

**Calling  
for a  
Crusade**

*by*

**Leo Szilard**

# Calling for a Crusade. . . . . by Leo Szilard

**A**S far as I can see, I am not particularly qualified to speak about the problem of peace. I am a scientist and science, which has created the bomb and confronted the world with a problem, has no solution to offer to this problem. Yet a scientist may perhaps be permitted to speak on the problem of peace, not because he knows more about it than other people do, but rather because no one seems to know very much about it.

Some of us physicists tend to take a rather gloomy view of the present world situation. We know that Nagasaki-type bombs could be produced in large quantities, and we know that the United States would be in a very dangerous position if large stockpiles of such bombs were available to an enemy at the outbreak of the war. Moreover, when we think of a war that may come perhaps ten or fifteen years from now, we do not think of it in terms of Nagasaki bombs. Nagasaki bombs destroy cities by the blast which they cause. But ten or fifteen years from now giant bombs which disperse radioactive substances in the air may be set off far away from our cities. If such giant bombs were used against us, the buildings of our cities would remain undamaged, but the people inside of the cities would not remain alive.

The traditional aim of foreign policy is to prolong the peace, i.e., to lengthen the interval between two wars. We physicists find it difficult to get enthusiastic about such an objective. The outlines of a war which may be fought with these weapons of the future are now becoming more and more clearly visible from our vantage point, and if we accepted the view that the world has to go through another war before it arrives at a state of permanent peace, we would probably pray for an early rather than a late war. Clearly, foreign policies which may prolong the peace cannot furnish the solution to our problem.

Collective security might very well have solved the problem which faced the world in 1919. Assuming American participation, perhaps it could have been made to work under conditions different from those

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which prevail today. But the ills of 1947 cannot be cured with the remedies of 1919. With the United States and Russia far outranking in military power all other nations, there is no combination of nations which could restrain by force either of these two giants.

No balance of power in the original meaning of the term is possible in such a situation, and there has arisen between the Russian government and the government of the United States, a rather peculiar relationship. Because of the possibility that they might be at war with each other at some future time, these two governments consider it their duty to put their nations into the position of winning that war if war should come. Stated in these terms, the problem is not capable of a solution which is satisfactory to both parties and Russia and the United States are thus caught in a vicious circle of never-ending difficulties.

This peculiar relationship between them became apparent sometime between Yalta and Potsdam. Just what caused the change in their relationship is difficult to say. Perhaps there was no particular cause other than the fact that these two countries lost their common enemy before they reached an agreement on a post-war settlement.

Russia's desire to push her frontiers in northern Europe as far West as possible can be understood on the basis of strategic considerations. We observe further that she takes active steps for the purpose of dominating politically a number of Balkan countries which are strategically important to her such as, for instance, Rumania. The United States takes active steps for the purpose of keeping friendly governments in Greece

and Turkey. Obviously, friendly governments in these countries would secure access to the Black Sea for the American and British fleets and would, in case of war, enable us to carry the war to Russian ports there. Friendly governments in Greece and Turkey are desired by us also in order to be in a better position to defend the Mediterranean including the oil deposits in the Middle East upon which we would want to draw in case of war.

Any economic aid that Russia may get would in some measure increase her ability to fight a war, and we note that when Russia was on the point of obtaining a loan of several hundred million dollars from the Swedish government, the United States ambassador protested against the granting of such a loan. The only economic aid which Russia was able to secure with our approval was a total of 250 million dollars of relief granted by UNRRA. This aid went to the Ukraine and Byelorussia and it is less than the amount of relief which Italy was able to obtain.

All this does not mean, of course, that either the United States or Russia want war. It merely means that they want to win the war if there is one. But as long as Russia and the United States will allow their policies to be guided mainly by such considerations, their course will be rigidly determined, and they will retain little freedom of action for working toward the establishment of peace.

## Negotiations on Control of Atomic Energy

How does atomic energy and the bomb fit into this picture? Atomic bombs may be the only effective weapon by means of which Russia could carry the war to the territory of the United States if there should be a war. Clearly, this is good and sufficient reason for the United States to try to eliminate atomic bombs from all national armaments. But can we see clearly for what specific reason Russia should be expected to concur, particularly if the methods of control involve measures which are difficult for her to accept?

In order to have effective control of atomic energy all over the world, the

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United States proposes to set up an Atomic Development Authority in charge of the mining, refining and manufacturing of uranium and other dangerous materials. It is a good proposal and it is difficult to see how control could be made effective on lesser terms. But, keeping in mind the possibility of war, it is easy enough to understand why Russia hesitates to agree to such a proposal. Large scale operations of such an agency on Russian territory would give the United States and other nations access to information of strategic importance to which they have no access at present, such as the details of the road and the railroad systems and the location of various industries.

What are the reasons which might, nevertheless, move Russia to agree to some effective method of control on the basis of the present negotiations? Such an agreement would greatly reduce the mounting tension in the world and improve our chances of avoiding war. In this sense at least it would serve the interests of Russia as well as the interests of the United States. Moreover, as long as the United States has a stockpile of atomic bombs and Russia has none, Russia cannot be certain that she will not be attacked and that the United States will not wage a preventive war, perhaps on the very issue of the control of atomic energy. Today it is difficult for us to imagine that this country would ever take such action. Having ratified the United Nations charter, we can not legally go to war except in the case of an armed attack or on the basis of a unanimous vote in the Security Council of which Russia is a member. The mere refusal of Russia to enter into an agreement on the control of atomic energy could hardly be construed as an armed attack. From the legal point-of-view, Russia would be within her rights if she built up a stockpile of atomic bombs and planes and rockets suitable for their delivery. She would only be doing what we are doing ourselves.

As matters stand at the moment, Russia has no atomic bombs. Feeling in this respect secure, we find it easy to see all this very clearly and, therefore, we recognize that such a preventive war against Russia could not be justified from a moral point-of-view. But can we predict how we shall react if the day approaches on

which Russia has a stockpile of bombs and airplanes and rockets suitable for delivery at a moment's notice? Can we visualize what kind of a life we shall be leading when we shall have to fear for our lives and the lives of our children, when the city in which we live, as well as all the other cities in the United States, shall appear to be in danger of being burned and smashed without warning? I do not venture to predict how we would react in such a situation, but I would not vouch for anyone I know, not for any of my friends nor even myself—in such a situation; I would not vouch for anyone's giving moral considerations the weight which we give them at present and which they deserve. The most ardent advocates of international cooperation might then turn into the most ardent advocates of a preventive war.

As long as we have bombs and Russia has none, she cannot be certain that we are not going to attack her. This is just the situation in which Russia finds herself today. At present we propose to eliminate atomic bombs from all national armaments by setting up an international control agency, and we offer to the Russians, as the main inducement, to discard our own bombs at an early date and thus to free Russia from the danger of being attacked.

Perhaps we will succeed in reaching an agreement on this basis and perhaps we won't, but it is a very narrow basis on which to negotiate. Russia and the United States are caught in a vicious circle at present, and it is not likely that this circle can be broken by negotiating on the issue of atomic energy as if it were an isolated issue.

Is it possible to break out of this vicious circle in which we are caught? And is it possible to go further and to reach the state of permanent peace without going through another world war?

Most of us physicists believe that nothing short of a miracle will bring about such a peaceful solution. But a miracle was once defined by Enrico Fermi as an event which has a probability of less than ten per cent. This is just Fermi's way of saying that there is a general tendency to underestimate the probability of unlikely events. And if we have one chance

in ten of finding the right road and moving along it fast enough to escape the approaching catastrophe, then I say let us focus our attention on this narrow margin of hope, for another choice we do not have.

