Europe and the Soviet Union

Proceedings of the CEPS Fifth Annual Conference

Volume I



CENTRE FOR EUROPEAN POLICY STUDIES Rue Ducale 33, B-1000 Brussels, Belgium Tel. (32.2) 513.40.88 - Telex 62818 ceps b Telefax: (32.2) 511.59.60

Europe and the Soviet Union

Proceedings of the CEPS Fifth Annual Conference

Volume I

© Copyright 1989, Centre for European Policy Studies. All rights reserved.

Contents

Volume I

Notes on	the Contributors
Introduct Peter Luc	ion
	Section I. Opening Dinner and Keynote Speeches
Chapter	Perspectives in East-West Political Relations: With Special Consideration to Aspects of Economic Policies
Chapter 2	2. L'Europe et l'Union Soviétique: Développements Récents et leur Influence Possible sur les Relations entre l'URSS et l'Europe Intégrée
Chapter :	3. Europe, the Soviet Union and Change
	Section II. Military and Political Perspectives: Papers Presented at Working Group 1
Chapter	4. The Soviet Threat: Comparative Assessments
	Response by Peter Vigor8
Chapter	 Arms Control: The Open and Hidden Agenda 8 Lawrence Freedman
Chapter	6. Arms Control: A View from NATO

Notes on the Contributors

Anders Aslund is Associate Professor (Docent) at the Stockholm School of Economics.

Ferdinand Feldbrugge is Sovietologist-in-Residence at NATO.

Jean François-Poncet is Chairman of the Economic Affairs Committee of the French Senate.

Peter Frank is Senior Lecturer in Soviet Politics, Department of Government, University of Essex, Colchester.

Lawrence Freedman is Professor and Head of the Department of War Studies, King's College, University of London.

Riccardo Iozzo is Vice President of the Project Group for Eastern Europe, Istituto Bancario San Paolo di Torino, Turin.

Martin J. Kallen is Chairman and Managing Director at Monsanto Europe S.A., Brussels.

Sergei Karaganov is Deputy Director of the European Institute of the Soviet Academy of Sciences, Moscow.

Phillip A. Karber is Vice-President and General Manager for National Security Programs, BDM Corporation, Washington, D.C.

Horst Günter Krenzler is Director-General for External Relations, Commission of the EC, Brussels.

Fredrik Pitzner-Jørgensen is Assistant Professor at the Institute of International Economics and Management, Copenhagen School of Economics and Business Administration.

Peter Ludlow is Director of the Centre for European Policy Studies, Brussels.

Jean-Claude Renaud is Director of Economic Affairs at NATO.

Wolfram Schrettl is Senior Research Fellow at the Osteuropea Institut, Munich.

Lothar Späth is the Prime Minister of Baden-Württemberg, Federal Republic of Germany.

Leo Tindemans is the Belgian Minister of External Relations.

Willem van Eekelen is former Minister of Desence, The Netherlands.

Luigi Vercellini is Director of the International Department at the Banca Commerciale Italiana in Milan.

Klaus von Dohnanyi is the former Mayor of Hamburg.

Peter Vigor is presently a consultant to and formerly the Director of the Soviet Studies Research Centre, Royal Military Academy, Sandhurst.

Heinrich Vogel is Director at the Bundesinstitut für ostwissenschaftliche und internationale Studien, in Cologne.

Ambassador Henning Wegener is Assistant Secretary General for Political Affairs, NATO.

Gérard Wild is Director of the Department of Socialist Economies, Centre d'Etudes Prospectives et d'Informations Internationales (CEPII), Paris.

Introduction

Peter Ludlow

Conferences on the Soviet Union are not at all uncommon in the late 1980s. It is therefore worth asking why the CEPS Annual Conference of 1988 was particularly noteworthy.

One obvious answer would be to point to the calibre of the principal speakers. It was by any reckoning a first rate group. What made the conference special. however, was not simply the quality of those who spoke, but the variety of expertise they brought to bear on the subject. The conference threw together experts from the EC and NATO, businessmen and independent analysts, and by no means least, a young, engaging and impressive spokesman of the new Soviet Union, Dr. Karaganov. The result was not just an agreeable cocktail, lightly consumed and easily forgotten. It was, by common consent, a highly original concoction, which provided those who partook of it with important insights into the nature of change in the Soviet Union and the complex challenges that these changes present to Western, and more particularly European policy-makers.

Jean François-Poncet's conclusions, printed in the final chapter of Volume II drew out several of the most important themes of the conference. In this brief introduction, I will therefore limit myself to three points.

The first concerns the enormity and complexity of the changes that are taking place. While it is true that, as Jean François-Poncet remarked, few, if any serious outside observers now doubt the "sincerity" of Mr. Gorbachev, both the causes and courses of the revolution are so numerous that it is impossible at this stage, and will presumably be for quite some time to come, to encapsulate the significance of what is happening in simple slogans such as the victory of democracy or the disappearance of the Soviet threat. Our discussions took place well in advance of the tragic events that have since occurred in Beijing, but there was a persistent note of caution in much of the discussion which warned against facile optimism. It can be seen in Phillip Karber's paper: it can be seen in Åslund's analysis of the limitations of COMECON: it can be seen in the invaluable observations of the business participants in the final panel. There are many opportunities, which can and must be seized. There are also, however, deep dangers which must be watched and contained.

This leads to the second point. *The Western response must be highly variegated*. It will involve defence and arms control; trade policy and business investment; human contact and human rights. That is why the compartmentalized nature of Western decision-making is so dangerously irrelevant to the present situation. In a period when the principal focus of East-West relations was on the military balance, and opportunities for trade, social and cultural interactions were strictly limited, the West could afford a double-track approach in which high policy was left to NATO, and the residual tidbits to a variety of lesser actors.

In the present circumstances, this artificial division is no longer tenable, and could become dangerous. If the end of the Cold War is really in sight, Frans Andriessen and his colleagues in the European Commission will have as much to contribute to its conclusion as the arms control negotiators in Vienna. It is therefore ludicrous that mechanisms for the coordination of commercial and security policies are so seriously underdeveloped, and indeed in many ways non-existent. Fortunately, to a large extent as a result of the persistence of Mr. Tindemans, our keynote speaker, EC foreign ministers appear to have accepted that at least as far as relations with the East are concerned, the clearcut distinction between the external policies of the Community and European Political Cooperation cannot be sustained. The new procedures approved at the recent Luxembourg Foreign Ministers meeting mark an important step towards the development of a genuine, EC foreign policy.

The challenge is not, however, merely of an institutional character, vital though more effective institutions are and will be. Institutions can in the final analysis only flourish if they are rooted in a political culture to which foreign ministers and parliamentarians, diplomats and soldiers, businessmen and intellectuals contribute. For obvious, historical reasons, Europe has several foreign policy cultures and not one. Over the next decades, if the response to the challenge of the East (and indeed to developments elsewhere) is to be adequate, the European Community as such will have to become the focus for a rich and multicoloured foreign policy culture of its own. The CEPS conference in 1988, which brought together many of those who ought to be heard in the developing debate, points the way. We need more occasions in which the head of the EC's department for external relations finds himself flanked by a former minister of state in a major foreign office and by leading bankers and businessmen. Only then, will policy be adequately founded and effective.

The third point has to some extent already been anticipated. It concerns the peculiar role and opportunity of the European Community in the unfolding East-West relationship. It is not a case of Europe wresting leadership of the

alliance from the United States. That is a crude and simplistic objective. It is much more that, as the principal accent of East-West exchanges switches from military measures to economic interdependence, the Western Europeans must for all kinds of reasons - historical, geographical and economic - become the leading Western players in the story. The following figures speaks for themselves.

Exports from the EC to Eastern Europe and the Soviet Union (millions of ECU)

	1985	1986	1987
EC 12	23.437	20.188	19.160
FRG	9.589	9.194	8.567
France	3.818	2.795	2.665
Italy	3.446	2.925	3.103
UK	1.988	1.735	1,569

Imports to the EC from Eastern Europe and the Soviet Union (millions of ECU)

1006	
1986	1987
24.759	24.423
8.363	7.434
3.879	3,700
4.230	4.912
2.445	2.594
	8.363 3.879 4.230

Source: Eurostat.

US Merchandise Trade with the USSR and Eastern Europe (millions of $\$ / \$1 = \pm 0.9$ ECU)

		 	
	1985	1986	1987
Exports			
USSR	2,423	1.248	1.480
Eastern Europe	792	742	746
Imports			
USSR	443	605	470
Eastern Europe	1.671	1.600	1.651

Source: The US Department of Commerce.

4 Ludlow

Fortunately, President Bush's Boston speech of May 1989, suggests that the new administration accepts these facts and recognizes that they are in no sense a threat to US interests or leadership.

The same figures bring out the special role of the Federal Republic within the European Community. It is a role that seems certain to grow rather than diminish in importance as the years go by. Efforts to reverse the irreversible are pointless. The proper strategy, welcomed by most responsible Germans themselves, is to ensure that the Federal Republic's leadership in East-West economic relations is firmly anchored in the Western alliance and more particularly in the European Community. The proper reaction therefore to the new situation is not to indulge in vacuous speculation about Germany's drift to the East, still less in hectoring of an allegedly deviant partner. The way forward lies instead through even more rapid progress towards the development of common policies within the European Community. Fortunately, this would seem to be the prevailing, if not the unanimously held wisdom of the moment.

It only remains to thank the Belgian Ministry of Foreign Affairs and more particularly Leo Tindemans for their many contributions to the success of the Annual Conference. Mr. Tindemans himself was a most distinguished keynote speaker. The setting was as usual the Palais d'Egmont, surely the most elegant conference centre in Europe. Finally, and by no means least, the Belgian Ministry of Foreign Affairs helped financially. We are also grateful to the Council Secretariat of the EC for financial help.

Section I

Opening Dinner and Keynote Speeches

Chapter 1

Perspectives in East-West Political Relations: With Special Consideration to Aspects of Economic Policies

After-Dinner Speech by Lothar Späth

I have been asked to reflect on certain perspectives in political relations between East and West with special consideration to the aspects of economic policies. Since this is an after-dinner speech, however, I shall only be able to touch briefly upon these points.

I. The Motivating Factor in the Reform Efforts of the USSR

The Soviet reform efforts are basically motivated by the necessity of economic progress. Mr. Gorbachev is fully aware of the fact that the Soviet Union's first priority must be to provide for better economic conditions, so that the people in the Soviet Union may lead a better life. And the Soviet disarmament initiatives must be seen in the same part of the national product available for the improvement of the living conditions of the population.

Mr. Gorbachev knows, furthermore, that with a widening of the global and technological gap between East and West, but also the Pacific region, the Soviet Union would no longer be able to keep its position as a superpower.

In future, the global weight of a nation will no longer be determined by its number of missiles and tanks, but more and more by its economic and technological performance and potential. This is why I firmly believe that the expansion of economic relations will be the decisive factor in the cooperation to overcome system-inherent thinking.

II. East-West Economic Relations

It is indeed true that right now the economic relations of Europe with the Soviet Union and other COMECON countries are in a somewhat difficult period, which is mostly due to price deterioration in the raw materials sector. Ex-

ports of Western industrialized countries to the East have dropped by 11.5% in 1986 and by 5.5% in 1987, and, in fact, in the medium-term there was a noticeable decline in the volume of trade with Eastern countries. This, however, seems to be improving as the economic forecast predicts a 2.5% increase of Eastern exports for 1988, and 5% for 1989.

The ups and downs of the past years clearly indicate to us that we must beware of a short-term and thus short-sighted evaluation of events. It would, to my mind, be misguided to narrow our view of things down to focusing merely on export shares and trade balances. In the long-term, a positive effect will be generated on East-West trade by *perestroika* in the Soviet Union as well as by improved worldwide political conditions.

We also have to change our previous image of economic cooperation with the East. The previous model, in which the Soviet Union supplied the raw materials and the West sold investment goods and technology, is obsolete. It should be replaced by newly created forms of cooperation.

At its 27th Party Congress, the Communist Party of the Soviet Union sent out a quite spectacular signal by adopting liberalization measures for the economy and foreign trade. This had been unthinkable only a short while ago and will now open up completely new possibilities and perspectives for economic cooperation between East and West. The admission of various types of cooperation up to joint ventures is almost a political sensation given the Soviet Union's political character.

Such a development, if it is supposed to function smoothly at various levels, urgently requires first of all information on products and markets.

For this purpose, we have agreed with our partners in the Agency for Mechanical Engineering, to establish a Management Centre in Leningrad. The Soviet Union's competitiveness will largely depend on quickly getting qualified managers who are able to face the challenges of the world markets.

III. Obligations and Tasks for Europe

In the development of East-West relations, Europe is called upon to play a strategic role. Mr. Gorbachev himself has coined the key word for the "Common House of Europe". On the other hand, he has expressed himself worried because of the great attraction which the EC has for neutral and non-aligned neighbouring states.

A strong Western Europe, however, does not compromise all of Europe; still, it is a centrepiece of the present as well as future structure of Europe. This free part of Europe will henceforth speak with one voice in all questions concerning the whole of Europe.

I am convinced that the powerful growth of the European Community also means a great chance for East-West relations. I have always believed that there is no better partner for the Soviet Union in its great quest than all of the states in the EC together.

IV. Gorbachev's Asian Card

The discussion about cooperation between Europe and the Soviet Union must never lose sight of one fact: the Washington-Moscow relationship still dominates global politics; however, Mr. Gorbachev has already picked up the Asian card.

Developments in the Asian region present another challenge to the Soviet Union: Japan has become an economic superpower, and China has set out on the long road to economic modernization. The Soviet Union must not only try to prevent a further drift from the United States and Europe, in order to keep its position as a superpower.

We may count on meetings between Mr. Gorbachev and the Chinese leaders in the not too distant future, which will start developments of the greatest importance for the whole of the Asian region, including the Eastern part of the Soviet Union and the Pacific states.

V. Talks Have Proved to be Stronger

In the whole context and general discussion of Europe's future, special emphasis must always be given to security and disarmament policies. The conclusion of the INF agreement has clearly shown that talks are more powerful than the instrumentation or armament arithmetics.

I firmly believe that the Soviet Union will do nothing to stop this process of de-escalation. It is also a great satisfaction to us that the Vienna arms control mandate talks have progressed so far and that the successful finalization of the Vienna follow-up conference of the Conference on Security and Cooperation in Europe (CSCE) is within reach. Such is the condition for starting the new and, for Europe, immensely important disarmament forum.

In all our future dealings, however, we should not take lightly the voice of caution raised last week by the Supreme Allied Commander John Galvin, warning us of misinterpretations and euphoria. It would, on the other hand, be equally wrong if we took an overly pessimistic stand towards the positive attitude displayed by the Soviet Union. All the more so since during the arms control talks they have come some way to meeting the Western position.

We Germans have also been encouraged to wholeheartedly support the talks in the first meeting of the two Defence Secretaries at the Military Academy in Moscow recently. In this context, I would also like to underline the importance of the European attitude towards COCOM. I do not quite agree with the severity of risks as described by the United States. I think this is proved by the fact that the technological and economic gap separating the East from the West has rather widened ever since we have had more intensive trading.

It should also not be overlooked that the Soviet Union in its open approach to cooperation in the field of technology is making itself in turn quite dependent, and this to a considerable degree. This offers more proof that cooperation in the field of high-tech as well contributes in the end to more stability in the world.

VI. Political Responsibility Means Shaping the Future

Questions of security and defence, up to a balanced disarmament, will continue to be of central importance for the cooperation of the West with the Soviet Union.

On the other hand, it would not be the right approach to wait for a solution to all political problems, including questions of human rights, and only then to initiate concrete steps towards cooperation. Our political responsibility requires that we start shaping the future today.

That is why we have to choose the reverse approach. We must now form the bonds, using existing economic, technological and cultural relations. These bonds are the pragmatic and constructive element of cooperation, together with the lengthy disarmament discussions. This element contributes decisively to the advancement of the right of freedom and prevents a return to the cold war and isolationist policies.

It is in the interest of Europe that the Eastern bloc countries are not isolated from international economic, scientific-technological and cultural relations, but that they have to rely on solid partners and stability in Europe and the rest of the world as well.

It is not up to us, as partners in the West, to help the Soviet Union in a general restructuring of its social system. What we can do, however, is to aid and support this Soviet policy of opening up to the West. We should especially not doubt the good will or the power of the Soviet leaders to enforce this.

The next few years will indeed be very hard for Mr. Gorbachev. He does not necessarily have to convince us in Europe; he must now put more and more pressure on the rigid administrative system, so that his political goals and objectives will penetrate through the bureaucratic structure and reach the actual targets. Europe's approach should consist of small but concrete steps. We should take our chances together, as Europeans, as they are offered to us right now, and together we should carefully construct the "European House" which will guarantee a Europe in peace for our children.

Chapter 2

Europe et l'Union Sovietique: Developpements Recents et leur Influence Possible sur les Relations Entre l'URSS et l'Europe Intégrée

Keynote Speech by Leo Tindemans

Monsieur le Président, Mesdames, Messieurs,

Personne ne conteste plus le fait que la Communauté Européenne soit devenue une réalité à la fois économique et politique face au reste du monde. Souvent, l'on entend encore formuler le reproche implicite que les pays tiers croient davantage en la force de la Communauté Européenne que les pays membres eux-mêmes.

Nous connaissons tous les différentes phases de développement qui, depuis les années 50, ont amené la Communauté Européenne à constituer le puissant bloc économique et commercial que nous connaissons.

La coopération politique, née timidement il y a à peine 18 ans, a connu un développement qui, même sur une base purement intergouvernementale, a fait entendre la voix de l'Europe à travers le monde. Le fait que la coopération politique ait reçu à présent une base juridique internationale, par son intégration dans le traité de Rome (via l'Acte Unique Européen), contribuera à ce que la Communauté dans son ensemble puisse s'exprimer toujours davantage, pour aboutir finalement à l'objectif ultime que, depuis 1969, l'on appelle "l'Union Européenne".

Il n'est pas nécessaire de rappeler qu'au début de l'année 1976, à la demande de mes collègues du Conseil Européen, j'ai essayé, dans mon rapport sur l'Union Européenne, de donner à cet objectif un contenu réel qui est encore en grande partie d'actualité aujourd'hui.

Le CEPS me donne aujourd'hui l'occasion de parler de l'avenir des relations entre l'Europe des 12 et l'Union Soviétique.

Vous savez tous que la Communauté Européenne est arrivée à un accord avec le COMECON, qui préparait le terrain à une reconnaissance immédiate de la Communauté par les différents membres du Pacte de Varsovie et au commencement des relations diplomatiques.

La reconnaissance par l'URSS et ses alliés européens de la Communauté en tant qu'entité constitue un tournant attendu depuis plus de vingt ans dans les relations intra-européennes. Puisque les relations sont appelées à se développer sur le plan économique entre l'URSS et la Communauté, il est inévitable que ces relations se développent également sur le plan politique, ce qui exige de la part des états membres de la CEE un effort accru de coopération et d'intégration de leurs politiques vis-à-vis de l'URSS.

C'est dans ce contexte que j'avais jugé utile de donner une nouvelle impulsion à la politique des Douze - dans sa globalité - à l'égard des pays de l'Est et donc aussi de l'Union Soviétique. L'idée s'imposait d'autant plus à moi que, surtout sous l'impulsion du Secrétaire Général Gorbatchev, un mouvement s'était dessiné en Union Soviétique auquel les Douze ne pouvaient à mon avis assister passivement. Je n'ai pas l'intention de m'étendre sur les perspectives de ce qu'on a appelé entretemps l'exercice Ioannina, mais j'ai pensé que ceci devait être cité dans cette courte allocution au sujet de l'avenir des relations euro-soviétiques. Quel est cet avenir des relations euro-soviétiques, comment se profile-t-il? Certes il est toujours hasardeux de prévoir, mais il me semble possible de situer le contexte dans lequel j'envisage ces relations entre l'Europe des 12, demain l'Union Européenne, et l'URSS.

Tout d'abord, il paraît évident qu'il ne s'agira pas seulement d'un contexte régional. Nous vivons à l'âge que l'on a appelé planétaire et il est naturel pour la Communauté de se préoccuper de toutes les grandes questions d'importance internationale, de se situer à leur égard, bref, de se profiler et de s'affirmer sur la scène internationale. Le dialogue entre la Communauté et l'URSS portera naturellement sur un large éventail de questions. Leurs relations seront susceptibles d'être influencées par les actions des uns et des autres en Europe et dans le monde.

En bref, les relations ne pourront plus être purement bilatérales. L'interdépendance des états et des régions du monde constitue une évidence croissante. Toute relation bilatérale comporte une dimension globale plus ou moins explicite. La manière dont on se situe l'un par rapport à l'autre est influencée par la manière dont chacun se situe dans l'ordre international, des grandes options qu'il y a prises. La Communauté devrait assumer davantage de responsabilités dans la promotion d'un ordre international plus satisfaisant à ses yeux.

Il est naturel qu'elle soit proche de ceux qui, en Europe ou ailleurs dans le monde, partageront à cet égard les mêmes convictions qu'elle.

L'Europe des 12 appartient au monde occidental. La division de la planète en plusieurs mondes distincts, dont l'Est et l'Ouest constituent les pôles opposés, traverse le continent européen.

