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THE US-USSR RELATIONSHIP AND ITS LIKELY IMPACT ON NUCLEAR PROLIFERATION

Regions of Actual or Potential Tensions in which Non-Nuclear-Weapon States at Present Rely on Automatic Superpower Protection

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INTRODUCTION

They say that from the beginning of time small and large states have equipped themeselves with the best arms they could afford to achieve or defend their interests. As long as international relations are based on substantial anarchy (and some believe it's best that way because the only alternative, they say, is an empire) it's inevitable (and perhaps opportune) that nations have or try to have the instruments with which to command respect. If that's the way things really stand, why waste time and energy in the quixotic (or imperialistic) battle for nuclear non proliferation? Wouldn't it be better to establish some kind of international order that includes the many large nuclear powers, but also the medium and maybe even the small ones? This question begs another: is it really true that a world with many military nuclear countries would be a more dangerous and unstable place than it is today? Nuclear weapons could provide a more effective defence, discouraging aggressors with their lethality; as someone figuratively put it, they would be the spines of a world of porcupines, peace-loving but unassailable animals (1).

If deterrence works for the superpowers, why not reproduce it in various regional contexts? Small nuclear forces would allow countries to establish their own equilibria, reciprocally dissuading each other from attacking, and to use the bomb as a final resort against larger nuclear powers. This theory has already been applied to Israel in the proposal that the government in Jerusalem should openly declare its nuclear weapons and the conditions under which it would use them, in order to permanently dissuade the Arabs from any idea of annihilating the State of Israel and at the same time to provide a basis for the start of negotiations with them (2).

This is an example of "the dove's dilemma". If nuclear weapons can prevent conflicts, isn't it best that they exist? This dilemma concerns both horizontal proliferation (the porcupine model) and vertical proliferation, in that mutual deterrence among nuclear powers generates peace.

Edward Teller is certaninly not a dove. His position has always been that since the proliferation of nuclear weapons cannot be halted, it would be better to question the current conviction that nuclear war cannot be limited. As early as 1960 he wrote that the danger of a limited nuclear conflict triggering a total conflict was minimal, which is why we have "to continue the development of light, cheap and flexible tactical weapons" and spread knowledge about nuclear weapons (3).

In Europe, NATO followed Teller's advice and instead of undertaking a more expensive strengthening of conventional defence, deployed thousands of these light, cheap and flexible tactical bombs (around 7000 at the beginning of the seventies) as a convenient low-cost solution.

This property of nuclear weapons - lower cost for the same destructive power ("more bang for a buck") - also underlies another question. If they are so cheap, why deprive the poorer nations of the possibility of creating their own nuclear defence with which to dissuade their enemies as the rich nations do?

In a nutshell, the attempt to prevent the spread of nuclear weapons to new countries is 1) anti-historical because it goes against the natural evolution of weapons; 2) inopportune, because it does not allow nuclear deterrence to extend to regional level; 3) unfair, because it prevents new countries, and in particular the poorer ones, from acquiring a nuclear defence and deterrence, which is, among other things, not very expensive.

Undoubtedly, non proliferation policies can be defined as anti-historical or "unnatural" (4). The question remains whether nuclear weapons are so novel that they exclude the application of some historical models. In other words, while the most powerful weapons available have always, from the beginning of time, been employed, only since August 1945 have weapons existed that can in one fell blow destroy vast territories and with repeated use perhaps jeopardize the survival of the human race, bringing the weight of such a risk to bear on the aggressor - even in the event of victory - thereby recommending other forms of action and exercise of power. The threat of use (rather than use) of nuclear weapons is one of these forms, although associated with other factors (delivery systems, communication command and control). Therefore, more and more powerful weapons were initially produced, then the yield decreased and they became more sophisticated in an attempt to graduate and specialize the effect. But that is as far as their "normalization" goes. Those who, like Teller, imagined that nuclear weapons would enter into the normal management of international conflicts were mistaken, at least until now.

Despite "miniaturization", nuclear devices have kept their specificity. A thershold remains that separates them from conventional weapons, even if the latter can have greater destructive power. Contrary to Teller's logic (and, indeed, that of many Soviet strategists), this threshold has not been crossed, just like the people at the party in Bunuel's film The Exterminating Angel who do not venture out the door although there is apparently nothing to keep them from doing so. Despite disquisitions on the controllability and limitability of nuclear conflicts, no one has yet put them to the test.

The protracted existence of an unviolated threshold is of great importance in that the longer it continues, the more remote the possibility of repeating the Hiroshima experience, the more uncertain the effects of multiple

nuclear deflagration in a conflict and the more unpopular the idea of using nuclear weapons become. Their utility, therefore, resides not in their use, but in the threat of their use, that is, their deterrent effect. Nuclear weapon states (NWSs) possess this deterrent ability, but not all to the same degreee. The US' and the USSR's is equal (more or less), independent and global. France's, England's and China's, since they have limited second strike capabilities, depend on the risk of escalation drawing in the superpowers. This has to be kept in mind when reproducing deterrence in theatres other than the East-West one is contemplated.

Any other new deterrent capabilities are bound to be not only local, but presumably unbalanced and increasingly dependent, in the sense that they are credible only to the extent that they can involve larger actors. Since deterrence among NWSs is not static, but extremely dynamic due to the evolution of technology and its consequences on strategy, this situation is bound to become more rather than less marked. For example, China has obviously lost ground in the race with the superpowers.

If the outcome of the use of nuclear weapons by NWSs is highly uncertain and their deterrent effect is accompanied by limited independence, it follows that countries cannot hinge their national security exclusively to their nuclear capabilities. The latter therefore become an extra over and above their conventional capabilities and in the end are not a cheap substitute at all, but a complementary luxury.