It is easy to agree that permanent peace cannot be established without a world government. But agreement on this point does not indicate along what path that ultimate goal can be approached, and not only approached but also reached in time to escape another world war.

Since our desire for security is the main reason for wishing to set up a world government, it may seem logical to propose that we set up at once a limited world government, which would deal only with the problem of security and the settlement of conflicts between nations, but would have practically unlimited authority within that narrow scope. Logical though this may seem, I wonder whether such a frontal attack on the problem of security is a promising approach; I am inclined to doubt that it is possible to achieve security by pursuing security.

### Control of Atomic Energy

On the basis of the present negotiations we might at best arrive at an agreement providing for general disarmament and for the control of atomic energy along the lines of the Acheson Report. This would mean that we set up an Atomic Development Authority which is in charge of the mining and manufacturing of fissionable materials all over the world. But if this Authority lives up to its obligations to promote the peacetime uses of atomic energy, ten or fifteen years from now a number of atomic energy power plants will be in operation in various parts of the world—many of them on the territory of Russia.

What should be the distribution of these power plants between the various nations? Should they be distributed according to economic needs? Or should they be distributed on the basis of military considerations? Is it possible to safeguard plants which are located on the territory of one of the major nations against seizure by the government of that nation? And if this cannot be done effectively, ought the United States to exert her influence to

keep the absolute number of these plants as low as possible while their distribution may be fixed by some sort of a quota agreement?

I believe the longer one thinks about the problems which would arise from such a situation, the more difficulties one will discover. As long as considerations of relative military strength remain the predominant considerations it will not be possible to resolve these difficulties.

Clearly, as far as the United States and Russia are concerned, any agreement in this field will have to be regarded more as a voluntary arrangement than an enforceable obligation. Perhaps there will be an armed force under the United Nations in the foreseeable future which could compel the observance of obligations of this sort by most of the smaller nations, but in the absence of atomic bombs such an armed force will certainly not be strong enough to coerce the United States, nor is it likely to be strong enough to coerce Russia.

Under such circumstances the question of incentives becomes the predominant question. The United States has obviously strong incentives for maintaining an arrangement that will eliminate atomic bombs from all national armaments. Therefore the question of what incentives Russia will have for wishing to keep such an arrangement in force and what incentives she will have for wishing to abrogate it becomes the controlling factor. The problem is to find conditions under which the incentives will be overwhelmingly in favor of continued cooperation rather than abrogation.

It seems to me that this requirement could be satisfied only within the framework of an organized world community. Only within such a framework could we hope to maintain arrangements between nations long enough to give the world a chance to work out the ultimate solution of the problem of peace. Perhaps if the United States were to take the lead and if she were willing to mobilize her great material resources for this purpose, such a world community might become a reality fast enough to enable us to pass without a major accident through the transition period.

## Organized World Community

A world community of this sort would require the setting up of a number of world agencies and perhaps also some special agency to coordinate their activities. What should be the function of these agencies? What should be their scope and scale of operation?

Groping in the dark I have made an attempt to outline the functions of at least a few such agencies. These and other agencies taken together might form the skeleton of a structure which may be capable of transforming itself within one or two generations into a genuine world government. In the meantime, each of these agencies would have its functions clearly defined by its charter, and all of these charters taken together would represent the world laws as soon as they are ratified by the United States, England, and Russia, as well as a certain number of other nations. The more clearly the operation of these agencies is defined by their charter, the less need there will be for more or less arbitrary political decisions later. Countries which have political systems as different as the United States, England, and Russia, cannot be expected to delegate in the foreseeable future vast law-making powers to any international body; it is easier for them to agree on what the laws should be than to agree on how the laws should be made.

The agencies which I have contemplated would operate on a budget of about twenty billion dollars per year.

They might move, in the next twenty years, in amounts of two to four billion dollars per year, farm products from the United States to densely populated industrial countries which are unsuitable for agriculture such as, for instance, England, Germany, and Belgium.

They might undertake the building up of a vast consumers' goods industry in a number of countries including Russia.

They might lessen the economic insecurity of nations exposed to the repercussions of booms and depressions that hit the United States. They might do this by purchasing large quantities of raw materials from these nations when importation of these materials into this country is at a low ebb, i.e., during depressions and by selling these materials from stock to

importers in the United States during booms.

They might tend to stabilize economic conditions in the United States by keeping the export of the United States at a high level during depressions and at somewhat lower levels during boom periods.

They might provide for the supervision of general disarmament and for the effective control of atomic energy installations all over the world.

They might provide for redistribution of strategic raw materials and other scarce raw materials which might otherwise be monopolized by certain nations, but they need not go quite as far in this respect as in the case of uranium and thorium.

They might enforce peace by maintaining an armed force strong enough to be able to restrain from illegal action most of the nations but not strong enough to coerce the United States or Russia.

## Changing the Pattern of Loyalties

All these functions so far mentioned relate to the redistribution of goods and services, and to security, but there is need for agencies which would serve a different purpose. The value of such agencies ought to be judged by asking how they would affect our lives, and by affecting our lives, affect our loyalties. For unless we can bring about a rapid shift in our present pattern of loyalties, a stable world community will not become a reality fast enough.

In America a man born in the state of New York may go to study at Harvard in Massachusetts and may, if he chooses to do so, settle in California. Few men born in New York State will actually do this, but the fact that all of them are free to do so, if they so desire, makes them look upon other states as potential places of study and potential places of residence, rather than potential battlefields. Can we bring about a similar situation in the world without opening the door to large-scale migration and can we by doing so materially change the present pattern of loyalties?

Many of the men who influence public opinion by speaking or writing come from a small class of people—the class of people who have had the advantages of higher

education. Their attitudes and their loyalties will in the long run, affect the set of values accepted throughout the whole community.

An agency in charge of student migration might be given the right to place, say, up to twenty per cent of "foreign" students into the colleges of any one country and could pay for their tuition and living expenses. Moreover, twenty per cent of the "foreign" students who graduate in any one country might be given the right to settle in that country, if they choose to do so.

In the United States we have at present an inflated student body of about two million college students. According to this scheme about four hundred thousand might be "foreigners." Since students spend an average of four years in college this means that every year one hundred thousand "foreign" students would enter the United States and out of these every year about twenty thousand might decide to stay permanently in this country. This is well within the limits set by the immigration laws, but new legislation would be required in some other countries before they can participate on equal terms.

If such a scheme were in operation, the total number of persons involved in this migration would be small, but every high school student, all over the world would look upon the United States and other major countries as potential places of study. Only a small fraction of the "foreign" students graduating in the United States might finally decide to stay here for good; most of them would not make up their minds about this until they actually graduate and see what positions are open to them. But in the meantime all those who study here in the United States would look upon this country as their home—at least potentially.

Assuming that every one of these "foreign" students received in the United States an allowance of \$2000 per year all of them together would cost less than one billion dollars per year, and this amount would come out of the general contributions of the United States towards the budget of the world agencies. Similarly American students in England and Russia would receive yearly allowances paid out of the English and the Russian con-

tributions. Many American students might be induced to study under this scheme abroad where they can study free rather than at home where no one takes care of their living expenses and tuition.

