

The difficult transformation from 'arms control' into a world security system'

'Arms control' is the regime under which, while maintaining considerable military forces, potential adversaries negotiate limitations on the quantity and quality of armaments (the consequence being that they agree to provide information and to have it verified).

This regime is an invention of the nuclear age. It was introduced by the United States and the USSR in the 1960s, its main aim being to avoid or overcome possible 'crises' and to regulate the arms race.

Until 1985, no other country was associated with it. On the other hand, since then, agreements on arms reduction and on confidence building measures, negotiated within the framework or as a result of the Conference on Security and Cooperation in Europe (CSCE) have involved all European countries in arms control.

While agreement between adversaries on the conduct of wars is a long-standing phenomenon of which it would be possible to write a history, negotiation between adversaries to prevent war is something new. In the search for peace and security, it represents a difficult, realistic and practical path mid-way between strong-arm policies (preparing for war in order to have peace) and an idealistic search either for 'disarmament' (often described as 'general and complete'), or for a way of institutionalizing 'collective security', which, to date, has remained out of reach.

We are therefore talking about a decisive conceptual breakthrough which has opened the way to a revolutionary transformation of the idea of security. It is conceivable today that it could lead to the elimination of defence systems based on armies and alliances, and to their replacement by institutional security mechanisms in which control, confidence-building measures and the acceptance of certain rules would make it possible to guarantee the non-resort to violence and the arbitration of international conflicts. In other words, we are witnessing at present a profound transformation of attitudes fashioned by thousands of years of war. It is therefore not surprising that this new method has had difficulty in establishing itself and developing. It is the shape which international conflict assumes, or should assume, when open war has become impossible. This shape, however, is today still very imprecise and has not yet finished changing. The fact that total war - the confrontation of two armies, each of which is seeking to destroy the other or to conquer it - is quite simply no longer possible when both have nuclear arms, has only reluctantly and slowly been realized. The theory of deterrence has had difficulty in taking hold in people's minds, and the fact that arms control is its inevitable corollary has been even more difficult to accept.

To the difficulty of understanding the entirely new situation created by the development of the two superpowers' nuclear arsenals was added the fact that strategy, in this new situation could no longer be tried out on the battlefield. The resulting feeling of non-accountability gave the most divergent theories a chance to contend, thus, since the beginning of the 1950s, conferring a highly academic character on military problems. However, specifically because of this abstract aspect, studying the development of ideas about 'arms control' gives a better view of the interplay of the forces which, in the emerging planetary society, are tending to encourage or to prevent the formation of a security system able to put an end to recourse to war.

In 1943, at Los Alamos, Niels Bohr, who had had a part in the design of the first A-bomb, said: 'The new weapon will not just contribute to the transformation of war, but will require mankind to transcend its age-old habit of making war'. Since the early days of the existence of nuclear weapons, words of this sort have abounded: 'As soon as the Russians have the bomb, we will have a lasting armed peace' (Szilard, 1945); 'To date, the main aims of the military establishment have been to win wars; henceforth, the aim will be to avoid them' (Bunch Brodie, 1946); 'strange stability' (Oppenheimer); 'existential dissuasion, autodissuasion' (McGeorge Bundy) etc. In August 1949, the explosion of the first Russian atomic bomb should have made it possible to define accurately the consequences of this situation of mutual deterrence.

This is in no way what happened, however. In order to understand the slow progress of the concept of arms control in people's minds, it has to be put back into the historical, ideological and political context of relations between the two superpowers since 1945, that is to say, the context of the 'Cold War' until 1985, and since then, the context of a new political situation which is bringing an end to this war.

It was a very imperfect and incomplete system of arms control which emerged from the first period. The one to emerge from the second period has not yet taken on a specific shape, but it is not impossible even now to guess at the outlines of what could be a new world security system.

The difficulty of the conceptual breakthrough between 1945 and 1985

The period between 1945-85 is normally divided into three phases:

- the early days of the Cold War from 1945 to 1962; (note 1)
- the phase of 'detente' between 1962 and 1981 during which the two big powers continued to confront each other throughout the world, while deciding basically to be careful, that is to say, to avoid major crises.? (note 2)
- the phase of renewed tension between the two big powers between 1981 and 1985. (Note 3)

The history of the arms race during these four decades corresponds fairly precisely to the three phases in this period.

During the first phase, from 1945 to 1962, both sides in fact built up complete arsenals, which included the means of delivering thermonuclear warheads to the very heart of each other's territories in a shorter and shorter space of time. It was also the phase during which America's unchallenged military superiority gave way to an approximate balance with the Soviet Union.

In 1950, atomic bombs could only be carried by aircraft, and these were A-bombs. In 1955, the USSR had approximately 20 bombs and a few strategic bombers, as opposed to the United States' 4750 bombs and 400 bombers. The first Sputnik was launched in 1957, before the American 'Explorer' (February 1958). In 1960, the USSR had a truly threatening attack force of 300 bombs, 50 bombers and, above all, some 20 intercontinental missiles. The United States had submarine-launched missiles by 1960, and the USSR by 1964. Satellite photo-reconnaissance was introduced in 1960 by the United States, and in 1962 by the USSR.

On the other hand, during the 'detente' phase (1962-81), qualitative progress in the arms race was still significant but made no fundamental change to the kind of balance that was maintained, although it went hand in hand with a senseless race for quantity. The important innovations were:

- the perfecting of ABM (antiballistic missile) systems in 1966 in the USSR, and in 1974 in the United States
- strategic missiles fitted with multiple independently targeted re-entry vehicles (MIRV), introduced in 1970 in the United States and in 1975 in the USSR
- so-called tactical weapons which could deliver miniature nuclear charges at various distances
- cruise missiles, slow-flying pilotless planes which could be launched from an aircraft, a ship or from land and were difficult to detect by radar.