European countries in NATO found out first hand that placing too much national defence in the hands of the so-called nuclear theatre weapons deployed in answer to the numerical advantage of the Warsaw Pact's conventional forces, generated a situation of greater uncertainty. A costly reassessment of conventional forces was undertaken after 1978, coinciding with a reduction in tactical atomic weapons, with deterrence entrusted to intermediate range nuclear missiles. That was the picture until the latter were eliminated in the INF agreement after Reykjavik.

On the other hand, Israel has strengthened its security thanks to extremely efficient conventional forces. Nuclear warheads have little to do with Israel's imposing military strength with respect to her neighbours.

The fact that local deterrents are not independent of the larger NWSs' not only undermines the theory that nuclear weapons can endow a new member of the atomic community with greater autonomy, but also complicates the East-West balance and, therefore, negotiations on nuclear weapons. These negotiations are being carried out mainly between the two superpowers; the other NWSs - France, Britain and China - have not participated so far. Although their nuclear deterrent forces are not a decisive obstacle to an agreement because of their inferiority with respect to the United States and the USSR, they nevertheless complicate negotiations. Although it can't be proven, it may be deduced that the emergence of new nuclear powers that are either independent of or somehow linked to the superpowers', would make negotiations on nuclear arms control even more difficult.

Nixon recalls that during his presidency he contemplated the use of nuclear weapons three times (5): 1) in the Indo-Pakistani war in 1971, which could have drawn in China (on Pakistan's side) and the USSR (beside India); 2) the Arab-Israeli war in 1973, when American forces were put on alert in

response to a Soviet threat of intervention; 3) in moments of crisis at the Chinese-Soviet border. It should be added that Kissinger denied that these options were ever seriously contemplated on an operational level, above and beyond what "President Nixon thought in the privacy of his office or his home" and claimed that the only real case of actual risk of nuclear conflict remains the Cuba crisis in 1962 (6). It is interesting to note, anyway, that in all three cases indirect conflicts or tensions between the two superpowers involved non-autonomous (China) or potential nuclear deterrents (Israel, India, Pakistan). In no case was the area of direct contact between the two alliances, that is Europe, involved.

The Dilemmas of the Protectors and those of the Protected

During negotiations on the nuclear non proliferation treaty (NPT), there was debate on the problem of the guarantees that NWSs would have to offer non nuclear weapon states (NNWSs) in exchange for their renunciation of nuclear weapons. They included the former's commitment to not attack the latter with those weapons (negative guarantee) - a commitment which ended up as a vague declaration made in the UN Security Council and later, as far as Latin America is concerned, in the signing of supplementary Protocols to the Treaty of Tlatelolco - and the promise to provide nuclear protection in case of aggression (positive guarantee) - a promise which forms the basis of several alliances, the main ones being NATO and the Warsaw Pact.

Although never formalized in a non-aggression pact, no NWS has ever used or threatened to use nuclear force against a NNWS. Both the United States in Vietnam and Soviet Union in Afghanistan lost their respective bloody wars without being able to resort to even a minimal part of their nuclear arsenals.

It is normally said that Western Europe is under the American nuclear umbrella and Eastern Europe under the Soviet one. Although already under an umbrella, England has its own nuclear force and so does France. The latter has not integrated its force de frappe with NATO's, but benefits from the American commitment in the framework of the Atlantic Alliance. The other countries in the Alliance, the Federal Republic of Germany, Italy and others, have formally renounced nuclear weapons in the NPT, but have obtained a positive guarantee which has also been translated into deployment of American forces on their territory. Like hostages ensuring respect of the guarantee, they have both a political and a military function.

Japan is in a similar situation. It is linked to the United States by a bilateral alliance, the only difference being that no American nuclear forces are stationed there.

Germany, Japan, Italy, Belgium and the Netherlands have long reached a technological level permitting them to equip themselves with nuclear weapons if they so desired (7). No wonder they were recalcitrant when negotiations on an agreement against proliferation started. On the one hand the Alliance to which they belonged constituted a substitute for the guarantee provided by their own deterrent, on the other hand, the NPT explicitly consolidates an inequality among its participants, codifying the renunciation of some states in return for a guarantee from others, and thus, in traditional terms, a loss of sovereignty. With their eventual signature of the treaty, they shattered the front of NNWSs which had formed during preparatory negotiations. The

situation in Eastern Europe was similar, even if the way in which it was achieved was different due to the lower degree of autonomy in foreign policy of the USSR's satellites.

Thus, alliances with the superpowers were an extremely important factor in non proliferation. In fact, critics say that the NPT is no more than a reflection of the situation determined by the existence of the two alliances: all countries adhering to it are either directly or indirectly (such as neutral like Sweden and Switzerland) protected or have no chance of ever achieving a nuclear capability for themselves or for others, while all the countries that have this potential - the threshold countries - and that do not belong to nuclear alliances, did not sign.

When substituting its own deterrent capability, guarantees of protection limit the country's independence, in that they transfer to the guarantor the decision on if, when and how to intervene. More substantial, however, than negative guarantees, which do not limit independence, they can protect against hird parties in as much as the deterrent of the protector is effective.

Western Europe is familiar with the dilemmas of being protected. On the one hand it would like the United States to be willing to "sacrifice New York for Paris", because that is the only thing that can really dissuade the Soviet Union from attacking, and gets upset every time any doubt is cast upon Washington's final loyalty. This occurred, for example, when Kissinger, in a frequently quoted speech delivered in Brussels in 1979 warned the Europeans to not rely too heavily on the American commitment. His actual intent was to stimulate the US' partners to taking a greater share in the alliance, but his words were music to the ears of those who, like the orphans of Gaullism, claim that the Old Continent must defend itself more autonomously.

