

Conclusion of a limited test-ban treaty is an encouraging event. It strengthens the slim hope that mankind will escape destruction in a nuclear war, and justifies the moving of the *Bulletin's* clock a few minutes back from the hour of doom.

Not that the treaty is a significant step toward disarmament; it is not. Not that, because of it, no additional nations will acquire nuclear weapons; it will not achieve this in the most important case, that of China. But the treaty provides the first tangible confirmation of what has been the *Bulletin's* conviction in recent years—that “a new cohesive force has entered the interplay of forces shaping the fate of mankind, and is making the future of man a little less foreboding” (January 1960 *Bulletin*, page 6).

This new cohesive force appears first as naked fear for survival, as realization that both sides are in the same boat to sink or swim together, and that their common interest in preservation is stronger than their divergent and contradictory desires for greater power or for spreading their ideological gospel.

Speeches on the test ban by American and Soviet leaders have been so similar that they could almost be interchanged. They presented a vision of the horrors of nuclear war—the vision that has obsessed world scientists ever since 1945, and caused them to urge upon their governments policies of restraint and conciliation.

To show how different the situation could have been, we have only to listen to the Chinese. They believe that the revolution in weaponry has not changed the human condition; that the contest between communism and capitalism should go on, using all means not excluding war. We must hope that by the time China itself becomes a major nuclear power, its leaders, too, will have understood the need to bow to the newly released forces of nature—forces which now impose themselves on the U.S. and the USSR. The foremost technological powers cannot join China in willfully neglecting the facts of the scientific revolution!

Secretary McNamara warned during the test-ban hearings that, by the logic of the nuclear age, our advantage in nuclear weaponry is a waning asset. When both sides, after having absorbed a nuclear attack, will be able to respond with a devastating counterblow, further growth of military establishments will bring

diminishing returns. Nuclear tests could do little to delay this balance of terror.

But what, some would ask, of the “antimissile missile” restoring to nations the capacity to protect themselves by their own defensive effort? However, a return to effective national defense is not in the cards in the nuclear age. An adequate antimissile defense is a will-of-the-wisp. While interception of single missiles is possible, protection of a whole country from a hail of them is not practical. Certainly, the U.S. and USSR are far from having developed an effective antimissile force, and without more atmospheric tests they will not even be able to approach this—probably in any case insoluble—problem.

Both sides made concessions in Moscow—not so much to each other, as to new ideas, alien to their accustomed ideological systems. The traditional order of priority of aims is national power first, all other considerations second. The American proposal, embodied in the Moscow treaty, had been repeatedly rejected by Moscow, which must have considered the test ban less important than strengthening its image by an “all or nothing” attitude. While the reversal of this order of priorities has been facilitated by the Soviet-Chinese controversy, the latter has merely accelerated a change already in the making, a change urged upon the Soviet policy makers by the facts of the technological revolution.

On the American side, too, there has long been a split attitude. The test ban has been a sincere aim of two administrations; but its pursuit had been less than wholehearted. As I pointed out long ago in the *Bulletin* (and as Walter Lippmann emphasized in a recent column), opposition to the ban was based on the belief in continued significant American leadership in military technology and consequent possibility of maintaining American security by its own military efforts. (In a recent anti-ban column, William F. Buckley called American scientific leadership “preternatural.”) This belief is slow to die, despite the shock of rapid acquisition of nuclear weapons by the Soviet Union, and consistent Soviet leadership in long-range rocketry.

That a test-ban treaty has been finally concluded suggests that the old order of priorities is being revised

in America, too. Strengthening common security begins to appear a sounder aim than the pursuit of old-style national security.

That the forces of realism seem to win out, on both sides, over those of obstinate dogmatism is the significant message of the treaty.

If the limited test ban is a first step, in what direction lie the next one? The first, obvious suggestion is: toward progressive disarmament and readjustment of the threatening deployment of the two camps. This, however, is only one, and perhaps not the most promising, direction.

