

LOREN R. GRAHAM

## Toward a New Era in U.S.-Soviet Relations

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*Because technological change has spurred political change in the USSR, the United States faces some unprecedented opportunities.*

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In the more than 70 years since the birth of the Soviet state, its foreign policy has changed dramatically, influenced in large measure by science and technology. Whereas Soviet leaders originally assumed that the differences between socialism and capitalism were so deep that cooperation between the two systems could exist only episodically and for limited tactical purposes, the new view is that socialism and capitalism must work together on common long-term problems.

Perhaps the greatest effect of science and technology on Soviet attitudes stems from the changes they've induced in the likelihood and consequences of major wars. Lenin believed that great wars were inevitable among the capitalist powers; the role of communists was to convert these conflicts, when they came, into class wars. In early communist doctrine, international warfare was thus considered the seedbed of socialist revolutions. Soviet history seemed to be an illustration of the validity of this viewpoint; the Russian Revolution, after all, came in the midst of the carnage of World War I, and the entire bloc of socialist countries in Eastern Europe arose in the aftermath of World War II.

The Soviet view that socialist revolutions often arose during great wars did not mean—contrary to many Western simplifications of the doctrine—that the USSR should aim for war; the orthodox Leninist position was that, because of their economic competition, capitalists would bring wars upon themselves that the proletariat would transform into revolutionary struggles. Regardless of the fine ideological points, however, early Soviet foreign policy regarded conflict, both among nations and among classes, as a source of positive social change.

When Nikita Khrushchev first revised this doctrine in the late 1950s, calling openly for an abandonment of the “Marxist-Leninist principle which says that while imperialism exists, wars are inevitable,” he cited the development of military technology as the reason for the change. Advancing the

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Loren R. Graham is a professor in the Program on Science, Technology, and Society at MIT and author of *Science, Philosophy, and Human Behavior in the Soviet Union* (1987), to be reissued this fall in paperback by the Columbia University Press. This article is based in part on his forthcoming book, *Science and the Soviet Social Order* (Harvard University Press).

principle of “peaceful coexistence,” he observed: “It would be too late to discuss what peaceful coexistence means when the talking will be done by such frightful means of destruction as atomic and hydrogen bombs, as ballistic rockets which are practically impossible to locate and which are capable of delivering nuclear warheads to any part of the globe. To disregard this is to shut one’s eyes, stop one’s ears, and bury one’s head.”

Khrushchev’s concept of peaceful coexistence was still a very narrow one, however, based as it was on an assumption of the eventual triumph of a Soviet-style system over capitalism—in which war was still deemed a possible, though not desirable, path. Khrushchev and his immediate followers believed that, horrible though a thermonuclear war would be, the Soviet Union was capable not only of surviving one but of actually winning it. To do so, it was necessary that the Soviet Union be adequately armed, which meant achieving rough parity with the United States in nuclear weapons. This goal was realized during the time of Leonid Brezhnev’s leadership.

Mikhail Gorbachev has now stated repeatedly that neither the Soviet Union nor any other major power could emerge victorious from a world war, and he has cited nuclear weapons as the major reason for the change in doctrine. He has expressed the fear that nuclear war might break out even accidentally, and has observed that “everyone seems to agree that there would be neither winners nor losers in such a war.” In his speech last December to the United Nations he continued to insist that nuclear weapons had demonstrated the “absolute limits” to military power.

Skeptics will maintain that the evolution of Soviet views on the subject of war is more one of rhetoric than of substance, and will point to recent support by the Soviet government of local wars in Central America, Africa, and Afghanistan. But although the Soviet Union continues on occasion to support local conflicts (as does the United States), it has demonstrated its fear of major ones both by word and by deed. The Leninist thesis that world wars can be advantageously converted into class wars is a museum piece.

But preventing nuclear war, particularly an accidental one, requires more than the discarding of outdated ideological doctrines. It calls for cooperation between the Soviet Union and the United States in communications, in the conducting of major military maneuvers, in weapons testing, and in arms control and verification. Limited as the current agreements in these areas may be, they clearly represent the beginning of the “new thinking” that is so much discussed at the moment in the Soviet Union.

That new thinking is now progressing into many other areas, such as cooperation on controlling threats to the environment and joint scientific research. But here, just as in arms control, the United States and the Soviet Union have a long way to go. Many of the previous scientific exchange agreements between the United States and the USSR were so hobbled—by bureaucratic regulations, Soviet fears of free contact, and American worries about technology drain—that their results were meager. With the advent of Gorbachev and *glasnost* to the Soviet Union, this situation is changing. The prospects for fruitful work on common problems are brighter now than ever.