The commitment to protect calls for credibility and therefore, the operational readiness of the US deterrent, in particular, of the nuclear weapons that European countries have requested or accepted to station on their territory. The basis for all this, naturally, has to be not only good will or respect for one's commitments, but a common security sphere: the American perception that its national security includes defence of Europe (and Japan). This perception has held up till now against isolationist drives and can be explained by the fact that although extended deterrence is felt to be a costly burden, it does put the United States in an enviable position. Furthermore, there is an unwritten clause in the Alliance which states that in return for protection, European states must give up pursuit of the global strategic capabilities they once had (and which two times in history made military intervention by the United States necessary).

On the other hand, Europeans fear the Americans' inclination to "press the trigger", before having exhausted all political avenues for solution of conflicts. This could lead to a nuclear exchange without Europe's security having been undisputedly shattered. The so-called "dual key" system is an attempt to recover sovereignty: one key is in the hands of the Americans and the other in the country hosting the nuclear warheads. The latter obviously has no influence whatsoever on the positive decision to use the nuclear weapon, which remains the prerogative of the President of the United States, but it does have veto rights with respect to use. In reality, this dual key system poses some complex problems in the event of its actual application in case of conflict. Political problems, above all: although the scenarios for

use of nuclear warheads in Europe are defined by NATO's Nuclear Planning Group, the final decision has to be preceded by a (multilateral? bilateral?) assessment of the situation which must be carried out in a very short time. And technical problems: the keys are made of magnetic cards built into the warheads and of complex and secret codes. Analysts agree that keeping up communications would be the greatest difficulty the Alliance would have to face upon the opening of hostilities. Moreover, the "dual key" system, if it exists, gives the host country the chance to prevent the use of NATO nuclear warheads but is impotent concerning the use of American warheads deployed in Europe (8). The past debate on the deployment of Pershing 2s and Cruise missiles, is an example of these ambiguities. Some governments, including those in London and Rome, said they were holding a key, while others, like the one in Bonn, refused it.

Western Europe's limited sovereignty (freely chosen and accepted, unlike the limited sovereignty imposed on the East and theorized by Brezhnev, but limited sovereignty nevertheless) has been well compensated. The alliance's deterrent effect has ensured more than forty years of total peace with relatively limited defence expenditures. European economies have benefitted from this and have grown remarkably, more than the US'.

These guarantees of protection could be extended to new countries, thus extending the relatively cheap benefits of peace and security and thereby probably also extending prevention of nuclear proliferation. Even if it has caused the United States other more serious concerns, the fact that Cuba - not a signatory of either NPT or Tlatelolco - is under the Soviet sphere of influence has reduced the risks of proliferation in that country. The influence and control exercised by Moscow over Libya and North Korea, now both signatories to the NPT, are well known.

This situation could be extrapolated to a world which is split into two alliances centered around the superpowers, each protecting its allies (or satellites) from each other with their (positive) nuclear guarantee. This would be a non proliferated world. It might even be a more peaceful world, as local conflicts would be subjected to greater control; in fact, if they were inside one of the two blocs, the hegemon superpower would act as peacemaker; if they occurred between countries from the two blocs, the superpowers would try to prevent or at least contain them to avoid escalation into a more or less general nuclear conflict.

This scenario of a world totally divided between two nuclear umbrellas is obviously not credible. It's true that the two alliances have not lost members up to now, on the contrary, they have gained them (except for the withdrawal of Albania from the Warsaw Pact long ago). Moreover, the group of non-aligned countries is less compact than ever. But it's also true that the capacity for control of local situations of the US and USSR has decreased with respect to the early post-war era. Controlling half the world each would not only call for strategic, political and diplomatic capabilities that are indeed increasingly out of reach of the two superpowers, but also for the renunciation of the medium powers, whether aligned or not.

Providing a guarantee of nuclear protection implies a double cost for the superpowers: the economic cost of a deterrent that is strategically complete - in the sense that it satisfies all deployment requirements and has second strike capabilities - and geographically extensive - in that it covers all the

allies' territory; and the political cost of exposing one's own population to risk in order to defend one's allies. Both superpowers have repeatedly complained about the excessive economic costs they have to bear, especially since the allies have become more affluent.

In Moscow, the feeling that it can no longer support the burden of military commitments pertaining to a guarantor seems to have brought about a real "agonizing reappraisal" which we will come back to later.

Polemics about burden sharing are recurrent in the Atlantic Alliance. When they become acute, like now, the United States exerts pressure by insisting that American troops stationed in Europe will have to be brought home in order to cut costs. American public opinion is caught in the dilemma between hegemony and isolationism. Positions between these two extremes do not necessarily reflect traditional political positions of right or left, conservative or progressive, Republican or Democrat. They vary from imperialistic hegemony to the quest for a polycentric Western leadership and from super-armed isolationism à la High Frontier (9) to a semi-pacifist isolationism.

Besides these costs for the guarantors, there are also the costs borne by those guaranteed: the economic cost of participating in the common defence - which is less than that of the guarantor - and the political cost of a lack of total autonomy in security decisions and, therefore, in decisions in general - which is greater than the guarantor's.

American hegemony, more oriented towards leadership than imperialism in the past , has generated a sense of protection among Western Europeans at acceptable costs. Under Reagan, the imperialistic characteristics of American hegemony were accentuated. Thus the political costs of the guarantees also increased. But there was no substantial change in the guarantees themselves, despite the uproar about a space-based defence. European doubts about security were actually alerted more when Reagan suddenly took the guise of the negotiator.

If a more isolationist position, be it leftist or rightist, were to prevail in the United States, however, European security perceptions would likely change. The same would presumably happen in Japan.

