

# The Atomic Bomb and the Prevention of War

Bertrand Russell in the Bulletin of the Atomic Scientists, October 1, 1946

*Mr. Russel in transmitting this manuscript wrote us an interesting note indicating that it had been refused by five American periodicals of wide circulation. (It has appeared in the English journal POLEMIC.) In offering it to the Bulletin which he reads »with interest and attention«—Mr. Russell trusted us to cut it if necessary without distorting his views.*

*We publish the article in full in the belief that Mr. Russell automatically deserves an American audience and that the Bulletin reader is sufficiently discriminating to profit from articles which he does not necessarily endorse.*

## THE IMPACT OF ATOMIC WAR

The atomic bomb has set a problem to mankind which must be solved if any tolerable existence is to be possible for the human race. The problem is that of abolishing large-scale war, not at some distant future date, but quickly, before there has been time for another vast conflict to break out.

If the next great war were to occur within the next two or three years, it would probably lead to a quick victory for the United States and its allies, since no other Power would have atomic bombs. But if there is no war in the near future, there will have been time for Russia to manufacture atomic bombs—and not only Russia, but many other nations, great and small. It must be assumed that bombs will soon become much cheaper and much more destructive than those dropped on the Japanese. In addition to bombs there is the possibility of spraying large regions with radioactive substances which will exterminate all life in their neighborhood. Given a little carelessness, life on this planet may be made impossible.

It is to be expected that, if war comes, it will begin with a surprise attack in the style of Pearl Harbor. The aggressor will hope for a knock-out blow so severe as to make retaliation impossible. If Great Britain were the target, it is probable that this hope would be realized, for Great Britain is peculiarly vulnerable to atomic attack, owing to the smallness of its area and the density of its population. It is to be expected that during the first day or two London, Glasgow, and all the major centers of population will be wiped out; industrial production will be paralyzed, and about half the inhabitants will perish. To carry on the war after such a blow would be totally impossible.

The situation will be slightly less catastrophic, though still appalling if the attack is directed against the United States. In the first 24 hours, New York, Washington, Chicago, and all the main centers of population will cease to exist; President and Congress will have undergone a diabolic alchemy, and a considerable percentage of the inhabitants of the United States, including most of those who are important in industry, will perish. The bomb will be borne by rockets, and it will be a matter of guess-work to infer what government is responsible. Some of the survivors will clamour for peace at any price, while others will proclaim that they would rather die than submit to so foul a blow. If the nation's store of atomic bombs has been successfully safeguarded, probably the resisters will prevail; there will be fierce revenge, many nations will be drawn in, and destruction will continue until disorganization makes the further manufacture of atomic bombs impossible. If one side succeeds first in this aim, it may consider that it has won a >victory<, but it will be a >victory< far more disastrous to the "victor" than any defeat known to history.

## THE COST OF "PREPAREDNESS"

Let us consider for a moment what will be involved in the meantime in safeguarding atomic bombs and rockets. It will be necessary to keep their location secret, which will mean virtually a prison camp for those who work in connection with them. It will involve a constant suspicion of treachery, leading to a prohibition of foreign travel for all but the most highly trusted public servants, as already in Russia. It will involve a complete cessation of freedom for all scientific workers whose activities have any bearing on the warlike utilisation of atomic energy. It will require apparatus and crews always ready, day and night, to retaliate upon whoever is considered the most probable enemy, as soon as there is any report of an atomic bomb being dropped. These crews must be told that, in a crisis, they are not to wait for orders, since the statesmen and the higher command will probably be wiped out. In the atmosphere of mutual suspicion thus generated diplomats will meet to discuss such important questions as who is to have the oil of Persia or the tin of Malaya; as they talk, they will be wondering which side will get in first with its Pearl Harbor. Sooner or later, nerves will give way, and the explosion will occur.

If utter and complete disaster is to be avoided, there must never again be a great war, unless it occurs within the next few years. Is it possible to establish a system which will secure this result before we suffer the penalty of our folly and our cleverness?

