presented to the General Assembly last autumn, we could consider reviving the mandate of the group of experts in order to allow them to conduct a further study on establishing a Zone Free from Weapons of Mass Destruction in the Middle East. We may envision a special representative of the secretary general touring the region to discuss with the countries concerned the necessary mechanisms and modalities for the implementation of this proposal. It might also be feasible to convene a special session of the Security Council to discuss the Mubarak plan.

- The security preoccupation of countries in the region must be addressed. A check-and-balance system is needed to demonstrate to all countries in the Middle East, especially Israel, that total reliance on a policy of deterrence will be detrimental to its national interest. In other words, what needs to be formulated is a self-fulfilling argument encouraging all the countries in the region to adhere to this Zone Free from Weapons of Mass Destruction in the Middle East as an added measure towards enhancing their own security.

Some argue that there is no reason for Israel to relinquish its policy of unavowed, undeclared, unilateral, ambiguous policy of psychological deterrence. But this policy has deepened mistrust in the region and exacerbated fear among its members. Most recently we witnessed growing concern among Israeli public opinion on how to deal with the aging Dimona reactor. Some argue for its total shutdown; others advocate a partial phaseout. Who will cover the expenses of cleaning Dimona? Israelis have expressed deep concern over the systematic dumping of nuclear waste in the Negev desert, which has serious effects on the surrounding states, and valuable water resources.

- Israel should sign a full scope safeguard agreement with the IAEA. It must be underscored that other threshold countries, such as Argentina and Brazil, are reported to be close to signing a safeguard agreement with the IAEA that is independent of their position on the NPT. The accession of Israel to the NPT would be the best possible alternative from an Arab point of view.

  The IAEA agreement would safeguard Dimona and put a cap or ceiling on Israel's nuclear activities. However, this agreement will do nothing to neutralize and account for the stockpile of weapon-grade material that has been accumulated over a period of four decades.

- The nuclear weapon states in general, and the Security Council in particular, should provide security assurances and protection to any state in the Middle East that is subject to a threat of use of nuclear weapons by invoking Chapter 7 of the Charter of the United Nations. Recently, Egypt presented to the Fourth Review Conference of the NPT a proposal to build upon and increase the effectiveness of Security Council Resolution 255 of 1968. In that proposal, Egypt called for a more comprehensive definition of assistance so as to incorporate technical and financial as well as humanitarian assistance and the imposition of sanctions against any state, party or non-party to the treaty, which uses nuclear weapons against a non-nuclear-weapon state party to the treaty.

- We should draw lessons from East–West arms-control agreements and confidence-building measures. While several methods could be employed from the European model, such as transparency and aerial reconnaissance, not all measures may be emulated in the Middle East. It must be remembered, however, that peace between Egypt and Israel brought about a system of international verification in full compliance with Resolution 242 of 1967, which calls for security arrangements in the region, and the establishment of demilitarized zones.

- We must develop a regional declaration that would prohibit nuclear testing and attacks on nuclear installations, and deposit that declaration with the Security Council.

- The protocols of Tlatelolco, in which nuclear weapon states presented security assurances to countries which have joined this Nuclear Weapons Free Zone provide a useful model. Similar assurances could be worked out for all countries joining the Zone Free from Weapons of Mass Destruction in the Middle East.

- We should study and develop a regional missile non-proliferation regime that would not

legitimize the technological gap between those that have and those that do not have missiles. But we must not hamper the right of all parties in the region for the peaceful uses and exploration of outer space.

GEOFFREY KEMP

These ideas have been circulating for over a year and surfaced explicitly last summer before August 2. The Gulf War has changed things very significantly. Therefore, the ideas that were explored before the war have to be reexamined in a new context. The problem, of course, is that the war is not over, and there may be some nasty surprises before Saddam is finally defeated.

Chemical weapons may be used. Some of the high technology may not function correctly. Until we have a full account of the war, it is difficult to speculate in detail about its impact on perceptions of security. At the conclusion of previous Mideast wars, ministers of defense looked carefully at what went well and what went poorly and then drew up plans for rearmament and procurement.

In the aftermath of this conflict, there will be interest in the Patriot missile and laser bombs, which seem to have been effective. This interest is normal and expected.

