

# LETTER TO STALIN

Leo Szilard

*In 1939, Dr. Szilard, as is generally known, took the initiative in bringing to the attention of President Roosevelt the scientific experiments which indicated that an atomic bomb was a possibility. This first step resulted in the mobilization of resources and skill which led to the atomic bomb. In the present article, Dr. Szilard discusses how Mr. Stalin, by taking the initiative, could in time resolve the present deadlock. Dr. Szilard would have preferred not to have published this article but rather to have sent a letter to Stalin dealing with these matters if permission to send such a letter, within the meaning of the Logan Act of 1799, could have been obtained. The memorandum on page 351 which he presented to Mr. Byrnes some time before the first bomb was tested in the New Mexico desert illustrates the type of clear thinking which forecast the present difficulties.*

I take the step of writing this "Letter" because I am deeply concerned about the deterioration of Russian-American relations, and also because I believe that the general sentiment which moves me to this action is shared by the majority of the atomic scientists who take an active interest in matters of public policy.

The steady deterioration of Russian-American relations has many disturbing aspects, but perhaps none is as serious as the lasting effect which it may have on the minds of the American people, as well as the minds of the people in Europe and elsewhere in the world.

Here in America more and more men will say to me in private conversation that war with Russia is inevitable. These are men who are capable of thinking independently and are not guided by whatever editorials they may read in their newspapers. To me their attitude is a symptom of grave danger because, once the American people close their minds on this subject war, in fact, will have become inevitable.

There are those who argue that there is no danger of an early war because at present Russia is too weak to start one and there is no precedent for the United States embarking on a preventive war. That there is no such precedent is, of course, true; but neither have the American people ever before been in a position where they

had to fear that if they remain passive during a protracted period of uneasy peace they may live to see the day when war—if it breaks out—will be brought to their homeland.

I do not mean to say that the United States may start a preventive war against Russia within the next six months; what I mean to say is that if the present trend continues for six months, a fateful change might take root in the minds of the American people and the situation would then be beyond remedy. Thereafter it would be merely a question of time—a few short years, perhaps—until the peace would be at the mercy of some Yugoslav general in the Balkans or some American admiral in the Mediterranean who may willfully or through bungling create an incident that will inevitably result in war. If the present trend continues for six months, more likely than not, the further course of events will be out of the control of the two governments involved.

The main reason for the present trend is the fact that two years have passed since the end of the war and no appreciable progress has been made toward a settlement. Russia and the United States have reached a deadlock.

All this does not come as a surprise to most of us who had worked in the field of atomic energy during the war and had time to adjust our thinking to the implications of the bomb. It was clear from the start



The following is part of a letter which Dr. Leo Szilard sent to the Attorney General under date of October 25, 1947. The article as printed is a revised version of the manuscript originally submitted to the BULLETIN and the Attorney General.

Enclosed is a copy of an article entitled "Letter to Stalin" which I have submitted to the BULLETIN OF THE ATOMIC SCIENTISTS for publication.

If it were in every respect proper for me to do so, I would write a letter to Mr. Stalin embodying the thoughts contained in the enclosed article and would seek some way of transmitting such a letter to him through the good offices of some prominent person who is known to him. It would be my hope that if my letter were transmitted to Mr. Stalin in such a manner he would perceive the genuine anguish which prompted my writing it and that he might therefore give consideration to its contents.

If such a letter were in fact to be transmitted to Mr. Stalin through some proper and desirable channel I would probably want to postpone indefinitely the publication of the article.

The enclosed article does not touch on any specific dispute or controversy with the United States and the letter which I would send to Mr. Stalin would merely follow its text, possibly shortened by omissions. You may, in the circumstances, think that the transmission of such a letter would not come under the Logan Act of 1799. On the other hand, you might think that the transmission of such a letter might come under the Logan Act or some other similar act and therefore, in accordance with the Logan Act, I am herewith making the formal request for permission or authority of the Government for the transmission of such a letter in the meaning of the Act.

that the existence of the bomb and the manner in which it was used would not make the settlement easier but rather more difficult. We knew that the world could be saved from another war only if both the United States and Russia were able to rise above the situation, and before this can come to pass one of them will have to take the lead.

Situations of this general type are not without precedent in history; they occur also on occasion in the lives of individuals, and the story of one such occurrence made a very deep impression on me. In 1930, twelve years after the end of the First World War, I met a classmate of mine and we talked of what had happened to us since we had separated. He had been a lieutenant in the Austrian Army, and in the last days of the war in the Carpathian Mountains he was in charge of a patrol. One morning they had heard by way of rumor that an armistice had been concluded, but being cut off from communications they were unable to obtain confirmation. They rode out on patrol duty as usual, and as they emerged from the forest, they found themselves standing face to face with a Russian patrol in charge of an officer. The two officers grabbed their guns and, frozen in this position, the two patrols remained for uncounted seconds. Suddenly the Russian officer smiled and his hand went to his cap in salute. My friend returned the salute, and both patrols turned back their horses. "To this day," my friend said to me, "I regret that it was not I who saluted first."

Perhaps by writing this "Letter" today I may make some slight amends for my friend's tardiness, for in these troubled times it is not without some personal risk for an American scientist to write a "Letter" such as this one.

Today Russia and America find themselves standing face to face, each of them fearful of what may be the other's next political move. The American people want peace. The Russian people want peace also.

As I see it, Russia wants peace—as does the United States—not only for the next five or ten years, she wants peace for good. And if I am correct on this point then peace can yet be saved; it can be saved by you, yourself.

It is within your power to resolve the deadlock and thereby to permit a change in the course of United

States foreign policy, but you can do this only if you decide to throw off the self-imposed shackles of the old-fashioned, and also of the new-fangled forms of diplomacy.

Russia and the United States are deadlocked on almost every point on which they have negotiated in the recent past. On every such point, Russia may have very good reasons for not yielding, and the United States may also have very good reasons for not yielding. I am not going to suggest that you should now yield on this point or that one, or that you should now "appease" the United States.

### THE APPROACH SUGGESTED

What I am suggesting in this "Letter" are a series of interconnected steps which are within your power to take. Because they are most unusual steps, these suggestions may appear quixotic to many and ridiculous to some.

What I am suggesting in this "Letter" may come somewhat as a shock to you. It may also come as a shock to some of my fellow-Americans who will read these lines. But this is not the time to hold back for fear of being exposed to ridicule or unwarranted accusations.

My first specific suggestion is that you speak directly and personally to the American people. What you may say to them, and you might wish to speak to them once a month, will be news, and because it will be news, it will be carried by the radio stations in the United States and will be reprinted in the newspapers. Naturally you would want to speak in Russian, but your interpreter could convey your speech sentence by sentence in English. Your speech could be recorded and released simultaneously in Russia and America.

The American people listen to their presidents because what the President says to them may affect their lives, and they will listen to you for exactly the same reason. But there is one important difference; you will be speaking to them as the head of a foreign state; your speech will be without effect with them unless it is felt to be one hundred percent sincere. The sincerity of your expression, as well as the other tokens of sincerity which you may be able to

present to the American people, will determine whether your speeches will strike home.

If your speeches to the American people were given full publicity in Russia, you would go a long way towards convincing the American people that you mean what you are saying to them.

And you would go a long way towards convincing the American people that they may expect fair play from you if you invited the President of the United States to address the Russian people just as often as you speak to the American public and accorded just as much publicity to his speeches in Russia as is given to yours in America.