### **A new domestic climate**

The impact of science and technology on Soviet attitudes has not been restricted to foreign policy; it has also fundamentally affected the internal political development of the Soviet Union.

One of the best examples can be found in computers and electronic communication. Evgenii Velikhov, vice-president of the Soviet Academy of Sciences, contends that censorship rules are being changed by the advent of personal computers. Although admitting that until quite recently strict controls were imposed in the Soviet Union on all means of communication—high-tech or otherwise—he observes that individual possession of such technologies is now proliferating to such a degree that the government could not impose the old rules even if it wished to. Fortunately, he optimistically maintains, the old controls are “no longer needed.” Two rising curves have crossed, he observes—the curve of communications technologies that are increasingly uncontrollable, and the curve of improving political maturity of the Soviet people. Thus a new realm of freedom is being entered.

Velikhov is one of the leading supporters of Gorbachev’s reforms, and his cheerful views are probably more of a hope than an established fact. Conservative Soviet analysts have called for retention of some censorship rules. Andrei Sakharov recently warned that several proposed laws in the Soviet Union

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would once again tighten controls over communication, and he even stated that one of them may be aimed at personal computers. Nonetheless, Velikhov's belief that the new communications technologies are increasingly difficult to control seems accurate. The ubiquitousness of technologies such as personal computers, communications networks, fax machines, and satellite broadcasts is a nightmare for a Stalinist-type censor.

Even if the Soviet government could find a way to prevent the new technologies from being used for purposes it does not approve of, the price that would be paid for this suppression of communication would be very high. The Soviet Union would fall even further behind Western countries in computer literacy, technological innovation, and social development. The present evidence is that the leaders of the Soviet Union are not willing to pay that price, and are accepting the fact that the new communications technologies act as levers to open up their society more and more.

Computers, however, are not the only example of how science and technology are changing the internal political development of the Soviet Union. They are also deeply involved in the recent dramatic rise of interest groups, made up of independent clubs and associations with their own political agendas.

In the present era of *glasnost*, these organizations are numerous and of many different types. The movement that led the way, however, was a response to technology, a protest against damage to the natural environment caused by industry.

Before Gorbachev came to power it was politically impossible in the Soviet Union to create organizations calling for greater rights for nationalities or religious freedom, but as early as the 1960s environmental groups were able to function, albeit under tight controls.

The pioneering protest was the Brezhnev-era effort to save Lake Baikal, the largest body of fresh water in the world and one possessing many unique species of animals and plants. The characteristics of that campaign permitted it to break through the artificial unanimity of Soviet politics: It was immensely popular, it cut across the political spectrum in an unorthodox way, it was an issue within which political demands could be clothed in technical arguments, and it did not seem immediately dangerous to political leaders. Sensing an unprecedented opportunity for independent activity, many political reformers first enlisted in the Baikal movement, and later joined other environmental organizations. Their success as a harbinger of political change is probably greater than their actual achievements in the preservation of nature, although some real progress has been made.

Even today the environmental movement continues to be the largest and most effective of the new interest groups. Within recent years, environment protests in the Soviet Union have resulted in the cancellation of construction plans for several nuclear power plants, improvement of pollution controls on lakes and rivers, the closing of a plant manufacturing synthetic additives for livestock feed, and the delay or shelving of plans for river diversion. Furthermore, the environmental movement continues to serve as a shield for groups with broader political agendas. In Latvia and Estonia, for example, local political analysts have spoken of the "environmental phases" of the nationalist movements, moments when the most effective ways of mobilizing nationalist sentiment are protests against Moscow bureaucrats' attempts to place polluting industries on the Baltic.

Many of the environmental protests have not been successful, but nonetheless are continuing. They include demonstrations against a chloropene rubber plant in Armenia and against a flood-protection dike around the harbor of Leningrad. And these are only the best-known of the protests; by now almost every large city in the Soviet Union and many small ones as well have witnessed environmentalist demonstrations or petition-gathering campaigns. To Americans or West Europeans these developments may not seem remarkable, but within the context of Soviet history they are momentous events. It is still not accurate to describe the Soviet Union as a pluralistic society, but these developments show that the old totalitarian model is completely outmoded for describing the Soviet Union today.

### **Ethics transfer**

As the leaders of the Soviet Union try to cope more successfully with the effects of technology, they are learning to place greater value on the experiences of other nations. No longer do they claim, as they once did, that technological abuses occur only under capitalism. They are seeking advice and cooperation on a whole range of technology assessment questions, including nuclear energy, environmental pollution, arms control, and biomedical ethics.