### Access to Information

Another agency might be delegated the task of giving access to "information" to everyone everywhere in the world. This agency might be given jurisdiction over one page of every newspaper in the world. The agency could either function as the "editor" of that page or it could suitably assign the pages under its jurisdiction to other newspapers. Thus for instance, a page in the Chicago Tribune might be assigned to the London Times, and a page in the London Times to the Chicago Tribune. A page in the New York Times might be assigned to Pravda, and a page in Pravda to the New York Times. It is difficult to forecast at the present time who would oppose such a scheme more vigorously, the "publisher" of Pravda or the publisher of the New York Times.

Some of these agencies would be more acceptable to the Russians than others, but a world community cannot be built by reaching agreements piecemeal and the whole pattern of agencies, properly balanced, will have to form a single package, which provides for at least the first steps towards a universal bill of rights. Just when and in what circumstances such a package might be acceptable to Russia is a crucial question which requires careful consideration. Something more will be said about this later.

### Recognition of Limitations

The obstacles to plans of this sort are obviously great but such plans can be kept within the realms of practical possibilities if we clearly recognize the limitations which we have to accept for the present.

We cannot give to such agencies the responsibility of maintaining full employment throughout the world because the United States is internally split on the methods which might be acceptable to her for achieving this end.

We must not expect to cope in the next twenty years with raising the standard of living everywhere in the world, for the high birth rate of India and China makes it impossible to attack this problem

on a worldwide scale by purely economic methods.

And finally, in view of the present pattern of loyalties it does not seem advisable to delegate to such agencies the right of opening the door for large-scale migration by removing immigration barriers.

### The Issue

There are a number of international agencies in existence today. It might be possible to create new agencies and to increase the scale of operation of the old ones. But to me it seems very likely that if progress were attempted on such a piecemeal basis and without having put the problem before the American people, such an attempt would be defeated.

To me it seems that the hope of smuggling 140 million people of this country through the gates of Paradise while most of them happen to look the other way is a futile hope and that only a full understanding of what is being attempted would have some chance of success, small though that chance may be. The problem which faces the world today can be solved only by the initiative of the American people. And it can be solved by them only if they understand their own position in the world and if they give their government a clear mandate to take the leadership for the creation of a world community. The first step in this direction is to put the problem squarely before the American people and to put the emphasis where it belongs.

The American people will soon be faced with a crucial decision. This decision is not so much what amount of national sovereignty we are willing to give up. Undoubtedly more and more sovereignty will have to be given up as time goes on, but the main issue is not the issue of sovereignty. The main issue is whether we are willing to base our national policy on those higher loyalties which exist in the hearts and minds of the individuals who form the population of this country but which do not find as yet expression in our national policy. The main issue is whether we are willing to assume our full share of responsibility in the creation of a world community.

If we are willing to do this we should be willing to mobilize our material resources for this purpose on an adequate scale. We should think of our contribu-

tions for the next twenty years as amounts reaching up to ten per cent of our average national income, i.e., up to about fifteen billion dollars per year. Fifteen billion dollars, if spent for this purpose, would of course, mean a surplus export of approximately the same amount. This could easily double and treble the rate at which industrialization proceeds in the world outside of the United States.

### Available Resources

We are quite willing to spend at present about ten per cent of our national income for the Army and Navy. Unless we are very fortunate, we may have to continue to spend in one form or another such sums for defense for the next five or ten years and our contribution towards building up a world community would then be an additional burden on our economy. But even so, once reconversion to peacetime production is completed we could assume such a burden without any reduction in our standard of living, for at this particular juncture we have a unique opportunity. Sixty per cent of our manpower was tied up in war production up to a short while ago. Assuming that we could maintain a high level of employment, we could expect an *enormous* increase in our standard of living. We could take on our share of the burden and still have an *appreciable* increase in our standard of living, and, moreover, a somewhat better chance of actually maintaining a high level of employment.

Obviously, it would be difficult for us to have an export surplus of fifteen billion dollars in boom years, and this should not be expected from us. But our export surplus in boom years could be kept small, say, 7 to 10 billion dollars, and only as we move toward a depression might it have reached the peak of 15 billion dollars.

### Methods of Financing

The question of financing the contribution of the United States would be up to our Government. It might, for instance, decide to rely on taxes during the boom and on the issuing of "Peace Bonds" during the depression. In the next twenty years during which this scheme would operate we might have to expect an increase in the public debt, but there is no reason why the total increase during this

long period should be larger than the public debt incurred within a few years during the war within a much shorter period.

### Equal Obligations

Let us not attempt to maintain the illusion that the rest of the world can repay us at any time in the form of material goods. The productive capacity of this country is enormous. If a high level of employment can be maintained our standard of living will rise rapidly and the working hours will fall rapidly to the point where the problem of disposing of leisure may come into the foreground of public attention. There will be no need and no occasion, unless time should go into reverse, for our asking or receiving repayment in goods.

This does not mean that the countries who may receive help in the next ten, fifteen or twenty years shall receive gifts without assuming obligations. These countries ought to have precisely the same obligation as the United States, i.e., the obligation to contribute to the development of the world up to ten per cent of their national income. Their actual contributions ought to be determined by the objective needs and on the basis of available resources. On this basis, however, most of these countries will probably be free for a number of years from any but rather small contributions. Gradually, more and more of them will be able to take on their share of the burden, and twenty years from now the productive capacity of Russia may very well be drawn upon in the early phases of the industrialization of China and India.

There is little reason for expecting any of the countries who would receive help to display gratitude. Nor is there much reason for looking upon our own contribution as anything but evidence that at last we have made up our minds to do our duty by the world. Raising the standard of living in certain countries or throughout the world in general will not in itself make the world more peaceful. A higher standard of living does not automatically promote or favor higher loyalties. But such higher loyalties will be developed if the world agencies affect the life of the individual, and by affecting his life, affect his loyalties. And above

all, the very fact that the people of this country have voluntarily assumed their share of responsibility would be regarded everywhere as a token of our facing not towards war but towards peace.

Within such a framework Russia might receive on the basis of objective needs and available resources perhaps five billion dollars per year. No sane person can believe that we are solely concerned about winning the next war if we are spending a substantial fraction of our national income for the welfare of those countries who would most likely be our enemies in case of war. In such circumstances we might even maintain a considerable military establishment and continue to spend billions of dollars for defense and yet find that other nations consider such action on our part as foolish and extravagant behavior rather than a threat to their security.

All this presupposes, of course, that we are really going to make the building up of a world community the cornerstone of our national policy and that the world can count on the continuity of such a policy. This probably cannot be achieved without amending the Constitution. The Constitution was twice amended in this century over the issue of prohibition, and if we are willing to go out of the way for the sake of being permitted to drink or for the sake of preventing others from drinking, maybe we shall be willing to go out of our way for the sake of remaining alive.

### Organized Political Action

The suggestion that this country should commit herself to contributions up to ten per cent of her national income sounds perhaps Utopian. Perhaps it will be asked why not be satisfied with making progress as fast as we can? Why not propose large-scale loans which the United States might make to other nations directly or through the medium of international agencies?

To me it seems that this more modest objective would be neither adequate for the purpose nor would it be very much easier to achieve. Certainly we could make loans to other nations on a large scale and actually receive repayment in

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## Calling for a Crusade

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goods if we were willing to make this possible by our tariff policy. But we are not willing to do this either.