All the machinery through which the American public is being kept informed in the United States would be at your disposal, and it would remain at your disposal in the absence of any attempt to use it for purposes of propaganda.

That you would be heard by the American people is certain; but how your speeches would affect them would depend both upon the substance and the tenor of these speeches.

What indeed should be the substance of your speeches?

What I suggest, in the first place, is that in your speeches you present to the American people a clear picture of a general settlement within the framework of a post-war reconstruction of the world, a settlement that would enable Russia and the United States to live in peace with each other.

At first you will be able to give such a picture in rough outline only; gradually you may be able to fill in more and more of the details. You might convey the details, perhaps, by issuing from time to time supplementary official reports.

By the time you have filled in the details, you will have given the American people more than merely a picture of a possible post-war world; you will have presented them with something that will amount to an offer for a post-war settlement.

You might well ask at this point, because it is indeed a crucial question, whether such a unilateral offer on your part, if it is generous, would not put you at a disadvantage from the point of view of later negotiations. You could easily make it clear, however, that your offer has to be taken as a whole, that you are perfectly willing to modify any one sin-

gle point to meet the wishes of the United States Government, but that for every point that the United States wants to have modified in her favor, you may ask that some other point be modified in Russia's favor. As long as this is clearly understood, you need not, and should not, hold back for the sake of later bargaining.

Such are the means through which you may be able to convince the American people that—in your view as well as in fact—private enterprise and the Russian economic system and also mixed forms of economic organization can flourish side by side; that Russia and the United States can be part of the same world; that “one world” need not necessarily be a uniform world. Until such time as the American people as well as the Russian people shall be convinced of this all-important point, we shall remain headed towards war and not towards peace.

I am told that these days the opposite thesis is presented by authoritative writers in Russia. And if this opposite thesis should be accepted as correct in America as well as in Russia—if it should be generally believed that there is indeed some inexorable law which, in the long run, makes war between your country and ours inevitable, then those in the United States who are now working for the preservation of peace would begin to feel that they are merely delaying the war which will be all the more terrible the later it comes.

## THE RESPONSE EXPECTED

Naturally you would want to know how the American people would respond if you should decide to take the initiative and adopt a new line of approach towards the United States. Would you really be able to break the present deadlock and thereby bring about a change in the course of United States foreign policy?

There is a vast body of men and women in the United States who view with genuine concern the rapid deterioration of Russian-American relations. Many of them have grave doubts in their heart as to the general wisdom of the present course of United States foreign policy, while they regard with equal misgivings the Russian counterpart of this policy.

If they do not at present take a stand in favor of changing the course steered by their own government, it is first of all because they do not see with sufficient clarity any practicable alternative course under present circumstances. Moreover they may believe that any attempt to bring about a change must necessarily come to naught as long as the speeches of your delegates will continue to follow a line of reasoning which is unacceptable to the large majority of the American public.

If you succeed in the difficult task of formulating in your own mind a practicable solution of the post-war issues and in conveying your picture of such a solution to the American public, then gradually, as you make statement after statement and issue report after report, a complete picture of an acceptable post-war settlement may unfold before the American people. By the time you will have filled in the details, and thus have implicitly extended a comprehensive offer, you also will have removed the block which had caused the deadlock.

This should have a direct and immediate effect on the foreign policy of the United States. Most Americans believe that those who are at present in charge of guiding American foreign policy were driven to the present policy because none other appeared practicable to them in the circumstances. It is generally believed that they are men of good will, who can be expected to change the present course the very moment they see a satisfactory way out of the present impasse.

You may or may not concur with this opinion. But in any case it is clearly within your power to give the American people a choice between two alternative courses of foreign policy. And if they do have a choice, the American people will exercise their choice—this I fervently hope—in favor of a course which may lead to peace. They will exercise their choice through all the mechanisms by which public opinion influences government policies in America. And those who are at present in charge of steering the course of American foreign policy may, to borrow a phrase of Mr. Stimson's, “either change their minds or lose their jobs.”

In this “Letter” I am trying to cope with a difficulty of communications which might be insurmountable. We in America have a crude and oversimplified picture of how political de-

isions come about in Russia. You in Russia may have a similar picture concerning America. It might be therefore difficult for a Russian to go along with the basic assumption of this “Letter”, that in America the most important factor for political decisions is not a public opinion created by the press but rather the attitudes and opinions of the individuals who constitute the American public, and that these attitudes and opinions may become the controlling factor in certain circumstances. But if this “Letter” had not one chance in a thousand of receiving serious consideration in Russia, I still would want to write it rather than to face the charge of seeing the approaching catastrophe without even raising a hand trying to avert it.

If the conclusion were reached that the measures advocated in this “Letter” would be effective, if adequately implemented, it would become necessary to face the difficulties of implementation. The difficulties of formulating an adequate solution to the post-war issues which would be acceptable to both Russia and the United States, as well as the rest of the world, are greatly increased by the absence of any interchange of thought between Americans and Russians who are not encumbered by the responsibility of representing the views of their Governments. It is perhaps understandable that atomic scientists should particularly stress this point and that they should discuss with each other whether there is any proper way in which they could help to bring about such an interchange of thought. The difficulties which stand in the way of achieving this or even a reasonable substitute thereof are obvious. But in view of their special responsibility it is perhaps not unnatural that atomic scientists should wish to assist in the implementation of some significant endeavor aimed at the permanent establishment of peace.

The general sentiment underlying this “Letter” is, I know, shared by the majority of the atomic scientists who take an active interest in matters of public policy, but the specific thoughts embodied in this “Letter” and the decision of writing it are my own and I am not speaking for any other person or persons.

*(Continued on Page 376)*

## WORKING FOR A MIRACLE

On superficial reading, and given the present trend of public opinion, Mr. Szilard's "Letter to Stalin" may bring to the author and, by implication, to the atomic scientists, an accusation of pro-Soviet leaning, or at least, of great naiveté in respect to political realities in general, and the Soviet system in particular.

Those who have followed the educational and political activities of the atomic scientists, know that the reason why a majority of them feel keenly the necessity of a comprehensive settlement with the Soviet Union and are skeptical about the long-range value of a policy of "containment" is not ideological sympathy or political nearsightedness, but the sober reflection that in the age of atomic and bacteriological warfare, no "containment" can be a lasting guarantee of the incapacity of a nation with the dimensions and industrial and scientific potential of the Soviet Union, to challenge the rest of the world. They know that if we were permitted to drift into such a conflict, the Soviet Union, despite a vastly inferior industrial power, would have the advantages of lesser vulnerability, easier dispersal, better psychological preparation for total war and habi-

tual regimentation of national life.

Starting from these premises and refusing to consider a "preventive" war as a morally justifiable alternative to a more dangerous war later, Mr. Szilard is looking desperately for a way out of the deadlock. In a letter reprinted on this page, he describes the reasoning by which he concluded that one such way might be to induce the Soviet leader to approach the American people directly. Mr. Szilard sees the American people and the Soviet leadership as the main forces on the world scene; if these two make up their minds that war is inevitable, nothing will be able to prevent it, since the Russian people has no voice of its own, and the American government is only an agent of the people.

Obviously, this concept is quite different from the Soviet "line", which blames the trend toward war on "warmongering" by a capitalist-dominated government and press.

How much chance there is of the Soviet leaders heeding Mr. Szilard's advice, or of using the proffered channels of communication for something other than their usual pronouncements? Mr. Szilard acknowledges that this chance is very small.

Why, then, does he deliberately expose himself to accusations of political naiveté?