The vicissitudes of nuclear deterrence

The situation in which the superpowers find themselves - guarantors within their respective blocs with a majority of non-aligned states, many of which are poor or developing - is, despite appearances, relatively simple with respect to the situation preceding the great upheaval of the two world wars. First, the balance of power system, which dominated in the nineteenth century was more complex, both in terms of the number of actors on stage and of the quality of their military forces and, therefore, of their spheres of influence (with associated guarantees of protection). The global and deterrent nature of today's nuclear weapons is greater than that of the military capabilities up to the first half of the century.

With a forty year record, mutual nuclear deterrence can boast a certain stability. That does not mean that one should be fooled about its technical

and strategic characteristics which are subject to change. The story of how the brief American nuclear monopoly after the war was replaced by the threat of Mutual Assured Destruction is well known. Offensive devices ended up prevailing in the superpowers' dreaded arsenals as a guage of vulnerability and, therefore, deterrence.

After the qualitative leaps made in nuclear warhead technology with the invention of the powerful H bombs (in the fifties) and very sophisticated warheads (in the sixties), the technical evolution that produced or accompanied this strategic evolution mainly involved delivery (aircraft, submarines, multiple warhead ballistic missiles, non-ballistic missiles), early warning (satellites) and command, control and communications systems (computers). The result has been the growing accuracy with which small targets can be hit and the ever decreasing time needed for decision making and response.

The increase in accuracy has had an important consequence: targeting of nuclear weapons has shifted from (extensive) civilian targets like cities to (smaller) military targets like missile sylos. The underlying reason is not humanitarian, it's strategic: destroying the enemy's second strike capability.

The greater vulnerability of nuclear weapons initially stimulated research on ways to protect them by hitting incoming missiles with defensive missiles (anti-ballistic missiles). But given the high cost and limited efficacy of this kind of defence, the two superpowers came to an agreement and later signed the ABM Treaty.

This treaty could not and did not prohibit further research on defensive techniques. After a decade and with the benefit of simultaneous progress made in the fields of satellites, computers and direct energy weapons (high kinetic energy pellets, particle beams and lasers) this research has produced its fruits and certainly generated new expectations, especially in relation to the Strategic Defence Initiative.

This multi-layer defence system would have consisted of 1) a network of hundreds of surveillance satellites to keep enemy territory and part of the oceans under observation; 2) a system for processing of the data so obtained and for response control; 3) a second satellite network - of so-called killer satellites - to hit enemy missiles during launching or in flight.

The idea that a system of defence against ballistic missiles would make nuclear weapons "impotent and obsolete" as Reagan stated in 1983 turned out to be a propagandistic expedient to create consensus for an extremely costly venture. It was, as such, rather successful. Initial consensus may have been facilitated by a large number of books, articles, films and scientific analyses on the terrifying consequences of nuclear war (the "day after" and the "nuclear winter"), on the possibility of the near extinction of the human race, on the uncontrollability of a conflict, on the risk of a war by error, on the moral need to find an alternative. This multifaceted campaign, which originated prevalently among American liberals, helped to create an ideal atmosphere for the proposal of an anti-nuclear defence, which originated on the conservative side.

Not only was the defence potential blown out of proportion in order to create consensus, but the whole initiative was immediately brought out into the open with fanfare and trumpets, before the results could be ascertained. Normally, weapons are developed in secrecy until there is a reasonable certainty that they will work. With SDI it was the opposite. Whichever the approach, there is now consensus that the system, at least in its original conception, is not feasible.

As a result, nuclear weapons are not obsolete. The composition of arsenals may change as a result, marginally shifting from an offensive-defensive mix towards more of the latter. It is not clear whether that will reduce the risks of war, for instance by extending decision making times during crises. In fact, the widely held convinction that a balance, or a set of balances, is more stable if the opposing forces are more defensive (to the extent that forces can be defined as defensive) is not substantiated by experience.

A second result has been the development of a new generation of weapons focussed on the target with reduced collateral damage (with associated ultra-rapid data processing networks). To use comic strip language, they could be defined as "zot" weapons as opposed to "boom" weapons, both nuclear and conventional. Satellites seem to be most endangered by these developments in military technology, which may be highly destabilizing in view of their role in intelligence and surveillance (10).

These rather ambiguous hypotheses have raised important questions for the medium powers, in particular, West European ones. What was going to happen to their security? What was the impact on the Alliance's strategies? What validity was left for the two national nuclear forces in Europe?

The Americans tried to be reassuring. The new prospects, they said, strengthened the guarantee to Europe because a) they increased the second strike capability of the United States and therefore its deterrent credibility, and b) they called for the development of technologies that the Europeans could imitate in order to build complementary defences against Soviet weapons aimed at the Old Continent. But, the Europeans objected, by reducing the superpowers' vulnerability (it was probable that the USSR would also have undertaken some kind of defence), the deterrent balance that has backed peace in the last forty years could be upset. There would be the risk of nuclear war in Europe, which could be separated from the global context (the famous decoupling!), especially if short range or battle field nuclear weapons were to remain on European soil.

Contrasting opinions have always been expressed about the usefulness of second rank nuclear deterrents and, therefore, about whether it was right or not of those who did to give them up. They were restated during the SDI debate. On the one hand, "decoupling" would corroborate those who have always claimed that European countries cannot leave their defence up to the guarantees of a foreign state forever; the English and French deterrent forces would require costly up-dating and could possibly be integrated with their own mini-SDIs, but they would be autonomous. Had this position been confirmed, it would have found new supporters in those countries that gave up the nuclear option even though they have the technology: the Federal Republic of Germany, above all, and outside of Europe, Japan.