L'Union Soviétique et l'Europe des 12 sc sont face de part et d'autre de cette division dont le mur de Berlin constitue la section la plus connue et la plus choquante.

La tendance actuelle des dirigeants soviétiques s'éloigne d'une conception expansionniste de l'idéologie. La priorité est donnée à la réforme du système, qui trouvait chez Marx et Lenine sa justification doctrinale, plus qu'à l'exportation de ce système. La politique étrangère pourrait être davantage dissociée des considérations idéologiques. Cette tendance a été bien accueillie à l'Ouest dans la mesure où elle ouvrirait des possibilités de dialogue et de coopération au service de causes qui dépassent les intérêts exclusifs de l'un et l'autre camp. Dans la mesure où la démarche idéologique peut être vue comme une tentative d'ériger des principes suprêmes au-dessus du droit, qui se trouve en quelque sorte relativisé, une désidéologisation de la politique extérieure crée des conditions favorables au progrès du consensus sur le plan international, entre pays à régimes politiques différents.

La question fondamentale reste: quel est l'ordre international souhaitable, quelles sont les chances d'accord à ce sujet?

La question n'a pas qu'un intérêt philosophique. Si l'on peut effectivement envisager un monde fait de zones d'influence quasi exclusives protégées par les dispositifs militaires et des "no man's land" plus ou moins vastes, on peut aussi envisager une situation où les contradictions entre les puissances rivales s'atténuent et où la recherche du consensus se substitue, fût-ce partiellement, à la recherche systématique d'avantages militaires ou idéologiques, à la rivalité stratégique mondiale. L'idée d'un ordre international sert à rationaliser la recherche du consensus destiné à atténuer la rivalité stratégique ou à mieux la gérer, avec moins de risques pour la paix.

Comme nous sommes dans le domaine politique, aucune vision de l'ordre international ne peut être considérée séparément des intérêts de celui qui la promet. Il n'en demeure pas moins que la recherche d'un ordre international plus satisfaisant reste au centre des débats internationaux de l'ère contemporaine et reflètent une préoccupation aussi vieille que la vie internationale: quelles sont les normes que l'on peut s'attendre à voir respectées par d'autres états?

16

L'amélioration des relations entre l'Est et l'Ouest, donc entre l'URSS et l'Europe des 12, aura des chances de se poursuivre, si la confiance peut progresser dans le respect des principes les plus fondamentaux du droit international, à savoir la Charte des Nations Unies. On sait à cet égard l'influence qu'à une époque récente l'intervention soviétique en Afghanistan a exercé sur la détente, sur le consensus apparent qui régnait à l'époque sur l'ordre international.

La question de sécurité fait aussi partie de celle de l'ordre international et ne peut être considérée à part. Je ne confonds pas l'ordre international souhaitable avec un idéal, qu'il me paraît imprudent d'espérer atteindre dans un avenir prévisible, à savoir que le respect du droit international soit assuré par un organe supranational, ou que la confiance dans le respect du droit soit à ce point assurée qu'on puisse se passer de prendre beaucoup de précautions sur le plan de la défense. Ces objectifs à long terme, je ne crains pas de les appeler utopie, non pour les discréditer mais pour les reconnaître pour ce qu'ils sont avec leur force positive. Ils donnent un sens aux efforts qui tendent à établir, pas à pas, un ordre international qui se rapproche autant que possible de l'idéal que j'ai évoqué. Ceci n'empêche pas les états qui peuvent aller plus loin ensemble de créer des espaces définis par des normes communes de respect, notamment des droits de l'homme et des libertés fondamentales: le Conseil de l'Europe en est le meilleur exemple, unique à ce jour sur la planète. Tous les membres de la Communauté Européenne en font partie et reconnaissent la juridiction de la Cour de Strasbourg. Le Conseil de l'Europe est fondé sur l'indivisibilité du droit international, le respect par les états des droits des personnes soumises à leur contrôle étant, à juste titre, considéré comme une assurance supplémentaire du respect des droits fondamentaux des autres états, tels qu'ils sont repris dans la Charte des Nations Unies.

L'Acte d'Helsinki a constitué pour l'ensemble du Continent européen une étape dont l'importance ne peut être sous-estimée. Il a manifesté de la manière la plus solennelle possible la voionté de surmonter la division du continent, en précisant et développant quelques principes fondamentaux du droit international, qui ont été regroupés dans un chapitre intitulé "principes régissant les rapports entre les états". Ces principes, dont les termes ont été agréés, font référence explicite à la Charte des Nations Unies, à la Déclaration Universelle des Droits de l'Homme et aux Pactes Internationaux sur les Droits de l'Homme. Ils précisent à mon avis l'ordre juridique tel qu'il devrait être respecté en Europe.

Ce qu'on appelle le processus d'Helsinki a pour but essentiel de développer des standards communs de respect de principes de droit, dont les termes ont été agréés. Les progrès effectifs que ce processus a pour but de stimuler et d'encourager réduisent la division du continent et nous rapprochent d'une unité véritable qui soit autre chose qu'une vision géographique.

La question juridique qui se situe au coeur du processus d'Helsinki ne peut être entièrement isolée, même si elle s'en distingue, de ce qui fait la vie des relations internationales dans ses différents aspects.

Tout ce qui développe les contacts humains directs entre les habitants de ce continent mérite d'être favorisé: le commerce, les échanges culturels, la circulation des hommes, des idées et des informations.

En ce qui concerne le commerce, la force motrice est de notre côté le secteur privé. Dans quelle mesure perçoit-il dans les réformes économiques qui sont appliquées à l'Est des chances accrues? Le développement des investissements favorise le développement du commerce mais les investissements ont, pour se développer, besoin d'un climat de confiance, du sentiment de la durabilité des conditions favorables qui sont consenties à un moment donné. La croissance future des économies de l'Est peuvent-elles être assurées uniquement par les secteurs étatisés nationaux et les investissements étrangers? Je pense qu'une libéralisation plus poussée des systèmes économiques à l'Est élargirait encore davantage les possibilités de coopération et la confiance dans l'avenir.

C'est à cette tâche que les Douze devraient aussi consacrer leurs efforts dans le cadre des négociations avec l'Est.

En ce qui concerne la culture et l'information, des signes encourageants de libéralisation sont apparus en URSS. Les parentés culturelles qui existaient dans le passé sur un continent qui a pu se prévaloir d'une certaine unité de civilisation n'ont pas disparu. Elles ont même étonnamment résisté à la séparation idéologique. Tous les gouvernements d'Europe devraient avoir à coeur de permettre que les peuples puissent renouer davantage les liens, parfois très anciens, qui avaient été compromis par la séparation idéologique et restaurer ainsi en Europe les conditions d'échanges culturels et intellectuels qui redonneraient à notre continent tout entier sa vocation de creuset de la civilisation.

Dans le domaine de la sécurité, la question du maintien de la paix, de la nonguerre, est évidemment essentielle à la survie même du continent, gravement éprouvé par la guerre à deux reprises pendant ce siècle. Depuis plus de quarante ans, en dépit des antagonismes, le continent n'a pas connu de conflagration générale, même s'il a connu des interventions militaires ou des menaces d'intervention. Il est impératif de chercher à dépasser cet état d'absence de guerre. "Paix impossible, guerre improbable" disait Raymond Aron. L'espoir reste vivant cependant qu'une paix véritable soit possible en Europe. Il inspire nombre de démarches, et justifie une politique d'ouverture et de dialogue à l'égard de l'URSS qui devrait d'autant plus être préservée à l'avenir que l'URSS manifeste les mêmes dispositions à notre égard.

Tout en faisant preuve de sens des responsabilités pour préserver les conditions élémentaires de la paix, il faudra maintenir une combinaison adéquate de politique militaire et d'ouverture à la négociation de mesures de désarmement propres à renforcer la sécurité de tous. Des chances se précisent de parvenir à l'élimination globale et contrôlée des armes chimiques, qui comporterait des mesures de vérification propres à crécr et à sauvegarder la confiance dans l'absence effective de production de ces armes. Nous pourrions parvenir très bientôt à un accord sur une négociation tendant à éliminer les disparités en matière d'armement classique. Je veux croire que la possibilité de parvenir à un accord éliminant les disparités en matière de forces nucléaires à courte portée se précisera. Si l'on y ajoute les négociations sur la réduction des armes stratégiques, on voit que l'agenda des négociations en matière de désarmement est bien fourni. La possibilité pour l'Alliance Atlantique et le Pacte de Varsovie d'assurer leur sécurité par une combinaison de moyens propres et de mesures contractuelles existe. Le succès d'une négociation n'est jamais garanti cependant et il faut garder une vision claire des objectifs, ne pas préjuger de ce qui n'est pas encore acquis.

Les efforts de désarmement doivent être poursuivis avec lucidité et détermination. La Communauté Européenne (les 12) pourrait avoir un rôle spécifique plus important à jouer en ce domaine si elle était dotée de compétences plus larges en matière de sécurité, ce qui n'est réalisable que progressivement en raison des réticences sensibles de la part de certains à l'intérieur de la Communauté. La presque totalité des membres de la Communauté sont membres de l'Alliance Atlantique; neuf d'entre eux sont membres de l'Union de l'Europe Occidentale à part entière.

L'Union Européenne, l'idéal vers lequel nous tendons, devrait être dotée d'une dimension crédible sur le plan de la sécurité. Un dialogue opérationnel en matière de désarmement doit en effet pouvoir être conduit à partir de positions communes définies au préalable, dans le but de parvenir à des compromis satisfaisants. Mais je reste convaincu que des relations tout à fait nouvelles dans ce domaine, avec l'Union Soviétique, devraient être conclues par l'Europe, les Etats-Unis et l'URSS; l'accord des trois s'avèrera de plus en plus indispensable.

Pour ma part, je n'envisage pas l'avenir des 12 - dans le domaine de la sécurité - autrement que comme étroitement lié à l'Alliance Atlantique, avec les Etats-Unis et le Canada, la Norvège, la Turquie et l'Islande. Ce système de

sécurité collective, soudé par l'adhésion aux mêmes valeurs de démocratie et de liberté, a bien servi la cause de la paix jusqu'à présent, la sécurité de l'Europe Occidentale et celle du monde.

Les transactions actuelles ou futures avec l'URSS en matière de sécurité et de désarmement dans la zone couverte par l'Alliance Atlantique ne pourraient dès lors être conduites de notre côté, le moment venu, que suivant le principe de la solidarité alliée.

Je pense que l'Europe des 12 a des raisons de se montrer encourageante à l'égard d'une politique étrangère qui nous ouvre les perspectives que j'ai évoquées. Elle a des raisons aussi de rester à la fois vigilante et exigeante en ce qui concerne la matérialisation des promesses qu'elle croit pouvoir discerner dans l'évolution actuelle.

Je pense qu'une politique étrangère responsable doit être marquée à la fois par le discernement à l'égard des chances à saisir et par la sobriété dans les prévisions. Les conditions réelles qui justifient le sentiment d'insécurité de l'Europe Occidentale pourraient se modifier positivement dans la décennie à venir. Dans cette décennie, le processus d'intégration de la Communauté devra s'approfondir, et des progrès significatifs vers l'Union Européenne seront indispensables. Il serait inconcevable qu'un ensemble politique de cette dimension n'ait pas de politique de sécurité extérieure, au sens plein du mot. Comme tout autre - cela va de soi - il a le droit de se préoccuper de la défense de l'intégrité de son territoire et des moyens de prémunir son indépendance politique.

Je compte sur des mesures réelles de désarmement; sur le développement accru des contacts humains, des échanges commerciaux, culturels et intellectuels; sur les progrès sur le plan du respect des droits de l'homme, afin de nous rapprocher sur le continent européen d'une situation de meilleure confiance dans le respect effectif des normes fondamentales du droit contenues dans la Charte. Plutôt qu'une architecture, je souhaite pour l'avenir de notre continent une évolution progressive, vers un ordre pacifique juste et durable, où les effets des divisions héritées du passé pourraient s'estomper graduellement. Les relations de l'Europe des 12 et de l'URSS se développent harmonieusement dans ce contexte de progrès vers des objectifs qui ont déjà été identifiés en commun, dans l'Acte Final d'Helsinki. Je vois venir le moment où l'URSS, dans ses contacts avec la CEE, demandera des contacts politiques, comme la Communauté a eu avec, par exemple, le Japon ou la Chine.

Je ne pense pas avoir épuisé mon sujet. Les relations entre l'Europe des 12 et le plus grand état du continent seront sans aucun doute l'objet de commentaires pertinents et d'analyses utiles lors de ce colloque. Je voulais pour ma

20 Tindemans

part me borner à indiquer quelques perspectives d'avenir, à signaler les indices qui autorisent l'optimisme sur l'avenir de ces relations, dans le contexte réel où elles auront à se développer.

Chapter 3

Europe, the Soviet Union and Change

Keynote Speech by Sergei A. Karaganov

Something is happening in Europe. The continent, where change had been very slow for so many years - apart from short periods of crisis or wars - seems now to be on the verge of rapid development, and it looks that change is almost inevitable. The question is not whether we can contain this change but rather whether we can direct the change or whether the change will direct us. My country is obviously changing - a subject to which we shall return later. Change obviously is occurring in Western Europe, as it recovers from the self-inflicted wound of Euro-pessimism and speaks with a more self-assured and confident voice than before. Rapid, although different change is also going on in East-East and West-West relations.

And above all, it seems to me that history is giving us an almost unprecedented set of pre-conditions or factors which suggest that it is possible to start a process of gradual amelioration of the status quo, respecting at each stage the requisites of political and military stability and even perhaps in the long run to overcome the status quo which we have inherited from the war or rather from the Cold War.

Our leader, Mikhail Gorbachev, in his book *Perestroika and New Thinking*, has named some of these more general pre-conditions. These include a shared set of historical memories among all Europeans; a mutual understanding between our nations which is much better than anywhere else in the world; a system of bilateral and multilateral talks, consultations, treaties and above all the Helsinki process. We are now glad to add to this list the new COMECON-EC ties and the enormous economic, scientific and moral potential of Europe. Europe is of course a cultural and historical entity united by common heritage.

In addition to this not insubstantial list, one could add several other specific factors, in analyzing the present-day situation. From my point of view, it is increasingly apparent that Europe has been living for already quite a few years under circumstances in which the Cold War has largely exhausted itself. The

states of the East and the West have realized most of the goals they had set for themselves in the Cold War, or have dropped or rejected those which proved to be unattainable.

In my view as a historian, the conservatives in West Europe and the US participated in the Cold War and used the Cold War mainly as a means to curtail the post-war "wave of the left" and to preclude the unification of leftist forces in the East and West. The strategy of containment was directed both against leftist forces in Western Europe and against the spread of political influence of the Soviet Union. The Soviet "military threat" at that time was clearly overblown. By 1948 after demobilization, we did not have any militarily meaningful army and were unable to attack even if we wanted to. But nobody even wanted to.

The objective of dividing the forces on the left was reached. The influence of the left in the West was curtailed. Today, hardly anyone in the West fears a serious socio-political challenge from within.

In addition to these aims, ultra-conservatives in Washington and some forces in West European countries, especially in the Federal Republic of Germany, were supporting the policies of rollback. One could question with some justification whether these Western politicians, when calling for liberation and rollback, were bluffing. Nevertheless, it was the official policy, which received support from many groups and was a matter of concern for the East. From the late 1950s to the beginning of the 1960s, the supporters of rollback began to understand the futility of their hopes, and their ranks started to shrink. The policies began to change from ones characterized by total confrontation and pressure towards more flexibility and appreciation of reality. The spheres of cooperation started to swell.

By legitimizing the territorial-political post-war status quo, the Helsinki agreement of 1975 signalled final defeat of the rollback advocates. It meant also that the Soviet Union and its allies reached the goals that they were aiming at during the Cold War, i.e. the repeal of rollback and consolidation of the positions of socialism in the countries of Eastern Europe. So, it seems today that both sides have won the Cold War; both sides have reached or have had to reject their goals. At the same time, of course, both sides have lost the Cold War in a sense that they didn't get the real peace: a European political order based on friendly co-habitation of all European states without the threat of war or the necessity to support enormous military machines.

By now the social and political differences, which were once the main reasons behind military confrontation in Europe, have been softened, eroded or even disappeared. Some of the ideological differences are, of course, still with us and will continue to be, but they are in a different league. The system of military-bloc confrontation has taken on a life of its own, becoming the main source of mistrust and fear between East and West. This military confrontation, reaching almost to the level of pre-war readiness, is out of proportion with the magnitude of social, political and inter-state differences existing between the countries in Europe. There are no differences or clashes of interest between East and West today which are sufficiently large to lead to deliberate war. It is clear that neither East nor West wants to use force nor believes that anything meaningful in Europe can be achieved by the use of force or by threats of force.

At the same time, we are keeping our military machines at a state of readiness which is almost pre-war - a clearly obsolete requirement which is increasingly evident to the people in Europe, East and West. This growing realization is causing an erosion of public support for military expenditures and certain basic operational concepts behind those expenditures.

We are also witnessing the coming of age, in a political sense, of a new generation in both Europe and the United States. Some in the West view this development with concern. I look at it with hope. The new generation is free from the traumatic experiences of the 1940s and 1950s. Its members fear less and they hate less. They do not share the allegiances of their fathers' generation nor accept the political necessity of a militarily-divided Europe - a situation which was clearly inherited and not of their making.

Democratization of security politics is a growing phenomenon in all countries, East and West. Defence policies are ceasing to be the exclusive domain of clites, as public discussion on military matters becomes increasingly commonplace. And, of course, that discussion - both in the East and West - restricts the freedom of vested interests to maintain the status quo, or even, in some cases, to accelerate the arms race.

I see another pre-condition in the fact that the Soviet Union has, since the early 1980s, overcome the disparities between its capabilities and those of the United States and NATO in the area of strategic and theatre level nuclear weapons.

From my point of view, this means that my country has reached a level of security never before enjoyed in its history. And in the absence of the need to compensate for nuclear superiority of the West with conventional forces, the USSR has much more freedom of manocuvre in the field of arms reductions.

Although we have had this freedom of manoeuvre for quite a few years, the opportunity at Vienna at what is called the MBFR (Mutual and Balanced Force Reduction) talks was lost. But I believe that there now exists in my country a political will not to give the other side or any side the means to drag us again into endless and fruitless negotiations. We shall push for real and deep radical cuts.

The elimination of nuclear superiority of NATO has almost neutralized the possibility that NATO will rationally use nuclear weapons first. This situation undermines what is left of the credibility of the "first-use" strategy. That doesn't mean that the threat of nuclear war has been eliminated: Operational plans are still intact so in case of a crisis, nuclear war could be unleashed by chance or by miscalculation.

I cannot see how this credibility could be restored by the so-called "moder-nization". With it one could get some additional but very limited nuclear options, but at a great price in terms of military stability and politically. Or, indeed perhaps these new plans are not actually about modernization? A more suspicious person might believe that these plans are aimed at a replay of 1979-1983 crisis which led to a stagnation of East-West relations for quite a few years.

The fact that the military basis of the present system is eroding opens up a new additional possibility: to repair it by disarmament. I think we should ensure that this possibility is realized. The Soviet Union is willing to be forthcoming, but not, of course, at the expense of its own and its allies' security.

In addition it seems to me that one can see a common and growing disillusionment among the countries of Europe and in the United States in the use of force in the developing world. An attentive observer could also find increasing evidence of an understanding within political circles of many countries that the accumulation of military might not only does not add to the influence of a state but, rather becomes counter-productive. It often leads, in fact, to a reduction of political influence. This is especially clear in Europe. Further investment in military confrontation in Europe would not bring any political or security dividends as it might have 20 or 30 years ago. Nothing can be achieved today by confrontation. The game is not zero sum minus, but sum game for both sides.

We are also witnessing a unique concurrence of economic interests in both the East and the West. We, in my country, badly need funds, talents, and people for restructuring and modernizing the economy - and for its humanization, that is, adjusting the economy so that it meets human needs. This humanization is the basic aim of *perestroika*, a very long-term project - indeed, requiring

dozens of years. The economic problems of Western Europe and the United States are, of course, of a different character and a different magnitude. But they are real, as graphically illustrated by the fact that almost nobody wants to increase military spending.

Another pre-condition is the growing understanding among many strata of the population that the real threat to security, especially in Europe, is not a military one and even could not be effectively met by military or technical means. The real challenges in an increasingly interdependent world are economic, ecological and demographic in nature. Money spent on things military obviously cannot then be spent on the real challenges.

I am now coming to the subject which is of course most dear to the political people of Brussels: 1992.

As is the case with most people I know, I don't believe that it will come in 1993 or 1994. But it will come. And it will increase the welfare, technical capability and economic influence of the countries of Western Europe; but it can also open up new possibilities for East-West relations.

I am not sure whether a Europe of 12 will go very far, very fast in attempting to forge a common line on political and security matters. "Common economic space" will create only a few very general conditions for that. What I am sure about, however, is the fact that Western Europe has already become more self-confident, more assertive, and more forthcoming, simply out of the expectation that it will become stronger. As we learned in the late 1970s and early 1980s, Europe is not a particularly forthcoming partner in periods of crisis.

