

add

Semi-Neutrality in Saturation Parity - Part III

by
Leo Szilard

Within a few years, America and Russia will be able to destroy each other to any desired degree and neither of them will be able significantly to decrease, by an all-out attack ^{directed} against the rocket-launching bases of the other, the capability of the other to strike an overwhelming counterblow. How is West Germany likely to respond to such a "parity of saturation"?

x Let us ask ourselves, for the sake of argument, what would have happened if there had occurred a few years ago a major uprising in East Germany against the established government and if substantial units of armed West German volunteers had moved into East Germany, to assist the insurgents.

Presumably, at first, one would not have known with certainty whether these volunteers were acting with the tacit approval, and active participation, of the West German Government, or whether they were acting against its wishes, and in disregard of its orders. Had such a contingency occurred a few years ago, the odds are that America would have extended protection to West Germany, against a possible atomic attack ^{directed} against West German cities by ~~the Soviet Union~~ ^{Russia}, on the ground that America must prevent the destruction of West German military power. America would have been likely to extend such protection to West Germany, whether Germany was, or was not, the aggressor, ^{and since West Germany is an American ally,} and to take the position that if there was any doubt on this score, West Germany ^{would have been} must be given the benefit of the doubt. ^{and under the question "who was the aggressor?"}

If a similar contingency were to arise in the years to come, ~~when Russia has saturation parity,~~ America would be likely to take quite a different position. In ~~such a situation,~~ ^{saturation parity,} if the Russians feared that the clash might escalate into an all-out atomic war they might ^{decide to} knock West Germany out of the war by striking first. They might do this by dropping

all at once, say, five to ten hydrogen bombs, each on one West German city. Having knocked West Germany out of the war by such a strike, Russia could then speak to America as follows:

"German aggression forced us to do what we did, lest the clash of arms escalate into an all-out atomic war which neither Russia nor America want. We realize that America could now respond by demolishing one Russian city after another, but for every Russian city that America may demolish, Russia would demolish one American city. Let's be rational about this, ~~what~~ ^{what} has happened, has happened; let's see now where we go from here. Russia does not intend to occupy any West German territory and she is willing to put up 5% of her industrial output to help rebuild the cities of West Germany, provided her contribution is matched, dollar-for-dollar, by America."


Because Russia would use up at most ten of her large bombs, she would still remain capable of destroying the United States to any desired degree.] Russia could hardly ^{assume} ~~hope~~ that America would respond in a rational fashion if she were to drop bombs on American cities, but she may well expect America to respond in such a fashion, as long as Russia ~~does not drop any bombs on America's own territory.~~ ^{refrains from making of an atomic attack from attacking}

an improvement
Should in these circumstances, Germany be provided with a certain number of submarines, bombs and rockets ^{enough} in order to ~~protect herself~~ ^{enable her to} ~~against Russia waging a first strike~~ ^{against her cities?} (and, perhaps, ^{to enable her to move into East Germany?})

If France and England were to pool their resources they might jointly develop submarines, bombs and rockets and thus speedily provide themselves with a small but invulnerable strategic striking force. They could not use such a small striking force for anything accept threatening retaliation in case of an atomic attack directed against their own territory, but even so, such a small force could fulfill the function of the sting of the bee.

Few nations contemplate with equanimity the possibility that Germany might come into the possession of ^a ~~a~~ ^{atomic} ~~substantial~~ strategic striking force. ~~There~~ ^{Still} there might not be too much objection to France and England jointly giving Germany a few submarines, rockets and bombs; just enough to let

her have the sting of the bee. If, however, Germany set out on her own to acquire a sting of the bee, by developing submarines, rockets and bombs then the other nations would have little assurance that Germany would stop at having ~~the sting of the bee.~~ *with a small atomic striking force.*

can she afford a big one?


* * *

Does Germany need to have a ~~substantial~~ strategic atomic striking force in order to safeguard her security in saturation parity? To my mind she does not, ~~but are the Germans going to see it my way?~~ *are not wholly*

X

In 1931, I met with a group of German friends in Berlin who thought that the time had come for Germany to re-arm, in order to be more secure. I said to them that when Germany lost the war in 1918, ~~the victors~~ *her neighbours* took from ~~Germany~~ *her* all that they wanted. None of them wanted to take from Germany anything thereafter. Thus, in 1931, Germany did not possess anything that had to be defended by force of arms and therefore, even though disarmed, she was secure. Only if Germany wanted to recover by force, or by the threat of force, some of the territories she had lost in the First World War, would she have to re-arm.

My German friends assured me - and I believe they were sincere - that they were not thinking of recovering any of the territories lost; they just wanted to have as much security for Germany as possible. At first, they appeared to have some difficulty in grasping my argument, perhaps because of its very simplicity. After a while, however, they seemed to get the point, or so I thought, until a few days later I met with them again and I found that I had to start ~~to argue~~ from scratch, from precisely the same point as before. They wanted Germany to re-arm, even though they did not know why they wanted this, and people who know what they want to do, but do not know why they want to do it, are rarely open to argument.

Just three years later, in 1934, two German colleagues, Arno Brasch and Fritz Lange, came to see me in London, to where I had moved in the meantime. They knew that Germany was in the process of re-arming on a substantial scale and they were worried. One of them asked me whether I thought that if Germany started a world war, for the second time and lost it, Germany would be razed like Carthage was razed, ~~and~~ I said that I didn't believe this would happen if Germany started another world war, but that it might ~~well~~ happen if she started a world war for the third time.

I could argue to-day / that Germany is in no need of having a strategic striking force, just as I argued in 1931 that Germany ~~does~~ ^{did} not need to re-arm; but I fear that to many Germans, my argument would not sound any more convincing to-day than it did some thirty years ago. It is a foregone conclusion that ^(there will be those who would) many Germans will now want Germany to have an independent strategic atomic striking force. The only question is: Are they going to prevail? ^X

Few nations can contemplate

There are those in America who believe that the way of keeping Germany from wanting to have an atomic striking force under her own control is to set up such a force under the joint control of ^{a very substantial atomic str. f.} ~~several~~ nations including America, ~~as well as~~ ^{and perhaps perhaps a few} Germany. But such a striking force would not give the Germans what they want, as long as America ^{has} retains the veto over its use, and there is reason to believe ^{that} the Germans propose to participate in it only because they assume that it may be possible ^{for them} to get rid of the veto. ~~Who would be fooling whom, in the end?~~

THE END

Semi-Neutrality in Saturation Parity - Part III

By

Leo Szilard

Within a few years the atomic strategic striking forces of Russia will have "parity of saturation" with those of America and I propose to discuss on this occasion how such a situation ^{might} ~~may be~~ ~~expected to~~ affect West Germany.

~~The nature of "saturation parity" and the instabilities which are inherent in it are as yet poorly understood.~~ Let us ask ourselves, for example, what would have happened if there had occurred, a few years ago, a major uprising in East Germany against the established government and if substantial units of armed West German volunteers had moved into East Germany, to assist the insurgents.

Presumably, at first, one would not have known with certainty whether these volunteers were acting with the tacit approval, and active participation, of the West German Government, or whether they were acting against its wishes, and in disregard of its orders. Had such a contingency occurred a few years ago, the odds are that America would have extended protection to West Germany, against a possible atomic attack directed against West German cities by Russia, on the ground that America must prevent the destruction of West German military power. America would have been likely to extend such protection to West Germany, whether Germany was, or was not, the aggressor and if there had been any doubt on that score, Germany would have been given the benefit of the doubt.

occur

If a similar contingency were to arise in the years to come, *and*
~~America would be likely to take quite a different position. In~~
~~saturation parity/~~ if the Russians feared that the clash might escal-
ate into an all-out atomic war, they might decide to knock West
Germany out of the war by striking first. They might do this by
dropping all at once ~~at once~~ *between and* five ~~to~~ ten hydrogen bombs, each ~~on~~ *on*
a West German city. Having knocked West Germany out of the war by such
a strike, Russia could then speak to America as follows:

"German aggression forced us to do what we did, lest the clash
of arms escalate into an all-out atomic war which neither Russia
nor America want. We realize that America could now respond by
demolishing one Russian city after another, but for every Russian
city that America may demolish, Russia would demolish one American
city. Let's be rational about this. What has happened, has
happened; let's see now where we go from here. Russia does not
intend to occupy any West German territory and she is willing to
put up 5% of her industrial output to help rebuild the cities of
West Germany, provided her contribution is matched, dollar-for-
dollar, by America."

The Russians would hardly be so foolish as to assume that
America would respond in a rational fashion if they were to drop
bombs on American cities but they might ~~not~~ expect America to respond
in such a fashion if, in the contingency described above, they ~~would~~ *were*
to demolish German cities, *but did not attack America's own*
territory. * * *

Would Germany need to have a substantial strategic atomic
striking force in order to safeguard her security in saturation parity?
There *are* reasons to think that she would not, but it doesn't follow
that these reasons ~~would~~ *may* make ~~much~~ *much* sense to the Germans.

In 1931, I met with a group of ~~German~~ *German* friends in Berlin who thought
that the time had come for Germany to re-arm, in order to be more
secure. I said to them that when Germany lost the war in 1918, her
neighbors took from her all that they wanted. None of them wanted to

take from Germany anything thereafter. Thus, in 1931, Germany did not possess anything that had to be defended by force of arms and therefore, ~~even though~~ ^{quite} disarmed, she was secure. Only if Germany wanted to recover by force ~~or by the threat of force~~ some of the territories she had lost in the First World War, would she have to re-arm.

My German friends assured me - and I believe they were sincere - that they were not thinking of recovering any of the territories lost; they just wanted to have as much security for Germany as possible.