As witnessed by his memorandum of 1945 (reprinted in this issue), Mr. Szilard early recognized that the atomic bomb would make the maintenance of an "armed peace" very difficult, if not impossible, and that only the "miracle" of a comprehensive settlement (Mr. Fermi has defined a miracle as an event which has only a 10% chance of happening) can prevent a war between the two remaining major powers.

Recent developments give little reason to dismiss Mr. Szilard as a foolish prophet. He apparently thinks—and he may be right—that by now, the chances of preserving the peace have become so small, that *every* approach which may conceivably break the deadlock, is worth trying. Not being content like many others, with waiting for a miracle, he feels that he must do something to bring it about.

Many will think that the kind of miracle Mr. Szilard is trying to conjure up is the least likely to materialize; it is up to them to analyze what "miracles" have a better chance of happening, and go to work to increase their probability.

E. R.

---

## COMMENT TO THE EDITORS BY DR. SZILARD

November 13, 1947

Dear Sirs:

Since the permission requested in my letter to the Attorney General of October 25 was not granted, I did not ask for further postponement of the publication of the article entitled "Letter to Stalin." I had discussed this article with quite a number of persons outside the atomic scientists' movement, and perhaps some of the questions raised, and the objections made, deserve to be recorded here.

One objection took the stereotyped form of "Why do you address yourself to Stalin? Why don't you write to President Truman?" Curiously enough, this very same phrase was used by two groups of persons—those whose outlook is close to that of the Administration and those on the left who oppose the foreign policy of the Administration. While these two groups use the same phrase, they

do not, of course, mean the same thing at all.

"Those on the left" mean that by writing such a "Letter" I am acknowledging that Stalin is the real obstacle to peace and I am neglecting to mention that actions on the part of our own Administration have contributed to, or have been largely responsible for, the present disturbing situation.

Those sharing the Administration's point of view seem to feel that, by addressing myself to Stalin, I am acknowledging that Stalin has a greater desire for peace, or has a greater ability to recognize the right path to peace, or else has a greater power to bring about a change than President Truman or his administration. These men will also say to me that those who are in charge of guiding American foreign policy are men of great ability who have an intense desire for peace. And if I accept this view as correct—they say to me—

then I ought to propose to Stalin (if I must propose anything to him at all) that he make a comprehensive offer to the Administration, rather than that he address himself to the American people.

My answer to them is, of course, that their view of our policy-makers—which incidentally is shared by the majority of the American people, as stated in my "Letter"—is irrelevant, for Mr. Stalin will base his actions on *his own views* rather than on ours. In my "Letter" I have, therefore, suggested a course of action which Mr. Stalin can follow even though his view may differ from ours. I suggested that if and when he has a case—and at present there is no case before us—he can take it to the highest authority in America—the American people.

Why did I not write to President Truman? First of all, because I cannot say to the President that if he

(Continued on Page 353)

# ATOMIC BOMBS AND THE POSTWAR POSITION OF THE UNITED STATES IN THE WORLD — 1945

*The following are excerpts from a memorandum prepared by Dr. Leo Szilard in March, 1945. This memorandum was to be placed before President Roosevelt, but owing to his sudden death, it did not reach him. Referred by the White House to James F. Byrnes it was placed before him by the author in a personal interview on May 28, 1945 (six weeks before the first bomb was tested in New Mexico). These excerpts contain none of the secret information which was embodied in the original document. It is believed that this was the first document which discussed the implications of the atomic bomb with respect to our future relations with Russia and the question of international control of atomic energy. It also contained the original suggestion of denaturing fissionable materials for the purpose of making more difficult their use for the manufacture of bombs.*

The development of the atomic bomb is mostly considered from the point of view of its possible use in the present war and such bombs are likely to be available in time to be used before the war ends. However, their role in the . . . years which will follow can be expected to be far more important and it seems that the position of the United States in the world may be adversely affected by their existence. The following might very well turn out to be the future course of events:

Before the end of the war we shall use atomic bombs against Japan. These bombs will be much less powerful than we know could be made and which in all likelihood will be made within . . . years yet the first bomb that is detonated over Japan will be spectacular enough to start a race in atomic armaments between us and other nations.

In a few months Russia's war with Germany may be over. The work on uranium will then undoubtedly be given a high priority there but it will perhaps still not be carried out on a large industrial scale until we detonate our first atomic bomb and thus demonstrate the success of this development. For a few years after that we shall almost certainly be ahead of Russia. But even if we assume that we could keep ahead of her

in this development all the time, this may neither offer us protection from attack nor necessarily give us substantial advantage in case of war . . . years from now.

. . . years from now Russia may have accumulated enough of some of the active elements which may be used for constructing atomic bombs to have an equivalent to . . .

Clearly, if such bombs are available, it is not necessary to bomb our cities from the air in order to destroy them. All that is necessary is to place a comparatively small number of such bombs in each of our major cities and to detonate them at some later time.

The United States has a very long coast-line which will make it possible to smuggle in such bombs in peacetime and to carry them by truck into our cities. The long coast-line, the structure of our society, and our very heterogeneous population may make an effective control of such "traffic" virtually impossible. One can easily visualize how a "friendly" power in time of peace may have such bombs placed in all of our major cities under the guidance of agents. This might be done free from aggressive intent. Such a power might know or suspect that we have accumulated a quantity of atomic bombs and fear our defenses are so strong that after the outbreak of hostilities it would be

difficult to reach our cities by air. In such circumstances it may be exceedingly difficult for its "government" to refuse to take "precautions" which its "army" considers necessary. . . .

So far it has not been possible to devise any methods which would enable us to detect hidden atomic bombs buried in the ground or otherwise efficiently protected against detection.

If there should be great progress in the development of rockets after this war, it is conceivable that it will become possible to drop atomic bombs on the cities of the United States from very great distances by means of rockets.

The weakness of the position of the United States will largely be due to the very high concentration of its manufacturing capacity and of its population in cities. Thirty million people live here in cities of over 250,000. This concentration is so pronounced that the destruction of the cities may easily mean the end of our ability to resist. Keeping constantly ahead of the Russians in our production of these heavy elements will not restore us to a strong position. No quantity of these "active" materials which we may accumulate will protect us from attack and so far as retaliation is concerned, we might not be able to do more than to destroy the large cities of Russia which are few in number and the economic importance of which is in no way comparable to the economic importance of our own cities. Thus it would appear that we would not gain an overwhelmingly strong position in a war with Russia merely by accumulating an enormous quantity of these elements or by increasing, as we might, the efficiency of our bombs from . . . to a much higher value.

The strong position of the United States in the world in the past thirty years was essentially due to the fact that the United States could out-produce every other country in heavy armaments. It takes a very large number of tanks, airplanes and guns to bring about a decision in a war and as long as tanks, airplanes and

guns are the major instruments of war the large production capacity of the United States gives it an advantage which may be considered decisive.

The existence of atomic bombs means the end of the strong position of the United States in this respect. From now on the destructive power which can be accumulated by other countries as well as the United States can easily reach the level at which all the cities of the "enemy" can be destroyed in one single sudden attack. The expenditure in money and material which is necessary to reach this level is so small that any of the major powers can easily afford it provided . . . For us to accumulate active materials in quantities beyond that necessary to destroy the cities of the "enemy" would probably give us some advantage in the war, but it is difficult to say whether the importance of such "excess" amounts of material would be really substantial. Out-producing the "enemy" might therefore not necessarily increase our strength very much.