I believe that in terms of security interests, East and West European countries have much in common and, of course, after 1992, Western Europe will become an even more interesting economic partner for its socialist neighbours. I personally believe that after 1992, Western Europe will acquire a capacity to fulfill most of the basic external economic needs of my country. After 1992, Western Europe could also serve as a model for future pan-European economic unification. We will exploit your own experience.

And now the last but by no means the least important pre-condition for positive change: those things happening in my country. Movement toward democratization and removal of the remaining vestiges of Stalinism are creating an especially favourable climate for change in all spheres of relations between the East and West. The ideological animosities and fears are being eroded. *Perestroika* has already changed much of how we think about the outside world, the latest example being Soviet rejection of the view that peaceful co-existence

represents a special form of class struggle. One hopes to see a similar process of debunking certain myths and obsolete notions on the part of the West.

To be fair, one must acknowledge that this process has started, but I think that my Western colleagues are too timid. Of course, even those who wish us well are not sure whether *perestroika* will survive. But I can remind you that two years ago there was a lot of talk about *perestroika* and Gorbachev having only a 70% chance of surviving over the next two to three years. Now the forces of *perestroika* are in a much stronger position. One has to understand that the longer *perestroika* stays, the deeper its roots grow.

We have changed not only the way we think but the way we act. Withdrawal from Afghanistan seemed unbelievable only two years ago. Now it is a reality. Three years ago virtually no one would have believed that on-site inspection would be acceptable. Procedures are now in place. Above all, the reality is the INF Treaty which proved that it is possible through disarmament to change military-strategic and political relations between the East and West.

All in all, it seems to me that one could come to the conclusion that military and political confrontation in Europe has reached a certain threshold. In Europe, East-West relations have accumulated political, military, economic, psychological and other pre-conditions amounting almost to a critical mass that will make it possible to start the process of eliminating altogether the confrontation.

Having said that, I want to stress that one cannot underestimate the difficulties and obstacles in the way to positive change. These include traditional thinking, inertia of military machines, inertia of political interests, careers vested in the old system, and the accumulated level of mistrust which is fading away very slowly due to the fact that many people do not want it to fade away at all. The major obstacles to rapprochement are the difficulties, especially in the economic field, experienced by the USSR and some of our allies. It would have been much better if we had introduced *perestroika* 10 or 15 years ago. But history does not offer us the chance to reenact what has already passed.

Among these hindrances is the fear within conservative circles that decreased confrontation will open up possibilities for manoeuvre on the part of smaller countries, and that the capabilities of the larger states to influence their allies will concomitantly be diminished. I do not share this view. A restructuring of relations within the alliances, including our own (which is already going on) would only make them more responsive to the needs of today and tomorrow. This kind of change would ultimately only increase long-term stability.

And now back to 1992. It offers not only promise but potential challenges as well. Many people in the East are fearful that 1992 could strengthen the structural economic divide of Europe, especially taking into consideration the now very limited possibilities of East European countries to penetrate into the market and to adjust to the new conditions. It would indeed be a tragedy if 1992 cemented the economic and possibly even the spiritual base of the military divide of Europe. I do not suspect ill will on the part of the European Community, but this scenario could materialize by default, if not compensated for and balanced by corrective measures, first of all in the military, political, cultural and human fields, but also in the economic field. I believe that people who are thinking about 1992 here have an obligation to think about these other measures too. Now is the time to take down walls rather than reinforce them.

The list of hindrances and difficulties could be made even longer, but in my view they do not alter the conclusion that those factors calling for positive change and making the change possible outweigh the might of the negative factors.

What is the goal of this change? Understandably a more peaceful security order in Europe, or, as some call it, a "Common European Home" or "European House" - meaning a future European security order which is optimal both for the East and the West and for Europeans as a whole.

What is the conceptual key to this new political order? In my view it could be the demilitarization and humanization of inter-European politics, processes that need parallel and interdependent action in all spheres of interaction between peoples and nations of the continent. In the purely political sphere, it could mean strengthening and redirecting the CSCE (Conference on Security and Cooperation in Europe) process from being an instrument merely intended to improve upon the status quo to one of gradually changing and ultimately overcoming this status quo. The Helsinki Act should of course be retained as a code of conduct, fully implemented in all its baskets.

In the political arena, establishment of this new security order could take the form of a first step toward eliminating the military-bloc divide of the continent with due attention paid to ensuring political-military stability at each and every level. Several paths could be pursued simultaneously. The two blocs could increasingly become political entities and less military ones, to the extent that integrated military structures could be dismantled. Above and between the blocs a web of political contacts, and institutions of a pan-European character could be created, which would eventually supersede the blocs and lessen their importance and utility.

The Warsaw Treaty Organization and NATO could in the end be dismantled altogether or remain for decades - but not as military blocs, but rather as political alliances of the old/new type. Indeed, it is a strange twist of history that under the peaceful conditions of today we have two military blocs with integrated military machines ready for fight. NATO, in fact, was originally created as a political organization and operated as such for a year; it was after the Korean War that NATO developed into a military alliance.

I think that the two blocs will remain intact for many years to come, because they reflect political, spiritual and economic allegiances and geographical realities. But if they became part of a different and a less militarized system of European security, they would probably cease to reinforce the divide in the continent.

In the process of gradually building-up a new security system, we should reduce the level of military confrontation. Radical reductions in conventional forces and armaments are high on the European disarmament agenda. There is no need to recite the proposals put forward by the East, but to note that these are not the last.

My goal for the future, say, by the year 2000, is to see the reduction of military machines by one-half. The Warsaw declaration of the WTO (Warsaw Treaty Organization) proposes something approximately like that goal in the first two stages of the reductions. The result would be to create a structural incapability of forces on both sides to attack.

Such a regime for conventional forces would open up the possibilities for cuts of nuclear arms located in Europe and indeed could hardly operate without such cuts. Radical transformation of the military and political situation in Europe would be such that nuclear weapons in Europe could be brought to a minimum level. Ultimately, in an environment of mutual trust, political cooperation and guaranteed security, nuclear weapons would become obsolete.

Such reduction of levels in military confrontation would, undoubtedly, drastically transform not only military-political relations, but also the political situation in Europe. Today people on both sides of the continent have to look at each other "through the sights of the guns". Such a view distorts the picture one has of the other people, the other country and the other political system. A neighbour looks not like a partner but rather like an enemy; differences look theatening and more like contradictions; competition looks like rivalry; any increase in influence or prestige, even in the cultural or spiritual sphere, is seen as a threat to security. For many of those who have developed this "gun sight" view, a lessening of tensions looks like a security threat

because of the fear that it would lead to a weakening of the cohesion of the alliances.

Liberating both sides from the necessity to look at each other as a potential enemy could qualitatively change the perceptions of political and ideological differences existing between socialist East and capitalist West in Europe. These differences will of course remain, but they will be of another character. The demilitarization of European politics will open up avenues for peaceful interaction in all spheres. The movement towards a united Europe in economic, cultural, spiritual, and human terms would accelerate dramatically. The competition between systems could become even more intense, but in the absence of the military factor I believe this kind of competition would have beneficial effects on both systems.

This new security system, the "European Home", we are thinking about, has nothing to do, of course, with an isolated egocentric Europe. On the contrary. By freeing all European nations - East and West, the United States and Canada - from a vastly expensive security system, they will have many times more resources to positively participate in world affairs.

One, of course, has to address the question of the two German states in any future security system. In my country as almost everywhere else, unification is not considered a realistic option for the foreseeable future. First of all, mere discussion of unification evokes distrust and fear and threatens to destabilize not only East-West but even West-West relations to a large extent. But the reduction of military confrontation and the opening up of possibilities for travel and communication between people would give both German states a possibility to live together more closely. These developments would not do away with the problem but they would help heal it.

And now I will address the much debated question of the US and Canadian participation in the "Common European House" in the future security system in Europe.

With all due respect to those participating in these debates, I think that these debates are irrelevant. The United States is a part of Europe - politically, culturally, historically, and morally. Economically speaking, it is more a part of Europe than many, or even most European states. It is part of the CSCE process, and nobody wants to destabilize this process. The US is a part of Europe in security terms. The present day weaponry and security interdependence have narrowed the Atlantic Ocean to the size of the English Channel. At the beginning of the century, some people on the British Islands spoke as if they were not Europeans; history has shown that they are. Similarly,

30

it is not possible to separate Europe from America in security terms, regardless of the dreams of some authors of the Discriminate Deterrence report.

Beyond all that, however, I believe that the US presence in the present and future security system is necessary. First of all, if the United States were to withdraw, which is completely out of the question, that could lead to destabilization among the other NATO allies. If this psychological pillar were to be pulled away, it could bring about a growth of fears in Western Europe, because it is accustomed to depending on American support both psychologically and militarily. I would also like to have the United States in Europe and in the European security system in order to preserve America's stake in European security. If the US does not have such a stake, Washington could become less cautious in times of a crisis. Furthermore, after studying American military doctrine for many years, I have developed a healthy, or what some would call an unhealthy, suspicious nature. This leads me to want to preserve the calming European influence on US foreign and military policies.

In the economic field, the situation is at one and the same time clear, but rather difficult. We have secluded ourselves for too many years from the international market, and we now have to open up. We have the determination but very few means. We have to do a lot ourselves; nobody can help us. That means restructuring the economy, adjusting our economy to the standards of the world market and above all - to the market of the Europe of 12. The Community is not at present that interested in economic cooperation with us because we are rather weak economically. But one has to understand that with perestroika, we will probably become one of the fastest growing and interesting markets - not very soon, but soon enough. And I think that it's high time for Europeans and Americans to think of opening up real possibilities for economic exchange. That means eliminating the discriminatory controls which do nothing to bolster security, but only hinder the rapprochement between East and West in the economic field.

One should not underestimate the necessity to radically widen human and cultural contacts between Eastern and Western Europe. We have already curtailed or lifted many of the limitations in this field. Now people travel much more freely, and I think that we shall continue in that direction. Cultural interaction between East and West in Europe is clearly insufficient. All European countries should devote more resources to facilitating cultural exchanges. But one has to understand that movement towards a united Europe in human terms is limited by realities - financial and economic. Finally, however, the main factor which limits human contact is the system of military division, hindering normal interaction between countries.

Lowering the level of military confrontation and widening of economic, cultural, human contacts should go in a parallel mode in all fields. One cannot go very far in one field, if the situation is not changing in another. We have to be realistic: even if both sides wanted a breakthrough in one single sphere, it would not happen, or could prove to be destabilizing.

I am coming to the conclusion of my talk. Of course, my ideas are incomplete and could prove to be unrealistic. Some of them are utopian. In any event, I am not sure whether the main draft for the future political order of Europe should come from the Soviet Union. It should be drafted, redrafted and then reviewed collectively. Only after these conditions had been met, could we come to a fruitful conclusion and create this draft for the new House of Europe.

We Europeans are heirs to a great tradition of people who dreamt of a peaceful, united Europe. In 1985, the Pope of Rome commemorating the 1100th anniversary of the death of St. Methodius, one of the fathers of the Cyrillic alphabet (the other one is St. Cyril/Constantine/)issued an encyclic "Apostles of the Slavs". The Pope said that one of the main thrusts of the lives and teachings of these two saints was the idea of a peaceful, united Europe - an integrated Europe - united in its diversity. This idea was taken up by Rousseau, Victor Hugo, Garibaldi and even Briant, and by many of the finest people and best minds of the continent. The Utopias were not implemented, but they survived, most probably because they corresponded to the basic needs and interests of Europeans. A realist would say that we are proud not only of our common heritage of humanism and idealism but also of that of pragmatism. Is it not down-to-earth pragmatism to attempt to implement these idealistic visions? I believe that history will give us the chance to succeed.

Section II

Military and Political Perspectives

Papers Presented at Working Group I

Chapter 4

The Soviet Threat: Comparative Assessments

Phillip A. Karber

One cannot speak today about the Soviet military threat to Europe without first recognizing that at the political level Gorbachev is "for real." He has introduced radical reform into Soviet society. He has called for a major restructuring of the Soviet economy. And, he has pursued meaningful arms control at a level of scope and seriousness never before witnessed in a Soviet leader.

While we may legitimately question how far Gorbachev will go - or be allowed to go - in implementing his bold new designs, a review of what he has already accomplished in the past three years, nevertheless, indicts an entire generation of Western Sovietologists:

- Few predicted that Gorbachev would lead the Soviets to the first public change in their strategic doctrine on how the military and the party relate to each other;
- Few predicted that he would have a very compromising attitude on INF, or that he would take the lead after essentially 15 years of Soviet stalling on MBFR to the point that the Soviets have become more articulate than the West about the rationale for mutual arms control and mutual balance in Central Europe;
- Few predicted that he would be well on his way to meeting the three Chinese demands for rapprochement a backing off of Soviet forces on the Chinese border, a pull-out from Afghanistan, and encouraging Vietnamese withdrawal from Cambodia.

Given just these three examples, who would dare predict that Soviet rhetorical intentions will not be matched over the next three years by real reductions in the military threat to Western Europe?

On the other hand, these reductions in the Soviet conventional military threat have not occurred yet. There is a conventional imbalance in Europe, an imbalance which if placed under the pressure of crisis conditions could produce a very unstable posture vis-à-vis the West's capacity for adequate conventional defence.

Table 1 Gorbachev's Military Inheritance: The Brezhnev Military Build-Up, 1963-1983

	1963	1983		hange 3-1983
Active Military Manpower (1000s)	3,300	4.644	+	1,344
Strategic Offensive Forces ICBMs SLBMs ICBM/SLBM Warheads Long-Range Bombers	90 107 200 190	1,398 969 7,727 145	+ + +	1,308 862 7,527 45
Medium-Range Bombers	0	100	+	100
Strategic Defensive Forces ABM Launchers Interceptor Aircraft SAM Launchers	0 4,500 4,800	32 2,500 9,500	+	32 2,000 4,700
Theatre Nuclear Forces MRBM/IRBM Launchers Other	200 A few	600 8,018	+ +	400 8,000
Land Forces Army/Ground Forces Manpower Army/Ground Forces Divisions Tanks	2,250 140 35,000	2,840 190 50,000	+ + +	590 50 15,000
Amphibious Forces Marine/Naval Inf. Manpower Marine/Naval Inf. Divisions Amphibious Lift	1? 0 0	14 1 28	+ + +	13 1 28
Tactical Air Forces Fighter/Attack Aircraft Medium-Range Bombers	4,000 1,000	4,225 575	++	225 425
Naval Forces Aircraft Carriers Cruisers Destroyers Frigates/Corvettes Attack Submarines Carrier Aircraft Land-Based Bombers	0 23 124 13 404 0 450	5 36 64 176 280 60 450	+ + - + - +	5 13 60 163 124 60
Mobility Forces Airlift Sealift External Forces (Divs. Deployed outside USSR)	1,065 873 26	780 1,664 40	- '+ +	285 791 14

Data adapted from John M. Collins, U.S. Soviet Military Balance 1980-1985.

Source: "Gorbachev and the Changing Soviet Conventional Threat", Phillip A. Karber,
Testimony before Defense Policy Panel of House Armed Services Committee,
July 14, 1988.

Table 2
Comparison of Divisional Weapon Holdings

	Soviet		Soviet US Germany		many	UK	ΝI		Be	
	MRD	Tank	Mech	Armor	PzGr	Pz	Arm	Mech	Arm	Mech
Personnel	12,700	11,500	16.600	16,300	21,000	18.000	11.500	10,000	9,000	7,000
Main Battle Tanks	220	328	290	348	110	308	285/ 228*		193/ 17 4* *	120/
Armored Fight- ing Vehicles	393	150	205	196	372	310	406	398	168	180
Anti-Tank Guns	12	_	-	_	_			-	-	24
ATGMs	132**	** 249***	335	*** 270***	216	180	165	72	54	36
Artillery (> 100mm)	126	126	72	72	79	79	72	54	40	54
Mortars	54	36	66	66	30	18	40	45	24	4 0
MRLs	18	18	9	9	16	16	-	_	_	-
SSMs	4	4	_	_	_	_	-	_	_	_
Anti-Tank Helicopters	6	6	36	36	_	_	18	_	_	_
Air Defense Guns	16	16	24	24	36	36	-	-		_
SAMs	36	36	24	24	_	_		_	****	_

^{*} Either five or four armored battalions per division.

Sources: Conventional Arms Control Options or Why Num is Better than None, Phillip A, Karber, paper prepared for Atlantic Brucke Conference, Berlin, September 18th, 1987.

^{**} Either three or two armored battalions per division.

^{***} Figure includes BMP-mounted ATGMs.

^{****} Figure assumes 200 M-2/M-3 armored fighting vehicles with a TOW launcher per division.

Even if Gorbachev is as reasonable and as internally preoccupied as he appears, no matter how pacific his intentions, he is to a certain extent victimized by the sheer magnitude of the military build-up bequeathed by Brezhnev (see Table 1). The quantitative expansion and qualitative modernization which Gorbachev inherited represent a level of investment which no national leader would be able to divest lightly - in an era when the credibility of nuclear deterrence is declining, many political leaders would be tempted to seek political capital from a large and capable conventional military structure that has already been bought and paid for at no small national sacrifice.

Karber

If in the upcoming conventional arms negotiations in Vienna, the West is to achieve something more than an ephemeral "spirit of détente" or self-induced "confidence-building mood," it is of fundamental importance to understand what is destabilizing about the current military posture and to focus on militarily significant measures for reducing that danger.

The coronation of Gorbachev, his consolidation of political power within the Soviet Union, the manifestation of his apparently earnest efforts to convince the West of the benign nature of Soviet intentions - all combine with the confluence of other events in 1988 to make this a pivotal point in the future of the Western Alliance's hopes for a stable conventional military balance in Central Europe. The negotiated INF Treaty, for good or ill, kicks away NATO's traditional crutch of dependence upon nuclear weapons to compensate for a lack of will to provide a robust conventional defence. Growing preoccupation with budget deficits, economic uncertainty, and industrial protectionism no longer make it possible to merely paper over the problem with promissory notes. The prospect of new negotiations on conventional arms control make it more important than ever to "get it right" this time - we can't afford another 14 years of data debate a la MBFR.

Instead of proposing remedial programmes for our conventional defences, rather than adopting a new spirit of transatlantic partnership in meeting a common peril, in lieu of developing a coherent and militarily significant proposal on conventional arms control, the West is trading decisive action for an introspective and devolutionary debate on methodology, assumptions, and strategic perceptions:

- How should one measure the balance?
- What qualitative factors should be included in a "net assessment?"
- Can the Soviets be confident of victory?

These are important policy questions which deserve thoughtful answers, but

we should not kid ourselves. Given the complexity of modern conventional combined arms combat, the imponderables of the fog of war, and the fact that an opponent's calculus of deterrence can and will change over time or in a crisis, any answer involves a high degree of uncertainty.

The "Balance of Uncertainty" must be tempered by the balance of material reality. "Bean counts," which may or may not accurately portray a given operational balance, are particularly important in an environment of active conventional arms control negotiations because quantities become both the unit of account and the measure of reduction. In order for the West to demand large-scale and asymmetrical conventional force reductions from the Warsaw Pact, we need to calibrate the quantitative disparities and articulate them with confidence and conviction to the other side. In order to maintain public support for tough and prolonged negotiations we need "a major public education programme" on the nature of the conventional imbalance in Central Europe. As Senator Sam Nunn, Chairman of the Senate Armed Services Committee, emphasized in concluding his speech at the 1988 Wehrkunde conference:

We cannot generate the needed public support for a sensible approach to redressing the imbalance without a much better public understanding of these issues.

Western governments know what the "material balance" is. Their respective intelligence agencies know where Soviet and Warsaw Pact forces are located along with the size and modernization level of the combat formations, and each has its favorite list of qualitative indices. They also know the relative strengths and weaknesses of their own forces as well as those of their allies. Given the diversity of Western collection efforts and multiplicity of assessors, one is repeatedly surprised at the consistency and quality of the "all source" bean counts. Within the West, there are inevitable differences of opinion and debates over what should be counted, caveats on interpretation, and internecine battles over coordination - with 95% of the bureaucratic blood spilled on the last 5% of data. But, on the basics of conventional force balance assessment. and within accepted counting conventions, there is widespread agreement. That is, agreement inside and between Western governments. However, outside, in the domain of democratic discourse, where public support of defence budgets, alliance commitments, and conventional arms control options is the ultimate arbiter of political policy, confusion over the conventional balance runs rampant. This confusion can only undermine public confidence - and Western negotiating power.

Western publics have a right to be confused. For decades they have been told that there is a significant military imbalance in conventional forces in Europe,

that the Soviet forward offensive presence is a danger requiring the expenditure of national treasure which peaceful societies would rather allocate to other needs. While these sacrifices have been made, albeit in different ways and with differing levels of commitment, Western military leaders have repeatedly complained that our conventional posture is insufficient to the challenge: that in the event of hostilities the NATO command would, after a short period of conventional combat, still require the first use of nuclear weapons to inhibit aggression that they otherwise could not stop. But the description and evaluation of the conventional imbalance has not been conveyed in terms of consistently derived and comparatively analyzed empirical data. Rather than build a Western consensus on the need for a strengthened conventional defence and a tough stand on conventional force reductions, we offer simplistic "threat" portrayals of gross quantitative statistics which don't convince anyone. Those who hold official statements in high esteem are willing to take their word on authority. Those opinion-makers in academe, the media, and government (particularly European Parliamentarians) who pride themselves on their own intellectual curiosity are increasingly convinced that the numbers game is intended to hide inherent Western strengths merely to play the game of bloated defence budgets.