At first, they appeared to have some difficulty in grasping my argument, perhaps because of its very simplicity. After a while, however, they seemed to get the point, or so I thought, until a few days later I met with them again and found that I had to start to argue from scratch, from precisely the same point as before.

They wanted Germany to re-arm, even though they did not know why they wanted this, and people who know what they want to do, but do not know why they want to do it, are rarely open to argument.

I could argue to-day that Germany is in no need of having a strategic striking force, just as I argued in 1931 that Germany did not need to re-arm; but I fear that to many Germans, my argument would not sound any more convincing to-day than it did some thirty years ago. It is a foregone conclusion that there will be Germans who would want Germany to have an independent strategic atomic striking force, ^{and} the only question is ^{whether} ~~are~~ ^{are} they going to prevail.

There are those in America who believe that the way of keeping Germany from wanting to have such a striking force under her own control, is to set up a ~~new~~ ^{substantial} strategic striking force under the joint control of America, ^{and} Germany ^{with} ~~and~~ perhaps a few other nations. ^{joining in} ~~with~~ Such a striking force would not give the Germans, ^{however,} what

they want, as long as America can veto its use and the Germans propose to participate in it, only because they assume that it may be possible for them to get rid of the veto. If such a striking force were, in fact, created, ~~the United States would then be in a position to endow~~ West Germany with a substantial striking force of her own, so to speak ^{by} the stroke of the pen, and few of the other nations in Europe contemplate with equanimity the possibility of such a contingency.

One may ask whether it might not be preferable ~~in these circumstances~~ to provide Germany with a ^{small} ~~certain~~ number of submarines, bombs and rockets; just enough to enable her to deter ^{on her own} an unprovoked Russian attack against her cities.

If France and England were to pool their resources they might jointly develop submarines, bombs and rockets and thus ^{equip themselves} ~~provide themselves~~ ^{each} ~~themselves~~ with a small but invulnerable strategic striking force. ^{neither of them} They could ~~not~~ use such a small ~~striking~~ force for anything except threatening retaliation in case of an atomic attack directed against ^{its} ~~their~~ own territory, but even so, such a ^{striking} ~~small~~ force could fulfill the function of the sting of the bee.

If Germany were to set ~~out~~ ^{on her own} ~~to develop~~ Submarines, bombs and rockets for the purpose of acquiring a sting of the bee, the other nations would have little assurance that ^{she} ~~Germany~~ would actually stop at having such a small ~~striking~~ striking force. It is conceivable, however, that the other nations involved would not raise ~~major~~ major objections if France and England were jointly to give Germany a few submarines, rockets and bombs; just enough to let her have the sting of the bee also.

Semi-Neutrality in Saturation Parity - Part II

By

Leo Szilard

In the years to come America and Russia will be able to destroy each other to any desired degree and when the strategic striking forces of Russia reach such a "parity of saturation" with those of America, then the world is confronted with a situation for which there is no precedent in history. Before long England will have to adjust her policies to this situation.

If England were to adopt a foreign policy and ²military strategy somewhat similar to those of France, then French objections to England's becoming integrated with the rest of Western Europe would presumably disappear. Should England subsequently decide to enter the Common Market, in spite of the temporary economic disadvantages that this might entail, ~~then we would have a Europe in which~~ French and English economic power and political influence might balance those of Germany, ^{in Europe} If, however, England were to remain closely integrated with the American defense system, France might continue to resist the integration of England with the rest of Western Europe and Germany's economic power would then be likely to become the dominating influence in Europe.

If England ceased to be an integral part of the American defense system and adopted a policy of "semi-neutrality" she would presumably want to maintain a small but independent strategic striking force that could function as "the sting of the bee". In fact, it might be politically very difficult, or impossible, for England to move towards a

position of "semi-neutrality" if she did not set up such an independent striking force.

The bee dies if it uses its sting and such a small strategic striking force could be used by England only to threaten retaliation in case of an atomic attack directed against her own territory; it would be of no value to her in any conflict with Russia, in which major English interests might be at stake, but not England's existence as a nation. Therefore, one must ask whether England could stand up to Russia if she ceased to be part of the American defense system and adopted a policy of semi-neutrality.

It ~~would~~ ^{it may be} be impossible to devise a policy which would enable England, single handedly, to cope with all of the various contingencies which could conceivably occur and one may, at best, devise a policy ^{that} ~~which~~ would enable England to cope with the contingencies which have a reasonable chance of occurring in the predictable future.

People might ask, for instance, what would happen if England were neutral and Russia were to invade the Middle-East and cut off Western Europe from Mid-Eastern oil. I personally doubt that Russia would make such a move in order to force Western Europe to buy Russian oil at higher prices, or for any other reason that comes to mind, and moreover, if Russia were to make such a move, she would be likely to find herself at war with the United States, whether or not England was neutral. ^{TP} It is hardly possible, however, for anyone to have absolute certainty in matters of this sort. And those charged with the responsibility of deciding what policy England shall pursue must compare, as best they can, the likelihood that Russia would make a military move directed against a neutral England, with the likelihood that a Russian - American conflict, centering outside of Europe, would involve England in a war with Russia. ~~if that were~~ ^{she} to remain a

close military ally of America.

If a war between America and Russia were to start with a direct nuclear exchange between them, it would be presumably of short duration and, therefore, would not involve England, provided she is not an integral part of the American military defense system. But in case of a protracted Russian-American conflict England might be regarded ^{by} Russia as a potential hostage, if she remained a close political ally of America.

If America had invaded Cuba in October of 1962, Russia might not have taken any action against England, because America's strategic striking forces had a significant superiority over those of Russia. But if, a few years hence, a conflict of a similar type were to lead to hostilities between America and Russia then England might be in danger from Russia, unless she establishes her neutrality in that conflict ahead of time.

It may be argued that if England were to cease to be an ally of America she would no longer have the kind of restraining influence on American policy that she exerted during the Korean War and again when France lost the war in Indochina. This argument may be correct, as far as it goes, but since, in the years to come, England, as a military ally, would be a potential liability to America rather than a potential asset, she could hardly continue to exert a restraining influence on American ^Ipolicy of the same kind she exerted in the past.

It would be probably still true, that were England to remain a close political ally of America then in a future contingency, similar to the Cuban crisis, America might be restrained by the fear that Russia might in some way retaliate against England. It is questionable however whether England would want to exert a restraining influence on such a basis, and at such a price.

* * *

In an article printed in 1949 in the NEW REPUBLIC (U.S.A.) I wrote:

"Yet England, when she realizes that her geographical position as well as the concentration of her population in London and a few other large cities makes her vulnerable beyond endurance, might also wish to be freed from the Atlantic Pact. If she does, we ought to lend her a helping hand, rather than try to obstruct a development that is inevitable."

Some people in America ^{may} think that England would render a dis-service to America were she to adopt a foreign policy and military strategy similar to those of France. But if they examined more closely America's situation in saturation parity they might be lead to the opposite conclusion.

Neither America nor Russia want war but in the circumstances they might get into a war with each other. Neither America nor Russia would want such a war to escalate, but the danger that it might do so and become an atomic war will be much greater in the years to come, than it has been in the past.

Had the Cuban crisis in 1962 lead to an armed clash, there might have been some initial escalation, but because of the superiority of the American strategic striking forces, at some point along the line, the Russians would have put an end to further escalation. If a similar crisis were to occur in the symmetrical situation of saturation parity then one could not predict which of the two parties would take the first step to halt ~~the~~ escalation. And if it is no longer possible to say who will put an end to escalation, then one also cannot predict just how far the escalation might go.

If it came to an exchange of strategic strikes between America and Russia, ~~then~~ the destruction might go far beyond that which Western Europe experienced during the last war. And if it hadn't been

for the Marshall Plan, the postwar recovery which occurred in Western Europe would not have taken place.

America's recovery after the next war might be brought about by a Marshall Plan in reverse, but this could happen only if the war were to leave the nations of Western Europe unscathed. These nations, when they reach the point where they would formally proclaim their semi-neutrality, might pledge to devote a portion of their industrial output to aiding America, should she suffer major devastation in an exchange of strategic strikes with Russia.

THE END

Lu Kerr.

Semi - Neutrality in Saturation Parity

By

Leo Szilard

Introduction

X When the strategic striking forces of Russia reach saturation parity with those of America, the nations of Western Europe will face a situation for which there is no precedent in history. On this occasion I do not propose to ~~cope with~~ ^{disarm} the larger issues which will confront the world when nations can destroy each other to any desired degree, in a rapid exchange of strategic strikes, rather, I propose to examine here only what France, Germany and England, in particular, may do in order to safeguard their own security.

If a conflict between Russia and America had led to an armed clash a few years ago, and if at some point along the line of escalation, Russia had made a sudden attack against America's strategic air bases and rocket bases, then America's residual striking capacity would have been sufficient to demolish, in a counterblow, all of Russia's sizeable cities. If, conversely, America had made such an attack against Russia's air bases and rocket bases of known location, Russia's residual counterblow would have fallen far short of demolishing all of America's sizeable cities.

Today,
/ America's strategic atomic striking forces might be superior to those of Russia by a factor of perhaps between three and ten, in the number of hydrogen bombs that they could deliver and, presumably, America could maintain this kind of numerical superiority in the years to come. She could not however, by doing so, keep Russia from ^{steadily} increasing her residual striking capacity. In recent years, Russia has steadily proceeded with

the hardening of her rocket-launching sites and the building of additional submarines, capable of launching long-range rockets, and to-day she has reached a point where her residual counterblow would be sufficient to demolish a number of large American cities. This is a higher price than America would be willing to pay for reaching her political objectives, in any of the conflicts that might be expected to occur in the predictable future, i.e. Russia's "residual striking capacity" would be sufficient to-day to inflict "unacceptable damage" on America.