The greatest danger arising out of a competition between the United States and Russia, which would lead to a rapid accumulation of vast quantities of atomic bombs in both countries, consists in the possibility of the outbreak of a preventive war. Such a war might be the outcome of the fear that the other country might strike first and no amount of good will on the part of both nations might be sufficient to prevent the outbreak of a war if such an explosive situation were allowed to develop.

One of the questions that has to be considered is whether it might be possible to set up some system of controls of the production of these active materials. Such controls would ultimately have to extend to every territory on the earth. Whether it is politically and technically feasible to set up effective controls and what we could do to improve our chances in this respect are questions that urgently require study and decisions. Some further remarks on these questions are made below, but other considerations might be put forward as soon as the question receives the attention of the Government.

A system of controls could be considered successful only if we could count on a period of grace in case the controls were denounced or obstructed by one of the major powers. This means that the system would have to be of such a nature that at least . . . would lapse between the time the

nations began to convert their installations for the purpose of manufacturing atomic bombs and the time such bombs became available in quantity. . . .

## **SYSTEMS OF CONTROL OUGHT TO BE CONSIDERED**

From a formal point of view all countries may be considered as potential enemies, but it is perhaps not too optimistic to assume that we may disregard the possibility of a war with Great Britain in the next fifteen years. It appears, however, rather unlikely that jointly with Great Britain we could police the world and thus prevent by force the manufacture of all of the "active materials" anywhere in the world, including Russia.

It might perhaps be possible to set up jointly with Great Britain and Russia some sort of joint control of the manufacture of the active materials everywhere in the world if we could get Russia to agree to such a control which of necessity would have to extend to her territory. The purpose of such a control would be to prevent the active elements from becoming available in a form in which they could be used for the manufacture of atomic bombs. This would not necessarily mean that the development of atomic power has to be suppressed but only that the elements involved must not be prepared in certain forms and degree of purity.

This point raises the following question: What forms of atomic power can we permit to be organized if we want to make sure that the available materials and facilities cannot easily be converted for the manufacture of atomic bombs? Some thought has already been given to this question with the following result.

There are two types of active materials. Materials of the first type can be diluted by the abundant isotope of uranium in such a way as to rule out the possibility of using them for atomic bombs while leaving unimpaired the usefulness of the materials for industrial purposes. A chemical separation from the diluting material would be impossible and a conversion into materials which can be used for atomic bombs would take . . .

Material of the second type which can be used for atomic bombs can be "denatured" by . . . Whether more elaborate methods can be worked out

which will permit the detonation of the denatured material is a question which would have to be carefully scrutinized. These lines merely serve to indicate that there might perhaps be a satisfactory solution to the problem of reconciling the requirements of safety of the United States with the desire not to hamper the development of atomic power for industrial purposes.

Unfortunately it is by no means sure that a satisfactory solution of this problem is in fact possible. It would be much easier, safer, and would require a much less tight control to arrest the development of atomic power by scrapping and outlawing the large and easily visible installations which characterize the first stage of this development.

## **CONTROL OF RAW MATERIALS COULD BE CONSIDERED**

If Russia, the United States and other countries were willing to forego the use of atomic power for peacetime purposes, one could have a system of control that would be fairly simple since it would be almost sufficient to control the movements of raw materials. Ores of uranium would have to be mined under control and transported to some "neutral" territory. Whether or not it would be permitted to have in a neutral territory installations belonging to . . . and atomic power plants is a question of minor importance. It appears likely that if the major powers were willing to forego the use of atomic power, a system of controls could be set up without encountering too great difficulties.

## **AN ALTERNATIVE SYSTEM OF CONTROLS WOULD HAVE TO BE MUCH TIGHTER**

On the other hand, if the United States, Russia, and other countries should have atomic power installations within their own territory, a very tight system of control would be needed in order to make sure that the nations would not have to face a sudden attack by atomic bombs. For a control of this sort to be effective, it would be necessary that our agents and the agents of Great Britain move

freely around in Russia, be permitted to keep contacts with Russian civilians, secretly employ Russian civilians for the purpose of obtaining information, and have entry into every factory or shop throughout the vast territory of Russia.

That there may be dangerous loopholes in control systems which might be set up is illustrated by events that took place in Germany after the first World War. At that time, there were many Germans who were willing to give information to the Inter-Allied Commission about violations of the control regulations, but those who actually did so were publicly tried under the German Espionage Law and were given heavy sentences. The Treaty of Versailles did not stipulate that the German Espionage Law must be revoked.

Clearly, it would be desirable to create a situation which would permit us to appeal in various ways to physicists and engineers everywhere for information that would uncover violations of the controls. This would give us additional assurance that such violations would be detected but it presupposes that we succeed in creating conditions in which we would guarantee the personal safety of those who volunteer such information and the safety of their families.

Since Russia cannot be expected to agree to such a control unless she obtains the same rights of control in the United States and Great Britain the question whether Congress and the people of the United States are willing to agree to such a control might become of paramount importance.

#### **HOW COULD RUSSIA BEST BE PERSUADED?**

As to our chances of persuading the Russians to accept mutual control, much may depend on the proper timing of our approach to Russia. It would appear that such an approach would have to be made immediately after we demonstrated the potency of atomic bombs....

Events may be expected to move so fast that if it is intended to reach an agreement with Russia and other countries such an agreement would have to be complete before the next presidential elections....

#### **IF THE CONTROL IS INTERFERED WITH**

While it may be a great step forward to establish a tight control on the atomic power development by a reciprocal agreement with Great Britain and Russia and extend it to all territories of the world, yet we cannot disregard the possibility that one of the major powers, for instance Russia, after a few years—during which the controls may have operated quite successfully—may begin to place difficulties in the way of an effective control of activities conducted on its own territory. It would be quite essential that the people of this country and the world be brought to understand from the start that any difficulties which any nation may place in the way of the established controls would have to be considered as tantamount to a "declaration of war".

Such a "declaration of war" would have the effect that the United States and other countries involved would at once begin to manufacture atomic bombs. If up to that time the control had been effective, it would take... to convert the materials and installations involved in the utilization of atomic power to the manufacture of bombs. In such an "armament race" in which all countries would have to start, so to speak, from scratch, the position of the United States might be quite favorable, provided the development of atomic power had been kept up at a high level.

Clearly if any major power deliberately wants to start a war, there will be a war and all that we can hope to achieve by the reciprocal control which we have discussed is that a war may not break out as a result of an armament race.

Still, it would seem that if the situation were generally understood there might be some hope that having succeeded in setting up a system of reciprocal control and having kept it in operation for a few years, neither the United States nor Great Britain nor Russia would attempt to interfere with this system of control in such a manner that its acts would be considered by the other partners as a menace. We would then perhaps have a chance of living through this century without having our cities destroyed.

An attempt to manufacture atomic bombs undertaken by any of the smaller countries would be of minor importance since it could be met by

immediate armed intervention using ordinary methods of warfare such as tanks and airplanes.

#### **IN THE ABSENCE OF A SYSTEM OF CONTROLS**

In discussing our postwar situation the greatest attention was given in this memorandum to the role that Russia might play. This was not done because it was assumed that Russia may have aggressive intentions but rather because it was assumed that if an agreement can be reached with Russia, it will be possible to extend the system of controls to every country in the world....

#### **Dr. Szilard's Comment**

*(Continued from Page 350)*

made a comprehensive offer for settlement of the post-war issues the Russian government would respond favorably. I cannot possibly have any basis for knowing how the Russian government would respond to any such approach. On the other hand, I can say how I believe the American people would respond to such a new approach on the part of the Russian government.