The default of Western officialdom on this issue has created a cottage industry of academic assessments and given rise to a veritable flood of articles, books, and institutional studies. The latter, in particular, are having a major impact on how the Central Front balance is publicly perceived because the institutions can bring to bear their establishment credibility and a long list of retired general officers and national leaders on their advisory boards. In addition, they can achieve a highly salient impact via press coverage of their reports. Some of the more prominent releases since the fall of 1987 include:

- IISS: The Military Balance 1987/1988
- Western European Union: Threat Assessment
- North Atlantic Assembly Military Committee: Alliance Security: NATO/Warsaw Pact Military Balance
- National Defense Trust: Common Security in Europe
- Scnator Carl Levin: Beyond the Bean Count

No institution in the West, and particularly in Europe, has more credibility than the London-based International Institute for Strategic Studies. Over the last 25 years, its annual publication, *The Military Balance*, has become the worldwide reference bible for conventional force balance analysis. No

unclassified study of the Central Front pretending to measure or assess the European conventional balance has been produced without depending heavily upon *The Military Balance*. The basis of its contribution and credibility has been a country-by-country order of battle roll-up, identifying major units and itemizing national inventories of conventional weaponry. Traditionally, the retired military officers who worked on the national orders of battle appended to the end of each year's volume a commentary discussing operational trends, as well as readiness and reinforcement issues and provided a comparative calculus of the immediately available NATO/Warsaw Pact forces. But, in *The Military Balance*, 1987-1988, this approach changed abruptly. Under new management, the military assessment was replaced by an academic apologia - a methodological tutorial on the complexity of balance assessment. The complexity is apparently so great that this year the publication contained the following statement:

...the IISS has decided not to present any overall judgements of the state of the conventional balance between NATO and the Warsaw Pact.

The exception was a judgement that traditional bean counts, the kind presented in official government sources, the kind that show that the Soviet-led Warsaw Pact has a substantial advantage in conventional forces, are not legitimate.

Static comparisons of like versus like - weighing each side's holdings of comparable weapon systems against the other's - have been widely criticized as irrelevant and potentially misleading. This conclusion is generally valid.

Here, too, the HSS made an exception, publishing a new table of comparative force data...

...designed with conventional arms-control negotiations in mind (since it is in this context that static comparisons of aggregated figures may be of greatest relevance and utility)...

In reviewing the proliferation of public balance assessments, in particular, in the five studies listed above, several common themes emerge:

- First, all of the above reports emphasize that quantitative "bean counts" are both irrelevant and academically disreputable.
- Second, none of these studies lets its apparent confusion over counting rules
 and comparative conventions inhibit it from concluding that the military
 balance in Europe is not as bad for NATO as popularly portrayed because
 numerical statistics show the Warsaw Pact quantitative advantage to be
 substantially less than popularly thought.

- Third, all of the studies proclaim or presume that Western forces have a significant qualitative edge in the technological performance of their fielded conventional weaponry vis-à-vis those of the Warsaw Pact.
- Fourth, none of the studies attempt to relate the "balance" of quantity and quality to the operational context in which the forces would or could be employed. In this sense they reinforce the misleading aspects of the static balance the very ones which they decry.
- Last, but not least, none of the studies relates its current snapshot of the balance, however defined, to developmental trends. In this sense they are historical, conveying none of the real and impending technological and structural changes which have occurred or are in process. This static perspective, the inability or unwillingness to address trends over time, implies a latent stability to the conventional balance because change is not an operative variable.

The purpose of this paper is to add the dimension of time to the discussion of the changing conventional military postures of NATO and the Warsaw Pact in Central Europe. Time is a critical variable in at least three aspects of the current debate. First, trends: the military balance has not, over the last 25 years, remained constant - the quantity and quality of the rival force structures is a continuously changing dynamic. In that sense, in order to think about where the balance will go in the future, one needs a sense of where it has been in the recent past. Second, Technology is itself a rapidly changing phenomenon, and the introduction of new weapons systems can dramatically change both potential military options and the perceived stability of the balance. Third, transition: the forces portrayed in all balance assessments tend to be those in their peacetime stations in a given geographical locale. As long as they stay there the stability of the balance is assured, but the assets of neither side are programmed to fight from their peacetime garrisons. It is their ability to redeploy, mobilize, and reinforce which determines the real dynamic interplay of the military "balance" in Europe.

I. Enduring Myths of an Evolving Balance

Comforting old myths do, indeed, die hard.

Enthoven and Smith, 1968

There is no small irony in the fact that the era of NATO's most significant expansion of conventional forces, when the relative balance of forward-deployed weaponry appeared most stable, was between the late-1950s and

late-1960s when Western strategy (under NATO's MC 14/2 "Sword and Shield" concept) was most dependent upon the early first use, massive employment and deep targeting of nuclear weapons. The early 1960s gave NATO its first glimpse of hope in terms of fielding a realistic conventional defence due to a combination of the build-up of the West German army and the structural streamlining - the "build-down" - by Khrushchev of the Soviet/East European forward forces for what he assumed would be an automatic escalatory environment. Thus while NATO did not change its strategy to "flexible response" until 1967, SACEUR adopted a "forward defence" concept for early and decisive conventional engagement ("the pause") as early as 1963, and NATO's general defence plans and force commitments took on a much more ambitious task - a conventional posture which could hold against initial forward-deployed Soviet and Warsaw Pact forces, an explicit doctrinal goal of conventional deterrence against the options of surprise or short-warning attack.

The analytical basis for NATO's increased conventional optimism grew out of a long series of in-depth and rigorously researched studies performed by the Systems Analysis Office of the US Secretary of Defense between 1961 and 1968. While much of the original material still remains classified, the methodology, logic of argumentation, and summary conclusions on the European conventional balance have long been available in the collective writings of Alain Enthoven and K. Wayne Smith.

It is hard to overstate the significance and influence of this work. It was the first attempt to relate careful "bean counting" to issues of operational art and organizational structure. It has served as the analytical framework for an entire generation of civilian and "outside" assessments of NATO's defensive prospects - still dominating, a quarter-century later, many of the current informed public perceptions of the conventional balance.

This work not only became accepted American policy in the Kennedy and Johnson administrations' pursuit of the "flexible response" strategy and NATO's adoption of it in 1967, but was subsequently incorporated into Kissinger's NSSM-3 of 1969, the 1972 Secretary of Defense planning guidance of Richardson, and the Schlesinger assessment of threats and remedial options presented to NATO in 1973. Nor is it accidental that the early Western MBFR approach was coincident with that of the pioneering Systems Analysis Office - in definition of the "NATO Guidelines Area", in category counting rules of conventional assets, and in preoccupation with ground force manpower as a key index of conventional capability.

The purpose in going back to the original Systems Analysis studies of the 1960s is threefold. First, they provide much of the methodology, explicit assumptions and analytical framework essential to any coherent and credible accounting and comparison of conventional forces in Central Europe. Second, the substantive conclusions which were drawn from these studies provide a useful benchmark to relate conventional trends and force development over the last several decades for both NATO and Warsaw Pact. Third, in attempting to demythologize popular misperceptions of the then extant conventional balance in Central Europe, these pioneering studies of Systems Analysis created a new set of perceptions - some of which were misleading then; some that, while true then, have not kept pace with the evolving conventional balance - all of which deserve a new look.

If some of the cryptic remarks which follow sound critical of the practitioners of early systems analysis, they should not be misconstrued as minimizing both the methodological and substantive debt which is owed to these pioneers of the balance.

Geography and an Accountant's Map of Europe

...in most measures of size, the forces facing each other in central Europe are roughly equal.

If the Warsaw Pact began to move units up to the Iron Curtain, so could NATO.

Enthoven and Smith, 1968

Defence experts point out that what really counts in terms of repelling a Warsaw Pact attack is not the overall balance of forces but the lineup in Europe's so-called central region, which includes East and West Germany and parts of Czechoslovakia and Poland.

Official figures give the East bloc an edge overall, but independent estimates for the crucial central zone reduce that disparity.

Time, 1987

The forces of NATO and the Warsaw Pact deployed in or oriented toward Europe represent a broad array of non-homogeneous assets, formations, and national military structures. These forces vary widely in the quantity and quality of assets, peacetime manning levels, dependence on national mobilization, time/distance proximity to the front, mode of transport, level of training, etc. - not to mention the varying levels of uncertainty with respect to our understanding of the extent and implication of these differences. Thus, in trying to make sense of the conventional balance, the early Systems Analysis studies spent an inordinate effort defining the rules of comparative assessment - designating

the geographic boundaries, explicitly articulating categories of contrasting capability, and always chasing down what appeared to be inconsistencies in data or conclusions. Their first challenge was to get a common and consistent frame of reference for comparing conventional forces, a geographic definition which was and still is both helpful and potentially misleading.

Central Europe continues to represent the heaviest concentration of conventional and nuclear weapons deployed in operational units of any area on earth, It is the only geographic region where the forces of the two superpowers stand face to face across a common border. It is the only area where both sides in a potential conflict not only possess nuclear weapons but have integrated their anticipated use as an explicit element of their military strategy and gone to considerable effort to doctrinally link the fortunes of a conventional campaign to a strategic exchange between the superpowers. Indeed, negotiated reductions in theatre nuclear weapons will not resolve the inherent tensions between conventional defence and nuclear deterrence, but will only exacerbate them. If the region between the Baltic and the Bavarian Alps is the one area where the outbreak of hostilities presages the imminence of World War III, it also represents the location of potentially decisive conventional battle, owing to the proximity in time and space of strategic objectives and the region's political irreplaceability in the alliance systems of both sides. In tacit recognition of its unique status, Central Europe has been the locus of no small arms race - with the quantity of major conventional weapons deployed in the area by both sides increasing 50\%, or by 50,000 systems, in the past two decades.

Thus, for the purposes of this paper, the Central Region is used as the focus of both operational comparison and the statistical accounting of conventional force levels over time. The counting rules for historical trends are the same as those popularized during MBFR - combatant assets in actively manned units of all national forces deployed within the NGA (NATO Guidelines Area): including the formations and territory of the BENELUX, West/East Germany, Poland and Czechoslovakia as well as the deployed US, Soviet, British, French and Canadian contingents. These counting rules exclude unmanned equipment in reserve stocks, maintenance pipeline, POMCUS, or East European mobilization units.

For all its strategic importance and methodological utility as a consistent and relatively transparent pot in which to count the beans, the Central Region and its active peacetime units represent only a fraction of the forces which could take part in a conflict there. Both sides have substantial reserves, pre-stocked equipment, and mobilization units which would increase the available force levels. Likewise, national forces adjacent to the Central Region which could and most probably would participate in a conflict there include units in the

western military districts of the USSR as well as US, British, French and Danish reinforcements. Moreover, with extended mobilization much of the continental based US Army and tactical Air Force could be redeployed to Europe while the Soviets could always commit all or some fraction of their strategic reserve. Tracking the endless variations in mobilization assumptions for all these additional players is beyond the scope of this paper.

Structural Asymmetries in Opposed Force Design

...either...what the Soviets called a "division" was far different from what we called a "division", or that we were making terribly inefficient use of our man-power and equipment, or a combination of these.

Enthoven and Smith, 1968

Within current manpower and budget levels, NATO could and should double its conventional capability through rationalized national division of labor and by restructuring its forces.

Canby, 1986

Although there has been vastly increased attention focused on both the Sovietled Warsaw Pact conventional build-up and NATO's various efforts at conventional enhancement over the last 20 years, nevertheless an examination of the two most frequently used structural indicators of conventional capability - manpower and divisions - reveals that the balance in Central Europe has remained remarkably stable since the mid-60s. Where NATO's manpower has declined imperceptibly and Warsaw Pact troop strength increased by about 20%, this change - the relative difference of 1.2 to 1 - hardly appears significant. While the Eastern bloc has maintained twice the number of divisions, given the mid-60s perception that the strength of a Pact division equalled only half that of a NATO division, this aggregate data belies much of the conventional competition.

Comparative Manpower

...NATO has as many men available as the Pact.

The fact of roughly equal manpower is particularly significant. A soldier, unlike a division, is a relatively equivalent unit, if he is similarly trained and equipped by either NATO or the Pact. Therefore, we are in fact already paying most of the cost of maintaining an equal military capability in NATO in terms of conventional forces.

Enthoven and Smith, 1968

NATO actually has an advantage in numbers of troops in the most important areas of Europe.

Deadline, 1987

The major analytical paradox which drove much of the Systems Analysis critique of Warsaw Pact conventional potential was the apparent discrepancy between the quantity of manpower available to ground force units versus the number of weapons which they fielded. Assuming that all armies were equally efficient in terms of their use of manpower, the mid-60s analyses presumed that the Warsaw Pact's "greater bang for the body" reflected inherent weaknesses in manning, dismounted infantry and sustaining conventional combat power. Although there was some truth in this presumption (and there still is for forward forces prior to mobilization), nonetheless, it was more precocious than prescient in that it ignored several major structural asymmetries between the two sides which inherently favor the Warsaw Pact.

One of the biggest differences is the fact that 46% of all ground force manpower located in the Central Region is from nations outside the area, and each of these stationed forces differs greatly in terms of overhead structure. Indigenous armies (those of the Federal Republic of Germany, Belgium, The Netherlands, the German Democratic Republic, Czechoslovakia, and Poland) must use a considerable proportion of their manpower to run and staff their national ministries of defence as well as to perform functions such as command, training, and maintaining a peacetime support infrastructure. Foreign units deployed in Central Europe are organized either as semi-self contained expeditionary forces (those of the United States and the United Kingdom) or forward extensions of field armics deployed in immediately adjacent areas (those of France and the Soviet Union). In terms of a correlation between manpower and weaponry, the latter forces are the most efficient because their peacetime establishment is outside the immediate counting area but physically proximate and tied with a rail LOC umbilical cord for bulk sustainability. Thus an asymmetry exists between the two blocs in the ratio of combat troops to overhead-support manpower, a difference that inherently favors the Warsaw Pact because the Soviet army, the largest national force in Central Europe in either alliance and representing over half of the Warsaw Pact ground force manpower, fields the highest ratio of combat to overhead personnel.

A second structural asymmetry, reflecting the independent and democratic nature of NATO, is that each of the eight member nations with forces deployed on the Central Front provides an essentially autonomous logistic and supporting infrastructure which, due to a lack of standardization and interoperability, is far more duplicative and inefficient particularly in its use of active manpower. While the Warsaw Pact is not nearly as standardized as common

ly believed (particularly given the rapid introduction of modern equipment into Soviet forces), nonetheless, in the areas of command and control, ammunition commonality and infrastructure integration, there exist both fewer national idiosyncrasies between fewer nations as well as the advantage of the peacetime regimentation of state-owned supporting assets. Compounding this asymmetry are the economics of system and scale. The Pact has more forces than can be placed on line, and in combat the centralized supporting echelons above the manoeuvre divisions will remain in operation to support successive waves of freshly committed units. Thus, the Pact does not require the same percentage investment of manpower in overhead assignments that NATO requires to maintain a few committed forces on the front in continuous combat. If the West had twice the number of divisions, the supporting slice necessary to sustain both frontline and committed reserves would proportionately be much more efficient. An unintended effect of this misappreciation of manpower asymmetries was that manpower was overrated as an index of combat effectiveness, an exaggeration which was carried over in the misbegotten conventional arms control approach of a decade later.

Evidence of the perils and flaws of employing manpower as an index of combat power as an approach to arms control - the main thrust of the MBFR talks - was revealed by Polish defector Col. Ryszard Kuklinski in an interview with a Polish-language journal published in Paris in 1987. According to Col. Kuklinski, the forces data submitted by Poland for the MBFR data exchange was knowingly incorrect, the false figures being not only dictated by the Soviet General Staff but upheld over the continued efforts of the Poles to correct them and remove an obstacle in the negotiations.

One of the most notable features of the conventional competition over the past several decades has been the addition of major conventional weapons without proportionate increases in ground force personnel. Thus, NATO has experienced a growth of 13,000 conventional weapons in a zero-growth ground force manpower posture. The armies of the Warsaw Pact have nearly doubled the number of conventional weapons for less than a 40% growth in manpower. This trend in both alliances has been driven primarily by: new weaponry which requires smaller crews; the piggybacking of additional assets onto existing structures (quantitatively larger artillery batteries within existing fire support battalions); and the provision of collateral weaponry into units with related missions (the proliferation of ATGM launchers into existing infantry squads).

Divisions

...if one counts only divisions, NATO is obviously outnumbered in immediately available forces. However...the term "division" is, after all, quite arbitrary.

Enthoven and Smith, 1968

...how is it possible to exaggerate the Warsaw Pact and depict NATO as hopelessly outnumbered?...The most time-honored method has been to count divisions...but the sizes and contents of divisions vary so much as to make their number meaningless for purposes of force comparison.

Enthoven, 1975

Yes, the Soviets have more divisions - but their divisions are smaller and less well-equipped.

C. L. Schultz, 1987

In the mid-1960s the Systems Analysis assessments of the conventional balance were extremely hostile to the use of the organizational concept of a division as a measure of comparative capability, despite the fact that a division was traditionally defined by virtually all armies as the largest manoeuvre unit with combined arms integration assigned independent missions on the modern battlefield. This definitional agnosticism was, in retrospect, well founded. Over the past 20 years the aggregate divisional structures of both NATO and Warsaw Pact forces have remained remarkably constant, organizationally masking a 50% increase in the total quantity of major conventional arms deployed in the Central Region. However, the expansion of conventional assets has not been equally distributed between the units of the respective blocs. Thus, although in 1965 it was accurate to describe a Soviet division as having only half the combat power of its average NATO counterpart, this is not true today. Indeed, there is greater variation in the strength of Western divisional units than between average units from the two sides. While the average East European active division is at least a decade behind its Soviet counterpart in quantitative expansion and qualitative modernization, nevertheless, there is an even wider disparity between NATO's strongest divisions (American) and their Western European counterparts, some of which are more the equivalent of a US brigade, (See Table 2, page 37.)

Competitive Trends in Conventional Weaponry

Because of the considerable differences in the structure of NATO and Warsaw Pact divisions, it is not very helpful to use the traditional method of calculating division "equivalents." There is no satisfactory way of adding up the very different capabilities of tank firepower, infantry firepower, artillery

firepower...and so forth. A better approach is to compare each major element of the forces separately ...

Enthoven and Smith, 1968

Static comparisons of like versus like - weighing each side's holdings of comparable weapon systems against the other's - have been widely criticized as irrelevant and potentially misleading. This conclusion is generally valid.

Military Balance, 1987/1988

Whatever the fault of the Systems Analysis studies in over-emphasizing the importance of manpower parity in explaining away asymmetries in weaponry, they nonetheless provided the first systematic calibration of conventional arms which not only provided much needed rigor in the accounting of quantitative assets but also lent itself to assessing relative qualitative capabilities. The major categories of comparison were: main battle tanks, anti-tank weapons, armored personnel carriers, artillery and mortars; and tactical air differentiated by mission emphasis. Although important categories were left out (multiple rocket launchers and air defence guns and missiles) and others misleadingly combined (anti-tank guns and missiles, artillery and mortars treated as equivalent systems), these early studies provided a useful first step in relating quantity to quality, mission to force structure.

Trends in the Armor/Anti-Armor Balance

...the Pact's largest potential advantage is in tanks; NATO has only about 55% as many in central Europe. But it is not clear that this numerical superiority is a decisive advantage. It reflects Soviet tradition...we could increase the emphasis on tanks if we thought that the total effectiveness of our forces would be enhanced thereby. In any case, NATO tanks are qualitatively better...

NATO has 30% more armored personnel carriers than the Pact.

And, since NATO would be on the defensive along most of the front, its 50% advantage in infantry anti-tank weapons would be important.

Enthoven and Smith, 1968

One important category in which NATO is at a large numerical disadvantage is tanks. Yet this... is to some extent offset by NATO's anti-tank defences and the superior quality of NATO's tanks.

Enthoven, 1975

The Warsaw Pact has an advantage in the number of tanks but NATO is superior in the quantity and quality of its anti-tank weapons.

US Department of State, 1984

...the majority of NATO's side are up-to-date main battle tanks...while the latest Soviet models...represent only about one-third of the Warsaw Pact total.

Time, 1987

The most threatening elements of Warsaw Pact force capability are the sheer size and weight of its armored forces. The Warsaw Pact has traditionally fielded greater armored forces than NATO, and this one major disparity has had a visible impact in shaping Western conventional paranoia as well as the development of NATO operational concepts, force structure, and technology. Since 1965, the Warsaw Pact has fielded nearly 4,500 additional tanks in Central Europe, while NATO has increased tank inventories by only 1,400. During this time, the Warsaw Pact has added 13,000 armored fighting vehicles, while NATO has deployed only 5,000 additional vehicles. Equally significant is that whereas NATO used to rely on substantial qualitative advantages in system technology to offset the quantitative disparity in armored systems, those qualitative advances have been diminished and NATO has lost its lead in fielded technological superiority.