## THE PERMANENT PREVENTION OF WAR

It is entirely clear that there is only one way in which great wars can be permanently prevented, and that is the establishment of an international government with a monopoly of serious armed force. When I speak of an international government, I mean one that really governs, not an amiable façade like the League of Nations, or a pretentious sham like the United Nations under its present constitution. An international government, if it is to be able to preserve peace, must have the only atomic bombs, the only plant for producing them, the only air force, the only battleships, and, generally, whatever is necessary to make it irresistible. Its atomic staff, its air squadrons, the crews of its battleships, and its infantry regiments must each severally be composed of men of many different nations; there must be no possibility of the development of national feeling in any unit larger than a company. Every member of the international armed force should be carefully trained in loyalty to the international government.

The international authority must have a monopoly of uranium, and of whatever other raw material may hereafter be found suitable for the manufacture of atomic bombs. It must have a large army of inspectors who must have the right to enter any factory without notice; any attempt to interfere with them or to obstruct their work must be treated as a *casus belli*. They must be provided with aeroplanes enabling them to discover whether secret plants are being established in empty regions near either Pole or in the middle of large deserts.

The monopoly of armed force is the most necessary attribute of the international government, but it will, of course, have to exercise various governmental functions. It will have to decide all disputes between different nations, and will have to possess the right to revise treaties. It will have to be bound by its constitution to intervene by force of arms against any nation that refuses to submit to the arbitration. Given its monopoly of armed force, such intervention will be seldom necessary and quickly successful. I will not stay to consider what further powers the international government might profitably possess, since those that I have mentioned would suffice to prevent serious wars.

## PEACE THROUGH POWER ALLIANCES

There is one other method by which, in theory, the peace of the world could be secured, and that is the supremacy of one nation or of one closely allied group of nations. By this

method Rome secured the peace of the Mediterranean area for several centuries. America at this moment, if it were bellicose and imperialistic, could compel the rest of the world to disarm, and establish a world-wide monopoly of American armed forces. But the country has no wish for such enterprises, and in a few years the opportunity will be gone. In the near future, a world war, however terrible, would probably end in American victory without the destruction of civilisation in the Western hemisphere, and American victory would no doubt lead to a world government under the hegemony of the United States —a result which, for my part, I should welcome with enthusiasm.

But if, as seems more likely, there is no world war until Russia has an adequate supply of atomic bombs, plans for world peace will have to reckon with Russia and America as roughly equal Powers, and an international government, if it is to be established before the outbreak of an utterly disastrous war, will have to be created by agreement rather than by force.

Short of actual force, however, the government of the United States, with the support of Great Britain and a number of other Powers, could do a great deal towards the creation of an international government. An alliance could be formed, consisting in the first place of all North and South America, the British Commonwealth, France, Belgium, Holland, Scandinavia, and Spain (after dealing with Franco). This alliance should proclaim certain international purposes, and declare its willingness to be joined by any Power that subscribed to those purposes. There should be both military and economic inducements to join the alliance: military, in that the alliance as a whole would undertake the defense of all its members; economic, in a lower tariff for trade within the alliance than for trade with countries outside it, and also in advantage as regards loans and access to raw materials. There should be a gradual increase in the closeness of the alliance, and a continually greater amalgamation of military resources. Every possible effort should be made to induce Russia to become a member of the alliance. In this way international government might grow up gradually.

#### PEACE THROUGH THE UN

There is, however, a strong body of opinion which favors a different course. Instead of trying to create a strong organization which would at first not include Russia, those who favor this opinion prefer a weak organisation, the United Nations, of which Russia is already a member. If this is to be anything more than a weak evasion of the problem, it must be supplemented by a vigorous attempt to alter the constitution of the United Nations. At present, there is machinery for preventing Finland from attacking Russia, but none for preventing Russia from attacking Finland. There is, in fact, nothing to hinder a Great Power from waging aggressive war, whether against another Great Power or against a small defenseless neighbor. The only wars prevented by the organisation of the United Nations are those that are not at all likely to occur.