X This would not necessarily mean that Russia's striking forces have ^{just} reached saturation parity with those of America, rather, it is conceivable that if it came to an all-out atomic war to-day, America would lose all her major cities on the Eastern Seaboard and some of her cities in the West, but she could still recover from such a war, whereas Russia would lose all of her cities of over 100,000 and ^{thus} ^a would suffer "destruction of her society" from which she **might** not be able to recover.

It is clear, however, that in time Russia **must** reach the point where her "residual striking capacity" would be large enough to demolish all of America's sizeable cities and at that point Russia will have achieved "parity of saturation." Moreover, ^{such} there is reason to believe that/ parity of saturation is now at ~~most one or two years away, if that much~~

Learn as it is

* * *

X Saturation parity is an inherently unstable situation, but we could presumably live with it, if there were universally accepted principles of international justice to which a reasoned appeal could be directed. In the absence of such principles, however, any one of a number of unresolved political conflicts

could lead to a war between America and Russia in saturation parity.

X There appears to be a tacit understanding between America and Russia on spheres of influence in Europe and - barring local incidents, or an uprising in Eastern Germany - it appears unlikely that a conflict centered on Europe would lead to war between them. No such tacit understanding exists, however, outside of Europe and a conflict centered on the Far East, Southeast Asia or Latin America might lead to a war, even though neither Russia nor America want such a war.

Since the end of the last war, America's commitments in the Far East and Southeast Asia have been steadily growing. None of the issues, that have arisen there, are likely to be resolved in the predictable future and new issues are likely to arise from time to time.

America's policies in these areas are not motivated by either economic or military considerations, rather they are motivated by political considerations and these, at times, reflect the prevailing domestic pressures. The American Government knows very well, for instance, that the continued occupation of the off-shore islands of Quemoi and Matsu by the Nationalist Chinese forces ought to be terminated and/John F. Kennedy said as much before he was elected President, but because of the prevailing political pressures nothing was done about these islands after he was elected. President Johnson will have to operate under the same pressures.

X After the war, many Americans came to believe that the fate of the world depends on the outcome of a world struggle, that will be waged between China, Russia and their satellites on the one side

X and America ^{as well as} and the rest of the nations - a few misguided neutrals excepted - on the other side. America's foreign policy in the Far East and Southeast Asia, charted in the early postwar years, is based on this premise.

X Oddly enough, if this premise were correct then America's proliferating ^{commitments} commitments in these areas would be likely to trigger a world war before long. And only, because it is becoming increasingly clear - as illustrated by the recent Russian-Chinese rift - that the premise is incorrect, can we assume that America could pursue her current policy, for a while, without getting herself, and the rest of the world, into very serious trouble.

* * *

Regarding Latin America, the official American position is that the United States cannot co-exist with any communist country in this hemisphere, which looks for support to the Soviet Union, and, because this position has strong popular support in America, it is likely to endure.

At the time of the Cuban crisis, in October of 1962, it was widely believed that America had to risk war, because the transporting of a number of medium-range rockets to Cuba, would have upset the strategic balance.

In fact, transporting these rockets to Cuba would have done nothing of the sort. There was no strategic balance at the time of the Cuban crisis and there is none to-day. Russia was proceeding then, as she is proceeding now, with increasing her residual striking capacity and she made a minor, rather than a major, step in this direction when she placed medium-range rockets on Cuba, which could be destroyed by a sudden strategic strike.

America was impelled to risk war in the Cuban crisis by political considerations, and not by any considerations of military strategy. Had Russia not yielded and had her ships continued their course on Cuba, in defiance of America's proclamation of the partial naval blockade of that island, American warships would have sunk Russian ships. No one can say how far escalation would have gone and whether Russia, being unable to resist America in the Caribbean area, would have retaliated elsewhere, perhaps in Europe.

America risked war in the Cuban crisis and on this particular occasion Russia yielded. It would be unreasonable to expect that in the years to come, Russia will yield always.

* * *

France

Had the Cuban crisis led to a shooting war, it could/ ^{have} easily involved France also.

If a war between America and Russia, arising out of a conflict centered outside of Europe, were to start with a direct nuclear exchange between them, it would automatically involve other nations of Western Europe who remained an integral part of the American defense system. Such a war would be presumably of short duration, however, and thus it would not be likely to involve ~~the~~ nations in Western Europe who **are not** part of this system. By disentangling herself from this defense system, France could avoid being involved in such a contingency.

But if a Cuban type conflict were to lead to protracted hostilities between America and Russia, which stops short of an atomic war, Russia might retaliate against one of America's

close political allies in Western Europe, whether or not they are an integral part of the American defense system. France could make it reasonably sure/that Russia would not retaliate against her by making it clear, well ahead of time, that she does not interpret the controversies centered outside of Europe in terms of a world struggle which would automatically align the so-called "free nations" on the one side and the Soviet Union, as well as China, on the other.

General de Gaulle recently took a long step in this direction when he offered the good offices of France to help accomplish the reunion of North Vietnam and South Vietnam. By speaking up on Vietnam, he went out of his way to make it clear that France does not recognize America as "the leader of the free world" in the current conflicts centered on Southeast Asia. It would appear that General de Gaulle is in no need to take advice from me in matters of foreign policy. He might not be in need to take advice from me in matters of military strategy either. I am less sure of this, however, because military strategy is an area where technical knowledge, and a dispassionate appraisal of the technological advances which may be expected, might come in handy.

I do not think that France can have an independent strategic atomic striking force and use it to threaten a strike against Russia, in a conflict in which major French interests might be at stake, but not the very existence of France as a nation. Still, before long, France could perhaps have, ^{before long,} a small striking force, consisting of submarines carrying long-range rockets, which could not be destroyed by Russia in a sudden attack, and which could demolish in a counterblow, say, three Russian cities.

Such a strategic striking force might be compared with the sting of the bee, which is not, properly speaking, an instrument of defense, for when it uses its sting, the bee dies. Yet, the sting of the bee deters people from going around catching bees, as long as they don't have any compelling reasons for doing so. If France ceased to be an integral part of the American defense system, and if she embraced the philosophy of "neutrality", in conflicts centered outside of Europe, then the Soviet Union would presumably have no reason to mount an attack against France and therefore such a small retaliatory capacity might be an adequate deterrent.

As long as France's strategic striking force consists of bombers, which would have to take off from air bases that could be destroyed by a Russian surprise attack, France is not in the possession even of "the sting of the bee." There is at the present time, however, no direct threat to the security of France, and by the time there may arise in Europe, as indeed it might, a new threat to her security, France, with a little luck, could be in the possession of a small, but invulnerable, striking force.

Two nations, like France and England could pool their resources and jointly develop submarines, rockets and bombs for the purpose of equipping themselves with a small strategic striking force. If, however, they were to place their striking forces under joint control - with either both of them, or neither of them, having power of veto - then these forces could not fulfill the function of the sting of the bee.

It is probably true that if France had such a sting of the bee and never tried to use it for anything, except for threatening retaliation in case of an atomic attack directed against her own territory, then it would do no harm for France to possess **such** a "sting" and it would conceivably do some good. I am not in a position to say whether the statesmen of France understand at this time that a strategic striking force must not be used for any other purpose.

* * *

Having discussed what France might gain by becoming semi-neutral, it is also necessary to **consider** now what France might lose by doing so.

Right after the Second World War the security of France was threatened by the combination of communist pressure from the inside and the possibility of Russian military intervention from the outside. At that time many people believed, rightly or wrongly, that only America's possession of the atomic bomb saved France from falling under the domination of the Soviet Union.

There is no such internal threat to the security of France to-day, and were the Soviet Union to invade Western Europe she would find herself at war with the United States, whether or not NATO is retained, *as it is presently constituted* whether or not France is semi-neutral, and whether or not America remains committed to the defense of Western Europe, in any formal sense.

To my mind, the possibility that Russia might deliberately set out to invade Western Europe does not represent a real danger to France to-day. But a border incident in Europe, or an uprising in East Germany, might lead to a war that neither Russia nor

America want and if it did - with NATO as it is presently constituted - the war might escalate to the point where France might be destroyed, along with the rest of Western Europe, in the process of being defended.

If a war broke out in Europe, at some point during the see-saw of fighting, the Russians might be tempted to send their troops in hot pursuit across the pre-war boundary and they might penetrate deep into Western territory or, conversely, ~~perhaps~~ certain NATO units, fighting ^{perhaps} under German commanders, might penetrate deep into Eastern territory. Clearly, the losing side would find it difficult to resist the temptation of resorting to the use of tactical atomic bombs against troops in combat, and once atomic bombs were dropped, by either party on the other side of the pre-war boundary, there would remain no clear conceptual line at which further escalation could be halted.

^{Taylor} Russia and America find themselves in the same predicament in this regard and they **could** discuss with each other the limitations that they would have to impose upon themselves in Europe, concerning the conduct of such a war, in general, and concerning the use of tactical atomic weapons against troops in combat, in particular. No such discussions have taken place so far, however, and there are none in sight. ^P Therefore, one may ask whether, from the point of view of the safety of France, NATO - as presently constituted - would not represent a potential liability rather than a potential asset, in the **next decade**.

* * *

Germany

How is saturation parity likely to affect West Germany?

Let us ask ourselves, for example, what would have happened if there had occurred, a few years ago, a major uprising in East Germany against the established government and if substantial units of armed West German volunteers had moved into East Germany, to assist the insurgents.

Presumably, at first, one would not have known with certainty whether these volunteers were acting with the tacit approval, and active participation, of the West German Government, or whether they were acting against its wishes, and in disregard of its orders. Had such a contingency occurred a few years ago, the odds are that America would have extended protection to West German cities, on the ground that America must prevent the destruction of West German military power. America would have been likely to extend such protection to West Germany whether Germany was, or was not, the aggressor, and if there had been any doubt on that score, Germany would have been given the benefit of the doubt.