In terms of relative technology, NATO and Warsaw Pact main battle tanks (MBTs) were roughly equivalent in the immediate post-World War II era, both sides deploying first generation WW II-era systems. NATO successfully converted its fleet to new second-generation (post-war) systems much more rapidly than did Pact forces. For instance, NATO had a much higher percentage of M-48s and Centurions than the Pact had T-54s and T-55s. In the mid-1960s, NATO introduced third-generation tanks (M-60, Leopard 1) and again converted its fleet faster than the Pact. Within a period of about 10 years, for instance, about 80% of NATO tanks were converted to third-generation systems, while it took the Pact that length of time to convert only 30% of its tanks to the third-generation T-62. However, the NATO lead in the introduction of new technology changed dramatically in the last decade as both sides began to deploy fourth-generation tanks like the Soviet T-64, T-72, and T-80, the German Leopard 2, and US M-1 Abrams. Today, the Soviets have virtually completed the conversion of their forward units to fourth-generation MBTs and have nearly as many of these modern systems deployed in the Center Region as NATO has total tanks deployed in the region.

In armored personnel carriers, NATO enjoyed an early lead in the 1950s with motorization and mechanization of its forces, when Warsaw Pact units were still truck-mounted. The Soviets slowly converted to armored personnel carriers in the 1960s, however, and fielded systems generally equivalent in capability to NATO's. The most important development in AFVs occurred in the late 1960s when the Soviets introduced the BMP, the first infantry fighting vehicle deployed in any army in Central Europe. This system provided sub-

stantially more capability for offensive operations and represented a clear advantage over NATO armored vehicle technology. NATO responded with the excellent German Marder and French AMX-IOP, which preceded the deployment of the US Bradley by more than a decade. While the Bradley has advanced mobility and firepower, less than half of US infantry battalions in Europe are equipped with the vehicle. Meanwhile, the Soviets have already deployed greater numbers of a new BMP with a 30mm cannon and a second-generation ATGM.

The Systems Analysis studies of the mid-60s argued that the disparity in armored forces was offset substantially by a NATO advantage in anti-tank systems. In fact, Western forces on the Central Front had only a marginal lead in anti-tank guns and missiles in the mid-1960s and, more importantly, the total NATO anti-armor holdings were actually trivial compared to the size of the armored threat. At the time, NATO had only 2,000 anti-tank guns and less than 1,000 ATGMs to counter more than 12,000 tanks and an equal number of armored fighting vehicles.

In response to the Warsaw Pact armor threat, NATO undertook a major effort to proliferate second-generation ATGMs throughout its infantry in the 1970s. Nevertheless, since 1975, the Warsaw Pact has deployed nearly twice as many ATGMs as NATO. Equally important, as NATO deployed large quantities of ATGMs in the 1970s, it virtually phased out all of its anti-tank guns, which the newer technology ATGMs replaced. In contrast, the Warsaw Pact maintained the vast majority of its anti-tank guns as ATGMs were introduced. As new composite, HEAT-defeating protective armor is incorporated into new main battle tanks and reactive armor is retrofitted to older systems, the possibility of ATGMs penetrating frontal armor with their shaped charge warheads is greatly reduced. This trend negates the effectiveness of most of NATO's man-portable ATGMs and suggests the need for a return to high-velocity guns which retain a greater penetration capacity.

NATO led the Warsaw Pact by more than a decade in the introduction of second-generation guidance for ATGMs. This gave the weapons high accuracy and allowed them to be proliferated into non-specialized infantry units. But Warsaw Pact forces have since made that conversion with the AT-4, AT-5, and the helicopter-mounted AT-6. A remaining asymmetry is the fact that only about 60% of NATO's launchers are mounted on armored vehicles, and only about half of those can be fired or reloaded from under armored protection. In contrast, 80% of the Pact's ATGMs are mounted on armored vehicles, and these can be fired and reloaded under armor protection.

With the introduction of new armor and anti-armor technologies throughout the years, there have been significant changes in this critical balance area. It is interesting that the Systems Analysis studies of the 1960s highlighted NATO's quantitative and qualitative advantages in anti-tank systems as a means to offset the large Warsaw Pact quantitative superiority in armored forces. While NATO did have a small lead in anti-tank guns and missiles in 1965, the combined total of NATO's anti-tank weapons was only 10% of Warsaw Pact armored assets - a very small fraction of the capability needed for effective defence. With the large and growing number of Warsaw Pact armored systems in the 1970s, however, NATO did undertake a significant build-up of ATGMs for infantry forces. Combined with the introduction of third-generation MBTs, the large-scale deployment of ATGMs provided NATO with an enormously improved anti-armor posture. Compared with MBTs, ATGMs provided a relatively cost-effective anti-armor capability that NATO was able to deploy in numbers sufficient to make Warsaw Pact armored forces substantially more vulnerable in offensive operations than a decade earlier.

Despite the dramatic improvements made in NATO's anti-armor capabilities in the 1970s, the armor/anti-armor balance has been completely altered by the introduction of composite, HEAT-defeating protective armor on newly deployed systems and the retrofitting of reactive armor onto previously fielded vehicles. The new composite armors are far less vulnerable to HEAT warheads (approximately three times more protection than equivalent steel plate) and they also tend to break up or distort long-rod, high-velocity penetrators (50% greater protection than steel plate). In recent years the introduction of new Soviet tank designs (T-64B, T-72M, T-80) incorporating advanced armor and the retrofitting of reactive armor on older systems to upgrade their survivability has virtually rendered the vast majority of NATO anti-armor systems obsolete, especially those that rely on HEAT warheads. At the present time, more than 90% of NATO's deployed anti-armor systems are incapable of penetrating the new Soviet tanks at typical engagement angles and ranges. Thus, a major area of NATO investment and improvement which spanned more than a decade has been almost completely undercut within a few years.

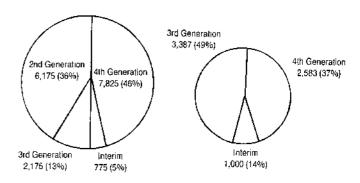
The advent of the new armor in the Warsaw Pact and NATO (incorporated in the M-IAI, Leopard 2 and Challenger) that is optimized against HEAT warheads is a major reason that the status of the tank is rising on the modern battlefield. Modern tanks with advanced armor are far more survivable than their predecessors were in recent years. In addition, modern tanks equipped with large caliber (120-125mm) main guns are the best available means to kill another tank incorporating advanced armor for the foreseeable future. At the

same time, tanks still represent the cutting edge of combined arms operations for the Warsaw Pact (penetration) as well as NATO (counter penetration).

In the 1960s, the Soviets envisioned using tanks as the critical means to achieve a breakthrough against NATO defences. Supported by other arms, the tank provided the necessary element for soizing and holding ground. As NATO defences grew more capable through the proliferation of anti-tank weapons, the increased vulnerability of a Soviet armored offensive was widely recognized. As a result, substantially greater levels of artillery were deployed in the Warsaw Pact in order to suppress NATO's anti-armor defences during the assault. At the same time, Soviet interest and emphasis shifted to attacking NATO defences before they had time to deploy fully and prepare firing positions for anti-armor systems. The Soviets recognized that a fluid battlefield was most conducive to armored warfare and the success of their offensive concepts. Thus, combined arms warfare was more oriented to manoeuvre by individual formations as a means to exploit NATO weaknesses. The deployment of new Soviet tanks that are invulnerable to most NATO anti-armor systems will only serve to heighten Soviet prospects for success. Without a new generation of effective anti-armor systems, NATO will be hard pressed to slow, much less halt, a large-scale armored offensive. Current Soviet concepts stress the value of rapid manoeuvre by armored forces to quickly penetrate and encircle NATO forces. To the extent that Soviet concepts have changed recently, the emphasis has been placed on very decisive manoeuvre to even greater depths than before and which would be undertaken as quickly as possible from the very outset of a conflict. In this context, the role of the tank in Soviet concepts is likely to remain paramount for successful operations. (See Table 3.)

NATO operational concepts have also been affected by changes in the armor/anti-armor balance. In the past, NATO tended to emphasize linear defensive concepts to prevent penetration by Warsaw Pact forces and allow for greater opportunities for attrition against attacking units. However, the deployment of fourth-generation main battle tanks and the reduced effectiveness of NATO's infantry anti-armor defences has led to greater interest in manoeuvre as the key to battlefield success within NATO as well. There is a growing recognition that NATO units can be more effective in combat if they can disrupt the Soviet scheme of manoeuvre through counterattack and achieve decisive results in individual engagements. Soviet forces are most vulnerable during the penetration battle and the Soviets expect to take their greatest losses in this phase of combat. Thus, the penetration phase represents an excellent opportunity for NATO to inflict heavy attrition against the Warsaw Pact and shape the outcome of the battle through successfully executed counterattacks.

Table 3 Tanks by Generation



Warsaw Pact

NATO

Quality of NATO vs. Warsaw Pact Tanks Active Duty Units Deployed in the NATO Guidelines Area

			Ratio
Warsaw Pact	145	NATO	WP:NATO
16,950		6,970	2.4:1
1,200 1,825 4,800	Leopard II M-1A1 Challenger	1,890 522 171	
7,825		2.583	3.0:1
775	M-1	1,000	0.8:1
2,175	Leopard 1 Chieftain AMX-30 M-60A3	2,339 456 370 222	
2,175		3,387	0.6:1
6,175	None		_
	1,200 1,825 4,800 7,825 775 2,175	16,950 1,200 Leopard II 1,825 M-1A1 4,800 Chatlenger 7,825 775 M-1 2,175 Leopard I Chieftain AMX-30 M-60A3	16,950 6,970 1,200 Leopard II 1,890 1,825 M-1A1 522 4,800 Chatlenger 171 7,825 2,583 775 M-1 1,000 2,175 Leopard I 2,339 Chieftain 456 AMX-30 370 M-60A3 222 2,175 3,387

Source: Beyond the Bean Count, second edition, 1988, by Senator Carl Levin, Chairman, Senate Armed Services Subcommittee on Conventional Forces and Alliance Defense.

Similar to the Warsaw Pact, successful NATO manoeuvre will be dependent on modern survivable tanks that can effectively engage opposing armor.

Trends in the Artillery Balance

The number of artillery and mortar tubes is about the same on both sides. However, because of better ammunition, better accuracy of certain weapons, and greater ammunition expenditure rate because of more logistic capability, NATO firepower is greater than that of the Pact.

Enthoven and Smith, 1968

The imbalance in NATO infantry ATGM protection and mobility would not be so serious if there were not also an imbalance in conventional fire support. Where the Warsaw Pact had about a 50% advantage over NATO in artillery in 1965, today it is a non-trivial 3:1. This ratio provides the Warsaw Pact a significant advantage in suppressing NATO's relatively soft anti-tank defences.

Throughout the 1960s, NATO had major advantages in that: a higher percentage of its artillery was larger caliber compared to Pact assets; the West was rapidly converting its systems to self-propelled chassis which added survivability and rapid manoeuvreability; and NATO had a clear lead in such areas as fire control, higher lethality, improved conventional munitions, and mechanized resupply. With the doubling of Warsaw Pact conventional artillery over the last two decades has come a significant growth in caliber, the modernization of self-propelled artillery, the fielding of advanced target acquisition/fire control, advances in munition lethality, the lowering of the organic level of combined arms integration at the regimental level and massive investment in forward deployed ammunition stocks.

The balance of NATO and Warsaw Pact artillery in Central Europe has changed dramatically since 1965. NATO's artillery levels have remained stable over time at approximately 2,000 systems. In contrast, the Warsaw Pact has increased its unit holdings from 3,000 systems in 1965 to more than 6,000 systems today. Thus, the Warsaw Pact quantitative advantage has increased from 1.5 to 1 to more than 3 to 1 at the present time. However, the quantitative balance does not provide much insight into relative capabilities in this area due to disparities in system mobility, weapon caliber and operational orientation.

The dominant considerations affecting NATO's artillery are the number of missions to be performed relative to systems available and the sustainability of fire support. While the quantity of NATO systems has remained virtually constant, the missions for its artillery have grown substantially. Today, NATO's

artillery is expected to perform suppression/attrition of manoeuvre elements (including specific anti-armor missions using munitions such as Copperhead), counter-battery fire, delay/attrition of follow-on forces, degradation of enemy target acquisition through smoke and other obscurants, and delivery of nuclear weapons. Given the large number of missions that NATO artillery must perform and the increased Warsaw Pact capacity for counter-battery fire, the lack of growth in NATO fire support assets represents a major shortfall between requirements and capabilities. The growing Warsaw Pact advantage in artillery does not bode well for NATO because the increase in suppression capability will tend to exacerbate the existing imbalance in the armor/anti-armor area.

In addition to the mismatch between missions and assets, NATO fire support capabilities are also constrained by limited animunition sustainability. The lack of sustainability is not so much a function of the total quantity of stocks available, as it is an issue of specific national stockpile shortages. These shortages are compounded by a lack of interoperability between the various NATO forces as well as a lack of transport assets to deliver munitions rapidly to forces under pressure and in short supply. These inadequacies are likely to degrade severely the effectiveness of NATO's fire support as those NATO forces in greatest need are likely to face depleted stockpiles while other forces under less pressure will have more than enough. As shortages arise under such circumstances, entire sectors of NATO's front will suffer the loss of fire support at the very time they need it the most.

While the growth in Warsaw Pact artillery systems has been impressive, the quantitative trends above would also appear to be misleading for several reasons. Although there has been a large increase in self-propelled systems in recent years, nearly two-thirds of Pact artillery is still comprised of medium caliber (122mm) towed systems with limited tactical mobility. The primary advantage of self-propelled systems is in the mobility they possess for manoeuvre combat which reduces their vulnerability to counter-battery fire and improves their displacement time. In this sense, the availability of substantial quantities of self-propelled systems has improved Warsaw Pact offensive capabilities in recent years by a great margin. Nevertheless, the large remaining quantity of towed systems does tend to limit the operational flexibility of fire support operations for many Warsaw Pact units.

A second area where Warsaw Pact fire support has been criticized is the large proportion of 122mm versus larger caliber tubes in units. This limitation is particularly relevant for a stable battlefield environment characterized by breakthrough operations where a high density of fire in a limited area puts a premium on large caliber weapons. However, as Soviet concepts stress more dispersed operations by individual units, the integration of 122mm tubes in

59

to regiments represents an important improvement because the systems are mobile and highly flexible, with a capability for indirect as well as direct fire engagements.

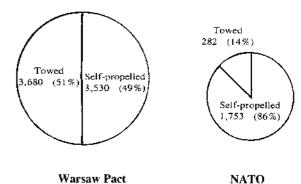
Karber

A further improvement in Soviet fire support capabilities has been the massive introduction of nuclear-capable artillery deployed at tactical and operational levels throughout Soviet ground forces. This represents a significant shift in the fire support balance in Central Europe given that NATO's historical superiority in battlefield nuclear systems, which was perceived as a key capability for the defence, has been erased by the Soviet effort. In operational terms this shift in balance has resulted in increasing uncertainty as to the military utility of NATO's tactical nuclear deterrent. It is not clear whether the employment of tactical nuclear weapons favors the offense or the defence, thus undermining NATO's incentive to escalate to nuclear first use. (See Table 4)

In looking to the future, NATO will be increasingly interested in disrupting Warsaw Pact follow-on forces. Since the capacity to strike deep is likely to be limited in the foreseeable future, the main systems targeted out to a depth of 50 km will remain artillery and SSMs (Surface-to-Surface Missiles). Unfortunately, NATO's lack of tubes and sustainability problems are likely to continue to constrain NATO's future effectiveness in a deep strike or interdiction role. The Warsaw Pact has also expressed considerable interest lately in integrated fire strikes employing MRLs (Multiple Rocket Launchers) and SSMs in a role that is similar to that envisioned for NATO fire support. In contrast to NATO, however, the large number of Pact MRLs and SSMs combined with large forward munitions stocks provides for a far more effective capability at the present time.

Moreover, the Soviets have been making great strides in improving the effectiveness of their delivery systems and conventional munitions. One method of improving SSM lethality that has been discussed in open Soviet literature for at least ten years is the use of unguided submunitions. The Soviets have apparently also been investigating terminally guided submunitions, but due to computer processing limitations their work in this area must be considered far less mature. Soviet research in another warhead technology, Fuel-Air Explosives (FAEs), is more advanced. FAEs represent a ten-fold increase in destructive power over TNT, making them equivalent to low yield nuclear warheads. Such advanced munitions were presumably behind Ogarkov's 1984 statement in "Revolution in Military Affairs" that the destructive power of conventional weapons could be increased by an order of magnitude, rivalling weapons of mass destruction.

Table 4 Self-Propelled vs Towed Artillery



Quality of NATO vs. Warsaw Pact Artillery Active Duty Units Deployed in the NATO Guidelines Area

Ratio WP:NAT	го	NA′	Warsaw Pact		
3.5:		2,035	7,210	Total Artillery	
				elf-Propelled	
	120	105mm	1,653	122mm	
	1,289	155mm	1,712	152mm	
	344	203mm	165	203mm	
2.0:	1.753		3,530	Total	
				owed	
			2.520	122mm	
	36	105mm	194	130mm	
	246	155mm	966	152mm	
13.0:	282	<u></u>	3,680	Total	

Source: Beyond the Bean Count, Second Edition, 1988, by Senator Carl Levin, Chairman, Senate Armed Services Subcommittee on Conventional Forces and Alliance Defense.

Even as the West increasingly moves in the direction of recognizing the value of indirect fire for suppression and disruption (as opposed to relying on artillery as the main means of conventional attrition), three factors - the loss of NATO's traditional advantage in mortars, the importance of taking into consideration the contribution of multiple rocket launchers, and the emerging role of conventionally armed surface-to-surface missiles - will place NATO at a disadvantage relative to the Pact in deployed capabilities to execute these missions in the future.

Whereas NATO had a lead in mortars until recently, the Warsaw Pact now deploys more of them than NATO. While Western infantry still depend upon World War II mortar technology, the Soviets have introduced a new 82mm system that is automatically loaded and fires 120 rounds a minute. Six are deployed in every infantry battalion, providing a massive salvo capability to suppress or degrade local anti-armor defences.

The Warsaw Pact has always emphasized multiple rocket launchers, which the Soviets used with great success in World War II. However, NATO has been less devoted to these systems. West Germany introduced its LARS system in the early 1970s, but the US-designed MLRS has just been deployed in USAREUR and will be operational with the French, British, and West German forces around the turn of the decade. Nevertheless, while the planned MLRS deployments will greatly increase NATO's MRL inventory, the gain will still be modest relative to Pact MRL assets, which currently number more than 1,200 systems. The Soviet BM-21, deployed in the mid-60s, has roughly the same capability as the German LARS, but the Czechs have produced an automatic reload for the BM-21 that doubles its salvo weight in the first two minutes. At Army and Front level, the Soviets were about five years ahead of NATO in deploying a general support rocket system, the BM-27.

Because NATO had a higher percentage of heavy caliber artillery, it was generally believed that, even if the Soviets caught up in advanced warhead munitions, their higher percentage of medium guns would be disadvantageous owing to being very inefficient for delivery. But the recent Soviet introduction of DPICM, scatterable mines, FAE and liquid-fire warheads for their large inventory of existing MRLs and emerging SSMs provides an efficient delivery system/munition combination.

In surface-to-surface missiles, the Warsaw Pact moved ahead of NATO in the mid-70s and now has a quantitative advantage as big as the edge NATO had in the 1960s. In addition, the Pact currently fields the only SSMs with conventional warheads. While the current accuracy and deployed numbers of the new systems are not yet decisive, if used as part of a combined arms attack

- as a precursor suppression strike - the new SS-21 could be targeted against NATO's forward Hawk belt and the SCUD against a small and select set of high value NATO main air bases. Against the latter, the purpose is not to kill planes but pin them in/out, reducing surge sortie rates, until the offensive bombers can reach their targets.

Trends in the Air/Air Defence Balance

With respect to tactical air power, the situation is different: NATO has a significant advantage. This advantage adds to the confidence that NATO's land forces could be made effective enough to contain the Pact forces in a conventional conflict.

While NATO has about 28% fewer aircraft immediately available in the center region than the Pact, it has considerably more aircraft in its world-wide inventory and thus a much greater reinforcement capability.

...NATO aircraft are far better qualitatively by almost every measure of relative capability - range, payload, ordnance effectiveness, pilot training, loiter time - and far better suited to conventional operations.

Enthoven and Smith, 1968

That the Pact has improved its capability for air defence and offense is hardly a matter for argument. That it threatens to eliminate NATO's advantages in tactical air power is more open to question.

Kaufmann, 1983

In terms of fixed-wing, high-performance aircraft, the quality of its pilots and advanced state-of-the-art of its ordnance, NATO air forces still enjoy a marked superiority plane-for-plane over their Warsaw Pact rivals. On the other hand, when placed in the larger context of the Central Region operational environment, presumption of qualitative superiority masks the significant maturation of Warsaw Pact conventional air/air defences as well as over-reliance and increasing demands on too few qualitatively superior NATO aircraft.