If the United Nations Organisation is to serve any useful purpose, three successive reforms are necessary. First, the veto of the Great Powers must be abolished, and majorities must be declared competent to decide on all questions that come before the organisation; second, the contingents of the various Powers to the armed forces of the organisation must be increased until they become stronger than any national armed forces; third, the contingents, instead of remaining national blocks, must be distributed so that no considerable unit retains any national feeling or national cohesion. When all these things have been done, but not before, the United Nations Organisation may become a means of averting great wars.

All this may seem Utopian, and perhaps it is. Politicians and diplomats are trained in evasion and ambiguity; most of them will prefer to offer a sham which can be obtained with little effort rather than an effective measure that is sure to encounter strenuous opposition, but they will dress up the sham so skillfully that many people will be deceived. Those to whom the survival of mankind is more important than victory in the next election must strive to enlighten the public while there is still time, and perhaps we can succeed.

The men of science, to whom politics is an alien art, find themselves suddenly faced with great responsibilities which they do not know how to fulfill. By their discoveries they have put immense powers, for good or evil, into the hands of ordinary men who have not the training required for a rapid change in age-old mental habits. The political world in complex, and understanding nuclei is no help in understanding diplomacy. But the same intelligence which enabled physicists to understand nuclei will enable them to understand politics, provided they realize that the problems are complex and slap-dash solutions will not work.

#### "THE BIG TWO"

Although people speak of the "Big Three" or the "Big Five", there are in fact two powers, the United States and the U.S.S.R., which far surpass all others in strength. Other Powers are, some of them, satellites of the one, some of the other, some hesitantly neutral. All other important Powers, including Great Britain, are, I think, prepared to acquiesce in the limitations of national sovereignty that are called for by the atomic bomb. This is not owing to any superior wisdom, but because their national sovereignty is already at the mercy of the Big Two. (E.g. the British have to submit to Bretton Woods and the Chinese, unless vigorously supported by America, to the loss of Port Arthur and the South Manchurian Railway.) The problem of establishing an international authority is therefore a problem of which the solution rests with America and Russia.

Russia, since it is a dictatorship in which public opinion has no free means of expression, can only be dealt with on the governmental level. Stalin and Molotov, or their successors, will have to be persuaded that it is to the national interest of Russia to permit the creation of an effective international government. I do not think the necessary persuasion can be effected except by governments, especially the government of the United States. Nor do I think that the persuasion can be effected by arguments of principle. The only possible way, in my opinion, is by a mixture of cajolery and threat, making it plain to the Soviet authorities that refusal will entail disaster, while acceptance will not.

#### THE EDUCATIONAL TASK IN AMERICA

Persuasion in the United States, where there is freedom of propaganda, is a different matter. If things do not go as we might wish, the fault is usually not with the politicians, though they get the blame; the fault is with public opinion, to which the politicians, as democrats, quite legitimately give way. What is needed is an immense campaign of public education. The average American voter, very naturally, is annoyed by the way in which the follies of Europe and Asia compel America to go to war; in his emotions he is an isolationist, even when hard facts have convinced his reason that isolationism is no longer practicable. He wishes the Atlantic were still so wide as in Washington's day, and is apt to forget the arguments against isolationism whenever business is prosperous.

To meet this difficulty it is necessary to bring home, not only to administrators and Congressmen, but to the average American citizen, the dangers to which, within a few years, America will be exposed, and the impossibility of warding off the dangers except by a partial surrender of sovereignty. The first reaction of nine people out of ten will be to urge that America should have more bombs than any one else, so that an attack by any other nation would be obviously folly. The fallacy in this point of view must be made plain to all and sundry. It must be pointed out that America has already been involved in two world wars as a direct result of the fear of being involved: both in 1914 and in 1939 Germany would not have gone to war if America had pronounced in advance against neutrality. It must be made clear that the same thing would inevitably happen again: a war between Russia and China, or between Russia and Great Britain, would be sure to involve the United States. Next, the utter disaster of an atomic war must be made clear, and it must be demonstrated that there is no defense against a surprise attack. Finally it must be proved that there is no hope in Kellogg Pacts, declarations of universal good will, alliances, or paper prohibitions of the use of atomic bombs. All this must be set forth in speech and in writing

throughout the length and breadth of the land, by men having no motive except public spirit and the hope that the world in which they have lived may still exist in their children's time.