If a contingency of this sort were to occur in the years to come, and if the Russians were to fear that the clash might escalate into an all-out atomic war, they might decide to knock West Germany out of the war by dropping, all at once, between five and ten hydrogen bombs, on West German cities. Having done this, Russia would then be in the position to speak to America as follows:

"German aggression forced us to do what we did, lest the clash of arms escalate into an all-out atomic war, which neither Russia nor America want. We realize that America could now respond by demolishing one Russian city after another, but for every Russian city that America may demolish, Russia would demolish one American city. Let's be rational about this. What has happened, has happened; let's see now

where we go from here. Russia does not ~~intend~~ to occupy any West German territory and she is willing to put up a few percent of her industrial output to help rebuild the cities of West Germany, provided her contribution is matched, dollar-for-dollar, by America."

The Russians would hardly be so foolish as to assume that the Americans would respond in a rational fashion if they were to drop bombs on American cities but, in the contingency described above, they might ~~expect~~ ^{rightly or wrongly} expect a rational response if they were to demolish German cities only and did not extend their attack to America's own territory.

* * *

Would Germany need to have an atomic strategic striking force in order to safeguard her security in saturation parity?

In 1931, I met with a group of friends in Berlin who thought that the time had come for Germany to re-arm, in order to be more secure. I said to them that when Germany lost the war in 1918, her neighbors took from her all that they wanted and none of them wanted to take from Germany anything thereafter. I said that Germany did not possess anything that had to be defended by force of arms and thus, even though disarmed, she was quite secure; Germany would have to re-arm only if she wanted to recover by force some of the territories she had lost in the First World War.

My German friends assured me - and I believe they were sincere - that they were not thinking of recovering any of the territories lost; they just wanted to have as much security for Germany as possible.

At first, they appeared to have some difficulty in grasping my argument, perhaps because of its very simplicity. After a while, however, they seemed to get the point, or so I thought,

until a few days later I met with them again and/^{they} started to argue the issue from scratch, from precisely the same point as before.

Evidently, they wanted Germany to re-arm, even though they did not know why they wanted this, and people who know what they want to do, but do not know why they want to do it, are rarely open to argument.

I could argue to-day that Germany does not need to acquire an atomic strategic striking force, just as I argued in 1931 that Germany did not need to re-arm, but to many Germans my argument might not sound any more convincing to-day than it did some thirty years ago. It is a foregone conclusion that there will be people in Germany who would want Germany to have such a strategic striking force and the only question is whether they are going to prevail.

There are those in America who believe that Germany can be kept from wanting to have a striking force under her own control, by setting up a strategic striking force under the joint control of America and Germany with perhaps a few other nations joining in.

The striking force under discussion would be equipped with two hundred Polaris missiles, enough to demolish two hundred Russian cities if each of them were to reach its target. Such a striking force would be substantial, it would, however, not give the Germans what they want, as long as America can veto its use, and there is reason to believe that the Germans propose to participate in it only because they assume that it may be possible for them to get rid of the veto.

The creation of such a striking force would make it possible to endow West Germany, by the stroke of the pen, with a substantial atomic striking force of her own, and few nations in Europe contemplate this possibility with equanimity.

In these circumstances one may ask whether it might not be preferable to provide Germany with a small striking force, just large enough to enable her to deter, on her own, an unprovoked Russian attack against her cities.

If Germany were to set out to develop on her own submarines, bombs and rockets for the purpose of acquiring a "sting of the bee", the other nations would have little assurance that she would actually stop at having a small striking force. But if France and England were to develop jointly submarines, bombs and rockets, in order to equip themselves, each, with a small **invulnerable** striking force, then there might not be too much objection raised, were they to give Germany a small striking force, just enough to let her have the sting of the bee also.

* * *

In the long run, the proliferation of atomic bombs may be inevitable, unless the United States and the Soviet Union reach an agreement on arms control, that is based on the concept of the ~~inacceptable counterblow~~ minimal deterrent, and puts an end to saturation parity.

Russia recently accepted the American notion that America, as well as Russia, may retain a small strategic striking force until the end of the third stage of the disarmament agreement and that inspection shall not be limited to equipment which is to be destroyed but shall be extended also to equipment which is

France

RSC

being retained. There are, however, no conversations in progress between America and Russia which would elucidate whether they both mean the same thing when they appear to be in agreement on the concept of the "minimal ~~contribution~~ deterrent" and it is not possible to say whether they would be prepared ^{available} to conclude an agreement on arms control on the basis of this concept. Therefore, the odds are that saturation parity is going to prevail in the predictable future.

* * *

England

It is rather difficult to see current events in their historical perspective and it may be true that it is easier to see clearly the future than the present. In 1949, when the Russians exploded their first atomic bombs, I tried to look into the future and in an article printed in the NEW REPUBLIC (U.S.A.) in October of that year, I predicted that France would want to move towards a position of neutrality, when Russia achieves parity of saturation. I was not prepared however to make a similar prediction for England and I wrote instead:

"England may be different. England is no less vulnerable to bombs than the rest of Western Europe. But, after the fall of France, England decided to fight on in the face of the heaviest odds, and she emerged victorious. England might decide to hold out indefinitely as our ally and, with worse luck this time, perhaps suffer utter destruction in case of war."

Whether England is going to remain a close ally of the United States and an integral part of the American defense system, or whether she will adopt a position of "semi-neutrality" may well determine the shape of Europe in the years to come.

If England were to adopt a foreign policy and a military strategy somewhat similar to those of France, then French objections to England's becoming integrated with the rest of Western Europe would presumably disappear. Should England subsequently decide to enter the Common Market, in spite of the temporary economic disadvantages that this might entail, French and English economic power and political influence might balance those of Germany in Europe. If, however, England were to retain her special relationship with the United States, France might continue to resist the integration of England with the rest of Western Europe and Germany would then be likely to become the dominating influence in Europe.

If England were to adopt a policy of "semi-neutrality" she would presumably want to maintain a small strategic striking force that could function as "the sting of the bee." In fact, it might be politically very difficult, or impossible, for England to move towards a position of "semi-neutrality" if she did not set up an independent striking force.

England cannot however set up a strategic striking force large enough to come anywhere near saturation parity with the striking forces of Russia. And even if she were able to do so, she could not make use of such a striking force for anything, except for threatening retaliation in case of an atomic attack directed against her own territory. The threat of waging a massive atomic strike against Russia would be tantamount to a threat of murder and suicide and such a threat would not be believable in any conflict with Russia in which major English interests might be at stake, but not England's existence as a nation.

In these circumstances, one must ask whether England could stand up to Russia if she adopted a policy of semi-neutrality, whether or not she were to maintain an independent strategic striking force.

One might ask, for instance, what would happen if England were neutral and Russia were to invade the Middle-East and cut off Western Europe from Mid-Eastern oil. I personally doubt that Russia would make such a move in order to force Western Europe to buy Russian oil at higher prices, or for any other reason that comes to mind, and moreover, if Russia were to make such a move, she would be likely to find herself at war with the United States, whether or not England **is** neutral.

To my mind, it is much more likely that a Russian-American conflict, centered outside of Europe, might involve England in a war with Russia if England were to remain a close ally of America, than it is likely that, if England were neutral, Russia could make a military move affecting major English interest, which would not get her into a war with the United States.

X
X
There was a time when England had numerous political, economic and military interests all over the world, and had to take risks in order to defend them. England could, and ~~to my mind~~ perhaps she should, reduce the risks that she is taking to the level of the interests that have remained.

It is being argued ^{on the other side} that if England were to cease to be an ally of America, she would no longer have the kind of restraining influence on American policy that she exerted during the Korean War and again when France lost the war in Indochina. This argument may be correct, as far as it goes, but since, in saturation parity

X ~~to be correct (in most cases)~~

England, as a military ally, would be a potential liability to America rather than a potential asset, she could hardly continue to exert a restraining influence on American policy of the kind she exerted in the past.

It would be probably still true, that were England to remain a close political ally of America then, in a contingency similar to the Cuban crisis, America would be restrained by the fear that Russia might in some way retaliate against England. It is questionable, however, whether England would want to exert a restraining influence on such a basis, and at such a price.

To sum up:

I believe that England would be more secure in the years to come if she were to adopt a position of "semi-neutrality" and were to maintain a small, but independent, striking force, just enough to function as "the sting of the bee." By pooling their resources England and France could jointly develop submarines, rockets and bombs and equip themselves each with a small but invulnerable striking force. Neither France nor England could use such a striking force for anything except for threatening a counterblow in case of an atomic attack extended to her own territory. If this were clearly understood and kept in mind, the possession of a small striking force by France and England would do no harm and it might do some good.

Barbara Tuchman, in her recent book The Guns of August relates the events of the first month of the First World War, and she forcefully demonstrates that all the great powers - England, as well as France and Germany - had based their strategies on the wrong premises. Perhaps it is too much to hope that the decision with which England is now faced may be arrived at on a different basis, but it would be a major tragedy if it were not.

* * *

Postscript

It may be asked whether England and the other nations of Western Europe would not render a disservice to America by moving

towards neutrality. Among several things to consider in this regard, there is also this to be kept in mind:

Neither America nor Russia want war, but a conflict centered outside of Europe might lead to war. Neither America nor Russia would want such a war to escalate, but it might escalate and it might well escalate to the point where America would have to draw for its recovery on the resources of Western Europe.

Several years ago, before Russia was anywhere near saturation parity, it would have been a foregone conclusion that in case of an armed clash between American and Russian forces, at some point along the line the Russians would put an end to escalation. But if such a clash were to occur in the fully symmetrical situation of saturation parity, then one could not predict which of the two countries would take the first step to halt escalation. And, if it is no longer possible to say who will put an end to escalation, then also one cannot predict just how far escalation might go.