In the mid-1960s, it was indeed fair to question whether the Warsaw Pact fielded an offensive air capability worthy of the name. Over the last two decades the emergence of an offensive potential has come with the tripling of range/payload (the Warsaw Pact can now drop more conventional tonnage on Paris without base restaging than it could drop on Frankfurt in 1965). While NATO has made a major improvement in air field survivability, the ability of the West to rapidly reinforce its air assets in the Central Region is nonetheless still dependent upon a considerable mobilization period. Time is necessary to provide the minimal sustaining infrastructure, point air defences and rapid runway repair

required to keep its main operating bases functioning at a high sortie generation rate in the face of air field suppression. NATO also needs time for the preparation of dispersal and collateral fields for the reception and bed-down of large-scale rapid air reinforcement. Although the studies of the mid-60s correctly pointed out that the West had a major advantage in air reinforcement potential, they grossly exaggerated the speed and ease with which NATO's existing peacetime air base and supporting infrastructure could be converted to effectively use that reinforcing potential.

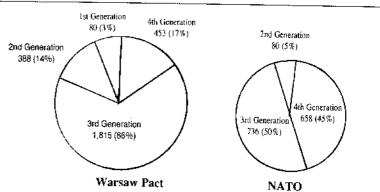
The numbers of tactical aircraft on both sides have roughly stabilized, as the Warsaw advantage has grown from 1.5:1 in 1955 to 2:1 in recent decades (see Table 5). NATO inventories declined with the modernization process, whereas the Warsaw Pact maintained its overall level. In qualitative terms, NATO maintained an overwhelming lead until the early 1970s, when the Soviets completely modernized their frontal aviation in the forward area with third-generation systems. Since, they have started yet another modernization program, and the latest Soviet systems are roughly comparable to NATO's current inventory in terms of range, payload, avionics, strike capacity, and munitions.

In the late 1970s, the US had two significant qualitative advantages over Pact aircraft. In terms of deep strike capabilities, the F-11l was in a class by itself, and the F-4 was still considered the best multi-purpose fighter of its kind. The subsequent deployment of the F-15 interceptor and the highly manoeuvreable F-16 fighter provided the U.S. and some NATO allies with airframes and avionics capabilities that were clearly superior to Soviet and East European counterparts. But more importantly, they were armed with all-aspect air-to-air missiles which allowed interceptors for the first time to engage multiple targets head-on at significant range – which sounded the death knell for a Soviet air offensive depending upon waves of medium-altitude bombers flying in tight formation through narrow sectors of NATO's air defence belt. The deployment of NATO AWACS was also an important step in terms of managing air resources and offsetting the quantitative imbalance.

However, deployment of the Su-17 and Su-20 and late model MiG-21s and MiG-23s - to replace second-generation Su-7s and early model MiG-21s - represented an important narrowing of the technology gap for the Warsaw Pact. Capabilities similar to NATO aircraft were evident, particularly in the MiG-23, which features a laser gunsight, an advanced intercept radar, and also is equipped with all-aspect air-to-air missiles.

The recent and growing forward deployment of the Su-24 Fencer and the introduction of the Backfire bomber into the Soviet Air Armies likely to participate in a conventional "Air Offensive" has given the Soviets a deep strike

Table 5
Tactical Aircraft by Generation



Quality of NATO vs. Warsaw Pact Tactical Aircraft Active Duty Units Deployed in the NATO Guidelines Area

Warsaw Pact	NATO	''	Ratio WP:NATO
2,736	,	1,474	1.9:1
198	F-15	06	
• • • • •			
	ZOFIIAUO	193	
453	Total	736	0.6:1
		724	0.0.1
600			
		160	
	Mirage 5-B	59	
		49	
62	A-10		
	Harrier AV8B		
	Jaguar	13	
1,815	Total	658	2.8:1
			,
245	E-104G	PΩ	
	1.1040	δU	
15			
388	Total	80	4.9:1
			1.512
80		None	
	2,736 198 120 135 453 633 730 275 115 62 1,815 245 80 48 15	2,736 198 F-15 120 F-16 135 CF-18 Tornado 453 Total 633 F-4/RF-4 Alpha Jet Mirage 5-B 115 NF-5 62 A-10 Harrier AV8B Jaguar 1,815 Total 245 80 48 15 388 Total	2,736 1,474 198 F-15 96 F-16 393 CF-18 54 Tornado 193 453 Total 736 633 F-4/RF-4 309 Alpha Jet 160 275 Mirage 5-B 115 NF-5 49 A-10 Harrier AV8B Jaguar 13 1,815 Total 658 F-104G 80 48 15 388 Total 80 48 15

Source: Beyond the Bean Count, Second Edition, 1988, by Senator Carl Levin, Chairman, Senate Armed Services Subcommittee on Conventional Forces and Alliance Defense.

capability comparable to that of the F-III. In addition, deployment of the MiG-31 Foxhound has provided a high-altitude interceptor with a look-down/shoot-down capability that was previously unavailable. In the last year, two new Soviet aircraft were introduced in Central Europe, the MiG-29 and Su-27, with capabilities similar to the F-I6 and F-I5, respectively. As their numbers increase, there will be increasing strain on NATO's dedicated interceptor fleet prior to reinforcement.

Where NATO had enjoyed a 2 to 1 advantage in the number of attack helicopters in the mid-1970s, today it is the Warsaw Pact that is superior by the same ratio, and its large fleet is qualitatively equal. In the 1970s, the attack helicopter was viewed as inherently favoring the defence in a set-piece breakthrough battle. But in a fast-moving meeting engagement, the like of which is now envisioned as probable in Central Europe, the ability to bring in attack helicopters on the flank and the rear of the defender will give increased shock to an armored offensive.

Air defence guns represent one area where NATO has been improving quantitatively and qualitatively, although a significant Warsaw Pact advantage still remains. Particularly noteworthy are the deployment of West Germany's Gepard in the late 1970s and the inability of the US to field an equivalent system. But the NATO allies are only now nearing the fielded capability which the Soviets deployed in the late 1960s of a self-propelled, radar-directed gun system like the ZSU-23-4. Its replacement mounts a bank of four 30mm guns directed by a phased array radar with electro-optical override and a closed-loop, laser-directed fire-control system, and has begun arriving in Central Europe.

While NATO had an early air defence advantage in the Nike-Hercules and Hawk belts in the 1960s, the Soviets soon deployed their SA-2 and SA-3 in deep zones. With the SA-4, the SA-6, and the SA-8 for mobile units, they established a protective envelope over the battlefield by the late 1970s, which while not preventing the intervention of NATO close air support, drove up the cost in expected losses, diversion of assets for suppression, and reduced per sortie lethality. In the last couple of years, the Soviets have begun replacing their SA-6s with the SA-II (featuring multiple-engagement radars and electro-optical override to counter jamming) and three years ago introduced the SA-5 into the Center Region. Its range and radar will force the US/NATO AWACS airborne warning and control system as well as NATO's side-looking airborne radar and other targeting and surveillance systems into less productive or more dangerous orbits.

As NATO slowly introduces the Patriot, in less than a one-for-one replacement of the antiquated Nike-Hercules belt, and debates where to put it, the

new Soviet SA-12 carries features that are virtually identical to it - including a rudimentary potential for ballistic missile intercept.

Given NATO's increasing dependence upon its air forces to offset a growing imbalance on the ground, its qualitative edge is being dulled less by the relative capability of the Warsaw Pact than an increasingly hostile operating environment and over-commitment of finite resources to an increasing number of requirements: offensive counter-air, escort and interception, ECM and air defence suppression, FOFA, close air support, as well as nuclear strike QRA. In essence, the Warsaw Pact does not lose the aerial balance if it can prevent NATO from winning it by achieving air superiority early enough and with sufficient remaining assets to make its full weight felt on the ground imbalance as opposed to an indecisive dribble spread over too many unfulfilled missions.

II. A Static Balance and Temporal Instability

When the change in the military balance from the mid-1960s to the present is viewed from the retrospective summary of the respective sides, the term balance itself seems inappropriate - the Central European imbalance seems more descriptive. The West made a major investment in the modernization and proliferation of infantry antitank weaponry only to end up, thanks to Soviet armor technology, worse off than it was in the mid-1960s. Likewise, the US led NATO in fielding advanced artillery munitions for more effective fire support, but now it is the West which is running scared of new Soviet suppression munitions. NATO has maintained its qualitative advantage in tactical aircraft but the Warsaw Pact has achieved parity in range and payload, and for the two missions most critical for NATO's ground success, there has been a notable decline in the West's capability to conduct survivable air support while the munitions and target acquisitions systems necessary to achieve more than 25% of the FOFA requirements are not programmed to arrive until the mid-1990s.

The static, snapshot balance assessments popular with Western academics and politicians missed the developments which worry NATO commanders because: first, they do not address the balance in terms of changing trends; second, they do not relate changing capabilities to changing operational concepts; and third, they do not attempt to track the politically difficult and militarily vulnerable transition from NATO's peacetime posture to wartime positions - they merely presume a prepared defence and assume away an attacker's preemptive incentives. In short, static balance assessments cannot address

the dangers of temporal instability because their methodology leaves out the component of time.

Trends: Force Ratios in an Operational Context

Although we cannot draw the conclusion...that NATO would necessarily defeat the Pact tank force,... in nearly every other area of land-forces capability, NATO holds the advantage in immediately available forces. Historically, such advantages have enabled the defender to exact an exchange ratio of 3 to 1.

Enthoven and Smith, 1968

...Soviet military doctrine and strategy...are believed to require at least a 5 to 1 force ratio in anticipation of high losses inherent in offensive operations.

Soviet Military Power, 1986

...presumably Soviet generals have learned the same basic military principles as everyone else, that an attacker will need roughly a 3 - 1 numerical advantage over an equally well-armed defender to be reasonably confident of success.

C. L. Schultze, 1987

The change in the Central European military balance since the Systems Analysis studies of the mid-60s has produced a dramatically different operational environment, a new range of offensive options for the Warsaw Pact, and for NATO a series of defensive problems out of proportion to the quantitative and qualitative shifts that have occurred within individual armament categories. The new conditions produced by the conventional imbalance cut across the spectrum of potential conflict: they greatly increase the likely instability associated with an inter-alliance crisis; they have given the Sovietled Warsaw Pact the capability to implement new and more threatening offensive operational concepts; and they have significantly reduced the military utility of NATO's resort to first use of nuclear weapons as an offset for conventional inadequacy. Unfortunately, as the early Systems Analysis pioneers discovered, it is a lot easier to criticize "bean counts" for what they exclude than to create them - consistently, comparably, and related to conventional operational reality.

The most accurate way of illustrating the change in the balance is in using consistent counting rules and tracking the development of conventional assets over time - via a "bean count". This approach, while admittedly not including critical intangibles or at least uncountables such as morale, training, leadership, etc., does allow one to say, "All other things being equal, the conventional balance has gotten better"; or, "Whatever weight you put on that intangible, when factored against the available force levels, things have got

ten worse"; or, "The net effect of an enormous investment in conventional forces and the human waste of an intense arms competition is that things have stayed the same".

In fact, based on the data summarized above, all three of those conclusions are true - depending on which counting regime one picks. Taking the widest set of counting rules, from the Atlantic to the Urals, including the entire Soviet Strategic Reserve and all the US assets which can be thrown in with a full month of reinforcement, the ratio of conventional weaponry has stayed virtually constant between 1965 and 1987. However, against the "classic" 90-division threat (a "guns of August" scenario assuming a fast mobilization and rapid reinforcement from adjacent areas in less than several weeks) which has been the dominant focus of traditional NATO force planning, the West, has actually made some headway, reducing the in-theatre imbalance at the start of hostilities from 2.55 to 1 down toward 2.3 to 1 - if not a lot, then at least in the right direction. On the other hand, just regarding the active forward forces in Central Europe, the area of comparative concern to the early systems analysts, the Warsaw Pact advantage has climbed from 1.5 to 1 up to 2 to 1 over the last 20 years.

If a "net" gain of .5 (from 1.5 to 2) in a gross force ratio does not seem like much, it represents a Warsaw Pact increase of over 30,000 major conventional weapons - an addition of more conventional weapons than NATO possessed on the Central Front in 1965. To look at it another way, through its methodical build-up over two decades, the Eastern bloc has altered the Central European military balance more significantly than if it had reinforced forward deployed forces by more than 30 divisions in 1966, and it has done so without triggering a counter-mobilization by NATO because the increases were introduced incrementally over years rather than in days. What is disturbing, given the quantitative magnitude and qualitative investment, is the extent to which old perceptions from the mid-60s have been perpetuated as myths of the balance in the mid-80s.

There is no element of conventional force analysis that is more used and less understood than the issue of force ratios. They are used for a variety of functions: to provide a description of competitive postures (in 1965 the Pact had more than a 2 to 1 advantage in tanks but NATO had a 2 to 1 advantage in new tanks); to provide a comparative measure and index of a changing balance over time (in 1987 the Pact has a 2.5 to 1 advantage in tanks but a 3 to 1 lead in the number of fourth-generation systems with a high-velocity gun and survivable armor protection); and, as most frequently misused, a prediction (or more reasonably a probabilistic statement) of expected battle outcome or anticipated requirement for success.

It is in this last role that the greatest analytical mistakes are made by not defining the level of analysis to which the ratio is being applied. At the theatre level, force ratios at best give an approximation of assets potentially available. Other than the intuitive implication that the worse the ratio, the fewer operational mistakes a side can afford to make, there is no historical truth or data to suggest a specific ratio which would assure offensive success or, when short of that magic number, guarantee deterrence. For example, in France during 1940, the Germans achieved early and decisive results with a theatre force ratio of I to I, and there are many examples where much more favorable attacking odds produced stalemate. At the other end of the spectrum, at the tactical level (where the 3 to 1 requirement originated in Napoleonic-era thinking), the numerical requirement for a successful attack is based on the anticipated lossexchange rate and what is needed to survive it. At the intervening operational level, the historical data show a modest correlation with superiority in numbers (for example, a 2.4 to 1 ratio on the major axis in France during 1940) but the outcome of battles can vary widely (in 26 World War II major tank battles, attackers won as often at unfavorable odds, including 1 to 6, as they did at favorable odds, including 6 to 1). Indeed, the nature of operational art is the simultaneity and sequentiality of combined arms application - a process driven by tactics, timing and terrain.

Over the last decade there has been no dearth of operational innovation in either alliance. In the context of NATO's Forward Defence we can count the STANAG "active defence", US AirLand Battle, NORTHAG "counterpenetration manoeuvre", "second echelon interdiction"/Follow-On Forces Attack, "cluster air defence in depth", and Offensive Counter-Air. For the Warsaw Pact Theatre-Strategic Offensive there is combined arms breakthrough, Operational Manoeuvre Groups, "fire strike"/Reconnaissance Strike Complex, Air Offensive, and "defensive air operation". Nor is there a shortage of published description and analytical critique of these operational concepts.

However, prospects for possibly the biggest single change lie in Soviet discussion of accepting a "defensive" defence. Soviet officers at the General Staff Academy in about 1984 were making the argument that in the event of war - and they clearly said that they wouldn't start the war - but if there were a crisis and hostilities were initiated, the following would be expected from the Soviet armed forces.

They would be expected on key selected areas of confrontation to seek out and destroy the opposing forces and control the opposing territory, to make sure that the war was not fought on their territory and also to destroy or retard with conventional means the defender's ability to respond with nuclear weapons.

In a perverted way, the Soviet strategic view of the Eurasian land mass could be interpreted as defensive, as establishing that their territory is sacrosanct and that they are trying to provide perimeter security. But that security ends up being offensively driven - a function of invading other peoples' lands to derive that defensive requirement.

When the Soviets talk about a "defensive" defence doctrine, it is not doctrine in the way we think of it, as in training of troops. Their view of doctrine is the guidance the party gives to the military. What they are clearly signaling is that they have somehow changed this understanding of what the army is supposed to do on that Eurasian land mass in conventional operations. The problem is that they haven't been clear to us or to themselves as to just what this means.

They have said they want not to be seen as a threat to their neighbours and that they would like not to have forces on a hair-trigger requirement, but it is not clear that they have given up the concept of preemption or given up the option in selected theatres of invading other territories.

The key focus of their strategy and the heavy concentration of their conventional assets have been on one of those theatre objectives - Central Europe. Central Europe has been the area driving their military requirements. This is the theatre worth fighting for, a theatre where they believe the campaign would start and the campaign needs to be most offensive earliest and most decisively successful. There has been a significant change not in what we have observed, not at the strategic level, but in the way they operationally use their forces.

In the mid-1970s, the Soviets were viewing their sweep across Central Europe as clearly offensive, featuring armies moving across what they call multiple simultaneous axes of advance. They were also assuming that the conventional campaign would last several days or a week before NATO initiated nuclear fire.

It is interesting that over the last decade there has been a significant growth in the amount of their exercises dedicated to the defence. This is reflected in the amount of time that they are spending on the defence, which has approximately doubled. In the past they would spend 20% to 25% of their manoeuvres on defence. Now it is close to 50%, but it has also expanded in terms of the level of units operating on the defence. Nonetheless, of the last exercises observed, half the front is on the operational defensive while the other half is attempting to encircle NATO forces. So, you can have it both ways.

Manoeuvre is the essence of modern conventional warfare. For the offensive it is the only means of seizing strategic objectives on the territory of the op-

ponent. In operational terms, it is the fastest and most efficient mechanism for the destruction of the opposing forces via deep penetration into the defender's vulnerable rear area and the encircled containment of his main body of resistance.

For the side whose political strategy dictates that its forces start on the defensive, manoeuvre is no less important. It is crucial first as a means of countermanoeuvre, achieved by the generation and tactical deployment of sufficient forces to prevent deep penetration and encirclement. Second, it is important as an operational compensation for a strategic weakness - the ceding of the initiative to the opponent at the outset of hostilities. While the concept of the initiative does not lend itself to mathematical expression or testing of Lanchestrian equations, nonetheless it can dominate all levels of combat by allowing the side which has it to: choose the point of main effort; get the maximum return in effectiveness from the orchestration of combined arms; and force the opponent into an inefficient "reactive cycle" that squanders his assets and creates an unintended exposure or vulnerability which can lead to decisive battle under unfavorable conditions. Manoeuvre offers the defence: the opportunity of converting an attacking penetration into encirclement of the attackers; the choice of selecting its own point of main effort where the offense does not have a superiority of assets; the option of choosing the time, place and conditions it prefers for decisive battle.

Third, for those who would convert conventional defence into conventional deterrence, manocuvre offers the only conventional means of threatening the aggressor with political punishment. If the only cost of conventional aggression is the stalling of the attack on the territory of the defender, the potential risk is only marginally inhibiting. Likewise, even a decisive defeat of the attacking forces can be tolerable to its leadership if it merely leads to a return of the status quo ante. Operational-level manoeuvre offers the defence a means of turning the attacker's defeat in battle into the destruction of his forces, the threat that he could suffer political loss through the occupation of his territory or defection of is allies - in short, the only conventional incentive for negotiated war termination.

The importance of manoeuvre for both the Warsaw Pact and NATO never really disappeared, but the preoccupations of both throughout the 1970s gave that impression. Thus, the Soviet concern for the breakthrough operation, the need to suppress the defence with fire and fight into its prepared positions, was a perceived operational precondition for offensive exploitation by manoeuvre. In the West, interest was focused on ensuring that no gaps for rapid offensive manoeuvre were left uncovered (mistaken as a linear defence), on exploiting the inherent defencibility of forward terrain to determine the attacker's points

of main effort (mistaken as a politically imposed weakness), and developing lethal technology to weaken and slow the mass and momentum of the attacking lead echelons (mistaken as only an attrition philosophy when in fact it was a defensive precondition for counter-manoeuvre when significantly outnumbered).

In sum, the ability of either a Warsaw Pact offensive or NATO defence to take advantage of manoeuvre is today more determined by the operational preconditions of the campaign scenario than the assets, technology or unique operational concept. NATO's best opportunity to exploit manoeuvre is in a ready and reinforced posture where there are only a few depleted initial penetrations, where the muscle-bound offensive is constrained by the limits of prepared terrain from bringing its full power to bear, and where the queuing of secondechelon formations offers the prospect for decisive counter-attack. The Warsaw Pact has one of two basic options - a short-warning attack in an environment conducive for offensive manoeuvre (an unprepared and unreinforced defence) in which their substantial reserve armies are incrementally introduced after the start of hostilities; or extensive pre-conflict mobilization in which the momentum of early manoeuvre and deep penetration are sacrificed for the safety of pre-deployed mass. They cannot have it both ways. On the other hand, the extent to which they once again have two options is a function of the Soviet led build-up over the last two decades.

Technology: The Dangers of Qualitative Parity

Yes, they have more tanks and aircraft but ours are of superior quality. If they are not, then we need a complete overhaul of our weapons acquisition strategy. In fact, if our weapons are not far superior to the Soviets' we ought to court martial a whole generation of military leaders.

C. L. Schultze, 1987

In the late 1960s, not only did the West have a significant margin of technological advantage in deployed conventional weaponry, but there were legitimate reasons for NATO to be optimistic that its technological lead could translate into a qualitative conventional edge. In the air, NATO's fighters and bombers were expected to be able to defeat twice their number as well as translate air superiority over the battlefield into a more robust defence on the ground. Advances in electronic guidance introduced an entire new generation of "precision" munitions which raised the prospect of reestablishing the firepower ascendency of the defence over the manoeuvre potential of massed armor.