Moreover, while I would not wish to say that the conduct of our own foreign policy could in no way be improved upon under present circumstances, I do not believe that the problem which faces the world today can be solved at the level of foreign policy in the narrow sense of the term by the Administration; nor do I believe that it is within the power of the Administration to offer to the world a satisfactory solution of this problem without the full support of the American people for a bold and constructive solution. Since I have developed these thoughts in a previous article—"Calling for a Crusade" which appeared in the April-May issue of the BULLETIN—I need not again go into this point here. But I might perhaps add that today it no longer seems likely that popular support or popular pressure for a bold and constructive solution will be forthcoming unless the people would have reason to believe that they could expect the Russian government to be cooperative.

Leo Szilard

# ALSOS: THE STORY OF GERMAN SCIENCE

Philip Morrison

*Dr. Morrison reviews for the BULLETIN Alsos, Dr. Goudsmit's story of German scientific effort recently published by Henry Schuman and Co. Dr. Morrison, who is now Professor of Physics at Cornell University, followed closely the attempts to find out how far and how fast German wartime science was progressing, and was a member of the first United States mission to visit Japan after the bomb fell.*

The Pentagon was a strange place in the months just before D-day. The enormous staff and detailed planning which makes up the base of every modern campaign had for the most part been finished. The experts had begun to learn a new geography; the National Geographic maps on every office wall showed the Japan Sea more often than the coast of Fortress Europe. Planning and initiative had passed for the most part to Eisenhower's staff, busy in London. Washington's job was to look ahead. There were a few urgent tasks still to be organized from the foundation up. One of these was Alsos.

## ALSOS IS ORGANIZED

The Manhattan District, under General Groves, was anxious to learn how far German work on the atomic bomb had gone. This problem was a rather new one for Military Intelligence. The great secrecy about our own effort and the novel nature of the weapon combined to invalidate many of the traditional schemes of G-2. The bomb, with its top priority and its even higher secrecy, was the last but one of a whole series of technical innovations which made a scientifically-oriented military intelligence necessary. Under the sponsorship of G-2, but with concealed and high pressure from the Manhattan District, a special intelligence mission was organized. This was Alsos.

The word is an excellent example of the letter jargon of the war, and I have heard many readings of it, be-

ginning perhaps "American Liaison Special . . ." But it just means groves, in Greek.

The name epitomizes the story of this mission. It was to examine the whole scientific progress of the enemy, first in the soon-to-be liberated countries west of the Rhine, and finally into Germany itself. Its assignment was a wide one, covering everything from camouflage paint to vaccines, but its heart belonged to uranium. It was from the Manhattan District that its real powers and its eagerness flowed.

The scientific leader of this mission was a happy choice, Professor S. A. Goudsmit, now at Northwestern University. Goudsmit was an early recruit of the Radiation Laboratory at M.I.T., who was pried loose from them only by considerable skillful diplomacy. He is a physicist of wide training, a man fluent in half the languages of Europe both by his birthright as a Hollander and by years of continental study. He knows the physicists of Germany as few men do. It was he who turned the hopeful lists of names and the bad guesses of Washington into real evidence.

## PURSUIT OF URANIUM AND TOOTHPASTE

*Alsos* is Professor Goudsmit's story of the mission. It is only candid to say that the unfortunate demands of continued secrecy, added to a not entirely winning style, make the story of *Alsos* somewhat less good reading than it ought to be, and much less interesting than Goudsmit's skill as raconteur promised. But it is still an



exciting story, and its anecdotes not only show how far Nature holds up the mirror to the art of Eric Ambler, but have a genuine historic importance for us. The nature of secrecy in science and the difficult question of the relation between scientists and politics are two points of the widest value which *Alsos* illumines.

The urge to tell at least one story from the book is irresistible. The Washington economic and technical studies of Germany were good enough to guess which German firms were likely to be engaged in any German work on uranium processing. When Paris was freed the early entry of Alsos to the happy city gave the mission plenty of work. A prime "target" was the Paris office of the Auer firm. As we had feared, Auer in Paris had indeed collected uranium. More than that, the Paris representative had scraped the French supplies of thorium for every kilo in the land. Was the U 233 possibility worked on by the Germans? Were we missing something important?

Alsos would find out. The Auer office was bare. But with real elan and much hard jeep-riding and some luck, the Auer man from Paris was found hiding out in a little Belgian town newly fallen into Allied hands. The trail had been followed in the best tradition; *cherchez la femme!* Peterson was quizzed. He had bought thorium, he didn't know why. He had been in Hechingen not long past to "visit his mother".

But Alsos knew that Hechingen was the evacuation village in south Germany for the Kaiser Wilhelm Institute for Physics. Herr Petersen couldn't be cracked. It is still hard to believe, but the reason which actually led Auer to stock thorium turned out to be the crack-brained scheme of an Auer director for making *thoriated toothpaste* in the happy post-war world! The reader of *Alsos* will find more than one such marvelous yarn.

There are more serious things to be found in the book. One is impressed

(Continued on Page 365)



**October 23.** Brigadier General *Carlos P. Romulo*, of the Philippines, said peace can be safeguarded by, among other things, "our agreeing as speedily as possible on the control and regulation of armaments, especially atomic armaments as provided in Paragraph 4 of the Soviet resolution which does make sense, but which, unfortunately, is here placed in the wrong context and is wholly irrelevant to the preceding paragraphs of the resolution.

## PROHIBITION

### VERSUS CONTROL

"Indeed, Mr. Chairman, the manner in which the last paragraph is tacked on at the end of the resolution would seem to have been deliberately intended to confuse and mislead, and to place the responsibility for the non-implementation of the resolutions we approved last year on armaments regulation and reduction upon the United States. The device is patently dishonest. It reveals the highly dubious motive which inspired the resolution, and on this account alone, if on no other, it does not deserve more serious consideration than we have already given it."

*Warren R. Austin*, of the United States, complained the Soviet proposal diverts attention from practical programs for removing causes of war—"distress, despair, hunger and ill health," the creation of U.N. police forces, the control of atomic energy. By ten votes to one, with one abstention, the atomic commission had approved its interim report on functions of an international control agency.

"The Soviet Union alone voted against this interim report," Mr. Austin said. "It has continued to urge prohibition before control is set up." The proposed resolution spoke only of outlawing atomic weapons, he went on, and "its silence is more eloquent than what it says, when it omits the balance of the resolution" of January 24, 1946, which called for effective safeguards as well.

"The majority of the commission which has worked assiduously for these many months on the problem of atomic energy control," Mr. Austin said, "knew that an exchange of pious promises not to use atomic weapons is of no value, except as a part of a fully effective system of

control. Without such control, no treaty would provide the security which the world demands. . . . It would be an actual fraud upon the public, unless it realized the limitation, if they thought it would protect them when in fact it did not. . . ."

*J. L. Ilsley*, Canadian Minister of Justice, took the same view, introducing his own substitute resolution which also omitted atomic reference. The majority of the atomic commission, he said, had insisted that effective control "cannot be achieved either by a mere diplomatic document saying that the manufacture and use of atomic weapons is being prohibited, nor by the later Soviet proposal that periodic inspection and check is sufficient."