If it came to an exchange of strategic strikes between America and Russia, their destruction might well go far beyond that which Western Europe experienced during the last war. And if it hadn't been for the Marshall Plan, the postwar recovery which occurred in Western Europe would not have taken place.

America's recovery after the next war might be brought about by a Marshall Plan in reverse, but only if the war were to leave the nations of Western Europe unscathed. Perhaps these nations, when they reach the point where they would formally proclaim their "neutrality" would pledge to devote a few percent of their industrial output to aid America, should she suffer major devastation in an exchange of strategic strikes with Russia.

It may be asked whether in case of such a war a neutral Western Europe would not be too severely affected by radioactive fall-out to be able to render substantial economic assistance to America.

To-day, if Russia and America were to exchange strategic strikes sufficient to demolish the twelve largest American cities (with a total of about 25 million inhabitants) and to cause a similar toll in Russia, the effect of fall-out on England and the rest of Western Europe would be negligible.

It is conceivable, however, that the arms race may enter into a new phase before long. Both America and Russia may be expected soon to deploy anti-missile missiles in defense of their rocket launching bases. For such a defense to be successful, it is only necessary that it prevent a ground burst of the incoming rocket and this is likely to be an attainable goal. But America and Russia might go further and deploy anti-missile missiles for the defense of their cities also. If this came to pass, America would almost certainly embark on a program of building fall-out shelters on a large scale for the population of her cities.

The building of fall-out shelters might not make very much sense for countries which may be expected to be a target of the attack, whether or not they deploy anti-missile missiles for the defense of their cities. For ^{the} neutral countries ^{of Europe}, however, such shelters would offer the kind of protection they would need if an arms race of this type were to get under way, and they could offer them adequate protection.

THE END

December 4, 1963

SUMMARY

Many among the conservatives are inclined to think that England ought to retain her special relationship to America, but have a substantial independent strategic atomic striking force in order to be able to stand up to Russia if America should stand aloof in a conflict in which some major English interests are at stake.

To my mind, England could not make use of such a strategic striking force in any conflict with Russia in which major English interests might be at stake, but not the very existence of England as a nation.

Many people in the Labor Party are inclined to think that England ought to pursue in her foreign policy an independent course, verging on neutrality in conflicts centered outside of Europe, but that she should have no strategic striking force under her own control.

To my mind, it may be politically difficult or impossible for England to adopt such a position of "semi-neutrality" without having a strategic striking force under her own control.

It seems to me that England would be more secure in the years to come if she were to adopt a position of semi-neutrality and were to maintain a small, but independent, striking force, just enough to function as the sting of the bee. By pooling their resources England and France could jointly develop submarines, rockets and bombs and equip themselves each with a small but invulnerable striking force. Neither France nor England could use such a striking force for anything except for threatening to retaliate in case of an atomic attack extended to her own territory. If this were clearly understood and kept in mind, the possession of a small striking force by France and England would probably do no harm and it might conceivably do some good.

Excerpts from a letter to a friend in England:

May 19, 1964

In October of last year I spent ten days in London, much of the time in the shadow of the Shadow Labour Cabinet.

...

I am enclosing a reprint from an article which I recently published in The Bulletin of the Atomic Scientists. It looks to me that we are not going to make any significant progress towards any real arms control and I believe that in its absence proliferation of atomic bombs will not be avoidable in the long run.

The enclosed manuscript "The Sting of the Bee in Saturation Parity" is based on this belief. I wrote it after my visit to London, primarily to stimulate discussion among those in the Labour Party who are supposed to make up their minds on the issue of the bomb. I was amused to find that I could not get this article printed in England - if I wanted to. Political thought appears to be at a low ebb at the present time in England. I wonder whether this is going to change after the elections.

With best wishes,

Yours sincerely,

Leo Szilard

Semi-Neutrality in Saturation Parity - Part I

by

Leo Szilard

If, at the time of the Cuban crisis, ^{(the} worst had ~~come to worse~~ ^{occurred} and ~~if~~ Russia had made a surprise attack against America's strategic air bases, and rocket bases, America's "residual striking capacity" would have been sufficient to demolish all of Russia's sizeable cities, (cities of over 100,000). But, if, conversely, America had made a surprise attack against Russia's air bases, and rocket bases of known location, Russia's counterblow would have fallen far short of demolishing all of America's sizeable cities.

In 1962, America's strategic atomic striking forces were superior to those of Russia by a factor of perhaps between three and ten in the number of hydrogen bombs that they could deliver. America could presumably maintain this kind of numerical superiority indefinitely, but she could not by doing so keep Russia from increasing her "residual striking capacity." Russia is proceeding with the hardening of her rocket launching sites and the building of additional submarines capable of launching ~~and~~ long-range rockets; ~~and~~ in time, she is going to reach the point where her "residual striking capacity" ~~is~~ ^{will ~~be~~ be} large enough to demolish, in a counterblow, all of America's sizeable cities. At that point, Russia will have achieved "parity of saturation."

There is reason to believe that parity of saturation is now at most a few years away.

* * *

At the time of the Cuban crisis in October of 1962, many people in Washington thought, rightly or wrongly, that if Russia did not yield, America would invade Cuba and that Russia would then retaliate in Europe and perhaps invade West Berlin. To me it seems likely that the superiority of the American strategic striking forces would have deterred Russia

from responding in such a fashion, but this argument ^{will} ~~would~~ not hold in saturation parity any longer.

If a conflict centered outside of Europe were to lead to an armed clash between America and Russia in saturation parity, France could become, more or less automatically, involved in a war with Russia if she did not disentangle herself from the American military defense system.

Moreover, if France wants to make reasonably sure that she would not be regarded by Russia as a "hostage" in such a conflict, then France must make it clear, well ahead of time, that she does not interpret the controversies centered outside of Europe in terms of an ideological conflict, which would automatically align the so-called "free nations" on the one side and the Soviet Union, as well as China, on the other.

X General de Gaulle ^{recently} took a long step in this direction ~~recently~~ when he offered the good offices of France to help accomplish the reunion of North Vietnam and South Vietnam. By speaking up on Vietnam, he went out of his way to make it clear that France does not recognize America as the "leader of the free world" in the current conflicts which center on Southeast Asia.

It would appear that General de Gaulle is in no need to take advice from me in matters of foreign policy. He might not be in need to take advice from me in matters of ^Imilitary strategy either. I am less sure of this, however, because military strategy is an area where technical knowledge, and a dispassionate appraisal of the technological changes which may be expected to take place in the predictable future, might come in handy.

I do not think that France can have an independent strategic atomic force strong enough to threaten a strike against Russia, in a conflict in which

major French interests might be at stake, but not the very existence of France as a nation. Still, France could perhaps have, before long, a small striking force, consisting of submarines carrying long-range rockets which could not be destroyed by Russia in a surprise attack and which could demolish in a counterblow, say, three Russian cities. Such a strategic striking force might be compared with the sting of the bee, which is not, properly speaking, an instrument of defense, for when it uses its sting the bee dies. Yet, the sting of the bee deters people from going around and catching bees, provided they don't have any compelling reasons for doing so. If France ceased to be an integral part of the American defense system, and if she embraced the philosophy of "neutrality", ^(then) the Soviet Union would presumably have no reason to mount an attack against France and therefore a retaliatory capacity sufficient to destroy three major Russian cities might be an adequate deterrent.

As long as France's strategic striking force consists of bombers, which would have to take off from air bases that could be destroyed by a Russian surprise attack, France is not in the possession even of "the sting of the bee." There is at the present time, however, no direct threat to the security of France, and by the time there may arise in Europe, as indeed it might, a new threat to her security, France, with a little luck, could be in the possession of a small, but invulnerable, striking force.

Two nations, like France and England could pool their resources and jointly develop submarines, rockets and bombs for the purpose of equipping themselves with a small but invulnerable strategic striking force. If, however, they were to place their striking forces under ~~the~~ joint ~~command~~ control - with either both of them, or neither of them, having power of veto - then these forces could not fulfill the function of the sting of the bee.

It is probably true that if France possessed the sting of the bee and never tried to use it for anything, except for threatening retaliation in case of an atomic attack directed against her own territory, then the possession of such a ~~small~~^{strategic} striking force by France would do no harm and it would conceivably do some good. I am not in a position to say whether the statesmen of France understand, at this time, that a small ~~strategic~~ striking force must not be used for anything else.

* * *

It is rather difficult to see current events in their historical perspective and it may be true that it is easier to see clearly the future than the present. In 1949, when the Russians exploded their first atomic bomb, I tried to look into the future and in an article printed in the NEW REPUBLIC (U.S.A.) in October of that year, I predicted that France would want to move towards a position of neutrality, when Russia achieves parity of saturation. I was not prepared however to make a similar prediction for England. I wrote:

"England may be different. England is no less vulnerable to bombs than the rest of Western Europe. But, after the fall of France, England decided to fight on in the face of the heaviest odds, and she emerged victorious. England might decide to hold out indefinitely as our ally and, with worse luck this time, perhaps suffer utter destruction in case of war."

Whether England is going to remain a close ally of the United States and an integral part of the American defense system, or whether she will adopt a position of "semi-neutrality," may well determine the shape of Europe in the years to come.

Barbara Tuchman, in her recent book The Guns of August, relates the events of the first four weeks of the First World War, and she forcefully demonstrates that all the great powers - England, as well as France and Germany - had based their strategies on the wrong premises. Perhaps it is too much to hope that the decision with which England is ^{now} faced may be arrived at on a different basis, but it would be a major tragedy if it were not.