The point I am trying to make is this: that nothing much can be achieved now or in the very near future until such time as the people of this country understand what is at stake. As far as the bomb is concerned, the people have not been told the whole story, nor have they fully understood what they have been told. What we need in this country now is a crusade—a crusade for an organized world community. We cannot look for our salvation to the 80th Congress. But this country is a democracy; we are the masters of our destiny. There will be elections in '48 and

again in '52. The issue before us will not be a partisan issue; atomic bombs are not precision instruments, they cannot discriminate between Republicans and Democrats. Voters who are willing to disregard all other issues and willing to cast their vote solely on the issue of establishing peace by creating an organized world community might decisively influence the nominations and elections in many of the states if they are organized for political action on this basis.

Today, if the Government were to approach Russia, she would hardly be willing to go along and do all that needs to be done. But suppose that a crusade should really get under way here in America. Clearly, there will be a fight—possibly a very big fight. Other nations will sit up and take notice. And if at last the fight

should be won and a President who has seen the light should approach the other nations with the backing of the people and Congress, then I believe we would have a very different situation, and Russia might go along.

Because there will be a fight, we can win something that has roots and permanence. Because there will be a fight, the American people will look and listen. And when the people of this country at last understand their own position in the world, they might be willing to do what is necessary.

Obviously the odds are heavily against us but we may have one chance in ten of reaching safely the haven of permanent peace; and maybe God will work a miracle—if we don't make it too difficult for Him.

*The author would appreciate any comments which the reader should care to make, addressed to him: c/o The Bulletin of the Atomic Scientists, Social Science Building, University of Chicago, Chicago 37, Illinois. Additional copies may be obtained at this address, price 15 cents per copy.*

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THE NEED FOR A CRUSADE

Leo Szilard

December, 1946

Some of us physicists who were closely associated with the work on atomic energy in the United States tend to take a rather serious view of the present world situation. We know that Nagasaki-type bombs could be produced in large quantities, and we know that the United States would be in a very dangerous position in case of war if large stockpiles of bombs were available at the outbreak of the war and could be used against her. Moreover, when we think of a war that may come perhaps ten or fifteen years from now, we do not think of it in terms of Nagasaki-type bombs. Within ten or fifteen years the danger may very well shift from bombs which destroy cities by the blast which they cause, to giant bombs which may be detonated far away from the cities and may disperse radioactive substances into the air. The buildings of our cities would then remain intact but the people inside the cities would not remain alive.

From the vantage point of the physicist it is gradually becoming visible what kind of a war we might have to expect if we have a late rather than an early war, and in our minds such a war takes on more and more the aspects of a catastrophe for which there is no precedent in the history of mankind.

Some of us might gradually become reconciled to the thought of our cities being destroyed by Nagasaki-type bombs but few of us could get reconciled to the thought of a war which may be fought with some of those weapons of the future. Hitherto it may have been considered the legitimate aim of foreign policy to prolong the peace, i.e., to lengthen the interval between two wars, but today physicists will find it difficult to get enthusiastic about such an objective. If they accepted the view that the world has to go through another war before it shall arrive at a state of permanent peace, their prayer would be for an early rather than a late war.



Do we have a chance of establishing permanent peace without first going through another world war? Most of us believe that nothing short of a miracle will bring about such a solution. Now a miracle has been once defined by Mr. Fermi as an event which has a probability of less than ten per cent of occurring, and I am inclined to share his view that there is a general tendency to underestimate the probability of improbable events. But if we have no more than one chance in ten of finding the right road and moving along it fast enough to escape a catastrophe then let us focus our attention on this narrow margin of hope and base our actions on it for another choice we do not have.

#### LIMITED WORLD GOVERNMENT

Whenever you talk to groups who may be regarded as samples of informed opinion you find almost unanimous agreement on the view that permanent peace cannot be established without a world government. But agreement on this point does not appear to have much practical significance because it does not indicate along what path that ultimate goal can be approached and not only approached but also reached in time to avert another world war.

Since our desire for security is the main reason for ~~wishing~~<sup>wishing</sup> to set up a world government, it may seem logical to propose that we set up at once a limited world government that would deal only with the problem of security and the settlement of conflicts between nations but would have practically unlimited authority within that narrow scope. Logical though this may seem, I wonder whether such a frontal attack on the problem of security is a promising approach and whether it is possible to achieve security by pursuing security.

#### ARRANGEMENTS VERSUS AGREEMENTS

In trying to define what I believe must necessarily be our first objective it would be well to state explicitly the limitations which we will have to accept. Two countries have emerged from this war as strong military powers, outranking by far all other nations, namely Russia and the United States. I believe we should not

assume that they will both be willing to delegate at an early date far-reaching law-making powers to some international authority. Nor should we assume that they will both agree to the setting up at an early date of either an international army or an international police organization sufficiently powerful to restrain effectively from illegal action such giants as Russia and the United States.

Collective security might very well have solved the problem which faced the world in 1919. Under conditions different from those which prevail today it could have been made to work with American participation. But the ills of 1945 cannot be cured with the remedies of 1919. With the United States and Russia outranking all other nations collective security has its limitation and this limitation provides the setting for our discussion here.

We may assume that we shall be able to arrive at some international agreement providing for general disarmament and effective control of atomic energy. But, as far as Russia and the United States are concerned such an agreement will have to be looked upon more as a voluntary arrangement than an enforceable obligation. In the absence of enforcement what would prevent later on an abrogation of these arrangements? Clearly we shall be able to count on the continued observance of such arrangements only if we can create conditions wherein the great powers would have a strong incentive for keeping these arrangements alive.

If we are able to build up a world community such incentives will be in operation and no great power could afford to place itself outside such a community by violating its international obligations. But before we go into this any further let us try to describe what is actually happening at the present time in the world.

THE VICIOUS CIRCLE collective security has its limitation and this limitation provides. To me, it seems that if we want to explain on the basis of some simple formula what is going on at present we may say the following: The United States and Russia are at present the two most important military powers. As long as war between them far as Russia and the United States are concerned such an agreement will have to be looked upon more as a voluntary arrangement than an enforceable obligation. In the

is a potential possibility, both of their governments will strive to be in a position to win that war if it should come. Clearly, the problem so stated is not capable of a solution satisfactory to both parties.

The desire to be militarily as strong as possible in case of war is, however, not the only consideration that ought to guide the United States and Russia in their relations with each other and other nations. In determining their national policy the desire to establish permanent peace ought to play as important a part as the desire to win the war if, during the transition period war should prove to be unavoidable.

We may try to analyze present relations of the United States and Russia in these terms and we may inquire what kind of a balance their actual policy strikes between the wish of having their relative strength with respect to each other as great as possible and the wish to eliminate the danger of an ultimate war as far as that is feasible.

The more Russia and the United States allow their policies to be guided by the wish to be militarily as strong as possible in relation to each other, the more rigidly their courses of action will be determined and the less freedom of action they will retain for working towards the establishment of peace. One has the impression that during the past year the foreign policies of both Russia and the United States were largely guided by considerations of their relative military strength. The United States and Russia are thus caught in a sort of vicious circle and the question is whether or not it is possible for them to break out of this circle.

#### ATOMIC ENERGY NO ISOLATED ISSUE

The proposals made in the Lillienthal Report for the international control of atomic energy were greeted with enthusiasm by most of the atomic scientists. They knew, of course, that an agreement along the lines of that Report would not eliminate the possibility of war; and they also knew that in case of war atomic bombs

would be used. But while atomic bombs might thus appear as a result of war, an agreement along the lines of the Lilienthal Report could go a long way to remove atomic bombs as a probable cause of war.