## WARMONGERING

### AND DISARMAMENT

**October 24.** Foreign Minister *Dmitri Z. Manuilsky*, Ukrainian Foreign Minister, called the question of war propaganda "second in importance only to the problem of control of atomic energy and reduction of armaments." The three issues were "necessarily linked in any workable program for peace." Propaganda in reactionary circles of the United States had created such war hysteria, he said, as to prevent agreement on atomic energy, disarmament and world police forces. The Australian proposal, he said, was "utterly incorrect" when it deleted the disarmament clause "in a vain effort to bypass questions that were unpalatable to the United Kingdom and the United States."

*J. H. Van Roijen*, of the Netherlands, called the Soviet atomic clause "out of place in this resolution and moreover incomplete and misleading in its citation of the General Assembly resolution of January 24, 1946."

*Carlos Eduardo Stolk*, of Venezuela, saw no need to link up warmongering and disarmament. "A close study would have to be made of all the aspects of the problem to determine whether or not the General Assembly should make a recommendation," he

said. "If so, the scope of that recommendation ought to be carefully defined."

*V. K. Wellington Koo*, of China, said the Soviet atomic clause contained only "the negative, passive aspect of control, namely the exclusion from national armaments of the atomic weapon." Effective safeguards, he said, were "an indispensable counterpart of exclusion."

The 10-1 vote on the second atomic report, Dr. Koo said, led to the "wish that there had been more cooperation so that unanimous agreement could be reached, thereby paving the way for its effective implementation. This, in our view, is the more necessary because progress in the work of the Commission for Conventional Armaments must necessarily depend upon a solution of this vital problem of atomic and other weapons of mass destruction.

"If the spirit of cooperation is lacking, another resolution of the General Assembly will not bring about more rapid progress, but will only serve to call attention to the failure to reach agreement and the underlying cause for this failure."

*Maurice Couve de Murville*, of France, said "the reduction of conventional armaments, the control and the prohibition of atomic weapons are in our opinion essential elements for the establishment of a true peace." But he also argued that the question of disarmament should be discussed in connection with the report of the Security Council, and submitted a French resolution on propaganda, which dropped the atomic clause.

Foreign Minister *Kuzma V. Kiselev*, of Soviet Byelorussia, charged that the disarmament and atomic resolutions had remained "a dead letter because of the United States and the United Kingdom," and asserted "the armaments race is going on."

## WAR PROPAGANDA LINKED

### TO ARMS MANUFACTURE

**October 25.** Foreign Minister *Jan Masaryk*, of Czechoslovakia, supported some positive action against war propaganda, and said this was definitely connected with the speediest implementation of the arms resolutions. "Moral and material disarmament should go hand in hand," he said.



Alfonso Lopez, of Colombia, wondered how it was possible to prevent warmongering when East-West disagreement appeared to be intensifying. No accord had been reached regarding peace treaties, atomic controls or disarmament. No progress had been made in conciliation since the last session of the Assembly, he said.

Hector McNeil, British Minister of State, said: "I do not pretend, or attempt to pretend, that there is no relation between the uncontrolled private manufacture of arms and propaganda in favor of war. There is unfortunately too much evidence on the subject of uncontrolled manufacture of arms and its co-relation, propaganda, for me, as a member of my government, to shut my eyes to this fact."

The British Laborite said there would doubtless be a full disarmament discussion at the appropriate time, and added: "Equally, I fear that the committee will have the greatest difficulty persuading themselves when they examine the evidence that the representatives of Soviet Russia have not been primarily responsible for the lack of progress on this essential and urgent subject."

## COMPROMISE RESOLUTION

### ON WARMONGERING

October 27. Australia, Canada and France succeeded in blending their views into a joint resolution to (1) condemn all propaganda which might disrupt peace, (2) request governments to promote friendly relations by available publicity and propaganda, (3) transmit this resolution to the Conference on Freedom of Information, meeting in Geneva next March. This omitted any atomic clause.

Mr. Vishinsky declared it would be "ridiculous" to speak against war propaganda, and at the same time to increase armaments.

"We do not suggest any solution," the Soviet delegate said. "We simply say the United Nations affirms the speediest implementation of the General Assembly resolution. Isn't it one of the measures that would redound against war? . . . You are not against that? Or are you?"

The Soviet resolution was rejected by paragraphs. On the atomic clause, the vote was forty to seven against

it, only Egypt joining the Slav bloc (the Soviet Union, Byelorussia, Czechoslovakia, Poland, Ukraine and Yugoslavia), with seven nations abstaining. The joint resolution against war talk then won committee approval, 56-0, with Haiti absent and was sent to the full Assembly.

## MEMORANDUM ON BIOLOGICAL WARFARE

On biological warfare, Dr. Zlotowski told reporters Oct. 3 that he would bring that issue up in the atomic commission, after an eleven-page memorandum had been circulated to Assembly delegates by the American Association of Scientific Workers.

The very existence of biological weapons, the Polish delegate contended, demonstrates that "it is absolutely necessary to have as a first step the immediate prohibition of weapons of mass destruction.

"From the point of view of atomic control, one may argue that this prohibition is meaningless as long as we don't have the mechanism to inspect development.

"In the case of biological warfare, the value of such a mechanism is extremely doubtful—or impossible. So first, at least, there should be an agreement to prohibit such weapons—for the moral value, anyway."

This view—counter to the majority opinion—would again defer establishment of controls over mass-destruction weapons, pending an initial prohibition.

Dr. Zlotowski argued that the U.N. should work to eliminate causes of war, rather than believe control of weapons would provide real safety. He envisioned a future which would see uranium resources playing the same role in international rivalries as oil has done.

So he contended any control must be such as would least interfere with individual nations' economies, while preventing any country from establishing dominance in the atomic field. Unless war causes were removed, he said, biological weapons would enable a disastrous war even if some nations lacked atomic bombs.

## Letter to Stalin

(Continued from Page 349)

### POSTSCRIPT

Having presented a number of suggestions outlining in detail—perhaps in too great detail—a course which you might wish to adopt, I feel that I ought to go one step further at the risk that what I am going to say may seem out of proportion with the main theme of this "Letter."

The vast majority of the atomic scientists who take an active interest in matters of public policy are free from any anti-Russian bias and they do not include Communists in either the narrow or wider sense of the term. If I were called upon to do so, I would try to form a committee drawn from their ranks who, acting as hosts, would gather a group of American citizens from all walks of life — men who are concerned about the welfare of America and who are also concerned about the welfare of the rest of the world, including Russia. Such a group could meet with similarly constituted groups from Great Britain and France on the one hand, and Russia, Poland and Czechoslovakia on the other hand. Russian scientists would surely cooperate if the initiative were taken by you, and the scientists of all these other countries could then also be counted upon to help in arranging such a meeting.

If the issues which face the world today were freely discussed in such an international group of private persons, after some initial faltering, the picture of a bold and constructive solution of these issues might emerge, and public opinion all over the world might then rally to such a solution.

In governmental negotiations the discussion is always hampered by the fear that once a point is conceded it is difficult to go back on it. But in such a discussion among private individuals it may be possible to deal with the controversial issues in the proper setting of a wider framework, and some of them may then appear reduced to their true proportions.

If a sufficient number and variety of those persons who would participate in these discussions would feel free to present their private opinions as distinguished from the official positions of their own governments, a free flow of thought might ensue, which could make available a valuable fund of ideas and suggestions upon which the governments could draw later on in their negotiations.

There could be, of course, in these discussions, no disclosure of any kind relating to the subject of atomic energy.

NOT FOR RELEASE!