During this period, the number of nuclear warheads rose from 5550 in the United States and from 600 in the USSR in 1965 to respectively 10,100 and 6000 in 1980, while the number of strategic missiles rose from 1850 in the United States and 525 in the USSR in 1965, to 2046 and 2582 respectively in 1980.

Finally, during the last phase (1981-5), the quantitative race continued, with the number of strategic nuclear warheads almost equal at 11,200 in the United States and 9900 in the USSR, and the number of the rockets rising to 2939 in the United States and 2682 in the USSR. However, the United States' ABM system, known as the Strategic Defence Initiative (SDI), remained at the stage of research and early experimentation with no real technological breakthrough.

These technical, military, political and ideological facts have to be borne in mind when examining the origin and development of the concept of arms control during this first period. In the first instance, it is fairly natural that, despite the remarks of Niels Bohr, Oppenheimer and a few other thinkers, the nuclear age should have been approached with a pre-nuclear mentality. From the beginning of the 1950s, there were several approaches to the problem, which led to discussions and conflicts of ideas and influence which in practice enabled the arms race to take the place of what could, or should, have been the well-understood game of mutual deterrence and strategic balance, guaranteeing peace.

To begin with, there was the idea that nuclear arms could genuinely be used, i.e. that they did not preclude battle but merely transformed it. In the United States, Paul Nitze, who for over 40 years was to be one of the recognized 'experts' in arms control negotiations, said in 1947 that nuclear arms were, after all, only 'the equivalent of a raid by 220 B29s'. Now, if the weapon could be used (it had been at Hiroshima and at Nagasaki, but in a situation in which the opponent could not reply in kind), it followed that protection had to be provided (hence the atomic shelters) and that, above all, superiority over a possible enemy had to be acquired by having more bombs than him or by making more powerful ones (hence the H-bomb race) and by permanently maintaining a situation in which the threat of the use of nuclear arms was always in your side's favour and not in favour of your opponent.

This kind of attitude, in both camps, seemed in some way natural since it was just the transposition into the nuclear age of the elementary strategic principles which had held good throughout history until 1949. Those who spoke of a completely new situation - for example, George Kennan right from the start, in the United States - had great difficulty in these circumstances in making themselves heard and then in making themselves understood. The whole history of arms control until 1985 and still perhaps today, can only be explained by the fact that they have only ever been partly understood.

The main reason for the survival into the nuclear age of pre-nuclear attitudes is, very obviously, ideological. The aim of the two big powers is to develop and maintain their hegemonies. The ideological division of the world, combined with national pride, must be translated into the search for superiority in military power and in armaments. For the 'hawks' who dominated the political scene, the idea that war was impossible - because it led inevitably to the admission of compromise - was therefore almost treason. This ideological climate played a major role, in both camps, and was the source of all the difficulty.

The complexity of the logic of deterrence did not facilitate things either. This logic consisted in attempting to have the opponent believe that one could be mad enough to initiate the nuclear cataclysm, and therefore acting as if one was preparing for a decision of this sort in cases of extreme crisis or of a fundamental threat to the 'national sanctuary'. It also consisted in doing one's utmost to retain a capacity for reprisal in the event of the other making the first nuclear strike without, however, leading him to think that superiority was being acquired which really threatened him with capitulation - in which case panic reactions in the event of crisis might become possible.

This led to the formation of a whole arsenal of concepts specific to this logic, concerning the nature of the theoretical strategic aims that one had to be capable of attaining: 'anti-city' or 'antiforces' strategies; or methods of progressive intimidation in case of attack, e.g. 'flexible response', the use of theatre battlefield weapons (possible only if one has a 'complete array', ranging from conventional weapons to intercontinental missiles, and including nuclear weapons of all sizes and ranges). NATO adopted this formula in 1967 (on the basis of a suggestion made by the United States in 1962), in place of the strategy of massive retaliation thought up by Foster Dulles and adopted by NATO in 1956. Finally, a whole series of concepts was elaborated around the idea of the 'first strike' - a broad nuclear attack aimed at destroying the opponent's capacity for reprisal, leaving him incapable of inflicting any substantial damage on the attacker - hence the importance of the antiballistic missile (ABM), the possible effectiveness of which would automatically reinforce the capacity for attack (by reducing the risk of your opponent inflicting damage on you in reply) and the capacity to reply should your opponent attack. Hence also the importance of the accuracy and number of nuclear warheads, which was to increase considerably with the development of MIRV missiles. Hence, finally, the importance of the mobility of missile launchers, preventing the enemy from knowing their positions in advance.

The role of the 'unthinkable', the reversal of traditional logic - in particular as regards the role of defence, the development of which proportionately increases the capacity for attack - the need to convince the enemy of one's determination in an irrational way, the need also not to terrify the enemy by becoming too credible, the development of armaments whose *raison d'être* is that they will not be used - all these paradoxes are difficult to understand and give rise to multiple interpretations. In these circumstances, the theory of deterrence very rapidly became the preserve

of people who considered themselves clever enough to perceive all its subtleties, and became the object of a particular intellectual snobbery.

The fact that the simplest and most rational notion of deterrence could be summed up in the expression 'mutually assured destruction', which can be abbreviated to MAD, demonstrates that the nuclear era has added the delights of apparent absurdity to the pleasures of strategic games. In these circumstances, it is not surprising that intellectuals, academics in particular, found in it a chance to exercise their skill in the handling of ideas and concepts. Thus, in the atomic age, in matters of strategic ideas, professors took over from the military establishment. Henry Kissinger became Secretary of State and Zbigniew Brzezinski became National Security Adviser by writing books on nuclear arms and although they had many rivals, they were not all quite as successful. They all nevertheless attempted to defend original or heterodox ideas in order to attract attention, which, of course, only adds to the confusion.