It is easy enough to agree on this point but there remains the issue of whether or not it is in fact possible to make progress by approaching in this specific manner the general problem which confronts us. Is it possible for the United States and Russia to break out of the vicious circle in which they find themselves caught by negotiating within the narrow terms of reference of the United Nations Atomic Energy Commission?

Since atomic bombs are the greatest threat to our security and almost the only weapon by means of which warfare could be carried to our own territory, our Government has taken the lead in asking for control of atomic energy. The Bikini tests have shown that atomic bombs are a grave threat to our navy and so responsible spokesmen of the Navy echo the Government's call for eliminating atomic bombs from national armaments. But are any of these reasons good arguments for persuading Russia to hurry up and come out in support of effective international control of atomic energy?

By agreeing to international prohibition of atomic weapons and to the operation of an effective inspection system Russia would not only agree to forego the only weapon with which she could bring the war to our own territory, but she would give up another military advantage. At present Russia has no difficulty in securing information which would be of potential value to her in case of war with the United States. She can buy maps of every part of the country and she has no difficulty in learning everything she needs to know about the distribution of our industry. I do not mean information which may be secured by means of spies--I mean the vast amounts of valuable information which does not fall into any of the secret categories. The United States has no simple means of acquiring the corresponding

information about Russia. Russian industry may be relocated to a large extent and the new location of the factories may remain a secret from us for as long as the news of it is kept out of the Russian papers. We may even remain in ignorance of new developments in the Russian road and railroad systems. But if any international agency were permitted to conduct large scale operations in Russian territory this advantage to Russia would be quickly lost.

Assuming that Russia's foreign policy is guided by rational considerations of much the same type as our own foreign policy, is it reasonable to expect that on the basis of the negotiations conducted in the United Nations Atomic Energy Commission Russia will agree to any arrangement which would effectively eliminate atomic bombs from her national armaments? I am not saying, of course, that it would not be wise for Russia to accept our proposals. I am merely saying that it would not be reasonable to expect wisdom to manifest itself at the level of foreign policy.

#### GENERAL DISARMAMENT

It is more reasonable to assume that Russia might agree to the effective elimination of atomic bombs within the framework of general disarmament. If the United States is willing to forego those weapons which would enable her to carry the war, at its very outset, into the territory of Russia and those countries in Europe which constitute Russia's first line of defense, it is conceivable that Russia would agree to forego those weapons which would enable her to carry the war into the territory of the United States. There does not seem any rational reason why Russia should not be willing to accept an arrangement under which the great powers are partially disarmed with some international force set up under the auspices of the United Nations, provided that we do not insist on going too far along this line and do not ask to have a force under the United Nations strong enough to be able to coerce Russia in case of alleged or real violations of their international obligations.

THE CRUCIAL DECISION

Just what would be the situation if we had such agreements providing for disarmament in general, and providing for the control of atomic energy along the lines of the Lilienthal Report in particular? If the atomic development authority of the Lilienthal Report were in operation and if it lived up to its obligations ten or fifteen years from now a number of atomic energy plants should be in operation all over the world--many in the territory of Russia. Should these power plants be distributed between various nations according to economic needs, or should they be distributed on the basis of military considerations? Is it possible to safeguard plants which are erected on the territory of one of the major powers against seizure by the government of that nation? And if this cannot be done effectively, should the United States exert her influence to keep the absolute number of these plants as low as possible even though the relative number of these plants would, of course, be fixed by some sort of a quota agreement?

I believe the longer you think about the problems which would arise from such a situation, the more difficulties you will discover as long as you have to go on the assumption that considerations of relative military strength will remain the predominant considerations.

It seems to me that only within the framework of a world community in which security is but one of a number of desires which have attained some measure of satisfaction could a state of disarmament be maintained long enough to give the world a chance of arriving at a permanent solution of the problem of peace. Perhaps if the United States were to take the lead and if she were willing to mobilize her natural resources for this purpose, a world community might become a reality fast enough to enable us to pass without an accident across the transition period.

The world community which we have in mind here might be defined as that substance for which a genuine world government might provide the legal framework. It

could be obtained if Russia and the United States as well as other nations were able to agree on the most important functions which a real world government going beyond the field of military security would have to fulfill in the present world. It would involve the setting up of a number of world agencies and perhaps also some world agency which would coordinate their activities. What should the function of these agencies be and what should be their scope and scale of operation if we wish them to become the skeleton of something that might in time be developed into a genuine world government? It seems to me that we ought to try hard to find an answer to this question.

There are a number of international agencies in existence today and it might be possible to add new ones to their number and increase the scale of their operations in the hope that we may thus move towards the establishment of a world community. But to me, it seems very likely that if progress were attempted on such a piecemeal basis and without having put the problem squarely before the American people, the attempt would be resisted. It would be resisted and with a few exceptions, defeated. The exceptions would be those measures which the Government may propose as instruments of American foreign policy in the narrow sense of the word. To me it seems that the hope of smuggling 130 million people of this country through the gates of Paradise while most of them happen to look the other way is a futile hope and that only a full understanding of what is being attempted would have some chance of success, small though that chance may be.

The problem which faces the world cannot be solved on the level of foreign policies which aim at prolonging the peace. Nor can this problem be solved by the Social and Economic Council of the United Nations. The problem which faces the world can be solved only by the American people if they understand their position and if they give their government a mandate to take the leadership for the creation of a world community. The United Nations in general and the Social and Economic

Council in particular, might very well serve as a framework for working out the detailed plan of such a world community, but they can provide no more than the framework.

The first step in this direction is to put the problem squarely before the American people and to put the emphasis where it belongs. In speaking to the people we ought to tell not only the truth, but the whole truth, and this is the whole truth as I see it:

The American people are faced with a crucial decision. This decision is not so much how much sovereignty they are willing to give up. Undoubtedly more and more sovereignty will have to be given up as time goes on, but the real issue is not the issue of sovereignty. The real issue is whether the United States is willing to assume her share of responsibility for the creation of a world community. Are we willing to base our national policy on those higher loyalties which exist in the hearts of the individuals who form the population of the United States but which do not find expression in the formulation of our national policy. If we are willing to do this, we should be willing to mobilize our material resources on an adequate scale for the purpose of creating a world community. We should think of our contribution as something like ten per cent of our average national income, i.e., about 15 billion dollars per year.

Fifteen billion dollars, if spent for this purpose, would, of course, mean a surplus export of approximately the same amount. Once reconversion is completed, we could assume such an obligation without an appreciable reduction in our standard of living. At this juncture we have a unique opportunity. Sixty per cent of our manpower was employed in war production in the past years. Assuming that we could maintain a high level of employment (which in the absence of a surplus export we might not be able to do), we could expect an enormous increase in our standard of living after reconversion is completed. If we accept our share of the burden in



building up a world community we could still have an appreciable rise in our standard of living and moreover, a better chance of actually maintaining a high level of employment.

#### SETTING LIMITATIONS

Any attempt at setting up a world community at the present time must necessarily reckon with certain limitations.

1. Providing for a high level of employment all over the world is a function which, under different conditions, would properly come under the responsibilities of some world agency. Unfortunately, the United States and other countries which operate on the basis of a market economy are split internally on the methods for damping trade cycles and for providing a high level of employment within their national boundaries. This will make it impossible to delegate the responsibility for general economic stability to any international agency. We could, however, delegate to an international agency the responsibility of maintaining inter-national commerce at some standard level. Thus while it would remain the privilege of the government of the United States, for example, to create an economic mess within the United States, an international agency might see to it that other countries shall be able to maintain their imports from the United States at a pre-depression level across a depression period in the United States.