THE FOLLOWING IS PART OF A LETTER SENT BY DR. LEO SZILARD TO THE ATTORNEY GENERAL UNDER THE DATE LINE OF OCTOBER 25, 1947:

Enclosed is a copy of an article entitled "Letter to Stalin" which I have submitted to the BULLETIN OF THE ATOMIC SCIENTISTS for publication.

If it were in every respect proper for me to do so, I would write a letter to Mr. Stalin embodying the thoughts contained in the enclosed article and would seek some way of transmitting such a letter to him through the good offices of some prominent person who is known to him. It would be my hope that if my letter were transmitted to Mr. Stalin in such a manner he would perceive the genuine anguish which prompted my writing it and that he might therefore give consideration to its contents.

If such a letter were in fact to be transmitted to Mr. Stalin through some proper and desirable channel I would probably want to postpone indefinitely the publication of the article.

The enclosed article does not touch on any specific dispute or controversy with the United States and the letter which I would send to Mr. Stalin would merely follow its text, possibly shortened by omissions. You may, in the circumstances, think that the transmission of such a letter would not come under the Logan Act of 1799. On the other hand, you might think that the transmission of such a letter might come under the Logan Act or some other similar act and therefore, in accordance with the Logan Act, I am herewith making the formal request for permission or authority of the Government for the transmission of such a letter in the meaning of the Act.

(AS REVISED IN PAGE PROOFS)

CONFIDENTIAL! NOT FOR RELEASE!

COPY FOR BULLETIN  
November 10, 1947

THE FOLLOWING IS THE TEXT OF AN ARTICLE ENTITLED "LETTER TO STALIN" WHICH HAS BEEN SUBMITTED FOR PUBLICATION TO THE BULLETIN OF THE ATOMIC SCIENTISTS BY DR. LEO SZILARD. IN THIS ARTICLE DR. SZILARD MAKES AN APPEAL FOR STALIN TO TAKE THE INITIATIVE AND ADOPT A NEW LINE OF APPROACH --NEW BOTH IN SUBSTANCE AND METHOD -- TOWARD THE UNITED STATES, CULMINATING IN A COMPREHENSIVE OFFER ON STALIN'S PART FOR A GENERAL SETTLEMENT WITHIN THE FRAMEWORK OF A POST-WAR RECONSTRUCTION OF THE WORLD.

THE PROBLEM TO BE SOLVED.

I take the step of writing this "Letter" because I am deeply concerned about the deterioration of Russian-American relations, and also because I believe that the general sentiment which moves me to this action is shared by the majority of the atomic scientists who take an active interest in matters of public policy.

The steady deterioration of Russian-American relations has many disturbing aspects, but perhaps none is as serious as the lasting effect which it may have on the minds of the American people, as well as the minds of the people in Europe and elsewhere in the world.

Here in America more and more men will say to me in private conversation that war with Russia is inevitable. These are men who are capable of thinking independently and are not guided by whatever editorials they may read in their newspapers. To me their attitude is a symptom of grave danger because once the American people close their minds on this subject war, in fact, will have become inevitable.

There are those who argue that there is no danger of an early war because at present Russia is too weak to start one and there is no precedent for the United States embarking on a preventive war. That there is no such precedent is, of course, true; but neither have the American people ever before been in a position where they had to fear that if they remain passive during a protracted period of uneasy peace they

may live to see the day when war -- if it breaks out --- will be brought to their homeland.

I do not mean to say that the United States may start a preventive war against Russia within the next six months; what I mean to say is that if the present trend continues for six months, a fateful change might take root in the minds of the American people and the situation would then be beyond remedy. Thereafter it would be merely a question of time -- a few short years, perhaps-- until the peace would be at the mercy of some Yugoslav general in the Balkans or some American admiral in the Mediterranean who may willfully or through bungling create an incident that will inevitably result in war. If the present trend continues for six months, more likely than not, the further course of events will be out of the control of the two governments involved.

The main reason for the present trend is the fact that two years have passed since the end of the war and no appreciable progress has been made toward a settlement. Russia and the United States have reached a deadlock.

All this does not come as a surprise to most of us who had worked in the field of atomic energy during the war and had time to adjust our thinking to the implications of the bomb. It was clear from the start that the existence of the bomb and the manner in which it was used would not make the settlement easier but rather more difficult. We knew that the world could be saved from another war only if both the United States and Russia were able to rise above the situation and before this can come to pass one of them will have to take the lead.

Situations of this general type are not without precedent in history; they occur also on occasion in the lives of individuals, and the story of one such occurrence made a very deep impression on me. In 1930, twelve years after the end of the First World War, I met a classmate of mine and we talked of what had happened to us

since we had separated. He had been a lieutenant in the Austrian Army, and in the last days of the war in the Carpathian Mountains he was in charge of a patrol. One morning they heard by way of rumor that an armistice had been concluded, but being cut off from communications they were unable to obtain confirmation. They rode out on patrol duty as usual, and as they emerged from the forest, they found themselves standing face to face with a Russian patrol in charge of an officer. The two officers grabbed their guns and, frozen in this position, the two patrols remained for uncounted seconds. Suddenly the Russian officer smiled and his hand went to his cap in salute. My friend returned the salute, and both patrols turned back their horses. "To this day," my friend said to me, "I regret that it was not I who saluted first."

Perhaps by writing this "Letter" today I may make some slight amends for my friend's tardiness, for in these troubled times it is not without some personal risk for an American scientist to write a "Letter" such as this one.

Today Russia and America find themselves standing face to face, each of them fearful of what may be the other's next political move. The American people want peace. The Russian people want peace also.

As I see it, Russia wants peace - as does the United States - not only for the next five or ten years, she wants peace for good. And if I am correct on this point then peace can yet be saved; it can be saved by you, yourself.

#### THE APPROACH SUGGESTED.

It is within your power to resolve the deadlock and thereby to permit a change in the course of United States foreign policy, but you can do this only if you decide to throw off the self-imposed shackles of the old-fashioned, and also of the new-fangled forms of diplomacy.

Russia and the United States are deadlocked on almost every point on which they have negotiated in the recent past. On every such point, Russia may have very good

reasons for not yielding, and the United States may also have very good reasons for not yielding. I am not going to suggest that you should now yield on this point or that one, or that you should now "appease" the United States.

What I am suggesting in this "Letter" are a series of interconnected steps which are within your power to take. Because they are most unusual steps, these suggestions may appear quixotic to many and ridiculous to some.

What I am suggesting in this "Letter" may come somewhat as a shock to you. It may also come as a shock to some of my fellow-Americans who will read these lines. But this is not the time to hold back for fear of being exposed to ridicule or unwarranted accusations.

My first specific suggestion is that you speak directly and personally to the American people. What you may say to them, and you might wish to speak to them once a month, will be news, and because it will be news, it will be carried by the radio stations in the United States and will be reprinted in the newspapers. Naturally you would want to speak in Russian, but your interpreter could convey your speech sentence by sentence in English. Your speech could be recorded and released simultaneously in Russia and America.

The American people listen to their presidents because what the President says to them may affect their lives, and they will listen to you for exactly the same reason. But there is one important difference; you will be speaking to them as the head of a foreign state; your speech will be without effect with them unless it is <sup>felt</sup> ~~felt~~ to be one hundred per cent sincere. The sincerity of your expression, as well as the other tokens of sincerity which you may be able to present to the American people, will determine whether your speeches will strike home.

If your speeches to the American people were given full publicity in Russia, you would go a long way towards convincing the American people that you mean what you are saying to them.