One of the major lessons of this conflict is the need for a more stringent arms control regime. Had there not been a profligate transfer of technology to Saddam Hussein, we would not be at war in the desert. These two ideas are going to be on everyone's agenda at the conclusion of the war.

There will be nothing new in this thinking. Everyone has known about the dangers of an uncontrolled Mideast arms race. Everyone has written about it for years, but different opinions always arise as to how or in what order one tackles the problem. What components of the arms race are the most dangerous and troublesome?

Does the Israeli nuclear weapon really promote insecurity in the region? What is the threat posed by the huge number of Iraqi tanks? What about Syria's chemical weapons program?

Various components of the Mideast arms race lead to different conclusions. The conclusions drawn determine the priority given to arms control. Everyone realizes that because the region is so complicated, it is impossible to deal with all the issues simultaneously.

One of the basic problems has been the strong differences of opinion in most regional countries as to the attitude and behavior of the external industrial powers. Everyone would agree that unless the cooperation of the regional powers is obtained, efforts to impose arms control on a region as developed and complex as the Mideast will meet difficulty.

In the past, the industrial powers poured arms into regions such as the Mideast for their own purposes. They have seen it in their interests to supply their friends and allies with vast quantities of weapons — sometimes for profit, sometimes for "strategic reasons."

As a result, transfer policies have led to indigenous production of arms in the Mideast and

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South Asia. Industrial power supply has given a country such as Iraq the wherewithal to fight for at least a month against, essentially, the NATO central front.

On other occasions, the industrial powers have united against on regions like the Mideast. Virtually every leader in the Third World, regardless of other disputes, has much in common with the National Rifle Association. They simply do not like Washington (or other capitals) to dictate their security needs or the types of rifles, machine guns, or missiles they should be permitted.

Without understanding this history of how the industrial powers have used arms control to pursue their own ends, it is impossible to grasp the key issues. The cooperation of the regional powers is necessary if any arms control efforts are to have long-term effectiveness.

In summarizing the more disturbing issues that this war has done little to diminish, one must first point to the power projection capability of countries in the region which is growing dramatically. The most obvious example has been the Iraqi ability and willingness to fire missiles at Saudi Arabia and Israel. If the missiles had had chemical or nuclear warheads, no defense, other than the Patriot missile, would have been available.

The missiles being fired are early-generation rockets deriving from the German V–2 designs.

The Patriot was not designed initially as an antiballistic missile system. It was upgraded, and it can barely perform this function. The Patriot missile certainly could not shoot down the Chinese missiles the Saudi Arabians already have in their inventory. These missiles, if used against Israel or Egypt or anyone else, could not be stopped. After this war, interest in upgrading defensive systems to cope with ballistic missiles will be renewed. As this interest grows, however, there is going to be pressure to put a ban or limitation on the transfer of all surface-to-surface missiles.

We cannot assume that chemical weapons will not be used in the future. We cannot assume that the military benefits of using chemicals, which were so apparent during the Iran–Iraq War, will not still exist when our enormous modern army has left with all its sophisticated protective gear. Other countries that do not have access to such protection may be much more vulnerable.

The United States and the Soviet Union, as well as Britain and France, do not complete the list of countries capable of supplying a whole array of material to countries like Iraq. China has a huge arms industry. as does North Korea, Argentina, and Brazil. They produce a whole array of technologies, and Brazil, in particular, has relied on exports to make up its balance of trade deficits.

Any supplier's cartel, with the exception of those involving the most sophisticated weapons, must be extensive.

An arms control regime following the war is a complicated effort. It can, however, be divided into functional components. There is a tendency to make a distinction, albeit a blurred distinction, between weapons of mass destruction and the conventional arms race. By the conclusion of this war, when we have seen the effect of an ATACMS or a fuel-air explosive, there may be an extension of the definition of "mass destruction" into what we now call the conventional arena.

Efforts to restrict particular categories of weapons always encounter fundamental problems in the security context. It is fashionable to distinguish between offensive weapons and defensive weapons, as if in banning the surface-to-surface missiles and keeping the air defense systems, we could have a more stable Mideast.

That argument simply does not suffice, especially if one looks at the overall force structure.