There is no truly rational or reasonable doctrine of deterrence since extravagance itself can increase the effect of deterrence and, consequently, stability, or lead the adversary to the negotiating table. For example, the threat of the development of an antimissile defence, even if it has no likelihood of being really effective - as in the case of the Strategic Defense Initiative - may worry the enemy and make him think or modify his behaviour. The fact remains that the arms race, both qualitative and quantitative, was directly sustained by at least four major deviations in relation to what could have been, 'on both sides', a more 'reasonable' view of armed peace and of the equilibrium between the two major powers.

The first was the almost constant search for 'superiority', as if it were a question of winning a war on the ground as in the good old days. This was conducive neither to useful negotiations on real quantitative limitations, nor to the inclusion in the negotiations (except for antimissile systems) of a ban on the development of new weapons.

The second was the illusion of quantitative equilibrium, i.e. the idea that the number of rockets and nuclear warheads played a role in itself, whereas only the invulnerability of the capacity for reprisal was important. Most of the 'experts' and politicians fell victim to this illusion. Robert McNamara attempted to



Progress in arms control: the Soviet army destroys SS-20 missiles at a base in Kazakhstan, June 1988. Sygma

explain that 'parity' existed between the USSR and the United States in October 1962 during the Cuban crisis, because, despite the numerical disparity of 17 to 1 (5000 strategic warheads in the United States as compared with 300 in the USSR), a nuclear attack against the USSR would

have been meaningless. In effect, a few dozen Soviet missiles would certainly have survived and would have sufficed to destroy the United States. Only a very few people understood him, however, and certainly nobody listened to him.

The third deviation was the illusion of the possibility of an invulnerable defence against the enemy's missiles, coupled with the idea of the 'moral' superiority of defence over attack. Evidence of this, for example, are Kosygin's words at Glassboro, during his meeting with Johnson in January 1967, in response to the same McNamara who explained to him that the deployment of a Soviet antimissile system would lead straight to a new escalation in the arms' race. He replied, 'Defence is moral; attack is immoral'. Even after the signing of the ABM treaty which ratified the opposite idea, the illusion rose again from its ashes in the form of SDI.

Finally, the fourth false idea was that national dignity and sovereignty, and the requirements of security, prevented verification by the adversary on national soil. The attempts made to overcome this taboo (for example, the 'open skies' initiative by Eisenhower in July 1955) were unsuccessful, the resort to 'national technical means', the expression used in the treaties to describe satellite observation, being finally judged adequate by everyone.

This is not the place to describe the discussions and rivalries that arose concerning these various ideas about deterrence and strategic balance, or the maintaining of stability in cases of crisis. It should be noted first of all, however, that thinking, although often abstract, was always tinged with ideology. Nationalism, the search for hegemony and the need to feel oneself in a position of strength influenced theoreticians much more than a desire for balance and the preservation of security. This ideological aspect was reinforced by the difference in level of understanding of the problem between:

- public opinion, which wanted peace, but was willing to believe that it could be obtained by force
- politicians, who either used the main concerns of public opinion for their electoral ends (Kennedy referring to the 'missile gap' in his 1959 election campaign against Nixon; Nixon using the same idea of gap in 1968 to appear the strong man against his Democrat rival, Humphrey; Reagan doing the same against Carter in 1980, etc.); or else they often put forward oversimplified views on strategic problems (Reagan and 'star wars', Kosygin quoted above)
- the military establishment which defended its interests and its budgets (Eisenhower, despite being a soldier himself, condemned the 'military-industrial complex'); and lastly,
- the 'experts', who made their reputations by opposing each other, and who made their careers in diplomacy or in the corridors of power.

In these circumstances, doctrinal attitudes were obviously influenced both by domestic policy situations (which determine the attitude of the Congress in the United States - MacCarthysm for example in 1954, and the strength of the conservative tendency, permanently encouraging the 'hawks' at the expense of the 'doves'), and by foreign policy (events in Vietnam in 1971 directly influencing the attitudes of Nixon and of Kissinger as regards China and during the SALT I negotiations with the USSR. The invasion of Afghanistan in 1979 afforded Congress an excuse for not ratifying the SALT II agreements). (Note 4)

Thus it may seem almost surprising that the concept of arms control nevertheless succeeded in overcoming all these obstacles and translating itself into a considerable number of agreements (note 2), in the so-called period of 'detente', of which the SALT I ABM agreement in 1972

and SALT II in 1979 were the most significant. If commonsense began to be heeded in 1962, it was very clearly because of the conjunction:

- of the feelings aroused, not only among the general public but also in the political establishment, by the fact of having come close to catastrophe during the Cuban crisis;
- of the existence, from the beginning of the 1960s, of arsenals containing strategic missiles with thermonuclear warheads making mutual destruction a certainty
- of the certainty that no technical progress could ensure the absolute superiority of either camp.

The overall climate thus described did not, however, enable the problem to be approached globally by either side. It would have been logical if the Cuban crisis had led, in order to preserve peace in the future, to a concern with the prevention of accidents and of crises, with the guaranteeing of stability and with the ending, if not the reversal, of the arms race in all spheres.

The psychological and political situation had not sufficiently matured for that, however. In fact, in the preparation of the SALT I agreements, the concern was only with the danger from intercontinental strategic missiles. The only important (but provisional) progress in the field of ideas was the understanding by both sides that it could be dangerous to develop defensive systems since this would necessarily lead to an even more frenzied race affecting missile numbers, accuracy and power.