2. If fast progress is to be made towards a prosperous world, we cannot wait until the under-developed countries shall lift themselves up by their bootstraps, but must provide for help through an international agency which can dispose of adequate funds. There are, however, limitations in this respect which cannot be removed with the stroke of the pen. In countries like India and China where the natural birth rate prevails, the population is necessarily limited by starvation, either manifest or latent. Measures of purely economic development cannot change this fact. It will take an adequate method of birth control and the planned

creation of a new pattern of habit going parallel with economic development to raise the standard of living in these two countries. It will be impossible to bring about the change simultaneously all over the whole area of India and China, and it may be impossible to do very much about this in the immediate future. But in the more remote future, perhaps ten or fifteen years from now, something might be done by starting with a small number of local areas within those countries and by allowing the "new fashion of prosperity" to spread out from the edges of those areas gradually, across the territories of India and China.

3. No plan would appear feasible in the near future which does not take into account the present pattern of loyalties. Loyalties which transcend the national loyalties are in existence and may be activated. At times they may be activated by frankly recognizing their existence. But there are limits to what can be done within the present pattern of loyalties. Not until there has been a considerable shift of loyalties away from the narrowly interpreted national loyalties, and this may mean one or perhaps two generations, will it be possible to provide for large-scale migration and the corresponding removal of immigration barriers.

#### THE RISK WE HAVE TO TAKE

Within the framework of a comprehensive plan for the reconstruction of the world in which Russia would participate, Russia might receive on the basis of objective needs and available resources through the intermediary of one or more of the proposed world agencies perhaps five billion dollars per year. In the more immediate future she might receive help in the reconstruction of Byelo-Russia and the Ukraine which have been devastated by the war, and in subsequent years, she might receive help in her endeavor to raise the standard of living of her people by enormously accelerating the rate of building up a consumer goods industry within Russia. Even though the arrangements under which such help may be given would presumably exclude the possibility of diverting external help for the purposes of

directly increasing the war potentials of the countries who participate, any help given will in some measure increase that war potential.

We cannot be sure that the Russian peasants in the Ukraine and Byelo-Russia who may receive help in the next few years, will not at some time be Russian soldiers, fighting against us in war. But if we wish to have a world community, we will have to take some risks. For it is impossible to create a world community if we continue to be guided by the wish of attaining maximum military strength within the limitations of our budget. The risk which we would be taking is not very great, for the outcome of the war (unless it came within the next five years) would hardly be determined by the number of physically able troops that are available, nor would it be determined by the number of skilled workers or the volume of the heavy industry. It would more likely be determined by the quantity and quality of the technological personnel at a very high level of training and perhaps also the number and spirit of the scientists at the highest level. Thus it will not be necessary to take any great risks, but it will be necessary to take some risks.

NO LOANS, NO GIFTS, NO BRIBES, BUT A CHANGE OF HEART

A world community cannot be built on the basis of bilateral loans. Nor should we attempt to maintain the illusion that the world can pay us back our contribution at any time in the form of material goods. The productive capacity of the United States is enormous, and if a high level of employment is maintained, it will go on increasing rapidly even if we assume the burden of exporting a surplus of ten to fifteen million dollars per year. If a high level of employment can be maintained the standard of living will rise rapidly and the working hours will fall rapidly to the point where the problem of disposing of leisure may come into the foreground of interest. There will be no need and no occasion, unless time should go into reverse, for our asking or receiving repayment in goods.

This does not mean that the countries who will receive help in the next ten, fifteen, or twenty-five years shall receive gifts without assuming obligations. These countries would have the same obligation as the United States to contribute to the economic development of the world up to ten per cent of their national income, as determined by objective needs and on the basis of available resources. However, on the basis of objective criteria, most of these countries will for a number of years be probably free from any but rather small contributions. Gradually, however, some other countries will come into play, and twenty years from now the productive capacity of Russia may very well be drawn upon in the early phases of the industrialization of China and India.

There is little reason for expecting any of the countries who would receive help in such a comprehensive scheme to display gratitude. Nor is there much reason for looking upon our own contribution as anything but evidence that at last we have made up our minds to do our duty by the world.

There is little reason, moreover, for believing that raising the standard of living in certain countries, in particular, or throughout the world in general, will in itself make the world more peaceful. A higher standard of living ~~does not~~ does not automatically promote or favor higher loyalties. Such higher loyalties will be encouraged and developed only if the world agencies which we are going to create will affect the lives of individuals, and by affecting our lives, affect our loyalties. Something more will be said about this point a little later. But the very fact that the people of the United States shall have voluntarily assumed their share of the responsibility for building up a world community will necessarily be regarded everywhere as a token of our facing towards peace and not towards war. We might then be trusted, perhaps, even if we went only part of the way towards general disarmament and were slow in reducing our military expenditure. For no sane person can assume that we are chiefly concerned with winning the next war if

we are spending a substantial fraction of our national income for the welfare of those countries who would most likely be our enemies in case of war.

All this presupposes, of course, that we are really making the building up of a world community the cornerstone of our national policy, and that the world could count on the continuity of such a policy on the part of the United States. This probably cannot be achieved without making changes in the Constitution. To change the Constitution is not an easy undertaking, but the Constitution has been changed twice in this century over the issue of whether we should be permitted to drink intoxicating liquors, and I find it difficult to believe, though, of course, it might be true, that we were willing to go out of our way for the sake of being permitted to drink or for the sake of preventing others from drinking, but shall not be willing to go out of our way for what is at stake at present.

#### SKELETON OF A WORLD COMMUNITY

I shall attempt to give a very tentative outline of a number of agencies which might be set up if the United States would be ready to play her part. Such agencies together with others which are not mentioned here, might serve as the skeleton of the world community. Each of these agencies would have its functions defined by its charter and all of these charters together ought to become the world law as soon as they had been ratified by a few major powers, as well as a certain number of other nations. Russia and the United States cannot agree on how the world law should be made but they might agree with each other and other nations on what the world law should be. The more precisely the operation of each agency is defined by its charter the less need there will be for more or less arbitrary political decisions. In the ideal case no such decisions need be taken after the charter has been drawn up with the exception of interpreting the charter in doubtful borderline cases. Each agency might be operated by a group of men who are elected from various nations but who do not represent the governments of those nations.

Russia and a few other major powers might retain for a number of years the right to withdraw from the world community by giving a few months notice. Something might be gained by allowing them to retain this right and little would be lost by doing so. Little would be lost because in the early stages a world community could not be held together by laws which would be unenforceable as far as such major powers as the United States and Russia are concerned.

AGENCY NO. I One agency would be needed for the permanent control of armaments. Even though Russia and the United States cannot agree to total disarmament and the creation of an international force which would be strong enough to coerce Russia or the United States, they might agree with each other and other nations to partial disarmament and the creation of an international force which would be strong enough to enforce the observ<sup>ance</sup>~~ation~~ of international obligations against the vast majority of the nations. International control of disarmament can be made effective if no military secret is recognized as a legitimate secret and if no military information may receive protection on the part of the national governments.