This is not to suggest that distinctions for analytical purposes have not value. However, in practice, efforts to decide which weapons should be eliminated from a given arsenal create the conundrum that different states have different perceptions of their security requirements.

The Arab countries see that nuclear weapons are unique, massively powerful, and give Israel a special edge.

The Israelis, on the other hand, argue that they need a qualitative edge until there is some Mideast settlement. A massive Arab conventional superiority has to be offset by Israeli nuclear and qualitative superiority.

Prior to August 2, Israel's nightmare was the "Eastern Front" — the marriage of Iraqi, Syrian, and Jordanian conventional capabilities in an offensive against Israel.

Once one acknowledges that Israel has a case for a qualitative edge over its neighbors and that the Arab countries regard nuclear weapons as fearful instruments of power, the case for the Arab countries maintaining a chemical weapons capability is more plausible. It is the poor man's nuclear weapon. It offsets Israel's nuclear advantage. Again, the Catch-22 situation of each

country's different perception of its security arises.

All countries argue that until there is a political settlement to the outstanding problems, they will take out the best insurance policy available to them. However, in taking out insurance policies, you scare the hell out of your neighbors, who then develop bigger and better weapons themselves.

How is this inevitable dilemma to be reconciled? What must come first — the political process or arms control? The answer is that they must proceed in tandem, and expectations must be lowered as to what is immediately possible to achieve in the region.

This is to suggest that we will not get a nuclear-free zone in the Mideast until there has been dramatic progress in the Arab–Israeli conflict. Furthermore, we won't eliminate chemical weapons in the region until there has been a dramatic reassessment of security requirements. An imposed solution derived by the two superpowers will meet resistance and will be ultimately unworkable.

There are reasons for optimism concerning the region. The Cold War may be reverberating in the minds of some, and we may get a nasty surprise in Moscow this summer if Mr. Gorbachev leaves. However, the end of the Cold War has meant that the two superpowers are at least nominally working together.

As long as there is dialogue between the two countries, we are making progress. In the past, the post-Mideast war scenario left the Soviets, Americans, French, and British all in competition to funnel the most arms into the region.

The two countries most crucial to ultimate peace in the region, Egypt and Israel, have shown more willingness to discuss the idea of arms control.

While Egypt and Israel have different approaches and definitions, both countries, including the Likud government, are prepared to talk about arms control. They look to the future. They look at their bills and their budgets and say, "Look, we cannot pay for Patriot missiles and stealth technology; someone is going to have to foot the bill. Who is that going to be? The cost of the arms race is such that both of us have an interest in limitations."

The United States will emerge from this war with closer relations with several Arab countries, particularly Saudi Arabia, who may now have a greater sense of self-worth and security. This means that the United States may be able to talk more openly with these countries about negotiated settlements to political problems, including the Arab–Israeli conflict.

U.S.–Israeli relations are now very good, thanks to the Patriot deployment. Without good relations between Israel and the United States, it will be impossible to include Israel in any negotiations, and especially arms control.

After this war, there will be a concerted effort by countries like Egypt, Saudi Arabia, the small Gulf countries, and possibly Syria, to work together with the United States and the Soviet Union.

The United Nations has played a key role. In the aftermath of the war, the United States will use it to look at regional problems. As long as the United Nations maintains its enhanced legitimacy, it can be useful in bringing together the parties to the conflict.

August 2 really changed our perception of the Iraqi military threat. On August 1, there would have been a debate, even within the U.S. Government, as to how dangerous was Saddam and as to how extensive was his weaponry. The allies disagreed on how to deal with Iraq. The moment he invaded, world perceptions changed. It will be difficult for Iraq to get back on track with its procurement programs for chemical, nuclear, biological, and conventional weapons.

The Germans have learned a lesson here, as has everybody else. Other countries will be able to procure that amount of equipment, but for the time being, Iraq will be put on hold.

Another question is how to stop other Saddam Husseins. This will be more controversial, because there are always differences of opinion as to who the rogue countries are.

There is legislation before the Senate that attempts to repackage export restraints based on a list of the rogues — North Korea, Iraq, and the like.

How does one define a rogue? The problem with the rogue list is that we all have our different rogues, and to imagine France, the United Kingdom, and the United States agreeing on a list is quite complicated. To imagine the Soviet Union and China agreeing to the rogue list is even more difficult.