Several years of maturation - from 1962 to 1968 - were therefore required, during which the main preoccupation was the possible risks arising from nuclear proliferation, before the two big powers decided to enter into bilateral negotiations for the limiting of strategic arms (the discussions opened in November 1969). Three years later, they were brought to a successful conclusion in the SALT I agreements by which the USSR and the United States agreed (ABM Treaty) not to deploy antimissile defensive systems, with only two exceptions: within a radius of 150 km around their capitals and 150 km around ICBM rocket sites, representing a maximum total of 100 antimissile weapons. (In July 1974, a protocol subsequently reduced the number of sites authorized to one only.) On the other hand, an interim agreement limited the number of ICBMs authorized to 1054 for the United States and 1618 for the USSR.⁶ The agreement did not limit the number of nuclear warheads which each missile could carry. Finally, implementation of the agreement was to be verified by 'national technical means', which represented a degree of political progress and progress in ideas in that, as the 1973 SIPRI Yearbook noted, 'the search for information about the adversary's activities, till then considered taboo, was raised to the rank of an internationally recognized and effectively useful activity'.

'For the rest', continued the same author, 'this agreement encourages the technological arms race and even legitimizes it. Will limitation lead to escalation?' This was obviously the logical consequence of an agreement restricted in this way to a single type of weapon. The negotiations of course continued and the preparation of a more complete agreement was provided for in the treaties. No decisive progress was, however, made along the path to SALT II, marked by the Ford-Brezhnev meeting in Vladivostok in November 1974, where it was decided to extend future agreements to all types of missiles and where an overall ceiling was established, and then by an American attempt in March 1977 to go beyond the 'Vladivostok formula' (an attempt immediately rejected by the USSR).

The June 1979 SALT II agreement, signed in Vienna by Carter and Brezhnev, provided - as from 1 January 1981 - for an upper limit of 2250 strategic carriers of all types, including a maximum of 1320 'heavy' missiles - 1200 of which (ICBM or SLCM) could be fitted with MIRVs (up to a maximum of 880 ICBMs). The number of warheads per MIRV missile was limited to 10 for the ICBM and to 14 for the SLCM. The agreement did not mention tactical weapons and Cruise missiles. It permitted the continuation of the qualitative race in almost all fields. The US Senate refused to ratify it.

The results of the agreement were that in 1985, as indicated above, the number of rockets exceeded the accepted limits by approximately 500 and that the number of strategic nuclear warheads, due to the development of the MIRV, had increased by roughly 2.5 times in the United States and by 5 times in the USSR since 1972.

Where intermediate range missiles and tactical nuclear weapons (artillery shells, mines, Cruise missiles etc.) were concerned, the number of nuclear warheads had reached almost 10,000 on both sides. A total of more than 40,000 nuclear warheads held by the two big powers represented the somewhat paradoxical outcome of the attempt to control arms. To this should be added the launching of the SDI programme, dear to President Reagan, despite the 1972 ABM Treaty which had, however, been signed and ratified by both sides for an indefinite duration.

The idea and practical application of arms control resulting, at this point, from 40 years of practice and mutual deterrence were therefore in the end limited, timid and under threat. It had undoubtedly been realized that nuclear confrontation was impossible, but commonsense lost

ground daily and an unlimited arms race continued to be nurtured by all possible ideological deviations preventing the implementation of a 'rational' doctrine of dissuasion.

Decisive progress from 1985 onwards

The same ideological forces and the same deviations continued to be manifest in the period which began in 1985. However, given the changes which had taken place in the USSR regarding ideology, doctrine and military policy, a new view of arms control began to take shape. On the Soviet side, it was tenaciously implemented by Mikhail Gorbachev. To some extent, it was indistinguishable from the trend towards 'disarmament', which it was to render more realistic. In these circumstances, it perhaps had more chance this time of going further than the previous view and of being translated into deeds in a less paradoxical way.

In May 1981, George Kennan, in a lecture given in Washington, suggested that the possibility of reducing nuclear weapons by 50 percent should be seriously considered. The idea that it was not necessary, for the maintenance of stability, to continue to build a few thousand extra rockets and nuclear warheads had little chance of being adopted and implemented when Kennan announced it. Five years later, it was to be the basis of the negotiations which took place at the Reykjavik summit between Gorbachev and Reagan and although it failed then, due to the American refusal to give up SDI, it served as a basis for the new negotiations on strategic arms control, renamed START (Strategic Arms Reduction Talks), the word 'reduction' replacing 'control'.

The innovations which followed from the partial failure/partial success of Reykjavik concerned:

- the idea that a whole category of weapons could be completely eliminated (phasing out of medium-range missiles by the Washington INF (Intermediate Nuclear Forces) Treaty in 1987 the idea that on-site verification of a treaty's implementation by inspectors from the adversary's side was henceforth acceptable (an idea also employed in verifying the implementation of the INF Treaty:
- Article 11 organizing on-site inspection for 13 years after the signing of the Treaty and Article 12 organizing measures for cooperation to increase the efficiency of the use of 'national technical means')
- the idea which came out of the decisions taken at CSCE (Conference on Security and Co-operation in Europe) to establish 'confidence-building measures', consisting in inviting the adversary's observers to manoeuvres carried out by armies on European soil
- the idea that if arms reduction negotiations did not extend to all categories of weapons, they should at least concern chemical weapons (in the case of all countries), strategic nuclear arms (the two big powers) and conventional weapons (23 countries).

These innovations were obviously not merely breakthroughs in ideas, perfecting the abstract concept of arms control. They were facilitated by the ideological changes taking place in the USSR and Eastern Europe and by their practical consequences in foreign and domestic policies. The climate was thus profoundly changed by the USSR's decision to withdraw its troops from Afghanistan and by the peace moves which this brought about or led to amongst its allies (Cubans in Angola, Vietnamese in Cambodia). The extraordinarily rapid changes taking place in Eastern Europe and the USSR are leading in their turn to a re-examination of the ideological conflict between East and West and consequently the front line which divided Europe in two, in the last resort challenging the very existence of the two military alliances themselves.