AGENCY NO. II Another agency might be the Atomic Development Authority of the Lillienthal Report, which would have monopoly of production of fissionable materials and a mandate to develop atomic energy for peacetime purposes on the basis of economic, rather than military considerations.

AGENCY NO. III While the above agency (No. II) ought to have full control of all natural resources of uranium and thorium and would be free to distribute them accord<sup>d</sup><sub>g</sub>ing to objective principles laid down in its charter, it will be necessary to have another agency having a limited amount of control over other essential raw materials such as oil, vanadium, manganese, nickel, etc. This agency might have the authority to purchase up to perhaps twenty per cent of the national out-put of any one of these commodities and to redistribute them according to objective needs, as set forth in its charter.

It is easy to talk in definite terms of matters which can be dealt with in figures, i.e., to talk of the distribution of material goods, but in doing so we may give the misleading impression that these are the most essential things from the point of view of a world community. As the concept of the world community will be taken more and more seriously and will receive increased attention gradually by straining our sluggish imaginations, we will be able to see more and more functions which world agencies might perform and which would be significant in their effect on creating a stable world community, though they may be insignificant in their material aspects.

At present we are merely making a feeble attempt in this direction in the hope to stimulate a serious discussion of this topic by attempting to describe possible approaches to the solution of this problem.

The value of these agencies ought to be scrutinized chiefly from the point of view to what extent they would affect our lives, and by affecting our lives may affect our loyalties. For unless we can bring about quite a rapid shift in our present pattern of loyalties, we cannot create conditions in which peace can have permanence.

One of the circumstances which are essential for bringing about, in the United States, the feeling in every American that they are citizens of the same country is the fact that a man born in New York state may go and study at Harvard in Massachusetts and may, if he wishes to do so, settle in California. Only few men born in New York state will go to study at Harvard or end up as residents of California, but the fact that any one of them is free to do so if he so desires, is largely responsible for the fact that a man born in one state of the Union looks upon other states as a potential place of residence. Can we bring about a similar situation in the world without opening the door to large-scale migration?

Some simple considerations given below show that in a sense, this is indeed possible. It is possible because of the fact that practically all the men who influence public opinion, i.e., those who write newspaper or magazine articles, speak over the radio or teach in schools--that these all come from a small class, the class of college graduates. It is their attitudes and loyalties which, in the long run, will be reflected in the scale of values throughout the whole community.

AGENCY NO. IV Let us therefore consider a world agency in charge of student migration which will have the right to place up to 20 per cent of foreign students into the colleges of any one country; and further, of those who study in any one country and graduate there 20 per cent shall have the right to settle in that country if they choose to do so. The living expenses and the tuition fees of the students would be paid by the agency.

What does this mean in practice? In the United States we have at present an inflated student body of about two million college students. According to this scheme, 400,000 might be foreigners. Since college students spend an average of four years in college, this means that every year 100,000 foreign students would come to the United States. Out of these, as many as 20 per cent, that is, 20,000 might decide to take up residence and stay permanently in the United States. As you see, it is a very small number, well within the quota numbers which are set up by law.

But even though these numbers are small, with such a scheme in operation every high school student all over the world would look upon the United States as a potential place of study and all the foreign students in the United States during the four years of their studies would look upon the United States as a place where they might decide to stay for good--a place of potential residence. Just who of them will actually stay would be determined by many factors; and most of them



would probably not make up their minds until they graduate and see what opportunities offer themselves in the United States and in their old countries. In the meantime, the United States would be their country--at least potentially.

Assuming that every one of these foreign students receives in the United States a grant of \$2000 per year to take care of their living expenses and tuition, the total cost of this enterprise would amount to 800 million dollars--less than one billion out of the total 15 billion dollars which the United States might contribute to the expenditure of the world agencies.

Similarly, the living expenses for American students in England or Russia, for instance, would be paid by the world agency out of the English and Russian contributions. It is likely that quite a number of American boys and girls would be induced to study abroad under this scheme where they can study free rather than at home where they must pay their own living expenses and tuition.

AGENCY NO. V In the long run something approaching a "bill of rights" and free access to information for everyone everywhere in the world will be necessary for a stable world community. Is there any hope, you may ask, that Russia will accept the principle of free access to information within the framework of some general scheme for establishing a world community?

The answer may depend on how the problem is formulated and how the solution is implemented. If you scrutinize the agencies which were set up under the Bretton Woods Agreement, you will find that the functions of those agencies were adjusted to the needs of countries which operate on the basis of a market economy. Russia would not have benefited from their operations even if she had decided to take part in their management. We shall not find the Russians cooperative if we propose a solution to the problem of distributing information which will not make it necessary for us to make any changes in our institutions, but will make it necessary for the Russians to make such changes.

We could, of course, always justify such a proposal to ourselves on the ground that we already have freedom of the press. It is, however, possible to look at the situation in a somewhat different manner. It is true that we have a free press in the sense that everybody can read any paper he likes to read and is therefore free to read over and over again the arguments which favor the opinions he happens to hold, and is free to learn of all the facts which support his opinions. If instead of simply wishing on the Russians our kind of freedom of the press we would propose to set up an agency for distributing information which would bring about changes not only in Russia but also in the United States we would at least have made a fair attempt with some chance of success. We could, for instance, propose to set up an agency which would have under its jurisdiction a certain amount of space, say one page in every daily paper all over the world and would use this space to bring both facts and opinions to the readers.

Such an agency might operate in a great variety of ways--one of the more bizarre ways, for instance, would be for the agency to assign one page in the New York Times to Pravda and one page in Pravda to the New York Times; one page of the Chicago Tribune to the London Times and Colonel McCormick the privilege of editing one page in the London Times and so on. If this was the mode of operation I am not so sure that the New York Times and Chicago Tribune would not be more opposed to such excessive freedom of the press than would be the Russian government.

Just what kind of operation would have the best chance of presenting the pertinent facts and a fair sample of opinions to the readers of every daily paper in the world and at the same time, being acceptable to both the United States and Russia can hardly be stated with any degree of confidence at the present time. Nor should Russian reaction to any proposal be judged except within the framework of some complete set of proposals that would be aimed at laying down the pattern of a world community.

AGENCY NO. VI (IN CHARGE OF GOODS & SERVICES) This agency would have two kinds of functions. It would provide for economic relief and development and also strive for international economic security by stabilizing international commerce. The first of these two functions will necessarily require large annual contributions on the part of some of the member nations.

The agency might, for instance, be responsible for bringing about and maintaining for a long period of years, movements of farm products in the amount from two to four billion dollars per year from the United States to other countries which are in the process of industrial development, are densely populated and not particularly suited to agricultural production. Belgium, England and Germany might very well fall into this category.

This same agency might move for a comparatively short period of years consumer goods from the United States to countries which have been devastated by the war. It might further move for a longer period of years capital goods necessary for building up a consumer goods industry in Europe and Russia.

The agency would have the right to call upon various nations for contributions up to ten per cent of their national income or more precisely, their national income averaged over a number of years across booms and depressions. The actual contribution requested from a nation might be as high as this legally permissible maximum during a depression when the actual national income is low, but the contribution requested should be considerably lower during a boom when the actual national income is high.

Clearly in boom years when the United States imports more goods, she provides thereby other countries with currency out of which they can pay for a considerable part of the United States' exports. But in years of depressions the export of the United States can be maintained at a high level only if the other countries are provided with additional amounts of United States currency. During a depression in

the United States it might be desirable to keep the volume of the United States' exports not only at a pre-depression level but to go further and to raise it considerably above that level. In this contingency, the agency might ask from the United States for her maximum legally permissible contribution.