Is there anything that can be done to promote regional negotiations in the absence of any breakthrough in the political process? While there will be a major debate following the war, the dilemma will be that the security of the region and the stability of the Gulf will require that we take seriously the weapons requests of the Saudis, the

Kuwaitis, and the little Gulf states. They will all want more. How can we deny Egypt and Israel high technology when it works so well? The Department of Defense will push strongly. The State Department will want to see restrictions. Unless there is an Arab–Israeli dialogue, little progress will be made.

Some things can be done. The European model of arms control does have some applications for the Mideast. A suppliers' cartel on specific technologies might work for a few years. However, in order to get where the Europeans found themselves two years ago, we have to address the underlying regional issues. In the Middle East, there is no agreement between the parties as to boundaries, let alone to principles of mutual respect and cooperation.

The bottom line is that political efforts to resolve basic conflicts have to be given as much priority as arms control, because without one the other cannot be achieved.

Question: Mr. Kemp, why are you so optimistic that the Germans and other countries that have been supplying arms to Iraq and other client states are suddenly going to get religion?

A number of German firms and American firms apparently were sending military components to Iraq even after August 2. Germany, Austria, France, and, I am sorry to say, the United States, in the military sales program, have always seemed to be able to rise above principle and ask, "What is in it for me?"

[Laughter.]

Kemp: The Germans, in particular, have been shocked and shamed by the discovery of the extent to which their exports were out of control. Furthermore, legislation will be passed in the United States to make any German company that wants to contravene U.S. policy on restrictions to Iraq think twice before doing so.

After it was discovered that a subsidiary of Toshiba had sold high tech to the Soviets that could make submarines quieter, Toshiba faced the wrath of God on Capitol Hill and changed its policy very quickly. This is one instance where the power of the Congress is going to have a deep impression on German companies who want to do business in the United States, as well as in Iraq.

There will be such constrictions placed on Iraq after this war that it will be a long time before they get access to the money to buy the equipment.

You are right that capitalist systems tend to follow the best financial path, but Iraq had between a $70 billion and $80 billion debt before the war. The cost of reconstruction will be twice that figure.

Everyone will insist that Iraq pay reparations. In order for Iraq to start pumping oil, there will be a lien put on that oil so that they have to pay compensation. Whatever happens, they will not have access to the money they had before the war to buy all this technology.

Nolan: The Germans have been leading the European Community in stringent proposals for community-wide adoption. It is being resisted by the French, among others, but the Germans, at least at the governmental level, have gotten religion about exports of this kind.

Question: Is it really feasible to expect no other countries in the developing world to aspire to weapons as long as the superpowers refuse to put the genie back in the bottle, through agreement in principle that the existing stockpiles of chemical, biological, and nuclear weapons will be destroyed by all those powers that now have them?

Harris: In theory, the biologicals should be in the bottle because of the 1972 treaty which

prohibits the development, production, and possession of biological and toxin weapons.

The United States and the Soviet Union both gave up their biological weapons programs as part of that treaty, so other programs cannot be justified by the fact that the superpowers have BW programs.

The purpose of the Chemical Weapons Convention is to ban chemical weapons across the board. Again, the United States and the Soviet Union are both intending to eliminate their stockpiles of these weapons under that treaty.

The United States has added a new proposal to the equation in the past year and a half — the so-called two percent proposal. We would retain the last five-hundred tons of our arsenal until such time as all countries capable of producing chemical weapons join the treaty regime.

This proposal has been opposed because it is discriminatory, among other things. It does not seem to me to provide political leverage vis à vis holdout countries, though that is part of the rationale for it.

The administration is moving away from the two percent position. They recognize that it is not feasible, will not be accepted in Geneva, and could well be a treaty-stopper. This two percent problem will disappear as the year progresses.

The superpowers signed an agreement last June under which they have agreed to dispose of all but five-thousand tons of their weapons by the year 2002. That process is already under way in the United States. The Soviets are still trying to design their chemical destruction program.

Not only have the superpowers committed themselves to getting rid of their weapons under the Chemical Weapons Convention, but they have agreed to stop producing chemical weapons in advance and to destroy the vast bulk of the weapons in their arsenals. That is a good example.