This new ideological and political situation therefore ought to make it possible to arrive at a more sophisticated view of the idea of security and to broaden the notion of arms control so as to give greater prominence to arms reduction and to measures for mutual and international control. It is impossible today to define precisely the new defence or security regime which will eventually evolve. We can, however, identify what needs to be taken into consideration in order to understand the main directions and imagine the possible twists and turns of this development. They include:

- the present arms reduction negotiations

- the types of opposition that there will continue to be to the development of arms control
- the possibility of new thinking on the problems of security.

If the present negotiations succeed

It is not ridiculous today to surmise that the ongoing arms reduction negotiations, taken as a whole, could come to a successful conclusion within three or four years. The general aims of reduction or prohibition are already accepted by both sides and the discussions at present concern ways of achieving those aims. The difficulties have been identified and both sides appear to have more or less resolved to overcome them. The recent concessions made on important points (for example, the inclusion of aircraft in the discussions on conventional weapons, the agreement to separate the START negotiations from the pre-condition that the United States should abandon SDI etc.) seem to indicate that solutions will be found to the remaining difficulties.

The significance of success in these negotiations would not lie in the nevertheless considerable reduction in the number of tanks,



The Bush-Gorbachev summit in Helsinki, September 1990: beyond arms control, there is a long way to go to achieve the establishment of a world security system. Le Segretain/Sygrna

planes and missiles, but in the psychological effect which would be produced by:

- the obvious disappearance of a threat of invasion or of aggression on both sides
- the presence on the territory of each side of a veritable army of inspectors wearing the 'adversary's' uniform.

The terms of reference adopted in January 1989 for the Conventional Armed Forces in Europe negotiations in Vienna state the aim of the negotiations as being to establish a stable and sure equilibrium between conventional forces at lower levels, to eliminate disparities and, as a priority, to eliminate the capacity for launching surprise attacks and undertaking large-scale offensives. They relate mainly to tanks, armoured vehicles, artillery and, since the concession made by President Bush, combat aircraft.

The USSR has already published a precise list of its arsenal, admitted the existence of disparities and accepted the principle of their elimination. In the case of tanks, armoured vehicles and artillery, this would lead to the Soviet Union destroying the equivalent of approximately 60 percent of the present figures, whereas NATO would only have to decrease its forces by 10 to 15 percent. This would take place even before the conclusion of the negotiations on unilateral reductions (withdrawal of 5000 tanks from Central Europe and the reduction of troop strength by 500,000) and already represents a contribution to doing away with the very idea of the threat of

Soviet tanks flooding into Europe, which has been the justification of NATO'S military policy for the past 40 years. The signing of the agreement would set the seal on this psychological and political transformation.

Similarly, in the Strategic Arms Reduction Talks (START) which are aimed at a 50 percent reduction of this type of weapon, the main problem is not that of knowing what the number of rockets, transporters or nuclear warheads will be. The reductions at present projected, to 6000 nuclear warheads and 1600 rockets, or transporters, on both sides, would in any event still leave an enormous destructive capability. Here too, the main problem is to eliminate the threat of a surprise attack - the danger of the first strike. The conclusion of an agreement - which would mean that the two remaining difficulties had finally been overcome (concerning the interpretation of the ABM Treaty and sea-launched cruise missiles) - would have a decisive psychological effect, namely, the development of the conviction that war is not really desired by either side.

Perhaps the most important psychological effect, however, would result from the implementation of the verification and control measures which the Treaties will include. According to estimates given in a CIA Report in December 1988 about the verification measures needed for implementation of the START Treaty, at least 2500 control installations would be required on USSR territory and almost as many in the United States. Verification of the conventional weapons treaty would probably require an even larger-scale organization. Finally, there has been very notable progress in negotiations since the adoption of the idea of 'confidence-building measures' in the Helsinki Final Act by the Conference on Security and Co-operation in Europe. As well as the sending of observers by both sides to a considerable number of manoeuvres organized by the countries signatory to the agreements," more binding measures (confidence-building and security measures) were worked out at the Belgrade and Madrid meetings subsequent to the CSCE, then by the CDE negotiations (Conference on Disarmament in Europe, Stockholm, January 1984 to December 1986). Finally, the last series of negotiations, which began in Vienna in March 1989, aims to extend and develop these measures through the possibility of sending observers to manoeuvres involving more than 13,000 men, instead of the present 17,000, and to bring about an improvement in the means of reciprocal observation and information. The Soviets even suggest the prohibition of manoeuvres involving more than 40,000 men, which would lead on both sides to the ending of exercises such as the present annual NATO manoeuvres (Autumn Forge) involving over 200,000 men.

This extraordinary development of verification, observation and control measures could not fail to reinforce on both sides the conviction that war was becoming a purely academic possibility which no longer justified the maintenance of enormous military might, which was, in fact, becoming less and less usable since the end result of control was to prevent its being employed. The idea of arms reduction combined with the development of verification measures, is to replace distrust by confidence. Ultimately, the very notion of deterrence is antithetical to that of confidence. It is therefore understandable that a suggestion has been made to go further and to create a situation in which, instead of threats just being reduced, they are finally eliminated.

This is why the situation which will be brought about by the success of the current negotiations on conventional and strategic weapons will be unstable - in the sense that it will inevitably lead to the continuation of negotiations to reach even lower levels of arms. The development of the political situation has already contributed more, perhaps, than the Conventional Armed Forces in Europe negotiations themselves to ending the possibility of a surprise attack in Europe. Inevitably, however, further progress will have to be made in the reduction of armaments, particularly where short-range nuclear weapons are concerned, under pressure from a reunified Germany and a few other countries for the abolition, or reduction to very low levels, of all the weapons of this type on their soil. It will also probably lead to a search for a lower level for strategic nuclear weapons. The idea that the discussions for a 50 percent reduction of strategic weapons were 'a step in the right direction but not enough' and that 'the elimination of all first strike weapons' must be proposed was put forward by ex-President Nixon in an article published in February 1989 in *Foreign Affairs*. He suggested the revision of the present process of START negotiations by a two-stage scheme which would include a first stage of less ambitious reduction (and therefore more easily attainable) and a second stage in which an attempt would be

made to achieve 'the much more difficult aim of increasing strategic stability by reducing on both sides the number of arms capable of destroying reinforced military targets' during a first strike. The level of these most threatening of arms should be reduced by much more than the 50 percent at present under consideration and he suggested a 75 percent reduction of the present level of arms of this type by both the Soviets and the Americans (including those currently planned, i.e. the MX, the Midgetman and Trident II D5 missiles).