The concept of international economic security is not compatible with allowing a depression to spread from one country to another. At present many nations feel that they have to be prepared for a sudden reduction in their exports and the consequent reduction in their imports if the United States should be hit by a depression. In order to be on the safe side, they wish to have a "reserve" in the form of an excessively positive trade balance and this desire stimulates trade rivalries and fights for additional markets.

If the United States is hit by a depression the agency could prevent this depression from spreading to other countries without ever asking for a greater contribution from the United States than the legally permissible maximum of about 15 billion dollars. In this respect it is indeed fortunate that the volume of foreign trade of the United States is only a small fraction of her national income.

As stated before, during a depression in the United States, the agency would provide other countries with means for maintaining and perhaps even increasing their imports from the United States. She could do this, in part by purchasing from other countries raw materials which the United States normally imports from abroad. In this manner the agency could prevent a too great dislocation of production in other countries and moreover, in the following boom period the raw materials thus acquired could be sold from stock by the agency to importers in the United States. The U. S. currency obtained by the agency from such sales during a boom in the United States would enable the agency to reduce the direct contribution of the United States to the agency during boom periods.

The mode of operation of the agency would have to be flexible enough to make the agency useful both to countries which are based on a market economy and to Russia. If capital goods are to be moved from the United States to Russia in order to build up a consumer goods industry there, clearly the purchases in the United States would have to be made by the Russian government and the Russian government would have to be provided with the means of making these purchases. On the other hand, if a consumer goods industry is to be built up in Holland, the agency might make direct payments to Dutch importers--perhaps a flat premium on all imports of capital goods in a certain broad category.

AGENCY NO. VII (FOR FINANCIAL COMPENSATION) The establishment of some such world agencies might be strongly resisted by perhaps small but nevertheless influential groups. Thus for instance, the agency for student migrations might be resisted by professional groups of lawyers, doctors, teachers, etc., in whose ranks an appreciable increase of supply without a corresponding increase of demand might be brought about by the proposed student migration. Though the financial losses of these professional groups would be in no proportion to the gain of the community their sense of proportions might be dulled if their financial security were threatened. This Seventh Agency could forestall their organized resistance by assuring the members of these profession adequate compensation. In the United States, for instance, they might be compensated for part or the whole amount of their federal income tax and the agency might then discharge its obligation by making payments directly to the Federal Government rather than to the individuals affected.

Assuming that 200 thousand professional men have to be compensated in the amount of \$1000 annually, this would amount to an expenditure of 200 million dollars each year and would bring the total cost of student migration for the United States up to the round sum of one billion dollars per year. This is by

way of comparison the amount which is spent at the present time for research and development by the army and navy.

Newspaper publishers might resist the establishment of a world agency in charge of information more vigorously if they were not assured adequate compensation for the space which they would have to put at the disposal of this agency. The loss to individuals in all of these cases is small compared to the gain of the community as a whole and the community can therefore afford to compensate for such losses and need not hesitate, if necessary, to over-compensate for them.

While the operation of the agency in charge of movements of goods and services would undoubtedly increase the export of the United States in the next 15 to 20 years, this holds only for the United States' exports as a whole. The large-scale operations of this agency may cause dislocations and certain industries may find their exports hit by such dislocations. Again, compensating for losses suffered by the industries affected would be comparatively small to the total volume of the export affected. Annual compensation in the amount of hundreds of millions of dollars paid by the agency for a number of years in compensating might, perhaps, adequately take care of losses suffered by a limited group of manufacturers losing an export volume of about one billion dollars.

#### FINANCING OF NATIONAL CONTRIBUTIONS

The world agency would have no jurisdiction over the methods which the various nations may adopt for financing their contributions to the agency.

This leaves the individual national governments enough flexibility to fit their methods of financing to their particular plans for maintaining a high level of employment. During a boom, when the contribution which a nation will be called upon to make will be presumably small, she might wish to raise this amount by means of indirect taxes (sales tax), while during a depression when her contribution might be large, she might wish to raise the amount by government borrowing.

Assuming that the period of high contributions on the part of the United States will be scheduled to last for no more than 25 years, part of this United States contribution might very well be financed by Peace Bonds much the same way as War Bonds were used to cover the cost of the war. It is, of course, not possible to take a stand on the question of the method of financing a nation's contribution to the world agency without taking a stand on the highly controversial question of how to solve the internal problem of the trade cycle and provide for a stable, high level of employment on the domestic scale. For this reason the examination of this issue must not be tied up with the general problem of creating a world community.

AS FAR AS THOUGHT CAN REACH

By asking that the United States commit herself to the creation of a world community which would enable us and the rest of the world to put our faith in the permanence of disarmament and the control of atomic energy, we have gone as far as thought can reach and there is not much hope that before the 1952 elections we may have a Government which would have a clear mandate in this respect. Once a world community is set up it will offer strong inducement to every nation to remain a member and we need not be unduly concerned if, for a number of years, secession should remain legally possible for some of the major powers. If such a world community becomes a reality the transition from it to a genuine world government will in time become an important issue for until that transition will come to pass we shall continue to live on borrowed time. But the world shall certainly not be ready for that transition before a strong majority of the people of the United States have reached a consensus on some one method for creating and maintaining employment within the United States at a high level and today 1952 is as far as thought can reach.

DO WE GO TOO FAR?

Some might think that it is Utopian even to consider that the United States might assume the responsibility involved in setting up a world community and would commit herself to contributions up to ten per cent of her present national income. They might ask why not be content with making progress as fast as we can? Why not consider large-scale loans which the United States might make to other nations directly or through the medium of international agencies. To me it seems that this more modest objective would be neither adequate for the purpose nor would it be any easier to achieve.

Certainly we could make loans to other nations on a large scale and actually receive payment in goods if we were willing to make this possible by our tariff policy. But are we willing to do this? The point I am trying to make is this-- that nothing can be achieved until the people understand what is at stake. They do not now understand it and it will not be easy to make them understand it. Until they do, nothing can be achieved and if they will at last understand, they will be willing to do whatever is necessary and possible to do. I have attempted to give my version of what I believe is necessary and possible to do.

BI-PARTISAN POLITICAL ACTION

To understand what is at stake is, of course, not a clearly defined issue. There are various degrees of understanding. The degree of understanding which is needed is for 10 or 15 per cent of the voters to understand enough to see that in 1948 or 1952 they will have to disregard every other issue and vote on the single issue of peace alone. The next elections may be close elections. Five or ten per cent of the voters might swing the elections in favor of one or the other candidate.

The issue which is at stake is not a partisan issue. Atomic bombs are not precision instruments--they cannot discriminate between Republicans and Democrats.



Those of my colleagues among the scientists who had some contact with members of the Senate in connection with legislation on atomic energy will bear me out, I hope, when I say that there was little difference between Republican and Democrat members of the Senate as such, but there was all the difference between those few who had fully grasped the significance of atomic energy and those many who did not. There was perhaps some correlation with age in this respect with the older men finding it more difficult to adjust to the situation than the younger ones. What we need now in this country is a crusade. This crusade would have to be built on one single issue and would have to disregard all minor or major side issues which have no bearing on the problem of peace. I am addressing these lines to those of my colleagues who know something first-hand about the shape of the war to come. They can talk on this subject with conviction that arises from direct knowledge. It is my hope that they will again raise their voices as they have done once before.