In the latter area, Soviet leaders have even begun to listen to the views of Western theologians and religious philosophers; biomedical ethics is an area in which the inadequacy of traditional Marxist approaches is particularly evident. Marx and Engels did not see any reasons for a separate and autonomous system of ethics. To them, the ethical systems of capitalist society were based on idealistic, ultimately religious, principles rather than on analyses of objective reality. Marx believed that in a communist society the “is” and the “ought” would come together, as the sources of exploitation and greed disappeared. People under communism would naturally behave in an ethical fashion.

The official disregard in the Soviet Union of traditional systems of ethics has made the discussion of the treatment of human subjects in biomedicine extremely difficult. Soviet scientists, along with those in other countries, have in the past decade developed very powerful technical means of altering, prolonging, and reproducing life. What are the ethical rules that should hold here? Is it permissible to “pull the plug” on life-support equipment for a terminally ill patient? And if so, when? What sorts of rules, if any, should govern surrogate motherhood? Can genetic engineering be applied to human beings? Does it make a difference, ethically speaking, if the goal of such genetic engineering is the curing of individual genetic deficiencies, as opposed to the “improving” of the human race in future generations?

These are questions that plague scientists and ethicists not just in the Soviet Union but throughout the world. The countries that have had the most success in coping with them, however, are those with traditions of consulting public opinion and gaining informed consent. Until recently, these traditions were almost absent in the Soviet Union, and even now they are very weak. Soviet scientists and ethicists are awakening to this fact and are looking abroad for experience in handling biomedical issues.

In the United States, the predominant approach is to form “ethical advisory committees” or “institutional review boards” with broad public representation. On the occasions when the President of the United States has convened ethical advisory committees to provide opinions on such questions as recombinant DNA research, he has been careful to include not only scientists and professional ethicists, but leaders of religious groups and community representatives as well. Often the ethicists, religious leaders, and community representatives have served as the “brakes” on the pace of application of biotechnology, slowing down the process until the ethical implications become clearer. To American scientists, this retardation has often been frustrating and perhaps even seemed wrongheaded, but most of them recognize the necessity to proceed cautiously and to consult the public that often funds their research.

Because of its history and political traditions, finding institutional mechanisms and intellectual rationalizations for such a “braking process” has been difficult in the Soviet Union. Medicine and science there have usually been paternalistic, with the physician or scientist deciding all questions. For example, patients with terminal cancer are not usually told the nature of their illness, on the grounds that the knowledge would unnecessarily depress them. Political and ideological factors also hinder Soviet progress toward more open research and therapeutic practices. The official opposition to religion as a source of values has so far kept leaders of the Russian Orthodox Church and other religious groups off the memberships of the few “scientific councils” that have been formed to deal with issues of biomedical ethics, despite their requests to be consulted.

In resolving the thorny issues of biomedical ethics the contribution of the official ethicists in the Soviet Union—the Marxist-Leninist philosophers—has been minimal, for two rather different reasons: The natural scientists have sensitive memories of the interference of Marxist philosophers in science during the Lysenko period and do not wish to give them a voice in determining what research can and cannot be done; and the philosophers themselves do not have a great deal to offer, given that ethics is so undeveloped in Soviet Marxism.

Nevertheless, a few reformers have emerged within the Soviet philosophical community who are calling for much more attention to biomedical ethics, and who are trying to make contact with Western groups with more experience.

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A leader here is I.T.Frolov, one of Gorbachev's top advisors on philosophy and ideology, who has joined with American bioethicists (from centers such as the Hastings Institute in New York and the Kennedy Institute in Washington) in international exchanges and discussions on these issues. In several cases, Soviet scientists have simply adopted the guidelines of Western countries on biotechnology, even though the elaboration of those guidelines involved procedures not yet acceptable in the Soviet Union. Soviet biologists, for example, adopted wholesale the guidelines of the U.S. National Institutes of Health on recombinant DNA research. As those American guidelines were relaxed, so were the Soviet ones.

Soviet medical researchers, physicians, and psychiatrists are also revising their procedures, sometimes reluctantly, for research on and treatment of human subjects. In almost all cases they are moving closer to accepted standards in the West. Thus the Soviet Union is engaged not only in "technology transfer" from the West, but in "ethics transfer" as well.

Such borrowing of Western experience, especially from the United States, will probably continue until the Soviet Union finds a way of creating truly representative bodies to address crucial biomedical questions involving life, death, and human values. It is important that the Soviet Union do so in order to find answers reflecting its own social consensus. Given the different religious and social compositions of the two countries, the American experience may not always be appropriate for the Soviet Union.