He wrote that the problem was not whether this treaty reduced the number of nuclear weapons, but whether it reduced the possibility of nuclear war. In the last resort, the value of any START agreement had to be judged on whether it increased the security of our strategic forces and decreased the possible encouragement on both sides to resort to nuclear arms in a crisis. This logic, which is now tending to make the elimination of threats - and not simply their reduction - the aim of negotiations, is what underlies the suggestions made by the Russians concerning conventional weapons, as witness the three-stage plan put forward by Eduard Shevardnadze: (1) reduction in Europe to begin with, eliminating the imbalance in troop strength and five categories of weapons (tanks, combat aircraft, combat helicopters, armoured vehicles and artillery) with reduction to a level 10 to 15 percent below the present lowest level on either side; (2) a second stage, enabling the reduction of these weapons to a level below 25 percent; (3) a third stage where the armed forces on both sides would be just 'strictly defensive' in character.

The further negotiations which will result from the signature of the agreements on nuclear and conventional weapons, at present being discussed, will obviously follow the lines laid down by ex-President Nixon and by the Soviet ex-Foreign Minister, Eduard Shevardnadze. This means that the idea of arms control could develop decisively towards a new view of military security based on two or three simple but entirely new ideas, in particular, that it is possible and desirable to seek security by the development of reciprocal control measures and, above all, that it is possible not only to reduce threats but also to eliminate them.

A situation of this kind would undoubtedly lead other nuclear powers, in particular the UK and France, to participate in the negotiations on these weapons. The problem of the minimum level of armaments guaranteeing security - what should be understood as 'reasonable sufficiency' - would therefore eventually arise in a considerable number of countries, more acutely than today.

Finally, it should be borne in mind that the negotiations on the prohibition of the production and possession of chemical weapons, which are taking place within the framework of the United Nations - and therefore amongst 159 partners - are also giving grounds for hope, despite the enormous technical difficulties, that they will reach a successful conclusion. Two remarks must be made about them:

- their success would lead to the establishment of an extraordinarily complex regime of international verification and inspection, leading to the setting up of a body employing thousands of inspectors; this would reinforce further, in the countries of the North, the psychological effect triggered off by the control measures concerning the other types of weapons
- we would witness the spread to all countries, including those in the Third World, of this new view of security based on control rather than on armaments.

Eventually, the system described above would lead to questions about the institutions needed: what institutions can provide a framework for measures of multilateral or world control? What structures and what powers should they have? What consequences should be drawn regarding regional organizations and the world organization? Do not security questions demand specific institutional solutions separate from those being put forward today for the economic and political organization of the future Europe, since they can be dealt with only over a much wider geographical area? And can security be organized in one specific geographical area without taking the rest of the world into consideration?

Resistance to the development of arms control

The pressure thus brought to bear for a new national and international security regime will obviously be counterbalanced by ideological and corporatist types of resistance and by interests

associated with current structures. Ideological resistance has already vigorously made itself manifest. The conservatives in the United States, in Europe and in the USSR refuse to admit that the present changes are lasting and fundamental. In the West, this attitude has assumed controversial and even ridiculous forms," the main idea being that nothing has changed except in words and that one should not drop one's guard, but, on the contrary, modernize, develop and act as if nothing had happened.

It is difficult to forecast the forms which this resistance will assume in either the East or the West in the event of the first round of the current negotiations succeeding, as envisaged here, and of increased liberalization in Eastern Europe. What needs to be taken into consideration can, however, be identified. In the first instance, it is to be expected that the reduction in military budgets will cause very difficult redeployment problems for a considerable number of military personnel and the armaments industry, and these do not appear, to date, to have been the subject of serious preparatory studies. The 'military-industrial complex' will continue to exert increasing pressure due to the fact that it will not only be threatened, but directly hit by cuts.

The revolution in ideas demanded by the fundamental change in the political, ideological and strategic situation will not be a simple matter. People have too long been accustomed to thinking in terms of traditional strategy and to dealing with a relatively simple situation of conflict between two rival and ideologically distinct camps to be able to adapt easily to such a new situation.

The shades of ideological opinion within each country and the various national sensitivities regarding defence problems are therefore going to provoke very varied reactions. The complexity of the strategic debate in the United States and Europe today clearly demonstrates that it is no longer adequate to divide people into hawks and doves. In a recent study, Stuart Croft 10 distinguished five different schools of thought in the United States - radical liberal dealers, defence democrats, conservative dealer bilateralists, conservative defenders, conservative unilateralists - thus leading to five different scenarios for American strategy - reinforcement of the ABM Treaty, deployment of a 'thin' antimissile defence in agreement with the USSR, the search for a radical arms control agreement with the USSR, very considerable reduction of the USSR's strategic ICBM strength combined with the limited deployment of negotiated antimissile defences, the deployment of an overall antimissile defence for missiles, and finally, general deployment of antimissile defences also providing protection for the public. There is the risk of an even more complex debate if the current negotiations are successful. What is probable is that it will concentrate on the nature of the threats which will have to be faced in the future.

Towards a new system and a new view of security

In the end, the development of arms control towards a new and broader regime integrating control into security or, on the contrary, its obstruction or rejection in circumstances which would enable traditional defence systems to be maintained and developed, will depend on political vision and the capacity to dominate and integrate all aspects of the problems. In other words, the future depends to a large extent on the development and adoption of new ideas about defence and security.