If such a campaign is to succeed, it requires three things: a definite programme, an organisation, and the enthusiasm of a great moral crusade. Without this last nothing can be achieved, for although, from a purely rational point of view, self-preservation alone will not overcome the obstacles of rational thinking that are presented by ancient habits of hatred, suspicion and envy. We shall have to realize that what injures a foreign nation does not necessarily benefit our own. We shall have to learn to feel a little uncomfortable if we wallow in plenty while millions die of hunger and cold. We shall have to feel that domination brings less happiness than cooperation, and that mutual hostility, which was always wicked, has now become suicidal folly.

The appeal to fear has its function, especially in providing an initial shock which may compel attention. But the ultimate and most valid appeal should be to hope. There is no need of great wars, no need of the horrors of populations reduced to utter misery, harried and starved in a vast campaign of retribution. There is no reason why poverty and want should continue anywhere in the world. There is no reason why national education, in almost every country, should encourage false beliefs which promote warlike feeling. There is no reason why increase in the efficiency of production should be used, not to raise the standard of life, but to increase the proportion of human effort that is devoted to mutual extermination. All these evils depend for their continued existence upon war, and the national hostilities bred by the fear of war. If once the fear of war were removed, the whole human race could quickly attain a level of happiness and well-being surpassing that of the most fortunate in any earlier time. If the atomic bomb shocks the nations into acquiescence in a system making great wars impossible, it will have been one of the greatest boons ever conferred by science.

But it is time to return from these high hopes to the very different world in which for the present we have to live. I shall assume that such a campaign as I have indicated has had a considerable measure of success in America and Great Britain. (It will encounter less opposition in Great Britain, because the British realize that Great Britain will be wiped out in the next great war, if it occurs.) It remains to ask ourselves what, in that case, we ought to do about Russia.

#### ANGLO-AMERICAN POLICY TOWARDS RUSSIA

The policy most likely to lead to peace is not one of unadulterated pacifism. A complete pacifist might say: »Peace with Russia can always be preserved by yielding to every Russian demand.« This is the policy of appeasement, pursued, with disastrous results, by the British and French Governments in the years before the war that is now ended. I myself supported this policy on pacifist grounds, but I now hold that I was mistaken. Such a policy encourages continually greater demands on the part of the Power to be appeased, until at last some demand is made which is felt to be appearance of cowardice or unworthy submission that the peace of the world can be secured.

In dealing with the Soviet Government, what is most needed is definiteness. The American and British governments should state what issues they consider vital, and on other issues they should allow Russia a free hand. Within this framework they should be as conciliatory as possible. This should make it clear that genuine international cooperation is what they most desire. But although peace should be their goal, they should not let it appear that they are for peace at any price. At a certain stage, when their plan for an international government are ripe, they should offer them to the world, and enlist the greatest possible amount of support; I think they should offer them through the medium of the United Nations. If Russia acquiesced willingly, all would be well. If not, it would be necessary to bring pressure to bear, even to the extent of risking war, for in that case it is pretty certain that Russia would agree. If Russia does not agree to join in forming an international government, there will be war sooner or later; it is therefore wise to use any degree of

pressure that may be necessary. But pressure should not be applied until every possible conciliatory approach has been tried and has failed. I have little doubt that such a policy, vigorously pursued, would in the end secure Russian acquiescence.

#### THE CONSEQUENCES OF FAILURE

The issue is the most momentous with which mankind has ever been faced. If it is not solved, war will exterminate the civilized portion of mankind, except for such remnants as may have been engaged in exploring the Antarctic Continent or investigating the theology of Tibetan Lamas. These will be too few to reestablish civilized communities. If mankind, in the course of a millenium or two, slowly climbs back to its present intellectual level, it is to be presumed that it will again inflict a similar catastrophe upon itself. If any of the things that we value are to survive, the problem must be solved. How it can be solved is clear; the difficulty is to persuade the human race to acquiesce in its own survival. I cannot believe that this task is impossible.