The revolutionary characteristics of this new technology were not insignificant. Fighter aircraft could attack point targets such as bridges with several sorties rather than several hundred. The proliferation of anti-tank guided missiles (which could kill armor at three times the range and with far greater accuracy than the systems they replaced) to NATO infantry could restabilize the defence and turn the clock back from Blitzkrieg to Sitzkrieg. An entire new species of weaponry - the attack helicopter - not only supplanted the target-servicing capacity of prepared defences, but served as a mobile reserve which could respond to an imminent breakthrough faster than an attacker could exploit it. Even in traditional weaponry, NATO's main battle tanks and artillery were perceived as being a full generation ahead of their rivals in the Warsaw Pact.

But, rather than producing a new era of Western conventional defensive supremacy, the 1970s resulted in a period of both doctrinal and technological frustration. The conventional defence improvements anticipated in the late 1960s and early 1970s simply did not rectify the conventional balance in Central Europe. As the importance of achieving a credible forward defence became more and more important and as NATO invested increased resources to improve the quality of its conventional forces, the military balance did not get better and in several critical areas became worse. The bottom line after 20 years of effort is that the Warsaw Pact first operational echelon is stronger than ever, and the option of an attack initiated by in-place Pact forces and which allows minimal defence preparation for NATO can no longer be dismissed. Worse, behind a growing imbalance in forward forces remains the specter of the Soviet reinforcing echelons.

In fairness, this failure was not merely a function of Western incompetence or inaction - the Soviet-led Warsaw Pact made no small effort to ensure that NATO did not succeed. These Pact efforts can be summarized in three successive but overlapping phases. First, during the late 1960s and early 1970s, the Warsaw Pact responded to NATO's flexible response doctrine with a massive increase in quantity. In the space of a decade, the Pact added more conventional weapons to their existing quantitative advantage in Central Europe than NATO possessed. Tank inventories were increased by 50%, artillery doubled, and massive stocks of ammunition and war consumables were moved forward into Eastern Europe (sufficient to out-sustain NATO in conventional combat by more than a month).

The second phase, through the 1970s, focused on improving the quality of combined arms integration of Warsaw Pact formations. In the 1960s, the average Warsaw Pact division had only half the conventional assets of its average NATO counterpart. By the end of the 1970s, forward deployed Soviet forma-

tions were equivalent to the average NATO division not only in the quantity of weaponry, but also in the balance between armor, infantry and conventional fire support systems. Similar improvements were made to correct conventional deficiencies in the higher echelon commands, with the army and *Front*-level formations receiving additional combat and supporting assets.

In many ways, the first phase was a brute force attempt to offset NATO's improving quality with an increase in the quantitative disparity with which Western technology was attempting to cope. The second phase was both more sophisticated and pernicious - a material manifestation of the Marxian dialectic - in that much of the build-up of combined arms capability was oriented as a counter to NATO's technological improvements. For example, the growth of conventional fire support at all levels of command provided a responsive mechanism to suppress the increased density of NATO's infantry anti-tank missiles. Likewise, the five-fold increase in the lethality of battlefield air defences was directed at offsetting the modernization of NATO's qualitative advantage in fixed- and rotary-wing close air support aircraft.

The third phase of the Soviet-led build-up presented challenges which NATO had not faced before - a qualitative threat. In terms of new weapons, by 1985 the Soviets had significantly closed the technological gap in areas where NATO had been thought to have a clear and long-lasting qualitative edge a decade earlier. In 1978 this author stated with confidence that:

Where the majority of Western force innovation is based on the anticipated production of advanced technology (for example: second-generation guidance ATGMs; the new Chobham armor for tanks; improved conventional munition warheads for artillery; cannon-launched, laser-guided projectiles; high energy/manoeuvreability tactical aircraft; air-delivered, precision-guided munitions; fuel air explosives; enhanced radiation warheads; and highly accurate terrain-following cruise missiles) there is as yet no evidence of experimental development or design prototypes of new systems incorporating these technologies within Warsaw Pact forces.

But, in less than a decade, Soviet forces have fielded at least one system incorporating every advanced conventional technology enumerated on that list. Moreover, they introduced the new systems in quantity.

A key aspect of this third competitive phase is that coincident with the introduction of weaponry providing general qualitative parity with NATO's latest fielded systems, the Soviets have been deploying and experimenting with new methods of conducting a conventional theatre offensive. These new operational concepts include a strategy for an offensive air campaign at the outset of hostilities to disrupt NATO's employment of airpower, and preempt, with

conventional means, the deployment of NATO's nuclear assets. The air offensive concept was made possible by the introduction of a new generation of tactical aircraft with expanded range/payload (albeit still inferior planefor-plane compared to NATO's best), advanced ECM, and highly accurate SSMs with conventional warheads (targeted to suppress NATO's air defences). The new emphasis on the Operational Mancuver Group (OMG) is also, to a great extent, a function of Warsaw Pact technological modernization: highly mobile infantry fighting vehicles to infiltrate the defence; long-range multiple rocket launchers with submunitions to forestall the timely arrival of NATO reserves; and sophisticated C³ for early penetration and rapid manoeuvre in the depths of NATO's rear area.

In this third phase, the massive Soviet investment in new weapons technology has not ignored second-echelon forces. Traditionally, the Soviets have given first priority in weapons modernization to their forward forces in Europe, content to outfit reinforcing units with previous generation "hand-me-downs". Starting in the late 1970s, the modernization of Soviet reinforcing forces represented an enormous technological investment. In terms of the major categories of weapon systems, reinforcing divisions moved to a position of quantitative parity with forward units in this third phase and, in several important areas, they achieved qualitative parity as well.

The Warsaw Pact cannot be held completely to blame for the failure of NATO's qualitative offset strategy. A significant part of the problem was self-inflicted. The Western alliance has not demonstrated a capacity to appreciate rapidly any qualitative changes in the threat. Much of NATO's technological lead was squandered for the lack of a unified approach and inefficient production. Given the multi-national character of the alliance, NATO's bureaucratic organizational structure and vague doctrinal guidance were not particularly helpful in operationalizing the West's technological strengths.

No small part of NATO's current conventional problem can be traced to a lack of appreciation of the extent to which the Warsaw Pact would go in challenging NATO's qualitative dependence. In the early 1970s, the West was slow to calibrate the degree to which the qualitative balance was eroding. In the early 1980s, it was easier for NATO to assess and accept the advances that had been made in Soviet technology than it was for the alliance to recognize that the Soviet military had the audacity and imagination to think of new ways of using their emerging technology. But, even where due recognition was given to the increasing capabilities of the Warsaw Pact, the focus was on calling attention to the developments as an admonition to alliance political elites and national publics to commit more resources to the overall defence. There was virtually no effort to prioritize the elements of the emerging threat in terms

of which needed to be addressed first, or identify potential Warsaw Pact vulnerabilities that might be susceptible to judicious application of Western technological advantages.

The second cause for the unfulfilled conventional expectations was the unexpected change in Western technological leadership. In the 1950s and early 1960s, the United States was the unrivalled champion within NATO of investment in R&D, the creation of state-of-the-art advances in weaponry, and the production of sufficient quantities to achieve economies of scale. However, by the mid-1970s, this leadership role had fallen into eclipse. Preoccupation with the Vietnam War and subsequent post-war withdrawal symptoms produced a "lost decade" in terms of American qualitative leadership. While R&D continued, and the US was still ahead in laboratory technology, and entire generation of new systems was either delayed or cancelled.

In the early 1970s, the demise of American predominance was not necessarily unhealthy for the alliance in that a resurgent European technology boom and industrial productivity gave the allies an incentive in conventional weapons design. Unfortunately, much of this effort was focused on producing competing versions of the same major systems which, when procured nationally, led to extreme inefficiencies and a number of other severe disadvantages. Since national system designs were essentially procured by each of the producing countries, the tendency was to bring about lower production runs which not only drove up the unit costs, but resulted in two other problems as well. First, the variety of systems produced by the nations created problems in standardization and interoperability of spare parts, ammunition, and sub-system components; second, the national emphasis on main "prestige" systems also served to deemphasize the design, development and procurement of other basic items of equipment including ammunition, other consumables, and C ³ components, all of which were badly needed.

Recognizing the inefficiencies of internecine nationalism, the Europeans broke substantial new ground in creating multi-national consortia where the individual national talents could be pooled, and a larger market offered the prospect of increased efficiency in production. Unfortunately, the time required to set up the new approach, the inevitable bureaucratic delays inherent in joint R&D, and the economic slowdown occurring in Europe resulted in repeated programme stretchouts which robbed a substantial degree of the efficiency that was originally anticipated from the consortia approach.

By the time the United States turned its attention back to issues of European security in the mid-1970s, several years and considerable effort were lost before the Americans realized that they were driving down the wrong side of a two-

way street. Although "Yankee" ingenuity and resurgent R&D investment could achieve a new technical breakthrough, it did not mean that the Europeans were willing to return to a sub-altern status. The Americans eventually realized that their continental allies had much to offer, and that mechanisms could be found whereby both sides could gain from creative joint ventures, cooperative development efforts, and financial tradeoffs. Unfortunately, at least five years was lost in consummating this transatlantic mating dance, a loss NATO couldn't afford, and which won't be rectified until the end of this decade.

The overriding cause for NATO not achieving conventional sufficiency during the 1970s was cost. The search for a qualitative offset to quantity as a general principle of weapons design had a sub-optimal efficiency frontier which the leading members of NATO spent a decade exploring. In requiring weapons to make up in performance what was lacking in force structure, weapon designers pushed the state-of-the-art in several areas at once, thereby compounding the risk and, inevitably, lengthening the developmental cycle. The longer a system was in development, the more the threat grew, and the more that had to be required of the system. Thus, add-on design modifications drove up costs which were amortized by pushing for even higher performance. Escalating prices with semi-fixed budgets resulted in a lower unit buy which, given the need to maintain a lukewarm armament production capability, caused a stretch in production. The net effort resulted in paying more and getting less. This vicious cycle can only be broken one of two ways: either producing a larger quantity of lower quality systems and then suffering block obsolescence; or designing the weapon at the outset with modular components which permit upgrade and subsequent technological growth potential. The latter approach usually requires a higher initial investment, and is thus a favorite target of most-conscious budgeteers.

Another aspect of unexpected cost growth was the bow-wave effect that was particularly involved in new systems where unprogrammed additional investment for maintenance and training was required to maximize system performance. An unfortunate example of this phenomenon was NATO's experience with the ATGM. Touted as a \$10,000 missile which could kill a \$1,000,000 tank, it was expected to be an enormously efficient addition to the defence. However, because of the high cost of the missile, O&M budgets could only afford several live firing demonstrations per battalion per year. The inability to train troops on the actual weapon reduced its theoretic kill probability of 90% (achieved by experts on a test range) to less than a third of that percentage in tests with NATO troops. Much has been written about emerging technology being a force multiplier, but unless it can be employed by average

soldiers, maintained under field conditions, and sustained in intense combat, it becomes a force divisor.

In sum, the 1970s offer several lessons with respect to NATO's search for qualitative means to offset the quantitative force imbalance. First, it is unlikely that an individual or combination of technological advances in conventional armaments will ever equal the haloyon days of the 1950s when NATO first became addicted to the financial parcotic of technological compensation (nuclear weapons) in lieu of force structure. Second, projections which assume NATO's technological superiority in a given area will last for more than a decade are, in terms of past experience, wishful thinking. The Warsaw Pact has seldom been the first to introduce a major new breakthrough in technology, and they still show considerable weakness in the micro-miniaturization of electronics, ADP, and sensor technology. Nonetheless, the Pact has shown the capacity to incorporate enough emerging technology into an overall system design to typically provide at least 80% of the performance achieved by comparable NATO systems. Or, to put it another way, they have gotten more than close enough qualitatively to make their quantitative superiority count. Moreover, once the Eastern bloc is able to cross the difficult hurdle of tooling up for a new technology, their large scale of production and rapid field deployment quickly close the gap against NATO.

Third, much of the Western technological advantage has been in aerospace components, but there is a practical limit to which these high cost and limited quantity systems can be risked to make up for their inadequate numbers of cheaper systems. Employing a high performance F-l6 fighter in close air support over a battlefield saturated with increasingly lethal air defence weapons because of ground force inadequacies in anti- armor and artillery weapons has the effect of squandering an otherwise precious technological edge which could be more effectively used in a complementary rather than compensatory role. Fourth, the preoccupation with major "prestige" systems led to an undercapitalization of munitions and supporting infrastructure, shortcomings which mean that the major system will be unable to maximize its qualitative advantage. For example, ICM munitions may give NATO artillery twice the effectiveness per tube over their Warsaw Pact counterparts. However, if we only have enough ICM ammunition to last the first three days of combat, a decisive qualitative edge will only provide a marginal operational impact.

Most importantly, while doctrinal statements of lofty objectives have an inspirational quality, they do not provide the level of detail or prioritization of effort required to guide technological development. In the absence of articulated operational requirements or a specification of military command priorities, individual countries can not provide an efficient or coherent

response. The pursuit of technology as an end in itself, simplistically rationalized as an offset to quantitative superiority will produce wasteful duplication, escalating unit cost, and a self-limiting contribution to NATO's conventional defence.

The Soviets, never shy about their concern over Western technological successes in conventional force qualitative modernization, are also aware that "financial problems play an important role in US plans to prepare for a 'global conventional war'," financial problems which they note tend to exacerbate intraalliance tensions within NATO:

Experts believe the Pentagon is now facing a complex task of deciding how to distribute the finances and change the organization and structure of the armed forces. As for the allocation of responsibilities, a central issue will be the evolution of the NATO strategy and U.S. capability to settle conflicts outside the zone of NATO's direct responsibility. In their turn, the European NATO member states will continue to resist U.S. demands to increase the allied contribution to the defence of Western Europe. Forced to choose between maintaining the existing force structure or developing a promising but costly program of improving the conventional balance between the Warsaw Treaty and NATO alliances, the "European members of NATO", American experts believe, "will probably hedge their bets and opt for the status-quo". ¹

Thus, the Soviet conclusion that there is neither the will nor the resources for the West to achieve conventional sufficiency - is a concept which

...has political, rather than military, significance. This concept can hardly be put into practice in the foreseeable future. For that neither the United States nor its allies have trained reserves in sufficient numbers. Nor do they have the necessary combat equipment of the required quality and in required quantities. ²

Transition: A Growing Preemptive Incentive

Fears of NATO vulnerability are largely based on paper comparisons.

Time, 1987

This report makes clear that the most serious military threat to NATO is posed not simply by the overall numerical ratios of Pact forces to NATO forces, but rather by the concentration of forward positioned, offensively equipped and trained Soviet heavy armor units in East Germany and Czechoslovakia. Warsaw Pact forces are positioned and equipped to launch an attack on NATO with relatively little warning. In contrast, NATO forces are not only in no posi-

tion to attack the Warsaw Pact (nor should they be); they are not even well-deployed to defend themselves without significant pre-war movement.

Beyond the Bean Count, 1988

A common theme in both the trend and technological discussions was the vulnerability of NATO's peacetime posture to transitional attack. With units requiring several days to transition to combat readiness, and given the variations in national anti-armor capability and the absence of prepared positions and implemented barriers, NATO's posture is tailor-made for exploitation by a Warsaw Pact attack off the march. Ground force penctrations can also be accelerated by Soviet interdiction of the forward deployment of NATO's frontline formations. The lack of time to disperse NATO's high-performance interceptors and move the semi-mobile SAM launchers to new sites makes the former attractive targets to tactical ballistic missile "pin-in/pin-out" bombardment and the latter vulnerable to suppression attacks. Likewise, NATO's tactical nuclear posture is vulnerable to conventional disruption if targeted before its C3 is fully up and before warheads have been dispersed. Undoubtedly, even in the midst of chaos and a crumbling defence, NATO could fire a symbolic nuclear "shot across the bow", but it would not sink the attack. In this environment it is the Warsaw Pact that would have the "flexible" options ranging from: ignoring NATO nuclear use and pushing on conventionally to the Rhine; under-escalate - by responding with a militarily decisive use of short-range systems limited to the battlefield; reciprocate deep; or horizontally escalate and target NATO's surface fleets and shore installations on the flanks (which could dramatically reverse an otherwise favorable posture there) with nuclear weapons,

To be fair to NATO, the weaknesses in its readiness posture are neither new nor have they grown significantly since "flexible response" became the alliance strategy. What is new is the Warsaw Pact's ability to exploit these vulnerabilities from a forward deployed position in Central Europe. Today, NATO faces forward-deployed forces that are equivalent to a reinforced and fully mobilized threat by 1965 standards. It is no wonder that NATO's conventional doctrine is in question - since the in-place force ratio is worse now than it was a quarter-century earlier when, under MC 14/2, NATO had a quick-fire "tripwire" strategy.

The inability of the alliance to undertake remedial action is a direct function of national priorities and the nature of the challenge. First, it is not a uniform problem but focused on the Central Region. The Southern Flank has a number of vulnerabilities but an unreinforced attack is not one of them. On the Northern Flank the transitional threat is more from unconventional operations (which while dangerous are more readily addressed). Second, on a front with

80

highly interdependent sectors, readiness is not a problem which lends itself to national priorities. The strength of the defensive chain in a transitional attack, where the ability to rationalize vulnerabilities by redeployment is minimal, is only as strong as the weakest national link. If individual Ministries of Defence (and Parliaments) resist spending modernization and force structure budgets to solve their own readiness shortfalls, they certainly do not volunteer to squander money on someone else's. Yet, the national forces which are the most vulnerable are the least able to afford enhanced readiness. Third, most of NATO's Central Region vulnerabilities to unreinforced attack are transient - with a post-mobilization half-life measured in a few days if not hours. While NATO doctrine makes an explicit and heavy demand for unit readiness, and a succession of SACEURs and CINCENTs have given it high priority, it has been difficult to motivate the membership to spend their scarce peacetime resources on a problem which will virtually disappear within the first week of mobilization (assuming, of course, that the war has not started).

Although many Western analysts have been at pains to dismiss the destabilizing danger of preemptive incentives during a crisis - even the Soviets point to this problem.

Both the WTO and NATO...deny any aggressive intentions with regard to the other side and assure that they will not start hostilities or use military force unless they are attacked. In a normal situation neither side considers aggression from the opponent as being very likely from a political point of view. But at the same time they are not willing to risk putting this assessment to a practical test relying solely on the guarantees offered by the opposing side, especially since they both discern considerable offensive possibilities in each other's military potential. Each side thus adopts appropriate measures in order to make offensive operations a doubtful undertaking for the opponent. As a result, the two sides end up augmenting their armed forces and armaments, political tension grows, and negotiations on lowering the level of confrontation become doomed to failure. In an acute crisis situation the existence of the offensive potential of one side, and all the more so, of both, could prove a strong impetus for a preemptive strike out of fear that the opposing side will seize the initiative and be the first to attack, or fearing that the opponent will undertake a preemptive strike in order to avoid defeat if it is attacked. 3

Even the Soviets now admit that their traditional emphasis on the offensive coupled with their imbalanced forward deployment threatened the West and requires "new thinking".

In analyzing the conventional armed forces the following premises were advanced: 'It is believed that a strategic offensive will be the main type of military operation. As for strategic defence, it is allowed only as a temporary measure for rebuffing the offensive of enemy strategic groupings, inflicting heavy losses

on him, holding important areas, and creating conditions for switching over to a strategic offensive. In some instances, such a defence can be resorted to deliberately.

Thus, while the military doctrine maintained its purely defensive nature, strategy, tactics and, accordingly, individual areas of the military buildup had an increasingly offensive orientation.

A new way of thinking in security matters presupposes a revision of the previous requisites and views and a greater conformity between foreign policy and military doctrine, on the one hand, and the development of the art of war and military buildup, on the other. 'New thinking', Mikhail Gorbachev noted, 'means bridging the gap between word and deed'. ⁴

Thinking about the conventional balance in Central Europe from the perspective of conventional arms control can be a useful corrective to the endless balance debates. Instead of arguing over the unknowable - trying to predict the outcome of future battles - it turns the debate toward policy questions which can be answered:

- What elements of the Soviet conventional posture opposite Europe do we find most threatening?
- What areas of Western strength should be protected or, conversely, offered up at the bargaining table?
- Given that the Soviets are unlikely to give us everything we want, what military reductions in which geographic areas would be most conducive to a stable balance?

Ultimately "bean counts" are the currency of conventional arms negotiations and the measure of force reductions but, by themselves, they do not provide any help in answering the fundamental question of defining what a stable balance should look like.

Senator Levin, in his critique of simplistic quantification and force balance ratios, has pointed out that "bean counts" are only one measure of the relative conventional postures in Europe - that there are at least a dozen other intervening variables or "components of a Realistic Assessment of the Military Balance". With the Senator's summary evaluation of the balance or his selection of components, nonetheless his list certainly addresses the most important areas of comparison and other candidates could certainly be subsumed under them. Moreover, throughout the Levin report is the implicit recognition that most of the thirteen components are not static, that mobilization time has a significant impact on the relative posture of the respective sides. (See Table 6.)