In this area, the East has made greater efforts than the West. A whole series of new ideas have been put forward in official speeches and in international forums to support the negotiation endeavours. Thus we have seen the emergence of the concepts of 'reasonable level of sufficiency', of 'comprehensive system of peace and security' (CSPS), and of 'defensive defence' along with the ideas of 'international economic security', 'dissolution of military alliances' etc. A whole new vocabulary has thus been put before Western governments, which have examined it with scepticism and distrust and then rejected its essential constituents.

The rejection by the West of the ideas put forward by the East has, however, not in any way been accompanied by counter-proposals in their place. Thus, the possibility of making decisive progress in the realm of ideas does not yet appear to be in sight. However, the speed of change is such that thinking will be forced at least to follow events if it does not precede them. If, as mentioned above, the negotiations on arms reduction succeed and continue and if control measures

develop generally and if, too, the democratization of Eastern Europe and the USSR continues, it is possible to imagine at least the types of problems to which solutions in the form of new ideas will have to be found. On the military, institutional and ideological levels, there are thus the problems of:

- the minimum level of armaments
- the kinds of verification and control measures which will necessarily go with it
- the types of threats to security which will have to be faced in the future and with what means
- the kind of institutions which could best enable a new regime or system of national and international security to be organized; - the type of society which would correspond to this kind of regime and institutions.

It is indeed a vast programme, but the scale of the current changes justifies political thinking going beyond a fixed framework. Security problems have always been linked to institutional and ideological questions. It is therefore not surprising that the changes which are taking place today in the ideological and institutional spheres are a fundamental challenge to the idea of security, the development of which in turn cannot fail to have an effect on ideology and institutions.

The extent and the nature of the measures, and even of the permanent regimes, for verification and control which will finally be accepted will obviously affect the solution which could eventually be found to the problem of the minimum level of armaments in each country. The answer to the problem of the kinds of threats which will have to be faced in the future will play an essential role in determining the overall view of the security systems. In this sphere we can expect considerable efforts of imagination, nurtured by various political ideologies which will have to be defended and promoted. It is on this subject that the most fantastic and the most mistaken ideas may develop, justified solely by the political and social prejudices of those who support them, although this will not prevent them from reaching a wide audience. The history (referred to above) of the ideas relating to permanent deterrence during the 1945-85 period gives some inkling of the ideological and theoretical battles which will be triggered off in this respect.

On the other hand, the current evolution of the role and the place of the nation-state (sovereignty being handed over to regional institutions, especially in Europe, the beginning of the acceptance of military inspection measures etc.) will, in future, be linked as much with the development of ideas in military matters as with the development of ideas concerning economic interdependence. However, while everyone can see that a new division of functions and powers has begun at the various subnational (internal autonomy), national, regional and world levels, nobody can say today what new political structures this will produce. The concept of worldwide 'collective security', hitherto accepted in theory, will, through the United Nations Security Council, perhaps develop in the direction of a more efficient regime if the taboos which have prevented it from functioning properly so far can be overcome one day.

Enormous problems are now being raised by the economic and political development of a world society divided into two totally different 'worlds' - the rich, post-industrial world with only a billion inhabitants, and the poor, agropastoral world which is only just beginning its industrialization and has more than 4 billion inhabitants. On the solutions which may or may not be found to these problems will depend, in the last resort, the viability of the security mechanisms which can now be set up. The future development and the broadening of the notion of arms control will therefore depend on a very great number of factors and on their combinations, thus preventing any forecast. The discussion which has already begun between East and West, and between conservatives and liberals in both camps, nevertheless suggests that these are two possible views of security which are going to come face to face with each other in the years to come.

The first will attempt to preserve the main aspects of the structures and the trends in development of the existing military apparatus, with a return to the purely national level if the existing alliances break up. It will attempt to justify the continuation of the qualitative arms race in all its forms (nuclear, ABM, space,

intelligent weapons, etc.), even if concessions have to be made as regards quantity, and will attempt to limit to the greatest possible extent or else to destroy what has presently been achieved by arms control.

The second will attempt to considerably reduce the present levels of armaments, to do away completely with certain types of weapons, to develop control measures and institutionalize them so as not just to reduce but to eliminate threats of aggression between countries which accept these regimes of permanent inspection. It will attempt to reinforce and to reform world institutions to enable them to guarantee an effective system of collective security.

In fact, the acceptance of the first measures of arms control by the 1972 treaties (prohibition of ABM defensive systems, limitation of one category of armaments, legitimization of observation by 'national technical means') opened the way to a possible move towards a world society from which resort to war would gradually be banished. It seems possible that the progress which has been made since, with limitation being extended to other kinds of weapons (SALT II), breakthroughs concerning direct observation (the confidencebuilding measures of CSCE) and concerning restrictions imposed (the CDE confidence and security measures), on-site verification and the complete phasing-out of one type of armaments (INF Treaty), can be pursued and developed in the current negotiations and produce a new international security regime.

The acceleration of the movement in this direction since 1985 does not, all the same, give grounds for hope that it will continue in a linear way. To date, this movement involves only the two major powers where nuclear arms are concerned, and the two major powers and some European countries where conventional weapons are concerned. Even for the countries thus involved, a political, institutional and ideological change of this scale, even if it were possible, could not take place without resistance and incidents. The extension to the whole world of a security system based on mutual control covering all kinds of nuclear, conventional, chemical and biological weapons, assumes that:

- for arms of this type, all nuclear countries, including China, agree to participate in an
- arms control regime, which is far from being the case
- the Third World countries agree to participate in a control regime which, to date, extends only to the countries of the North
- the rich countries agree to pay the very high price of world economic and social integration.