### **A new social sensitivity**

The Soviet experience in biotechnology is only one example among many of how issues that at first seemed merely technical have led to consideration of social and political questions, thereby loosening up the society. Consider the very nature of the country's industrialization: Leaders in the Soviet Union now realize that in their headlong drive for modernization in the immediate pre- and post-World-War-II periods they embraced technocratic approaches that ignored social costs, environmental damage, and aesthetic values. As a result, Soviet citizens are yearning for a more humane, variegated, and sensually rich culture than the Soviet-style machine age permits. Many are questioning the traditional predominance among the Soviet leadership of narrowly educated technocrats who gave them for so many years a uniform and monotonic life in everything from the forms of economic organizations to the styles of apartment houses.

Throughout most of Soviet history, the government emphasized mammoth construction projects that were seriously flawed from the standpoint of investment choices, environmental considerations, and social effects. The top administrators were usually former engineers who were enamored with the technical aspects of the projects but who knew little about economics, cost-benefit analysis, and impacts on quality of life. Furthermore, statistics on poverty and social deviance were either not collected or not publicized until a few years ago. As a result, the government was often unaware of the social effects of its industrialization policies.

Among the gigantic projects promoted by the Soviet government in the past have been the most ambitious programs in hydroelectric power and canalbuilding in the twentieth century, as well as the largest nuclear power plants ever built. Even more breathtaking projects have been discussed but not so far adopted, such as the "Northern Rivers Project" under which the flow direction of several of Siberia's latest rivers would be partially reversed in order to provide irrigation water for Central Asian agricultural regions. This project, which has been called the largest civil engineering project in history, is shelved at the moment, but there have been recent requests for new feasibility studies.

The same sort of attempt to solve economic prob-

lems with technological fixes has been an integral part of Soviet agricultural policies. The system of agriculture created in the early 1930s gained much of its rationale from the conviction that the full potential of agricultural machinery could not be attained as long as the land was divided into small private plots. Soviet engineers maintained that the enormous tractors and combines they planned to produce could work effectively only when tilling fields of thousands of acres.

There was, of course, some justification for this belief, as the steady growth in the average size of farms all over the world in recent decades has shown. But the inability of machinery alone to solve the problems of agricultural productivity is illustrated by the fact that the Soviet Union has become the world's largest producer of tractors and simultaneously one of the world's least productive agricultural countries. Soviet plans for agriculture have been too narrowly grounded in technology and too little aware of the economic and psychological factors that make the difference between a hard-working private farmer and a listless state employee.

Even after some of the problems of socialist agriculture clearly emerged, Soviet leaders still attempted technological rather than economic or sociological solutions. When Khrushchev realized in the late 1950s and early '60s that Soviet farms were in trouble, he concocted an even grander technocratic vision: The extension of massive, mechanized state farms (which he called "agricultural cities") into virgin lands. This project soon encountered not only the same difficulties of poor motivation that troubled the rest of Soviet agriculture but also suffered because of inadequate rain, which was the reason the areas had not been cultivated in the first place.

Under Brezhnev, agriculture absorbed enormous investments directed toward new equipment and land improvement, but the centralized managerial principles of Soviet agriculture remained the same. Only under Gorbachev have Soviet administrators recognized that no amount of investment in equipment will solve the motivational problem that is the basis of low productivity in agriculture. In the past few years, the emphasis has begun to shift from technology to private responsibility and profitability, with families in some cases even being permitted to have inheritable leases of land.

At the present time, a similar shift is occurring in other areas as well. The Soviet Union's previous emphasis on technocratic approaches to economic and industrial policies is being supplemented by strong interest in their social dimensions. Gorbachev relies much less heavily on the older type of engineering bureaucrat for advice, and much more on broadly educated scientists, economists, sociologists, and even humanists. (His top advisor, Aleksandr Yakovlev, is an historian, who wrote his dissertation on Roosevelt's New Deal).

### **To foster mellowing tendencies**

The new Soviet concern with the social aspects of economic development is one in which the United States could play a very helpful role, if it will recognize the possibility. In addition to promoting scientific exchanges between the two countries in traditional areas such as the basic sciences, we should also propose collaborative work on the host of environmental and developmental problems that have begun to preoccupy Soviet leaders. Most of these issues are ones that the United States has already begun confronting, and we have a much larger body of professionals who are experienced in the underlying social, economic, and political modes of analysis.