Semi-Neutrality in Saturation Parity - Part II

By

Leo Szilard

In the years to come America and Russia will be able to destroy each other to any desired degree and when the strategic striking forces of Russia reach such a "parity of saturation" with those of America, then the world is confronted with a situation for which there is no precedent in history. Before long, England will have to adjust her policies to this situation.

If England were to adopt a foreign policy and ^{ay} military strategy somewhat similar to those of France, then French objections to England's becoming integrated with the rest of Western Europe would presumably disappear. Should England subsequently decide to enter the Common Market, in spite of the temporary economic disadvantages that this might entail, ~~then we would have a Europe in which~~ French and English economic power and political influence might balance those of Germany. ^{in Europe.} If, however, England were to remain closely integrated with the American defense system, France might continue to resist the integration of England with the rest of Western Europe and Germany's economic power would then be likely to become the dominating influence in Europe.

If England ceased to be an integral part of the American defense system and adopted a policy of "semi-neutrality" she would presumably want to maintain a small but independent strategic striking force that could function as "the sting of the bee". In fact, it might be politically very difficult, or impossible, for England to move towards a

position of "semi-neutrality" if she did not set up such an independent striking force.

X
X
The bee dies if it uses its sting and such a small strategic striking force could be used by England only to threaten retaliation in case of an atomic attack directed against her own territory; it would be of no value to her in any conflict with Russia, in which major English interests might be at stake, but not England's existence as a nation. Therefore, one must ask whether England could stand up to Russia if she ceased to be part of the American defense system and adopted a policy of semi-neutrality.

X
X
X
It ~~would be~~ ^{is maybe} impossible to devise a policy which would enable England, single handedly, to cope with all of the various contingencies which could conceivably occur and one may, at best, devise a policy ^{that} ~~which~~ would enable England to cope with the contingencies which have a reasonable chance of occurring in the predictable future.

X
X
X
People might ask, for instance, what would happen if England were neutral and Russia were to invade the Middle-East and cut off Western Europe from Mid-Eastern oil. I personally doubt that Russia would make such a move in order to force Western Europe to buy Russian oil at higher prices, or for any other reason that comes to mind, and moreover, if Russia were to make such a move, she would be likely to find herself at war with the United States, ~~whether~~ or not England was neutral. ^X ~~It~~ ^{It} is hardly possible, however, for anyone to have absolute certainty in matters of this sort. And those charged with the responsibility of deciding what policy England shall pursue must compare, as best they can, the likelihood that Russia would make a military move directed against a neutral England, with the likelihood that a Russian - American conflict, centering outside of Europe, would involve England in a war with Russia, ~~if she~~ ^{she} were to remain a

close military ally of America.

X If a war between America and Russia were to start with a direct nuclear exchange between them, it would be presumably of short duration and, therefore, would not involve England, provided she is not an integral part of the American military defense system. But in case of a protracted Russian-American conflict England might be regarded ^{by} Russia as a potential hostage, if she remained a close political ally of America.

If America had invaded Cuba in October of 1962, Russia might not have taken any action against England, because America's strategic striking forces had a significant superiority over those of Russia. But if, a few years hence, a conflict of a similar type were to lead to hostilities between America and Russia then England might be in danger from Russia, unless she establishes her neutrality in that conflict ahead of time.

X It may be ^{also} argued that if England were to cease to be an ally of America she would no longer have the kind of restraining influence on American policy that she exerted during the Korean War and again when France lost the war in Indochina. This argument may be correct, as far as it goes, but since, in the years to come, England, as a military ally, would be a potential liability to America rather than a potential asset, she could hardly continue to exert a restraining influence on American policy of the same kind she exerted in the past.

X X It would be probably still true, that were England to remain a close political ally of America then in a future contingency, similar to the Cuban crisis, America might be restrained by the fear that Russia might in some ^{way} ~~way~~ retaliate against England. It is questionable however whether England would want to exert a restraining influence on such a basis, and at such a price.

* * *

X ^{the} In ~~an~~ article printed in 1949 in the NEW REPUBLIC (U.S.A.) I wrote:

"Yet England, when she realizes that her geographical position as well as the concentration of her population in London and a few other large cities makes her vulnerable beyond endurance, might also wish to be freed from the Atlantic Pact. If she does, we ought to lend her a helping hand, rather than try to obstruct a development that is inevitable." X

X Some people in America ^{may} think that England would render a disservice to America were she to adopt a foreign policy and military strategy similar to those of France. But if they examined more closely America's situation in saturation parity they might be lead to the opposite conclusion.

X Neither America nor Russia want war but in the circumstances they might get into a war with each other. Neither America nor Russia would want such a war to escalate, but the danger that it might do so and become ~~an~~ ^{an} atomic war will be much greater in the years to come, ^{than} ~~then~~ it has been in the past. X

X Had the Cuban crisis in 1962 led to an armed clash, there might have been some initial escalation, but because of the superiority of the American strategic striking forces, at some point along the line, the Russians would have put an end to further escalation. If a similar crisis were to occur in the symmetrical situation of saturation parity ~~X~~ then one could not predict which of the two parties would take the first step to halt ~~furthe~~ escalation. And if it is no longer possible to say who will put an end to escalation, then one also cannot predict just how far the escalation might go. X

X If it came to an exchange of strategic strikes between America and Russia, ~~then~~ ~~the~~ the destruction might go far beyond that which Western Europe experienced during the last war. And if it hadn't been

for the Marshall Plan, the postwar recovery which occurred in Western Europe would not have taken place.

America's recovery after the next war might be brought about by a Marshall Plan in reverse, but this could happen only if the war were to leave the nations of Western Europe unscathed. These nations, when they reach the point where they would formally proclaim their semi-neutrality, might pledge to devote a portion of their industrial output to aiding America, should she suffer major devastation in an exchange of strategic strikes with Russia.

THE END

Semi-Neutrality in Saturation Parity - Part III

By

Leo Szilard

Within a few years the atomic strategic striking forces of Russia will have "parity of saturation" with those of America and I propose to discuss on this occasion how such a situation ^{might} ~~may be~~ ~~expected to~~ affect West Germany.

~~The nature of "saturation parity" and the instabilities which are inherent in it are as yet poorly understood.~~ Let us ask ourselves, for example, what would have happened if there had occurred, a few years ago, a major uprising in East Germany against the established government and if substantial units of armed West German volunteers had moved into East Germany, to assist the insurgents.

Presumably, at first, one would not have known with certainty whether these volunteers were acting with the tacit approval, and active participation, of the West German Government, or whether they were acting against its wishes, and in disregard of its orders. Had such a contingency occurred a few years ago, the odds are that America would have extended protection to West Germany, against a possible atomic attack directed against West German cities by Russia, on the ground that America must prevent the destruction of West German military power. America would have been likely to extend such protection to West Germany, whether Germany was, or was not, the aggressor and if there had been any doubt on that score, Germany would have been given the benefit of the doubt.

If a similar contingency were to ~~arise~~ ^{occur} in the years to come, ~~and~~ America would be likely to take quite a different position. ~~In saturation parity,~~ if the Russians feared that the clash might escalate into an all-out atomic war, they might decide to knock West Germany out of the war by striking first. They might do this by dropping all at once ~~say~~ ^{between} (five ~~to~~ ^{and} ten hydrogen bombs, each ~~on~~ ^{on} a West German city. Having knocked West Germany out of the war by such a strike, Russia could then speak to America as follows:

Another "German aggression forced us to do what we did, lest the clash of arms escalate into an all-out atomic war which neither Russia nor America want. We realize that America could now respond by demolishing one Russian city after another, but for every Russian city that America may demolish, Russia would demolish one American city. Let's be ~~rational~~ ^{rational} about this. What has happened, has happened; let's see now where we go from here. Russia does not intend to occupy any West German territory and she is willing to put up 5% of her industrial output to help rebuild the cities of West Germany, provided her contribution is matched, dollar-for-dollar, by America."

The Russians would hardly be so foolish as to assume that America would respond in a rational fashion if they were to drop bombs on American cities but they might ~~well~~ expect America to respond in such a fashion if, in the contingency described above, they ~~would~~ ^{would} demolish German cities. *... did not ...*

to ~~that~~ *... Americans own territory!*

* * *

Would Germany need to have a substantial strategic atomic striking force in order to safeguard her security in saturation parity? There are reasons to think that she would not, but it doesn't follow that these reasons ~~would~~ ^{may} make ~~much~~ ^{sense} to the Germans.

In 1931, I met with a group of ~~German~~ friends in Berlin who thought that the time had come for Germany to re-arm, in order to be more secure. I said to them that when Germany lost the war in 1918, her neighbors took from her all that they wanted. None of them wanted to

take from Germany anything thereafter. Thus, in 1931, Germany did not possess anything that had to be defended by force of arms and therefore, even though disarmed, she was ^{quite} secure. Only if Germany wanted to recover by force, ~~or by the threat of force~~ some of the territories she had lost in the First World War, would she have to re-arm.

My German friends assured me - and I believe they were sincere - that they were not thinking of recovering any of the territories lost; they just wanted to have as much security for Germany as possible.

At first, they appeared to have some difficulty in grasping my argument, perhaps because of its very simplicity. After a while, however, they seemed to get the point, or so I thought, until a few days later I met with them again and found that I had to start to argue from scratch, from precisely the same point as before.

They wanted Germany to re-arm, even though they did not know why they wanted this, and people who know what they want to do, but do not know why they want to do it, are rarely open to argument.

I could argue to-day that Germany is in no need of having a strategic striking force, just as I argued in 1931 that Germany did not need to re-arm; but I fear that to many Germans, my argument would not sound any more convincing to-day than it did some thirty years ago. It is a foregone conclusion that there will be Germans who would want Germany to have an independent strategic atomic striking force, ^{and} the only question is: ^{whether / or} ~~Are~~ they going to prevail?