Shoumikhin: The public sentiment in the Soviet Union towards these matters is very clear. The discussions on chemical weapons have vast support among the Soviet public. It was quite surprising, because people were fighting for peace and against these weapons. But initially they did not care too much because the economic situation was so terrible.

Now the chemical negotiations and the future agreements get wide support. Whether this is going to have any influence on what is going to happen, we do not know because the country is changing. The role of public opinion in policymaking is also changing.

We hope that what happened with chemical weapons will happen in the future. It would be easier for the government to push forward any programs of limitation, reduction, and elimination on other weapons systems.

Question: I was surprised that Geoff Kemp thought there was going to be a scramble for rearmament. It strikes me that one of the lessons for the Arab states of this crisis is that no matter how big your conventional buildup, it does not do you any good.

Kuwait spent a lot of money on conventional weapons and was easily defeated. Saudi Arabia spent a lot of money on conventional and missile weapons and still had to call for outside support. Iraq spent a lot of money on conventional and chemical weapons, and it is getting thrashed. So do you share his perception, Mr. Karem, that the states in the region are going to rearm quickly?

Karem: There are theoretical underpinnings to Geoff's argument — Quincy Wright's theory of the periodicity of war, and so on — but we will not get into that.

Why should we envisage the future of the region as swinging into rearmament when my president tried to propose a completely different system of security that is based on mutual cooperation and peace?

This is more solid. We have a history of success in the region, and we should develop it rather than get into armaments more than peace.

Kemp: I hope I am wrong, and that this wonderful new world after the war will lead Kuwait and Saudi Arabia to see the foolishness of relying on armed force, and that we are always going to be there to help them the next time.

However, they will get exactly the opposite message. They will say the United States did it this time; we had better not rely on it forever. There will be pressures in this country not to want to repeat an operation like this.

In some respects, this was the ideal war at the ideal time. We had overbuilt Saudi Arabia. The U.S. armed forces were still at a strong level, though they will be cut back because of the economic situation. I hope you are right, but my gut tells me the opposite.

Question: It strikes me that attacking nuclear sites is one of the primary methods of non-

proliferation policy in the region. Israel, the United States, Iraq, and Iran have all bombed their opponents' nuclear reactors at one time or another in the last 10 years.

[Laughter.]

It is also a key chemical weapons non-proliferation measure that Elisa did not mention in her talk.

[Laughter.]

Is it realistic to propose an arrangement in the region where such attacks would be banned?

Karem: There is a structured process of destruction of safeguarded nuclear facilities going on. In 1981, there was another process of destruction by Israel against Iraq, a country adhering to the Non-Proliferation Treaty. Its nuclear installations are subject to international and IAEA safeguards.

A durable system of mutual confidence and effective international verification in the region could stand the test of time.

What has been happening is sorrowful. Iraq's invasion of Kuwait is wrong and was because of a wrong decision taken by one person in Baghdad. We should look beyond that and establish a system that should succeed.

Question: One of the variables affecting U.S.–Soviet cooperation in the region after the war is differences in how we assess the lessons of the war, and what has happened in it.

Dr. Shoumikhin, can you help us understand what the attitude of your military is going to be in assessing those weapons? Let me just give a couple of examples of the sorts of things I have in mind. As you pointed out, you have had more access to information about the American military than about the Soviet military.

Your military has expressed great concern about the American sea-launched cruise missile. That appears to have been successful in the early phases of the war. Your military has expressed great concern about the destabilizing effect of air-delivered weapons against command and control networks. The tactical surprise achieved in the first twenty-four to forty-eight hours of the war seemed to be the sort of thing they might be looking at.

Some in our press speculate about those in the Soviet military who are worried about the poor performance of Soviet weapon systems that have been supplied to Iraq.

Please help us to understand what it is that the Soviet military is most threatened by in the war.

Shoumikhin: We should consider not only the military aspect — whether your weapons performed well, whether others' weapons performed better — but also social aspects.

What is happening to the army, to those fine men and women that were considered the defenders of their motherland?

Consider this: the families of servicemen in the Baltics of non-Baltic extraction are not allowed to send their children to school and are deprived of decent housing conditions. It is not just a matter of how your weapons performed; it is a matter of how you perceive the army and its role in this society.