But it could also have been claimed that "star wars" were about to mark the demise of the minor NWSs. The cost of up-dating the French and English deterrents (and even more so the Chinese) would have been prohibitive. Even if united into a scarcely credible and every efficient Superstate, Europe would have difficulty in bridging the gap. The right course, then, was not to take part in the race at all.

Not only SDI, the hawks' favourite invention, but also positions on the opposite side of the American political spectrum created problems for Europe. In approximately the same period, they came out with ideas like "no first use", that is a Western commitment to not use nuclear weapons in case of a conventional invasion by the Warsaw Pact (overturning NATO strategies) and "minimal deterrence", that is, reduction of the deterrent to a level that is more symbolic than strategic.

These contrasting stances all seem to express a sense of American "tiredness" with the strain of extended deterrence, a strain which is accentuated by the technological trend reducing decision making times during crises. The result is an increased risk of war by error, due to the mistaken assessment (human or technical) of enemy movements, or by a spiralling sequence of hostile steps and retaliations. The former is favoured by the growing rapidity and accuracy of nuclear weapon systems which are highly dependent on electronic intelligence, the latter by the presence of tactical nuclear weapons ready for use in the initial phases of a conflict. Nuclear capable third parties simply add to the complication: this explains why one of the points of convergence of the various American positions is non proliferation.

If that is the real danger, "an agreement to cut current nuclear arsenals in half could have beneficial effects, but it would not in itself significantly change the basic shape of the problem we face", as some analysts who, in the midst of hawks and doves call themselves "owls", observe (11). They're in favour of arms control, of course, but what really counts is 1) crisis control - rapid and clear communications between governments during crisis; 2) avoiding the use of nuclear threats in order to apply political pressure; and 3) readiness of instruments able to explain the enemy's behaviour. Plus a clear distinction between nuclear weapons and conventional weapons and, above all, no increase in the number of nuclear actors.

The proposal to set up two "Centers for reducing nuclear risk", one in Washington and one in Moscow, equipped with a mixed staff from both countries and directly linked to the crisis control rooms of the two capitals (12), led to the agreement signed in September 1987. It established an electronic system for binding notification of the launching of ballistic missiles and the transmission of other information "out of good will", but neglected to implement the most innovative aspects of the proposal, like mixed staffs.

From a political point of view, the agreement to eliminate INFs was of great importance. Despite the limited numbers and restricted categories involved, it marked a long awaited positive turn in nuclear arms control negotiations. Equally important is that the superpowers have finally accepted effective verification, opening their plants to inspection by the adversary.

If this were to lead to acceptance of the principle of international verification in the future, the repercussions would be of great moment above and beyond bilateral relations between Washington and Moscow.

The question comes up again whether the future role of the French and English nuclear forces is going to change. A looser link between the European theatre and the global strategic picture will accentuate their dilemma of whether to integrate more fully with the American deterrent (English model), with the prospect of a further loss of profile, or strengthen their autonomy (French model) with the prospect of isolation (like in the Chinese case). And yet, since they have intermediate range missile capabilities, i.e. the capability to hit the Soviet Union, they may be seen as the natural replacement for the INFs and their validity would thus be confirmed, although at a very low level of credibility for the reasons stated above. For a while it seemed that the new situation was about to enhance a higher degree of convergence - still the main "variable" in the hands of European decision makers - between France and Great Britain and with other European countries, above all Germany. The latter's perception of being the nuclear battlefield par excellence, a perception heightened by remaining and "decoupled" artillery and short range missiles, caused a state of Angst among public opinion. The last two types of nuclear weapons are often put into the same basket, called Short Range Nuclear Forces, but this is misleading. While German concerns are justified as far as artillery is concerned, the same cannot be said about missiles. The lengthening of their range would have the double advantage of strengthening deterrence through "coupling" and not having them falling on West German soil.

CURRENT DEVELOPMENTS AND THE FUTURE OF THE NON PROLIFERATION REGIME

Four main indications can be drawn from the lengthy introductory considerations above. Two are conceptual:

- the specificity of nuclear weapons remains. As a consequence concepts related to nuclear weapons such as deterrence and non proliferation cannot simply be transferred to other types of weapons like conventional or chemical and biological ones;
- the near-bipolar and global nature of the current nuclear deterrence also remains. Reproducing nuclear deterrence on other scales and in other areas has proved unfeasible so far. Thus deterrence and non proliferation are closely linked, possibly mutually conditional;

and two are historical:

- the "protectors", i. e. the superpowers - whatever the important differences between them - both seem to be finding it hard to ensure continuing protection to the same extent as before, mostly for reasons related to relative economic decline. And both are keen to maintain a nuclear non proliferation regime based to a large extent on their protecting role;
- the protected countries do not seem, for the time being, to be very interested in the idea of getting rid of their nuclear protectors. Over the years those in the West have gradually come to support the non proliferation regime more than most of them did in the early days; those allied with the Soviet Union were not allowed to develop an autonomous view on nuclear issues

and have at present other problems to deal with in their relationship with the protector;

In the debate about non proliferation, those countries which are customarily described as "problem countries" fall into non protected areas (with the possible exception of Israel and, perhaps, Cuba, that may be considered a protected states, as will be discussed later). But there are "potential problem countries", which because of their technological level (and possibly covert activities) can go nuclear, credibly nuclear, in a shorter time span than most "actual problem countries". All of them fall into the protected areas, even if they are neutral, like Sweden.( ) They are not "actual problem countries" because (a) they eventually formally committed themselves not to go militarily nuclear; (b) their perceptions of security have not changed substantially ever since; (c) they have become, as said before, either supportive of, or resigned to the non proliferation regime.

Moreover, it may be interesting to note that by far the largest share of IAEA safeguards (and practically all IAEA/Euratom safeguards) are carried out in the (protected) "potential problem countries" because of the intense civilian nuclear activities in most of them.