And you would go a long way towards convincing the American people that they may expect fair play from you if you invited the President of the United States to address the Russian people just as often as you speak to the American public and accorded just as much publicity to his speeches in Russia as is given to yours in America.

All the machinery through which the American public is being kept informed in the United States would be at your disposal, and it would remain at your disposal in the absence of any attempt to use it for purposes of propaganda.

That you would be heard by the American people is certain; but how your speeches would affect them would depend both upon the substance and the tenor of these speeches.

What indeed should be the substance of your speeches?

What I suggest, in the first place, is that in your speeches you present to the American people a clear picture of a general settlement within the framework of a post-war reconstruction of the world, a settlement that would enable Russia and the United States to live in peace with each other.

At first you will be able to give such a picture in rough outline only; gradually you may be able to fill in more and more of the details. You might convey the details, perhaps, by issuing from time to time supplementary official reports.

By the time you have filled in the details, you will have given the American people more than merely a picture of a possible post-war world; you will have presented them with something that will amount to an offer for a post-war settlement.

You might well ask at this point, because it is indeed a crucial question, whether such a unilateral offer on your part, if it is generous, would not put you at a disadvantage from the point of view of later negotiations. You could easily make



it clear, however, that your offer has to be taken as a whole, that you are perfectly willing to modify any one single point to meet the wishes of the United States Government, but that for every point that the United States wants to have modified in her favor, you may ask that some other point be modified in Russia's favor. As long as this is clearly understood, you need not, and should not, hold back for the sake of later bargaining.

Such are the means through which you may be able to convince the American people that—in your view as well as in fact -- private enterprise and the Russian economic system and also mixed forms of economic organization can flourish side by side; that Russia and the United States can be part of the same world; that "one world" need not necessarily be a uniform world. Until such time as the American people as well as the Russian people shall be convinced of this all-important point, we shall remain headed towards war and not towards peace.

I am told that these days the opposite thesis is presented by authoritative writers in Russia. And if this opposite thesis should be accepted as correct in America as well as in Russia -- if it should be generally believed that there is indeed some inexorable law which, in the long run, makes war between your country and ours inevitable, then those in the United States who are now working for the preservation of peace would begin to feel that they are merely delaying the war which will be all the more terrible the later it comes.

#### THE RESPONSE EXPECTED.

Naturally you would want to know how the American people would respond if you should decide to take the initiative and adopt a new line of approach towards the United States. Would you really be able to break the present deadlock and thereby bring about a change in the course of United States foreign policy?

There is a vast body of men and women in the United States who view with genuine concern the rapid deterioration of Russian-American relations. Many of them have

grave doubts in their heart as to the general wisdom of the present course of United States foreign policy, while they regard with equal misgivings the Russian counterpart of this policy. If they do not at present take a stand in favor of changing the course steered by their own government, it is first of all because they do not see with sufficient clarity any practicable alternative course under present circumstances. Moreover they may believe that any attempt to bring about a change must necessarily come to naught as long as the speeches of your delegates will continue to follow a line of reasoning which is unacceptable to the large majority of the American public.

If you succeed in the difficult task of formulating in your own mind a practicable solution of the post-war issues and in conveying your picture of such a solution to the American public, then gradually, as you make statement after statement and issue report after report, a complete picture of an acceptable post-war settlement may unfold before the American people. By the time you will have filled in the details, and thus have implicitly extended a comprehensive offer, you also will have removed the block which had caused the deadlock.

This should have a direct and immediate effect on the foreign policy of the United States. Most Americans believe that those who are at present in charge of guiding American foreign policy were driven to the present policy because none other appeared practicable to them in the circumstances. It is generally believed that they are men of good will, who can be expected to change the present course the very moment they see a satisfactory way out of the present impasse.

You may or may not concur with this opinion. But in any case it is clearly within your power to give the American people a choice between two alternative courses of foreign policy. And if they do have a choice, the American people will exercise their choice--this I fervently hope--in favor of a course which may lead to peace. They will exercise their choice through all the mechanisms by which public opinion influences government policies in America. And those who are at present in charge of steering the course of American foreign policy may, to borrow a phrase of Mr. Stimson's,

"either change their minds or lose their jobs."

In this "Letter" I am trying to cope with a difficulty of communications which might be insurmountable. We in America have a crude and oversimplified picture of how political decisions come about in Russia. You in Russia may have a similar picture concerning America. It might be therefore difficult for a Russian to go along with the basic assumption of this "Letter", that in America the most important factor for political decisions is not a public opinion created by the press but rather the attitudes and opinions of the individuals who constitute the American public, and that these attitudes and opinions may become the controlling factor in certain circumstances. But if this "Letter" had not one chance in a thousand of receiving serious consideration in Russia, I still would want to write it rather than to face the charge of seeing the approaching catastrophe without even raising a hand trying to avert it.

If the conclusion were reached that the measures advocated in this "Letter" would be effective, if adequately implemented, it would become necessary to face the difficulties of implementation. The difficulties of formulating an adequate solution to the post-war issues which would be acceptable to both Russia and the United States, as well as the rest of the world, are greatly increased by the absence of any interchange of thought between Americans and Russians who are not encumbered by the responsibility of representing the views of their Governments. It is perhaps understandable that atomic scientists should particularly stress this point and that they should discuss with each other whether there is any proper way in which they could help to bring about such an interchange of thought. The difficulties which stand in the way of achieving this or even a reasonable substitute thereof are obvious. But in view of their special responsibility it is perhaps not unnatural that atomic scientists should wish to assist in the implementation of some significant endeavor aimed at the permanent establishment of peace.

The general sentiment underlying this "Letter" is, I know, shared by the majority of the atomic scientists who take an active interest in matters of public policy, but the specific thoughts embodied in this "Letter" and the decision of writing it are my own and I am not speaking for any other person or persons.

THE END

POSTSCRIPT:

Having presented a number of suggestions outlining in detail -- perhaps in too great detail -- a course which you might wish to adopt, I feel that I ought to go one step further at the risk that what I am going to say may seem out of proportion with the main theme of this "Letter."

The vast majority of the atomic scientists who take an active interest in matters of public policy are free from any anti-Russian bias and they do not include Communists in either the narrow or wider sense of the term. If I were called upon to do so, I would try to form a committee drawn from their ranks who, acting as hosts, would gather a group of American citizens from all walks of life -- men who are concerned about the welfare of the rest of the world, including Russia. Such a group could meet with similarly constituted groups from Great Britain and France on the one hand, and Russia, Poland and Czechoslovakia on the other hand. <sup>scientists</sup> Russians would surely cooperate if the initiative were taken by you and the scientists of all these other countries could then also be counted upon to help in arranging such a meeting.

*Americans and others are also concerned about the welfare of*

If the issues which face the world today were freely discussed in such an international group of private persons after some initial faltering, the picture of a bold and constructive solution of these issues might emerge, and public opinion all over the world might then rally to such a solution.

In governmental negotiations the discussion is always hampered by the fear

that once a point is conceded it is difficult to go back on it. But in such a discussion among private individuals it may be possible to <sup>deal with</sup> ~~ALTERNATE~~ the controversial issues in the proper setting of a wider framework and some of them may then appear reduced to their true proportions.

If a sufficient number and variety of those persons who would participate in these discussions would feel free to present their private opinions as distinguished from the official positions of their own governments, a free flow of thought might ensue, which could make available a valuable fund of ideas and suggestions upon which the governments could draw later on in their negotiations.

There could be, of course, in these discussions, no disclosure of any kind relating to the subject of atomic energy.