These rich countries, given the current changes in the East and the technological progress which is bringing all of them into the postindustrial era, are tending to form an increasingly homogeneous society, but world society, despite the trend towards economic interdependence, is still profoundly heterogeneous, the countries in the South having neither the same mode of production, nor the same ideologies, nor even the same security problems as those of the North. The question whether the North will be capable of getting the countries of the South to adopt an arms control regime covering all kinds of weapons amounts in the last resort to asking whether the North is capable of producing a homogeneous world society. In other words, is it capable of exporting to the South its ideology composed of a mixture of the desire to grow rich, human rights and democracy, and of transferring to the South its capacity for production and modernization and, lastly, its standard of living?

It is to be feared that the answer will be no. It has become fashionable to say that the notion of international security must be entirely revised and corrected so as to include ecological considerations in particular. We are, nevertheless, still a long way from having made the changes in our attitudes necessary in order to define and accept all the consequences (particularly economic and financial) of a view of security adapted to the problems and potential of modern society.

In fact, we are today witnessing a race between the evolution of attitudes accustomed to seeing the international system in military terms and the rapid development of new threats which are no longer of a military type but which are the outcome of massive migrations from the South to the North and which are at present destabilizing the rich and developed world. It would be a strange paradox that a society which had become capable of designing and putting into practice a system aimed at eliminating war, were to disintegrate due to its incapacity to identify new types of threats and to set up, in good time, the means of avoiding them. History, however, offers many examples of cataclysms which have not been prevented owing to the slow pace at which attitudes evolve.

(Translated from French)

Notes

1. 1. This period was distinguished, among other things, by the Marshall Plan (June 1947), the Berlin blockade, the separation of the Federal and Democratic Republics of Germany, the Korean War (1950-3), the emergence of communist China, the Constitution of NATO (1949) and of the Warsaw Pact (1955), the entry of the Federal Republic of Germany into NATO, the French phase of the war in IndoChina (1946-54) followed by the American involvement in Vietnam, the suppression of the Hungarian uprising (1956) and the beginning of the Algerian War. In Russia, the period saw the reign of Stalin until March 1953, then of Malenkov, Bulganin and Krushchev, while in the United States, Eisenhower succeeded Truman in 1952, and Kennedy followed Eisenhower in 1960. This period ended with the Cuban crisis between September and November 1962, a crisis which enabled the two big powers to realize that the risks of a nuclear confrontation were very real.
2. This was the period of the Vietnam War, until the American defeat in 1975, of the ideological split between Peking and Moscow (1963), the crushing of the Prague uprising (1968), and the normalization of relations between China and the United States (1971). It was the main period of decolonization and saw the development of numerous local and regional conflicts in which the two big powers were directly or indirectly involved (from the Congo to the Middle East, including Africa, Central America and Asia). In the USSR during this period, Krushchev was in power until 1963, followed by Brezhnev, while in the United States, Kennedy was in power until 1963, Johnson until 1968, Nixon until 1974, Ford until 1976 and Carter until 1980, when he was succeeded by Reagan. It was also the period during which the following were signed: the Moscow nuclear test ban treaty (1963), the treaties on the demilitarization of space and on the denuclearization of Latin America (1968) and the fourpower agreement on Berlin (1971). It also saw the opening of the Conference on Security and Co-operation in Europe in 1972, the opening of the MBFR negotiations in 1973, the SALT I (ABM) agreement in 1972, the agreement on the prevention of nuclear war between the USSR and the United States in 1973, and the SALT II agreements in 1979.
3. This third period was marked by the development of Soviet military intervention in Afghanistan (which began at the end of 1979), the increase in American nuclear arms in Europe (deployment of the Pershing II), and President Reagan's 'strategic defense initiative' which was to challenge the whole East-West strategic balance.
4. The examples given here almost all refer to the United States, where the political and strategic scene is the best known. All the information concerning the USSR nevertheless shows that, *mutatis mutandis*, the political and strategic interaction has been similar.
5. Cf. Robert McNamara's romantic account of his feelings, on 27 October 1962, after he and Kennedy had informed Krushchev that the United States would undertake further action if the Soviet missiles were not withdrawn from Cuba: 'I will not speculate on what that further action might have been, but I do know that as I left the White House and walked through the garden to my car to return to the Pentagon on that beautiful fall evening, I feared I might never live to see another Saturday night.', in *Blundering into Disaster*, New York: Pantheon Books, 1987, p. 11.
6. The difference between the two figures is justified by the American superiority in strategic bombers (450 in the United States against 140 in the USSR) which were not included in the agreement, by geographical considerations, and by the fact that the United States already had MIRV missiles, which was not true of the USSR at the time the agreement was signed.
7. At the end of 1988, under these agreements, 83 'military activities' had been notified on both sides (33 for NATO, 46 for the Warsaw Pact and 4 for the non-aligned countries) and observers had been invited to be present at 35 of them. On top of these, 18 challenge inspections had been successfully organized (5 in the United States, 5 in the USSR, 2 in the United Kingdom, 2 in the German Democratic Republic, 1 in the Federal Republic of Germany, as well as in Turkey, Bulgaria and Poland). International Institute of Strategic Studies, *Strategic Survey*, 1988-1989, p. 53.
8. Cf. Graham T. Allison Jr. 'Testing Gorbachev', *Foreign Affairs*, Autumn 1988.
9. 'The fact that General Secretary Gorbachev can smile and dresses well does not mean that there is a fundamental change in Soviet aims' Caspar Weinberger, *Foreign Affairs*, Spring 1988; see also Thierry de Montbrial, 'La securite exige la prudence', *Foreign Policy*, Summer 1988; 'Report on Selective Dissuasion' from the American Commission on long-term integrated strategy: 'the failure (of the new Soviet policy) could lead the regime to seek legitimacy in military success abroad...' etc.
10. International Institute for Strategic Studies (IISS), 'The Impact of Strategic Defences on European-American Relations in the 1990s'. *Adelphi Papers* 238.