A number of important developments are taking place against this background, which can be summarily listed under the following major headlines:
1) the US and the USSR have reached an agreement to zero the INF located in Europe and seem to be halfway through an other agreement that would sizably reduce strategic nuclear forces;
2) a broad and complex dialogue has been initiated between East and West in Europe that may, through negotiations or unilateral steps, bring about reductions in the conventional forces of the two alliances and probably also in the remaining nuclear forces, as well as improvements in economic and human relations;
3) the Soviet and other communist regimes are attempting reforms along highly differentiated patterns and to extremely varying degrees. Those reforms are mostly domestic and economic in nature but foreign policies are clearly affected;
4) change is also evident in the Pacific rim, because of the emerging economic powers, outstanding among them Japan on the verge of becoming the world's No.1 economic power.

The consequences of these develoments on the future of the nuclear non proliferation regime in those regions where countries rely on nuclear protection from the superpowers will be analysed in the following pages.

Europe

Besides the traditional specificity of being the most important area of "contact" between the two blocs and, thus, the area with the highest concentration of weapons of any kind, continental Europe is experiencing the new specificity of being the area where three out of the above four developments have their major impact, while not being indifferent to the fourth. Implications in all fields -strategic, economic, political, cultural- promise to be far reaching. Here we will confine ourselves to the strategic ones, indeed to the problem of nuclear weapons alone.

Subsequent to the zero-INF agreement the debate in the West on the future of the theatre nuclear forces has witnessed the existence of two schools of

thought. For one, further reductions must be worked out with emphasis on the denuclearisation of buffer zones to be enlarged so as to lead up to a drastic reversal of the present situation in Central Europe, from the area with the highest concentration of nuclear weapons to a nuclear weapon free zone (NWFZ). For the other school of thought enough has been done in the nuclear field (wrongly, some believe) and now priority has to be given to conventional force reductions; nuclear forces on the contrary require modernisation, partly to respond to the inevitable technological developments and partly to compensate for the consequences of foregoing intermediate-range missiles on the flexible response strategy of NATO.

The Atlantic Alliance, beyond the current search for a formula for the coming Summit, seems to be steering toward this second line with the addition of considering further cuts (whether unilateral or negotiated is not clear at the present stage) in nuclear artillery which has already been reduced by some 2000 warheads or more in subsequent installments since 1979. This addition -it has to be underlined- is not a minor one. Battlefield nuclear weapons represent an important chunk of nuclear forces deployed in Europe by both alliances. Their deterrent effect is limited (though not altogether negligible) because of their limited stategic credibility, insofar as they represent either the recipe for a limited nuclear war -which would not please the Europeans, i. e. the would-be protected- or the trigger for very early escalation to a strategic nuclear exchange -which would not please the would-be protectors, who in the end decide whether to push the button or not.

Let us look, for a moment, at the scenario implied by the other line of thinking. A denuclearised Europe does not automatically mean the disappearance of the superpower guarantee. In theory the umbrella may be maintained at only the upper level of direct exchange between the American- and Soviet-based or sea-launched strategic forces. De facto such a guarantee would be weakened dramatically, if not simply switched from a positive to a negative one (as described before).

More importantly, Europe would likely once again become an open field for conventional conflicts, most probably generated by resurgent nationalist sentiments. The current evolution in the communist countries, besides promising developments, shows signs which are inevitably of great concern. The reference here is to nationalist movements and ethnic turmoil, which may sow the seeds of instability in the changing pan-European landscape.

Thus the solution of further reducing certain kinds of nuclear weapons stationed in Europe, parallel to the cutting of conventional forces, while maintaining credible nuclear deterrence is the right one and should be pursued boldly. Credible nuclear deterrence implies that the remaining nuclear forces -say, something between 1000 and 2000 warheads out of the currently estimated 4660 on the NATO side- should not be frozen in the current configuration, but modified according to technological improvements and strategic requirements. After the zeroing of the INF, the new mix would see a zeroing or quasi-zeroing of nuclear artillery (depending on the outcome of CFE), some remaining free-fall bombs, a few hundred (not-so)-short-range missiles and a number of stand-off missiles to be introduced anew.(14)

Two out of the three other official NWS that make nuclear deterrence nearly bipolar are European. The existence and the ambiguities of the British

and French nuclear forces have already been discussed. London and Paris have succeeded in keeping them out of the arms control picture so far, and Mosscow has shown a remarkable degree of flexibility in this respect. But, as an Italian political figure said, "they are not on the moon".(15) Once NATO has better defined the Alliance's strategy in the new context of decreasing numbers, Britain and especially France should become more active participants in nuclear arms control negotiations and their national nuclear forces should enter the picture of reductions. At the same time, they should increase their complementarity with the NATO deterrent and possibly becoming more "European" in their vocation. This may mean that while authority on use would remain national, planning and targeting activities would be shared.

The always very remote prospect of a common nuclear deterrent, occasionally linked to a future strongly united (Western) Europe, is certainaly not brought any closer by the current developments in Eastern Europe. Besides the clearly declining perception of threat, the Community is already finding it hard to implement all the provisions of the Single European Act and may have difficulty in the future in maintaining a political profile, were candidatures for entry by neutral countries like Austria, let alone by current Warsaw Pact countries like Hungary, ever to become pressing.

Now, how relevant is such debate on nuclear forces of nearly all flags and all kinds to the future of the non proliferation regime? To the same degree that the existence of the non proliferation regime is relevant to the debate -that is very little today. The apparent paradox resides in the fact that the regime was set up gradually and, to a certain extent, sucessfully to control the spread of nuclear weapons, while nuclear arsenals on and around the Old Continent were being built up at a dramatic pace.