There are those in America who believe that the way of keeping Germany from wanting to have such a striking force under her own control, is to set up a ~~very substantial~~ ^{and} strategic striking force under the joint control of America, ^{with} Germany ~~and~~ perhaps a few other ^{other} nations. ^{joining Germany in} ~~But~~ Such a striking force would not give the Germans ^{however} what ~~what~~

they want, as long as America can veto its use and the Germans propose to participate in it, only because they assume that it may be possible for them to get rid of the veto. ^{then then it would be possible} If such a striking force were, in fact, created, ~~the United States would then be in a position to endow West Germany with a substantial striking force of her own,~~ ^{could be obtained} ~~so to speak~~ ^{by} at the stroke of the pen, and few of the ~~other~~ ^{other} nations in Europe contemplate with equanimity the possibility of such a contingency.

One may ask whether it might not be preferable ~~in these circumstances~~ to provide Germany with a ^{small} ~~certain~~ number of submarines, bombs and rockets; just enough to enable her to deter ^{on her own} an unprovoked Russian attack against her cities.

If France and England were to pool their resources they might jointly develop submarines, bombs and rockets and thus ^{equip themselves} ~~speedily provide~~ themselves with a ^{each} small, but invulnerable, strategic striking force. ^{Neither of them} They could ~~not~~ use such a small ~~striking~~ force for anything accept threatening retaliation in case of an atomic attack directed against ^{its her} their own territory, but even so, such a ~~small~~ ^{striking} force could fulfill the function of the sting of the bee.

If Germany were to set out ~~on her own~~ ^{on her own} to develop submarines, bombs and rockets for the purpose of acquiring a sting of the bee, the other nations would have little assurance that ^{she} ~~Germany~~ would actually stop at having such a small ~~strategic~~ striking force. It is conceivable, however, that the ~~other nations~~ involved would not raise ~~any~~ major objections if France and England were jointly to give Germany a few submarines, rockets and bombs; just enough to let her have the sting of the bee also.

Fms. →

December 4, 1963

SUMMARY

Many among the conservatives are inclined to think that England ought to retain her special relationship to America, but have a substantial independent strategic atomic striking force in order to be able to stand up to Russia if America should stand aloof in a conflict in which some major English interests are at stake.

To my mind, England could not make use of such a strategic striking force in any conflict with R^Ussia in which major English interests might be at stake, but not the very existence of England as a nation.

Many people in the Labor Party are inclined to think that England ought to pursue in her foreign policy, an independent course, verging on neutrality in conflicts centered outside of Europe, but that she should have no strategic striking force under her own control.

To my mind, it may be politically difficult or impossible for England to adopt such a position of "semi-neutrality" without having a strategic striking force under her own control.

It seems to me that England would be more secure in the years to come if she were to adopt a position of semi-neutrality and were to maintain a small, but independent, striking force, just enough to function as the sting of the bee. By pooling their resources England and France could jointly develop submarines, rockets and bombs and equip themselves each with a small but invulnerable striking force. Neither France nor England could use such a striking force for anything except for threatening to retaliate in case of an atomic attack extended to her own territory. If this were clearly understood and kept in mind, the possession of a small striking force by France and England would probably do no harm and it might conceivably do some good.

Semi-Neutrality in Saturation Parity

By
Leo Szilard

At the time of the Cuban crisis of October 1962, many people in Washington believed that if Russia did not yield America would invade Cuba and that Russia might then retaliate against a "hostage" in Europe and perhaps invade West Berlin.

It was not deemed likely that Russia would respond to an American invasion of Cuba with a strategic strike directed against America. Had worst come to worse and had Russia made a surprise attack against America's strategic air bases and rocket bases, America's "residual striking capacity" would have been sufficient to demolish all of Russia's sizeable cities, (cities of over 100,000). But if, conversely, America had made a surprise attack against Russia's air bases and rocket bases of known location, Russia's counterblow would have fallen far short of demolishing all of America's sizeable cities.

At the time of the Cuban crisis, America's striking forces were superior to those of Russia by a factor of perhaps three to ten in the number of hydrogen bombs that they could deliver. America could presumably maintain this kind of numerical superiority indefinitely, but she could not, by doing so, keep Russia from increasing her "residual striking capacity" to the point where it would be large enough to demolish, in a counterblow, all of America's sizeable cities. At this point Russia will have achieved parity of saturation.

There is reason to believe that saturation parity is now, at most, a few years away.

* * *

Had war broken out between America and Russia in October of 1962, it might have involved France also. If France does not want to risk that she may be more or less automatically involved in a war with Russia, should a similar conflict lead to an armed clash between America and

Russia in saturation parity, then she must disentangle herself from America's military defense system.

But for France to do this much is not enough. If France wants to make reasonably sure that she would not be regarded by Russia as a "hostage" in any similar Russian-American conflict then France must make it clear, well ahead of time, that she does not interpret the controversies centered outside of Europe in terms of an ideological conflict, which would automatically align the so-called "free nations" on the one side and the Soviet Union, as well as China, on the other.

General de Gaulle took a long step in this direction recently, when he offered the good offices of France to help accomplish the reunion of North Vietnam and South Vietnam. By speaking up on Vietnam, he went out of his way to make it clear that France does not recognize America as the "leader of the free world" in the current conflicts which center in Southeast Asia.

It would appear that General de Gaulle is in no need to take advice from me in matters of foreign policy. He might not be in need to take advice from me in matters of military strategy either, even though I am less sure of this, because this is an area where technical knowledge, and a dispassionate appraisal of the technological changes which may be expected to take place in the predictable future, might come in handy.

Obviously, France cannot have an independent strategic atomic force strong enough to threaten a strike against Russia, in a conflict in which major French interests may be at stake, but not the very existence of France as a nation. Still, France could perhaps have perhaps a small striking force consisting of submarines carrying long-range rockets, which could not be destroyed by Russia in a surprise attack and which could demolish in a counterblow say, three Russian cities. Such a strategic

striking force might be compared with the sting of the bee, which is not properly speaking an instrument of defense, for when it uses itssting the bee dies. Yet, the sting of the bee deters people from going around and catching bees, provided they don't have any compelling reasons for doing so. If France ceased to be an inéeegral part of the American defense system and if she embraced the philosophy of "neutrality" the Soviet Union would presumably have no reason to mount an attack against France and therefore a retaliatory capeacity sufficient to destroy three major Russian cities might be an adequate deterrent.

As long as France's strategic striking force consists of bomber plans which would have to take off from air bases that could be destroyed by a Russian surprise attack, France is not in the possession even of "the sting of the bee." There is at the present time, however, no direct threat to the security of France, and by the time there may arise in Europe, as indeed it might, a new threat to her security, France, with a little luck, could be in the possession of a small but invulnerable striking force.

It is probably true that if France possessed the sting of the bee and never tried to use it for anything except for threatening retaliation in case of an atomic attack directed against its own territory, the possession of such a small striking force by France would do no harm and it would conceivably do some good. I am not in a position to say whether the statesmen of France understand, at this time, that a small strategic striking force must not be used for anything else.

* * *

It is rather difficult to see surrent events in historical perspec-
tive and it might be true that it is easier to see clearly the future.
In 1949, when the Russians exploded their ~~afist~~ first atomic bomb, I tried to
look into the future and in an article which was printed in the

NEW REPUBLIC (U.S.A.) in October of that year. I predicted that France would want to move towards a position of neutrality when Russia achieves parity of saturation, but I was not prepared to make a similar prediction for England. I wrote:

"England may be different. England is no less vulnerable to bombs than the rest of Western Europe. But, after the fall of France, England decided to fight on in the face of the heaviest odds, and she emerged victorious. England might decide to hold out indefinitely as our ally and, with worse luck this time, perhaps suffer utter destruction in case of war."

Whether England is going to remain in saturation parity a close ally of the United States and an integral part of the American defense system or whether she will adopt a position of "semi-neutrality" may well determine the shape of Europe in the years to come.

Barbara Tuchman, in her recent book, *The Guns of August*, relates the events of the first four weeks of the First World War and she forcefully demonstrates that all the great powers - England, as well as France and Germany - had based their strategies on the wrong premises. Perhaps it is too much to hope that the decision with which England is faced at this juncture, may be arrived at on a different basis, but it would be a major tragedy if it were not.

THE END

Semi-Neutrality in Saturation Parity - Part II

By

Leo Szilard

If England were to adopt a foreign policy and military strategy somewhat similar to those of France, then ~~the~~ French objections to England's becoming integrated with the rest of Western Europe would presumably disappear. Should England subsequently decide to enter the Common Market, in spite of the temporary economic disadvantages that this might entail, then we would have a Europe, in which French and English economic power and political influence ~~would~~ ^{might} balance those of Germany. If, however England were to remain closely integrated with the American defense system, France might continue to resist the integration of England with the rest of Western Europe and Germany's economic power would then be likely to become the dominating influence in Europe.

If England ceased to be an integral part of the American defense system and adopted a policy of "semi-neutrality" she would presumably want to maintain a small but independent strategic striking force that could function as "the sting of the bee." In fact, it might be politically very difficult, if not impossible, for England to move towards a position of "semi-neutrality" were she not to set up such an independent striking force.

The bee dies if it uses its sting and such a small strategic striking force could be used by England only to threaten retaliation in case of an atomic attack directed against her own territory; it would be of no value to her in any conflict with Russia in which major English interests ^{might} ~~may~~ be at stake but not England's existence as a nation. Therefore, one may ask whether England could stand up to Russia in the various contingencies which might conceivably occur, if she ceased to be part of the American defense system and adopted a policy of semi-neutrality. Suppose for instance Russia were to move troops into the Middle East and cut off

Western Europe from Mid-Eastern oil?