Such cooperation, however, will require a fundamental change of attitude. Much of American foreign policy toward the Soviet Union since World War II has been based on the concept of "containment" presented by George Kennan in his famous "X" article in *Foreign Affairs* in 1947. In the light of current tendencies in the Soviet Union, that article makes fascinating reading today. Contrary to later simplifications of his views, Kennan in 1947 did not call for an unending cold war against all Soviet policies or eternal opposition to the Soviet state but instead for "firm and vigilant containment of Russian expansive tendencies" aimed toward "promoting tendencies which must eventually find their outlet in either the breakup or the gradual mellowing of Soviet power."

At the time that Kennan wrote, the tendencies toward the gradual mellowing of Soviet power were not visible, but today they are. Therefore the second half of containment, which was the promotion of such tendencies in the Soviet Union, should now be at the top of the American agenda. Although it would be a gross and naive error to maintain that the Soviet Union under Gorbachev has changed so fundamentally that

the United States can drop its guard, it would be a tragic failure by American policymakers not to foster the mellowing tendencies now clearly under way.

The questions arising from science and technology that have played such important roles in softening Soviet attitudes are also the ones on which cooperation between the two countries is most feasible and appropriate. We should therefore come together to discuss these issues and find ways to solve common problems. Acid rain, the greenhouse effect, depletion of the ozone layer, deforestation, space exploration, industrial and agricultural management, problems of biomedical ethics, development of new sources of safe energy, and the avoidance of nuclear war are not "Soviet" or "American" issues; they are general issues confronting us all. The fact that by working on them together we not only may make progress on the problems themselves but are at the same time promoting the mellowing forces now emerging in Soviet society means that such cooperation would serve both the scientific and the political goals of the United States.

But, critics may ask, what if Gorbachev is overthrown and the Soviet Union again returns to its militant stance of the past? Can anyone guarantee that this will not happen?

Of course not. But given the will, the talents of American policymakers are surely up to the task of initiating cooperative projects with the Soviet Union that do not give away our leading military technologies. Many of the projects that could be launched in, say, biomedical ethics, studies of the greenhouse effect, the social implications of technology, and even exploration of space can be constructed in such a way that sensitive technologies are protected. Even in very sensitive areas (such as on-site arms control verification and exchanges of visits by military observers), recent experience involving the two countries has shown that one's secrets can be protected while achieving the advantages of greater cooperation.

Less than a decade ago, many American scientists were so repelled by Soviet policies toward refuseniks and dissidents and by the invasion of Afghanistan that they cut off all further contacts with their Soviet colleagues. Although some problems still remain, the current situation is vastly different. The Soviet Union has not only corrected many of these policies but is at the present moment more open to the consideration of Western values than at any time in its history. Should we not meet this new attitude with a welcoming hand? We might well take new notice of George Kennan's observation in 1947 that "the issue of Soviet-American relations is in essence a test of the overall worth of the United States as a nation among nations. To avoid destruction the United States need only measure up to its own best traditions and prove itself worthy of preservation as a great nation."

We will be showing our worth as a nation and measuring up to our best traditions if we now work with our Soviet colleagues on the issues of science and technology that concern us all and that have had so much to do with bringing the Soviet Union to its present receptive position. At the same time, we will be increasing the chances that the moderating tendency in the Soviet Union will continue.

### *Recommended reading*

Thomas Barnett, "The Concept of Technocracy and the Soviet Politburo," Department of Government, Harvard University, unpublished paper.

Mikhail Gorbachev, "Speech at the United Nations," *The New York Times* (December 8, 1988).

Loren R. Graham (ed.), *Science and the Soviet Social Order*, Harvard University Press, Cambridge, forthcoming, especially the chapters by Bruce Allyn, Harley Balzer, Richard De George, Seymour Goodman, Paul Josephson, Frederick Starr, and Douglas Weiner.

Thane Gustafson, *Reform in Soviet Politics: Lessons of Recent Policies on Land and Water*, Cambridge, England: Cambridge University Press, 1981.

T. Anthony Jones, Waiter Connor, and David Powell (eds.), *Soviet Social Problems*, Boulder, Colorado: Westview Press, forthcoming.

George Kennan ("X"), "The Sources of Soviet Conduct," *Foreign Affairs* 4 (July 1947):566-582.

Eugene Skolnikoff, "The Technological Factor Shaping East/West Relations," paper prepared for Institute for East/West Security Studies Conference: "The Impact of Technology on the Future of European Security and Cooperation," Finland, June 11-13, 1987.

Evgenii Velikhov, Interview for NOVA, Presidium of the Academy of Sciences of the USSR, Moscow, December 4, 1986.