Does the regime require the European status quo? Or can it sustain the opposite trend of decreasing numbers in nuclear weaponry? Wouldn't the regime be best served by the above mentioned solution of a central European NWFZ? Let us take the last question first. The rather profound change in security perceptions of the European countries that this prospect is likely to generate, and the resurgent risk of conventional conflicts of nationalistic origin so familiar to European history would probably bring to the forefront the "potential problem countries" (as defined before), not necessarily in the sense that they would become "actual" overnight. Initially they would simply experience domestic and possibly foreign pressure to change their attitudes and policies towards non proliferation and to take some intermediate steps.

Instead, the maintenance of theatre nuclear deterrence at a lower numerical level of weapons, if obtained through subsequent steps each characterised by a degree of stability not inferior to the previous one and if accompanied by measures to reduce risks of conflict by accident or misperception (e.g. by developing and/or multilateralising "crisis centres" of the type set up, as already mentioned, in Washington and Moscow), should reduce the "nuclear fever" in Europe.

Such a conceivable scenario - by no means an assured one - of gradual change in the European nuclear landscape, would combine the survival of the nearly bipolar nuclear deterrence with the scaling down of nuclear arsenals. The nuclear threat for neighbouring areas remains very unlikely (the famous "out-of-area problems", repeatedly discussed within and between Western Europe

and North America, have never implied nuclear solutions). The non proliferation regime would be strenghtened. The 1990 NPT Review Conference will have to recognise that non negligible reductions -either negotiated or unilateral- have begun in Europe during the previous five years, consistently with Art. VI of the NPT.

As is well known, non proliferation is not prominent on the agenda of European capitals. Except for a few opinion groups prevalently sponsored by American circles, the subject is not of frequent and profound interest even among political scientists. The 12 members of the European Community, however, have set up a working sub-group on non proliferation in the framework of the European Political Cooperation. The signing of the NPT by Spain has helped to reduce differences among the member governments.

The Twelve may thus develop a common position for the coming Review Conference as they have done in CSCE. A highly positive contribution to the conference would be represented by an announcement by the French government that the signing of the treaty before the 1995 deadline is under consideration.

East-Asia and the Pacific

At a IISS annual conference (1986), Henry Kissinger discussed differences between the European strategic outlook and the East-Asian and Pacific one and suggested "that the security and foreign policy of the Asian nations, different though they are , are more similar to what European foreign policy used to be in the nineteenth century, more dependent on a perception of the balance of power, a greater emphasis than has been the case in Western Europe on the political and geopolitical element, less insistence on American reassurance".(16)

If this is true, an international regime like the one introduced by the NPT and other nuclear non proliferation provisions is even more "unnatural" there than it is in Europe. In all other world regions where the "balance of power" scheme is dominant -South Asia, South-West Asia and Latin America- "problem countries" dot the scene. Taiwan and South Korea used to be listed among the "problem countries". Now they should be considered more as "potential" ones and as such, be put in the same category as Japan.

As has been said before, Japan's economic rise is the main international feature in the region. The political and strategic implications of such a rise are still unclear to the Japanese people themselves. The issue of globalism and/or regionalism in the orientation to be given their foreign policy is very prominent in the political debate. The direct and short term implications of such debate for nuclear non proliferation appear very marginal. Tokyo not only remains committed to the NPT, but has substituted past policies of foot-dragging with a more cooperative attitude, subsequently developing a line of conduct of its own. The industrial sector, which used to be critical of the technological constraints deriving from US non proliferation politcies, has now come to support an international code of conduct that generates a more stable framework for a potentially expanding international role.

As for the changes taking place in the communist countries, Japan has so far been the most "cold-footed" of Western countries about Perestroika. After

having made sure that the zero-INF agreement is global, i.e. it also covers the Soviet intermediate range missiles deployed in Asia, it has followed the ongoing East-West dialogue, particularly some West European enthusiasm, with a kind of detachment. Japanese industry has been discouraged by the government from rushing to Moscow with even only a fraction of the entrepreneurial activism it has displayed in other areas. The "Northern Territories" issue, which has been put forward as a priority matter, seems to have provided an appropriate façade for a cautious if not diffident attitude.

Japanese immediate concerns about "relaxation of tension" are today less bound to the Soviet Union and to China than to the United States, with which trade frictions periodically arise and, more or less indirectly, affect security, as was the case in the FSX fighter aircraft dispute. A widespread perception in Japan is that it has to use its economic power to pinpoint the American strategic hegemony, which includes holding the nuclear umbrella over the land of the rising sun.

In the longer run, however, things may evolve differently. Japanese economic strength is already such as to make the ceiling of 1% of GNP (constitutionally put on defense expenditure) approach the current French, German and British defense budgets, without taking into consideration those R&D activities which are labelled peaceful but have direct or potential fallout in the military sector. Among the latter are the development of nuclear fuel reprocessing and plutonium purification, as well as research related to uranium enrichment.

Japan has a very advanced nuclear industry and the fact that the nuclear power program is being implemented at a slower pace than planned may turn into an advantage for two reasons: first, because it allows subsequent power stations to absorb new safety arrangements so as to make them more reliable than others on the market; second, because the Japanese nuclear industry (possibly in close alliance with the survivors of the American one) may find itself in a strong competitive position internationally, were the nuclear solution to become attractive again for energy problems if new environmental concerns ("green house effect", etc) become dominant in the 90s.

Moreover, economic strength and generational turnover are introducing a more assertive attitude into the Japanese leadership, which at one and the same time shows new capabilities to deal with the complex international issues of interdependence and signs of new self-confidence, nationalistic pride and resentment towards foreign partners.