The agreement undoubtedly opens some possibility of slowing down the arms race. With the Soviet abandonment of their former all-or-nothing attitude, common exploration of the capabilities of seismic detection may be possible. A ban on underground tests producing certain minimum readings on internationally supervised instruments may result in further reducing the usefulness of testing to the military of both sides.

While the search for acceptable disarmament and disengagement steps should be pushed forward with all energy, other areas of Soviet-Western relations should not be neglected. The possibility of a limited test ban arose from the recognition, by both sides, of their common interest in survival. This negative interest may be too limited to permit more significant steps. The opposition to the test ban in America originates largely with those who believe that we and the Soviets have no common interests; that what is good for them must be *eo ipso* bad for us. The extent of the community of interests of the West and the Soviet society must become much more obvious before such attitudes will disappear, and thus make significant accommodation possible.

Two areas of common interests exist and could be broadened: political stabilization and advancement of science and technology.

A common interest in political stabilization arises from the fact that the U.S. and USSR are "have" nations, for whom consideration of possible losses outweigh those of possible profits. The Laos settlement was the first recognition of this fact. A common interest exists in the prevention of renewed Chinese-Indian war. In Berlin both sides are motivated by a desire for stabilization—except that for the West, the main concern is stabilization of the status of West Berlin, while for the Soviet Union, it is the stabilization of the shaky state of DDR. The building of the Berlin wall indicated Soviet recognition that this aim could not be achieved by pressure on West Berlin, and that drastic surgery was needed—amputation of the DDR from the rest of Germany. Stabilization agreements on Germany may now be possible, even if the West continues refusing to recognize the DDR as a sovereign state. Stabilization agreement in Asia, Africa, and Central Ameri-

ca are also within the realm of possibility, thus taking inevitable changes in these areas out of "battles in the cold war." It is in the mutual interest of the U.S. and USSR to prevent a political change anywhere on the globe from becoming a potential source of military confrontation.

Even more constructive than the freezing of the political map (or, at least, agreeing not to pour oil onto its smoldering fires) could be cooperation in science. Earth and its atmosphere, the ocean with its natural resources and, the expanses of cosmic space offer challenges for the human intellect which can be associated only superficially with the pursuit of selfish aspirations of a single nation or ideological system. Some of these challenges are of a scope and costliness which calls for a common effort. Technological advancement of the new nations is, at least up to a certain level, also a possible area of cooperation. Common interests clearly exist in the improvement of health and nutrition everywhere, and in rational solution of the problems posed by excessive growth of population in many new nations.

All this has been said before, but the test-ban agreement calls for saying it again, with new urgency. Peoples have begun to recognize that they are, first of all, members of the human race and only secondarily nationals of a certain state or adherents of a certain creed. In the whirlstorm of the scientific revolution, the whole human race finds itself tossed around by this storm, with the salvation of all depending on common efforts.

Let us then go ahead from the test ban to exploring, with a will, all possibilities of broadening the areas of our common interests. The Chinese proverb "every journey begins with a first step," which the Soviet leaders are fond of quoting, is meaningful only if the purpose of the journey is known. The Soviet ideologists are reluctant to acknowledge that they are going toward permanent cooperation with the West in making the earth a livable place. The American leadership is less dogmatically bound; but it, too, does not yet base its future plans on broad, long-term, constructive cooperation with the Soviet Union.

A good beginning has been made with the implementation of the agreement on cooperation in meteorological and communication satellites which followed the test-ban accord. Other similar agreements could now follow. Perhaps a committee of scientists from the West and the USSR should be created to explore all possible areas of scientific and technical cooperation in development of the program sketched out in the Stowe Report (January 1962 *Bulletin*, pages 15-30). Nothing could bring nations so closely together as the realization that they are members of a team, working for the common benefit of mankind. Science offers many possibilities for such teamwork. In the wake of the test-ban agreement, it is time to begin pursuing them with dedication.