These pressures are being built up, and as a result, there are colonels in the Supreme Soviet who make sweeping declarations as to the role the army should play in the society.

The "democrats" and "liberals" who oppose any military threat or coup react quite negatively. They will affect the military discussions that are going to take place.

Suppose there are programs for improvements and new weapon systems. The reaction will not be purely technical. If these things are discussed at the Supreme Soviet, they will be discussed as part of the overall debate on the role of the army on the future of the country.

Many will say, "You do not need them. You are not going to fight Americans and we do not want you to become stronger. We do not want to spend so much money on these things on principle."

Question: Suppose nuclear weapons and missiles do proliferate over the next ten to fifty years. There is reason to suspect that they may. Missiles are used with the space program, and nuclear bombs, simply by the spread of civilian technologies, will be easier to produce. Then what happens? What are the political effects of that?

Singh: That trend is likely to emerge. It will make the world more complicated politically. There will be more actors with greater influence and greater capacities. It would need harmonization. It would need reconciliation.

The current moment is that much more important. We have lost the last forty years. If we persist in pursuing selective technology controls, the suppliers will lose their credibility, which is required to build a more harmonious relationship.

The problem of credibility needs to be addressed.

Question: The United States has recently announced an intention to deploy towards the end of the decade GPALS (Global Protection Against Limited Strikes) to intercept ballistic missiles worldwide.

Assuming it is deployed, it brings up the question whether the United States will have the ability to intervene between third parties. The United States would also obviously have the capability to intervene unilaterally or bilaterally.

What effect would this have on future ballistic missile proliferation? It may make missiles less attractive.

Karem: I feel uncomfortable responding to questions the premises of which are based on the perpetuation of the arms race, of relying on new weapons systems. My background is one of disarmament.

What is wrong with the security arrangements and with treaty agreements and conventions that have kept peace so far? We have, for example, the Outer Space Treaty of 1967, which allows for the peaceful exploration of outer space and prohibits the emplacement of nuclear weapons. We have the Non-Proliferation Treaty of 1968, which has a history of success. We are all looking forward to an extension conference in 1995.

I would rely on multilateral efforts between countries strengthening existing legal regimes, plugging the loopholes that exist within them, working diplomacy, and a continuous process of consultation among countries instead of relying on a system of armament that may break down and endanger international peace and security.

Singh: Does the United States want to be the 911 of the world?

[Laughter.]

It is still force projection for a political objective. Imagine that somebody from outer space comes and says, "I am going to terminate your conflicts on this earth. I shall send missiles from my planet and terminate conflict for you." It would not be well-received.

[Laughter.]

Nolan: It is interesting to raise this question after the discussion that we have had, because it reflects an interesting disconnect in thinking about technological panaceas and the international security environment of the future. Implicit in your question is the continued U.S. technological domination through remote control of regional conflicts.

That sidesteps all of the discussion that we have had about the different structure of demand among regions that drives the proliferation question. The political variables admittedly are more complicated to deal with than technical fantasies — which GPALS is at this point, unfortunately.

Question: What will be the impact on the nuclear non-proliferation regime of the perception that a non-nuclear weapon state, Iraq, a party to the Non-Proliferation Treaty, has been attempting to develop a nuclear weapons?

Singh: Not only Iraq but many other countries who are party to the NPT have ambitions for developing nuclear weapons.

Something larger than the NPT is needed to address these concerns. The systems will have horrendous kinds of consequences. Certain areas which need to be redressed.

Karem: How can we draw a line between civilian uses and military uses? Who has the authority to decide? Who has the power to verify?

The answers to all these questions are embodied in the statute of the International Atomic Energy Agency. Iraq is a signatory of the Non-Proliferation Treaty.

Once there are suspicions of a violation, the agency takes the necessary measures. There are technical inspectors who are paid to do this job. Records are kept of nuclear material and waste. If there is fear of a violation, the agency can step in and verify it.

In negotiating the CWC, we are trying to develop a system of ad hoc or challenge inspection.

It is going to be one of the most elaborate systems of inspections, tied to an executive council, which in turn is tied to the highest political organ of the United Nations — the Security Council — to verify compliance of states. Once there is an ascertained indication of a violation, sanctions should immediately be imposed.