Obviously, no policy which England may adopt at this juncture would ensure that England could not possibly get into trouble in any of the contingencies which could conceivably occur and ~~but~~ ^{at best} one may ^{hope to} ~~at best~~ devise policies which would make England fairly secure in the contingencies which have a reasonable chance of occurring, in the predictable future. Thus, one must ask:

Why should the Russians move to cut off Western Europe from Mid-Eastern oil? Would they do this in order to force Western Europe to buy Russian oil at higher prices or would they take this step, more or less wantonly, just to weaken and embarrass Western Europe? It might be conceivable that they would do such a thing, but is it probable?

One may also ask:

What other moves might Russia conceivably make at England's expense in the predictable future? And how likely is it that Russia would make any of these moves?

If those, charged with the responsibility of deciding how England shall respond to saturation parity, are to base their decision on rational considerations, then they must try to find the answers to the questions listed above and ^{then} base their decision on these answers.

If a war between America and Russia started with a direct nuclear exchange between them it would be likely to be of short duration and ~~and~~ England would presumably escape being directly involved, provided she ceased to be an integral part of the American defense system. But if England wants to protect herself against being treated by Russia as a hostage in a protracted Russian-American conflict, which may stop short of an atomic war, she must go one step further and adopt well ahead of time a clear position of neutrality in the conflicts which are centered outside of Europe. Because of the overwhelming superiority which the

American strategic striking forces had over those of Russia in 1962, presumably Russia would not have moved against hostages, such as West Berlin, even if America had invaded Cuba. But when Russia has achieved saturation parity, she might very well move against one of America's close political allies in Europe, if a similar contingency were to lead to protracted hostilities outside of Europe.

It may be argued, and probably rightly so, that if England were to cease to be a close ally of America, she would no longer have the kind of restraining influence on American policy which she exerted in the past, during the Korean War, and again when France lost the war in Indochina. To me, it seems doubtful, however, whether England could continue to exert a ~~restraining~~^{an} influence of this sort, even if she were to remain a close ally of America, because from here on England, as an ally, would be a liability to America rather than an asset, in case of war. Still, if England chose to remain a close ally of America then, in contingencies similar to the Cuban crisis, the fear that Russia might ~~look upon~~^{regard} England as a hostage would be likely to restrain America to a certain extent. Thus, the issue is whether England would want to exercise a restraining influence on American policy on such a basis, and at such a price

* * *

In an article printed in 1949 in the NEW REPUBLIC (U.S.A.) I wrote:

"Yet England, when she realizes that her geographical position as well as the concentration of her population in London and a few other large cities makes her vulnerable beyond endurance, might also wish to be freed from the Atlantic Pact. If she does, we ought to lend her a helping hand, rather than try to obstruct a development that is inevitable."

I am inclined to think that America ought to encourage England to move towards a position of semi-neutrality at this time.

The official American position remains that "the United States

cannot co-exist with any communist country in this hemisphere which looks for aid to the Soviet Union," and this position has strong popular support. In these circumstances and in the absence of a political settlement in Southeast Asia, America is likely to continue to take calculated risks which might get her into a war with Russia.

Because of the superiority of the American strategic striking forces prevailing in 1962, it was predictable that if the Cuban crisis were to lead to an armed clash, the Russians would put an end to escalation, at some point along the line. But if a similar crisis were to occur in the symmetrical situation of saturation parity, then one could no longer predict, with any degree of assurance, which of the two parties would take the first step to stop escalation. And if it is no longer possible to say who will take the first step, then one also cannot predict just how far escalation might go.

It if came to an exchange of strategic strikes between America and Russia then, even if escalation were stopped rather early in the game, the destruction might go far beyond that which Western Europe experienced in the last war and it is well to remember at this point that if it hadn't been for the Marshall Plan, the postwar recovery which occurred in Western Europe would not have taken place.

America's recovery after the next war might be brought about by a Marshall Plan in the reverse, provided that the war leaves the nations of Western Europe unscathed. If, they were to reach the point where they would formally proclaim their semi-neutrality, the nations of Western Europe might then pledge, to devote an appreciable portion of their industrial output to aid to America, should America suffer major devastation in an exchange of strategic strikes with Russia.

THE END

~~1~~ 2

Semi-Neutrality in Saturation Parity - Part I

by

Leo Szilard

If, at the time of the Cuban crisis, worst had come to worse and if Russia had made a surprise attack against America's strategic air bases, and rocket bases, America's "residual striking capacity" would have been sufficient to demolish all of Russia's sizeable cities, (cities of over 100,000). But, if conversely, America had made a surprise attack against Russia's air bases, and rocket bases of known location, Russia's counterblow would have fallen far short of demolishing all of America's sizeable cities.

In 1962, America's strategic atomic striking forces were superior to those of Russia by a factor of perhaps between three and ten in the number of hydrogen bombs that they could deliver. America could presumably maintain this kind of numerical superiority indefinitely, but she could not by doing so keep Russia from increasing her "residual striking capacity." Russia is proceeding with the hardening of her rocket launching sites and the building of additional submarines capable of launching of long-range rockets and, in time, she is going to reach the point where her "residual striking capacity" ~~will~~ ^{would be} large enough to demolish, in a counterblow, all of America's sizeable cities. At that point, Russia will have achieved "parity of saturation."

There is reason to believe that parity of saturation is now at most a few years away.

* * *

At the time of the Cuban crisis in October of 1962, many people in Washington thought, rightly or wrongly, that if Russia did not yield, America would invade Cuba and that Russia would then retaliate in Europe and perhaps invade West Berlin. To me it seems likely that the superiority of the American strategic striking forces would have deterred Russia

from responding in such a fashion, but this argument would not hold in saturation parity any longer.

If a conflict centered outside of Europe were to lead to an armed clash between America and Russia in saturation parity, France would become, more or less automatically, involved in a war with Russia if she did not disentangle herself from the American military defense system.

Moreover, if France wants to make reasonably sure that she would not be regarded by Russia as a "hostage" in such a conflict, then France must make it clear, well ahead of time, that she does not interpret the controversies centered outside of Europe in terms of an ideological conflict, which would automatically align the so-called "free nations" on the one side and the Soviet Union, as well as China, on the other.

General de Gaulle took a long step in this direction recently, when he offered the good offices of France to help accomplish the reunion of North Vietnam and South Vietnam. By speaking up on Vietnam, he went out of his way to make it clear that France does not recognize America as the "leader of the free world" in the current conflicts which center on Southeast Asia.

It would appear that General de Gaulle is in no need to take advice from me in matters of foreign policy. He might not be in need to take advice from me in matters of ^Imilitary strategy either. I am less sure of this, however, because military strategy is an area where technical knowledge, and a dispassionate appraisal of the technological changes which may be expected to take place in the predictable future, might come in handy.

I do not think that France can have an independent strategic atomic force strong enough to threaten a strike against Russia, in a conflict in which

major French interest might be at stake, but not the very existence of France as a nation. Still, France could perhaps have before long a small striking force, consisting of submarines carrying long-range rockets which could not be destroyed by Russia in a surprise attack and which would demolish in a counterblow, say, three Russian cities. Such a strategic striking force might be compared with the sting of the bee, which is not properly speaking an instrument of defense, for when it uses its sting the bee dies. Yet, the sting of the bee deters people from going around and catching bees, provided they don't have any compelling reasons for doing so. If France ceased to be an integral part of the American defense system and if she embraced the philosophy of "neutrality" ^{then} the Soviet Union would presumably have no reason to mount an attack against France and therefore a retaliatory capacity sufficient to destroy three major Russian cities might be an adequate deterrent.

As long as France's strategic striking force consists of bombers which would have to take off from air bases that could be destroyed by a Russian surprise attack, France is not in the possession even of "the sting of the bee." There is at the present time, however, no direct threat to the security of France, and by the time there may arise in Europe, as indeed it might, a new threat to her security, France, with a little luck, could be in the possession of a small, but invulnerable, striking force.

Two nations, like France and England could pool their resources and jointly develop submarines, rockets and bombs for the purpose of equipping themselves with a small but invulnerable strategic striking force. If, however, they were to place their striking forces under ~~the~~ joint control - with either both of them or neither of them having power of veto - then these forces could not fulfill the function of the sting of the bee.

It is probably true that if France possessed the sting of the bee and never tried to use it for anything except for threatening retaliation in case of an atomic attack directed against her own territory, then the possession of such a ~~small~~^{strategic} striking force by France would do no harm and it would conceivably do some good. I am not in a position to say whether the statesmen of France understand, at this time, that a small strategic striking force must not be used for anything else.

* * *

It is rather difficult to see current events in their historical perspective and it may be true that ^I it is easier to see clearly the future than the present. In 1949, when the Russians exploded ^I their first atomic bomb, I tried to look into the future and in an article printed in the NEW REPUBLIC (U.S.A.) in October of that year, I predicted that France would want to move towards a position of neutrality when Russia achieves parity of saturation. I was not prepared however to make a similar prediction for England. I wrote:

"England may be different. England is no less vulnerable to bombs than the rest of Western Europe. But, after the fall of France, England decided to fight on in the face of the heaviest odds, and she emerged victorious. England might decide to hold out indefinitely as our ally and, with worse luck this time, perhaps suffer utter destruction in case of war."

Whether England is going to remain a close ally of the United States and an integral part of the American defense system or whether she will adopt a position of "semi-neutrality" may well determine the shape of Europe in the years to come.

Barbara Tuchman, in her recent book The Guns of August, relates the events of the first four weeks of the First World War and she forcefully demonstrates that all the great powers - England, as well as France and Germany - had based their strategies on the wrong premises. Perhaps it is too much to hope that the decision with which England ^{now} is faced may be arrived at on a different basis, but it would be a major tragedy if it were not.

THE END