Finally, temptations for Japan may not necessarily be in the direction of reconsidering the nuclear weapon option. As for other advanced countries, intermediate steps are conceivable, like building nuclear powered submarines. The insular situation and the geostrategic position of the country would certainly not deprive the proponents of such a program of substantive arguments. And, if countries traditionally devoted to non proliferation like Canada do consider this option, the example would probably not be disregarded out of hand in Tokyo.

What, in the light of these tremendous economic, technological and cultural potentials, can exert such pressure on the Japanese as to upset their present cost/benefit analysis of the nuclear option (or simply their self-control)? One or more of the following scenarios: 1) a collapse of the

non proliferation regime, either regionally or globally or both; 2) increased strain with the United States with a consequent (or simply concomitant) loss of confidence in the American nuclear protection; 3) a new rise in the perceived threat from the two communist giants in Asia.

The current debate in Japan about its international role must be seen against the background of these scenarios. It appears to the author that a somewhat stronger regional orientation may be appropriate in order to put Japanese strength to use in producing more structured development and stability in the area. Strategic stability would be helped by the fact that neighbouring countries are, out of past but not forgotten historical experience, likely to be mutually watching each other to prevent the rise of new hegemonic roles, and particularly new nuclear states. Japan knows that a change in its attitude towards military nuclear capability, following, say, the French model, would inevitably entail a similar change with the Koreans and possibly others. Its position is likely to remain similar to the German's for quite some time. This should help the stabilisation of the non proliferation regime, thus preventing scenario no.1.

But Japan will most probably also keep growing as a global actor. Western cooperative instruments will require continuing adjustment to a scaled down American hegemony and will have to be improved (for instance by strengthening the Euro-Japanese segment) without putting the global strategic balance into question. That would take care of scenario no.2.

Finally the current trend of improvement in East-West relations should be continued and made irreversible by binding agreements and institutions. Japan should display a more open attitude and be called upon to take a more active role in such fora as the United Nations and others. This should help preventing scenario no.3.

The alternate solution of developing a NWFZ located between the area covered by the Rarotonga treaty (17) and the area corresponding to ASEAN (18) is not quite convincing. The situation is to some extent different from the European one, but negative guarantees only would not prevent Japan, Korea, Taiwan and possibly other countries from feeling cut off from the security system within which they have grown economically strong. The "balance of power" would probably deteriorate into major conflicts, as happened in Europe in the nineteenth century.

Cuba and Israel

These two countries represent hybrid cases. The Middle East is not a protected region; on the contrary it is a typical "problem area", located on the borders of the East-West strategic equilibrium. Israel, always at the top of the list of "problem countries", does, however, enjoy a guarantee from the United States, possibly even stronger than the one granted the European allies. Cuba, also a non-signatory of the NPT but with quite primitive nuclear know how only, is just across the US border, but a member of the Warsaw Pact. Both countries, though in quite different situations and for quite different reasons, have problems with their respective protectors and are encouraged by them to show moderation.

Israel is considered a de facto NWS and as such is a powerful incentive towards proliferation. Recent discussions have centered more on its delivery

capability than on its nuclear weapon capability, but the latter inevitably acts as a multiplier of the concerns related to the former. Were the Middle East to split into two spheres of influence (as the Camp David process seemed to imply for a while), the situation would have eventually revealed several similarities with Europe, with Israel playing the French or British role. Were Israel to fully develop its launching capability so as to reach Soviet territory, the similarities would then be with the 1962 Cuba pre-crisis situation, duely reversed.

Ever since the '60s, Moscow has exerted control over Havana's nuclear ambitions, as already noted. Washington has not been able to exert similar control over Tel Aviv, whose nuclear activities (only military) have become a permanent handicap for the very active and occasionally dogmatic non proliferation policy of the protector.

No major change in this complex situation can be expected. Pressures on Israel are numerous today, but have purposes other than the nuclear issue. However, if the dialogue between the superpowers were to develop and cover regional problems, keeping the "bomb" issue completely out of the picture may be difficult and the prospect of a Middle Eastern NWFZ -occasionally discussed- may become a less remote prospect, even in the interest of Israeli security. Tel Aviv and Moscow have been working for quite some time now on re-establishing diplomatic relations. Perhaps Fidel Castro can be forced to go down the same path with Washington.

CLOSING REMARKS AND QUERIES

The four major developments on the international scene that were listed before may substantially change the scene by 1995 -the year of the NPT renewal- from the way it is today. Excessive extrapolation should, of course, be avoided. The process of change is subject to slowdowns here and there and possibly also to reversals. A high degree of unpredictability must be assumed.

Two principal sets of questions are likely to arise concerning the future of the non proliferation regime if we project our analysis, indeed our speculation, five or six years ahead in this state of high flux. One is about the evolution in some of the countries of Eastern Europe that may lead to a greater autonomy, or possibly even the neutrality or semi-neutrality of one or two. Would Moscow's nuclear guarantee remain and would this guarantee still coincide with the sphere of security of the Soviet Union, even if its sphere of influence were modified by a shift towards the West in the economic and possibly the socio-cultural life of these countries? Will this eventual "finlandisation" of some Warsaw Pact members affect the nuclear non proliferation regime before 1995?

Secondly. The shrinking of Soviet political -if not strategic- hegemony may be going parallel to a confirmed decline of American economic -if not political- hegemony. Will the strategic nuclear balance nevertheless remain strong and extended enough not only to maintain deterrence but also to continue to discourage attempts to build regional nuclear balances of dubious stability? Moreover the dual leadership of the superpowers has been the main engine in advancing the non proliferation regime and containing if not solving the remaining "problem situations" that affect and limit the regime itself. If

this dual leadership is weakened, will multilateral cooperation be able to supplement it and be effective enough to bring about a renewal, possibly an improvement, of the NPT in 1995?

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