A country that is a full-fledged member of the NPT — unlike India — is different from a country that is not. Once you adhere to an international treaty of this stature, then you derogate a variety of measures.

Kemp: The first test of the NPT will come in the aftermath of this war. Iraq last had its facilities

inspected approximately six months ago. There are twenty pounds of enriched uranium in Iraq. We have bombed every nuclear installation in Iraq five times over. When the inspectors go back six months from now, and we cannot find the material, the question will be what happened to it? There will be ugly speculation as to who walked off with it, and as to where it is currently located.

Singh: The point which I made about nuclear proliferation was personal. It had nothing to do with the Indian Government. I do not subscribe to the Indian Government's position.

Question: I have a question for Mr. Singh. He said, "Unlike in Sino–Indian threat assessments, rationality tends to give way to emotion in the context of Indian or Pakistani threat analysis."

He also said, "The concerns get multiplied by traditional animosities and suspicions, raising threat perceptions to inordinate levels."

One concept for reducing those animosities and suspicions is scientific and professional exchanges.

Should these possibilities be explored?

Singh: Traditional animosities are there; it is a fact.

We would like to enlarge the communication, but in the political sphere, fears, threats, and anxieties have developed. They should be examined dispassionately, and a solution sought out. It will not be easy.

We welcome opportunities to exchange views and ideas. We would like to broaden them. We have done so with China. We have started a Sino–Indian border trade.

But in the case of Pakistan, there is a problem. We do not have this kind of contact.

Question: If in the aftermath of the Gulf War there is a proliferation of anti-tactical missile systems, is that an unalloyed good or does it create other proliferation problems? For instance, might it stimulate further offensive missile proliferation?

Kemp: That is exactly the type of question that will need careful examination. The euphoria over Patriot's performance is going to stimulate demand for Patriot and stimulate more money for Patriot follow-ons. Patriot cannot deal with all the missiles in the Third World.

Some of the technologies involved in these systems have applications for offensive purposes. Longer range ATBMs get into grey areas of the ABM Treaty.

Transferring this equipment will be complicated. Not even the Israelis could master the Patriot. The Israelis already had Patriots in the country when the war started, and had refused to accept American assistance because they always want to do things themselves.

If Israel has had problems with the Patriot, then other countries that want it are going to find it even more difficult.

Nolan: The critical debate is yet to be had because of the support for Patriot.

It is not clear that the offense–defense dynamics that are discussed in the strategic context pertain. Offensive systems like cruise missiles, better ballistic missiles, and countermeasures will proliferate. Alternatively — and all this hinges on cooperation — a transition to lower levels of offenses and defenses might work, but it depends on the region.

The provision of Patriot forces you to state who your friends are. This has already come up in the context of selling the system to the Saudis, the United Arab Emirates, Kuwait, and Bahrain, as well as Israel.

Question: Can we expect to stop proliferation without the United Nations and the superpowers providing guarantees that territorial integrity will be assured and that government change will come only through internal and not external forces? These guarantees would not be words but immediate U.N. action through inspection teams for verification and then forces for defense.

Iran begged for the United Nations to come and see if the charges on the Iraqi use of chemicals could be verified. It took almost three years for the United Nations to act.

Karem: The charter of the United Nations has envisaged all these problems, and there are stipulations. There is a letter and there is a spirit of the U.N. charter.

What is happening now is the emergence of political will among the key players, who control the Security Council.

For the first time in the history of the United Nations, we have seen a modus vivendi among these key players translate itself into a modus operandi.

We have all read Article 51, which allows for the right of legitimate self-defense and which has been invoked many times, but for the first time now we are seeing the application of Article 49, which says that once there are measures taken by the Security Council, all states involved should employ a collective effort towards the fulfillment of measures decided by the Security Council resolutions. These are applied now in the Middle East.

Singh: Are you looking to a hegemony shared between the superpowers? Whether it has a UN letter of legitimacy or not, the United States will go about and resolve the conflicts. It should act in concert with dispassionate objectivity. The Gulf crisis has been handled with respect for the larger consensus. It is carrying the UN resolution with it.

Most countries are not powerful enough to implement a UN resolution. The United States and the Soviet Union can have that responsibility as long as it is not translated into a more self-serving instrument.

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