Table 6
Components of a Realistic Assessment of NATO
vs. Warsaw Pact (WTO) Conventional Military Balance

		Levin Overalt Estimate	Karber Estimates Impact of Preparation Time		
			Short Warning	Rapid Rein- forcement	Extended Mobilization
T S E	Deployment of Forces - The Capability for surprise Attack and affective Defense in surope	wto	WTO	NATO	NATO
V	Quantity of Major Veapons Systems ("Bean Count")	wro	WTO	WTO	WTO
	Ouality of Major Veapons Systems	NATO	equal	NATO	NATO
4. F	orce Readiness	NATO	wto	NATO	NATO
5. F	orce Sustainability	WTO?	WTO	equal	WTO
	lumber of Active and leserve Personnel	equal	equal	equal	NATO
7. Q	quality of Personnel	NATO	7	NATO	NATO
8. in	nteroperability of Forces	wro	WTO	equal	equal
C	command, Control, communications and stelligence	equal?	WTO	equal	NATO
10. R	eliability of Allies	NATO	equal	NATO	NATO
	conomic and Industrial trength	NATO	?	equa l	NATO
l2. G	leographic Factors	WTO?	WTO	NATO	equal
M	bility to Decide to Iobilize Prior to Jutbreak of Hostilities	WTO	WTO	equal	WTO

Source: Beyond the Bean Count. Second Edition, 1988, by Senator Carl Levin, Chairman, Senate Armed Services Subcommittee on Conventional Forces and Alliance Defense.

There is a traditional assumption in Western threat assessments - that, for the Soviets, more is better. That the greater the quantity of conventional forces that the Warsaw Pact can mobilize opposite NATO prior to hostilities the better their prospects of success in a conflict. But a look across the Levin components suggests that while this may be a tradition, it is not necessarily true. In fact, time can be NATO's greatest potential resource.

First, against the traditional perceived threat of a rapid Warsaw Pact mobilization and reinforcement, the deployment of up to 90 divisions against NATO's Central front within several weeks, time permits the West to maximize the inherent advantages of its defence (terrain preparation, reinforcement of qualitatively superior airpower, and mobilization of better trained reserves); reduces the attacker's advantages (loss of surprise, decisively lower quantitative ratio for committed forces); and exacerbates Warsaw Pact weaknesses (dependence upon East European "allies" to participate in high-attrition breakthrough battles, need for poorly trained and hastily assembled reservists to man over one-third of the force). Moreover, for the last two decades the NATO allies have made a concerted effort to address this contingency by investing in faster U.S. air and ground reinforcement coupled with European expansion and modernization of reserves, an investment which is increasingly showing results.

Second, time is also NATO's greatest danger - if we do not get enough of it. The West fields strong forces in Central Europe in peacetime but much of their capability is squandered in a short warning attack (the absence of prepared positions to slow down the rate of the attack and inflict disproportionate losses, maldeployment of over half of the forward defence brigades, low readiness of many of the Corps and higher echelon Commands and supporting logistics infrastructure, the short training time for European draftees which would make up over 50% of NATO's front line formations, the increased vulnerability of NATO airfields, and growing weakness in deployed infantry anti-armor weaponry). As Senator Levin points out, the massive and asymmetrical deployment of Soviet armored formations so close to the inner-German border, becomes particularly dangerous when combined with their recent and forward loaded technological modernization (having closed much of the qualitative gap) and their inherent advantage in deciding to mobilize - both as an attacker seizing the initiative and as a closed society covertly preparing for hostilities. The Levin assessment helps in recognizing the instability of this contingency, and underscores the importance of reducing the quantitative disparity of the highest quality Soviet forces via conventional arms control.

Third, the Levin report also highlights a self-inflicted wound, one which conventional investment, not arms control, can only heal. The inability of the Western alliance to sustain its committed conventional forces is an indictment of NATO's defence priorities. Although we have a vastly superior economic and industrial base, the time dimension required to bring it to bear is on a temporal scale of many months not weeks. NATO commanders should not be forced to abandon a successful conventional defence just because sufficient stocks of ammunition were not a budget priority.

In the past, the dangers of transitional attack have been dismissed or ridiculed by a plethora of deductive arguments which, in the face of a changing operational environment, are becoming political shibboleths for budgetary evasion. The belief that cautious Soviet decision-making and conservative military operational style would not take the risks inherent in a unreinforced attack has been used to forestall NATO reaction for so long that today, if the Soviets have the audacity to contemplate starting a war (or "winning" a crisis), the transitional contingency is the one with the least risk and fastest possible gain.

Warning and readiness are not synonymous - ambiguity in one and built-in reaction time lags in the other can, and historically have, produced a situation where intelligence is not surprised but the defending forces are not prepared. In the event of a crisis in Central Europe, it is NATO which - in having to undertake a multiplicity of hasty readiness preparations including the deployment of forces toward the East - may appear provocative. If the most generous excuse for the Warsaw Pact build-up over the last decade is to attribute it to Soviet paranoia, then a NATO desence which requires a sudden but initially ineffective deployment scramble may indeed produce an attempt at preemption. Warning and readiness can be mutually reinforcing where marginal improvements in the defensive posture in peacetime can force the potential aggressor to hedge. The more forces he brings forward, the less ambiguous the intelligence indicators and the easier it will be for NATO political elites to initiate mobilization and reinforcement. But today, defence against a transitional attack is an area where NATO collectively is not getting in security what its individual members are paying for in forces.

Time is NATO's greatest resource. The economic and technological potential of the West provides the greatest hope for the long term success of containment - as both a competitive edge and incentive for domestic reform in the Eastern bloc. Militarily, NATO's forces offer a formidable defensive potential and will do their best when they have had time to deploy to prepared positions, mobilize reserves, and redeploy reinforcements.

But the lessons of the last two decades are that the there is a real, and growing danger for the West in taking time for granted. When viewed from the perspective of trends in competitive force postures, it is the West which has fallen even further behind in the quantitative buildup of its conventional forces. Technologically, NATO has squandered an enormous qualitative lead via self-inflicted inefficiencies. A strong and modernized forward-deployed Soviet conventional presence in Central Europe offers the Warsaw Pact the option of preempting NATO's vulnerable process of transition from peacetime status to a prepared forward posture. The conventional balance in Central Europe has remained neither static nor stable.

III. Back to the Future: Requirements for Conventional Arms Control

In summary, over the last two decades it is Soviet action and Western inaction which have combined to create the current imbalance and latent instability in Europe. Over the last year the Soviets have again seized the initiative - this time in conventional arms control. If they are serious, then only Western action in simultaneously adopting a comparative posture and articulating its own interest in conventional arms control and testing the seriousness of the East will produce a militarily significant change in the Soviet threat.

Notes and Sources

- Oleg Amirov, Nikolai Kishilov, Vadim Makarevsky, and Yuri Usachev, "Conventional War: Strategic Concepts", in *Disarmament and Security* 1987 Yearbook, pp. 367-368, Moscow, 1988.
- 2. Ibid.
- 3. Alexei Arbatov, "Military Doctrines", in *Disarmament and Security 1987 Yearbook*, p. 213, Moscow, 1988.
- 4. Ibid.

Response by Peter Vigor to the Paper by Phillip Karber

The typescript of my original comments on Dr. Karber's paper seems to have been lost in the post. CEPS therefore asked me to prepare another set of remarks; we agreed between us that, because approximately six months had elapsed between the holding of the conference and my rewriting of my original comments, and because during that period a great deal of considerable importance had taken place in the field of East-West relations, it would be desirable that my new version should take account of much of those events as seemed to me to be pertinent. We also agreed that it would be wrong to present it to my readers without making it perfectly clear to them that there are differences between it and the original version; and the aim of this opening paragraph is to do exactly that.

Dr. Karber has written his paper with the very laudable objective of giving his readers some guidance as to how to make a more sophisticated (and therefore, one hopes, more accurate) assessment of the comparative strengths and weaknesses of NATO and the Warsaw Pact. His subtitle is therefore to some extent misleading. His paper does not so much consist of "comparative assessments" of the Soviet threat, as of an assessment of some comparative assessments. Its greatest value is likely to be for the kind of person, many of whom were present at the Conference, who are not specialists in Soviet military affairs nor in defence studies in general, but who take an intelligent interest in these subjects in their capacity as responsible citizens of their respective countries. Dr. Karber's paper will have given them the means to pursue that interest more effectively than hitherto.

Its greatest merit is to demolish the notion that what is known as the "bean count" may safely be taken as the only data base necessary for making an accurate assessment of the Soviet threat. By the "bean count", of course, I mean the listing of the numbers of the various types of weapons systems which each side is reckoned to possess. When the total number of each of these types has been put down on paper and tabulated, the resulting table can be used to "prove" the existence of a serious Soviet threat and something of its nature. On the other side of the great European divide, a similar process will naturally disclose the existence and the nature of a corresponding threat from NATO. It is important to stress that "bean counting" is not just the sole prerogative

of the non-specialist, intelligent citizen to whom I have referred, but also of policy-makers who have based too large a part of their military/foreign policy decision-making on the uncertain results of too deep a commitment to the lure of fabaceous enumeration.

If we now go deeper into Dr. Karber's analysis, he gives a sharp rebuke, in the first instance, to those in the West who refuse to press for a strengthened Western conventional defence, but instead "offer simplistic threat portravals of gross quantitative statistics which do not convince anyone". There have been a number of non-official Western assessments (e.g. those of London's International Institute for Strategic Studies) which, in Dr. Karber's view. possess a common tendency to depict the Warsaw Pact's numerical advantages over NATO to be less than is popularly thought; to give NATO's forces a qualitative edge over the Pact forces which, in Karber's view, they do not always have; to ignore the operational context in which both sides' forces are likely to be employed in time of war; and, last but by no means least, to take no account, in their analyses, of developmental trends. "In this sense", says Karber, [these studies are] "historical, conveying nothing of the real and impending technological and structural changes which have occurred or are in process. This static perspective, the inability or unwillingness to address trends over time, implies a latent stability to the conventional balance because change is not an operative variable". It is therefore only natural that Dr. Karber should go on to declare that "The purpose of this paper is to add the dimension of time to the discussion of the changing conventional military postures of NATO and the Warsaw Pact in Central Europe". Furthermore, he is obviously correct in deciding to do so; and we are all his debtor as a result.

On the other hand, as we all know, a correct assessment of the threat from a potential enemy demands that we take into our calculations our ideas not only of his capabilities, but also of his intentions. Dr. Karber makes no mention of the Warsaw Pact's intentions. Of course, he would have been faced with difficulties, supposing he had decided to do so. Capabilities can always be measured by some sort of scientific yardstick, however imperfect; intentions, on the other hand, defy objective analysis. Because the Pact can be shown to have a very considerable numerical advantage in certain key weapons systems, it does not necessarily follow that it will seek to exploit those advantages by invading Western Europe. On the contrary, history has shown that it has not tried to do so. It may be remembered that, during the 1970s, the US military, together with the US military/ industrial complex, put forward the superficially attractive notion that for a comparatively short period the USSR would have a "window of opportunity" for the conquest of Western Europe as a result of its superiority over NATO forces in certain very important

areas. Improvements in NATO (and especially in American) forces, then perceived as imminent, would mean however that the "window" in question would be shut before very long. Consequently, so the Pentagon argued, the Warsaw Pact would be bound to attack before the shutting took place. It had the capability: it must therefore have the intention.

Perhaps because I had the opportunity of meeting with the Red Army in Berlin soon after the end of the Second World War, I have never been convinced by this reasoning. Much as its might was feared in the West in 1945, it was never capable of embarking upon a major war as the Berlin Airlift showed. The colossal losses in adult males suffered by the Soviet Union from 1941-45 were in themselves sufficient to quench whatever embers of bellicosity may have been smouldering in the heart of Stalin; and comparably weighty, though different considerations have been operative ever since. That, at least, is my view of the matter; and I am sorry that Phillip Karber never so much as touched upon this side of things in his paper. The more's the pity, given the recent disarmament proposals put forward earlier by Mr. Gorbachev, and now by Mr. Bush. Either these are, both sets of them, purely propaganda proposals, or else their authors, both of them, accept that in today's world neither side has any intention whatever of starting a war against the other. For all except a small minority of the inhabitants of the countries of the Western alliance, it must surely be clear that NATO is in no position to do so; but it may be useful to those of them who happen to know Russian to turn to the January 1988 number of the Soviet journal *Kommunist* and see that their assessment is shared by three influential Russians.

To return once more to Phillip Karber's paper, it is my belief that the non-specialist, but interested and intelligent Western citizen will again most benefit, if he has to be selective, by concentrating his attention on pp. 65-85 of his paper. Better to read the whole thing, of course; but unfortunately in this modern age we are all of us short of time.

Chapter 5

Arms Control: The Open And Hidden Agenda

Lawrence Freedman

Introduction

There has rarely been a time in NATO's history when so many established policies and assumptions have been subject to such intense scrutiny. The unexpected turn in US-Soviet relations - brought about by the arrival of Mr. Gorbachev on the scene and by the shift in the policies of the Reagan Administration - has created an optimism with regard to the future of European security, even to the point where some suggest that soon the basic fracture across the continent might be healed. Others, more pessimistic, not only doubt that the Soviet Union can reform itself sufficiently to make that possible (even if its current leaders would like to) but also fear that a combination of political and economic pressures is encouraging NATO to lower its guard.

Behind the concerns of many in the NATO establishment is a belief that the current security system has been optimised to a greater extent than many dare admit publicly. Remove the disciplines of superpower confrontation and nuclear deterrence and the result might be less than a new golden era of international harmony and universal human rights than a return to the more complex European politics of an earlier era, with the resurgence of traditional rivalries and conflicts. For those on the Western side of the Iron Curtain, the fate of those on the Eastern can seem a small price to pay for continued stability. Similarly a period of unprecedented peace brought about through the fear of nuclear war appears to be worth the apparently manageable risk of utter disaster were the system to suffer a catastrophic failure. Dependence on the United States can also appear as a cost, but that must be set against the economic cost of any serious drive towards self-sufficiency. Thus those critical factors of bipolarity. Atlanticism and nuclear deterrence are being qualified at the moment, but they are not being deliberately abandoned.

The short-term developments in Soviet policy encourage an essentially "wait and see" attitude in Europe. This caution is reinforced by the conservative (traditional European rather than radical American) approach to security affairs. The intense debates of the 1980s have not produced any consensus on, or indeed any compelling description of, an alternative security system. The

basic threat to the current system is therefore not a vision of a better future, or a surge of military adventurism but the steady impact of political change. The more direct challenges - whether the ideological zeal of the Reagan Administration in its early years or popular "Gorbophoria" - are easier to deal with than the processes by which the United States is having to come to terms with its reduced circumstances or the Eastern bloc with the failure of the socialist project. The current security debate in Europe therefore reflects this tension between the conservative impulse and the passage of history.

For many people arms control appears as the medium through which this process can be controlled. Rather than take great unilateral steps on the basis of optimistic assessments of long-term trends in both the intentions and the capabilities of the old adversary, adjustments to the military balance must be negotiated so that everything is done in a reciprocal and coordinated manner. Because it is the thought of a nuclear confrontation that makes the East-West antagonism seem so dangerous, the natural response to any relaxation in relations is to step up activity in arms control. Because there are normally one or two agreements that can be wrapped up quite quickly in these circumstances the impression can soon be created of great momentum, with exciting new prospects for radical breakthroughs.

However, if the basic antagonism remains, then there are limits as to how far arms control can go. In part this is because of the intricate nature of the negotiations and the demands of verification. In part also it reflects the tortuous processes of consensus-building on both sides. In the West there are divisions over the continuing role of and requirements for nuclear deterrence; in the East the first blush of enthusiasm over concepts such as "sufficiency" and "defensive defence" is now giving way to a more searching analysis of the sources of East-West stability. The problem is that not only have these various debates thrown up all sorts of difficulties with the alternative concepts for future arms control, but that they are still phrased within the traditional terms of East-West antagonism.

As already noted, there are as yet no compelling alternative visions for a new Europe that could offer us an alternative frame of reference. Even if we all signed on to such a vision it would be surprising if it were one that could be obtained through the clumsy mechanisms of arms control. How fundamental will be the transformation of the security system to be witnessed over the coming decades remains a matter for speculation as is its ultimate destination. What can be said is that a transformation of even the most limited kind will still come about largely through political and economic changes rather than military adjustments, and that the process will not be a grand exercise in geopolitical engineering but the normal mixture of the intended and the unexpected.

There will be military adjustments - possibly of a substantial nature - but they will follow and reflect political changes as well as shifts in attitudes towards the role of armed force in European affairs. For this reason arms control cannot move faster than the political and economic developments on the continent. Furthermore, to the extent that these developments encourage improved East-West relations and a declining role for armed force (neither of which can be taken for granted), arms control may become less necessary *even* if *more* possible.

I. Denuclearization and the Decline of Deterrence

A strong rhetorical commitment has been made by Mr. Gorbachev to a nuclear-free world and Mr. Reagan has not been far behind in his endorsements of this concept. This has led many in the NATO establishment, who see the INF Treaty reflecting this commitment and assume without much evidence that it is strongly backed by public opinion, to express concern that a woolly idealism will lead to the loss of nuclear deterrence. If it is believed that without nuclear deterrence there could well have been a bloody confrontation over central Europe then the loss of this discipline threatens a rehabilitation of great power warfare. A more moderate gloom warns that at least in these circumstances the Soviet advantage in conventional forces would tell and allow it to exercise a powerful hegemonic influence over the continent. Hence the desire to stop the rot of "denuclearization" at whatever the point the internal NATO debate happens to have reached at any given time - at the moment shortrange missiles.

It is not necessary to assume a mechanical relationship between the presence of nuclear weapons and the incidence of conventional war to acknowledge that complete denuclearization would be both a snare and a delusion. It is a delusion because even if we got rid of nuclear weapons there are plenty of other means by which human beings can do terrible things to one another on a mass scale - chemical warfare is one obvious candidate. It is at any rate not practical: the secret is out and it is widely dispersed. Nuclear status could be recovered during the course of a war and this possibility, along with the anxiety that someone somewhere would have kept a few devices back for safe-keeping, would produce considerable uncertainties. It is a snare because partial denuclearization could be worse than the status quo because if war appeared imminent the incentive to mount a first strike would be that much greater because it would have a higher chance of success.

These are all well-rehearsed arguments. There is a risk, however, that they serve as something of a distraction. In practice we are nowhere near denuclearization. Despite the concern expressed during the debates over the accumulating zeroes of 1987, NATO will not be denuclearized as a result of the INF agreement. None of the missiles being removed or now not to be deployed was available before 1983; nor had any other systems of equivalent range been removed to make way for them. The loss is of a new capability rather than one that has long had a central place in NATO plans. As the Pershing 2 missiles were introduced, 108 old Pershing 1As operated by the US Army were removed. These will now be joined by 72 Pershing 1As operated by West Germany, along with their American warheads.

The concern over denuclearization is based on the prospect that either remaining nuclear systems will now be cut and so undermine confidence further in nuclear deterrence, or that a sort of mental disarmament will take place so that NATO will no longer be prepared to make the nuclear threats required by the doctrine of flexible response.

These are two distinct types of denuclearization. A change in attitudes towards the practice of nuclear deterrence is only loosely linked to changes in force structure. In some ways attitudinal change is more significant than disarmament and more impressive as a trend. It was not a trend that began with the INF Treaty. More important here was the original decision - taken in December 1979 - to deploy cruise and Pershing missiles. The long debates over nuclear strategy and deployments occasioned by this decision brought to the fore a series of problems with nuclear deterrence that had long been appreciated by strategists and policy-makers but had been considered too difficult - and in practical terms too irrelevant - to warrant public ventilation.

These difficulties with nuclear strategy had been common fare among the specialist community since the first years of NATO. It is perhaps because we are so used to them that it is so difficult to gauge whether they have in some way become more acute. The long-standing question is of extended deterrence: can Western Europe rely on the United States to put itself at nuclear risk in order to deter a conventional invasion by the Warsaw Pact? In the political climate of the early 1980s, this old question was given a new twist: was Western Europe being put at nuclear risk by the United States in its pursuit of a global confrontation with the Soviet Union? Although the two questions were based on quite different - and indeed opposed - strategic assessments they suggested a similar answer, that the role of nuclear weapons in NATO strategy should be reduced. The protest movements went further and argued that nuclear weapons should have *no* role.

The debate in some ways diminished nuclear deterrence. The shift in the United States was particularly marked because of the early enthusiasm of the Reagan Administration for a robust form of nuclear deterrence. The Western position would be reinforced by a strategic modernization programme which would provide a future President with a range of options, including the conduct of a protracted nuclear war, should deterrence fail. The long saga of the MX ICBM and the doubts over the capacity of command, control, communications and intelligence systems to operate in the way required under any circumstances and certainly not in a nuclear environment, undermined the approach. Politically it also ran into problems as it suggested an optimism over the prospects for nuclear war-fighting which appeared sinister and reckless to many sections of public opinion.

In March 1983, President Reagan suggested an alternative approach which came to be known as the Strategic Defense Initiative (SDI). The long-term practical impact of SDI will probably be slight. However, the philosophy surrounding the Initiative was clearly opposed to traditional forms of nuclear deterrence. From a "technical fix" designed to render nuclear weapons "impotent and obsolete", it was a short step to a political fix to achieve the same objective. The obvious method for this was arms control. This was far less controversial than SDI and more likely to produce results. Again as exhibited most dramatically at the 1986 Reykjavik summit, the philosophy was one opposed to nuclear deterrence. This evidence of a trend in American thinking was reinforced by revelations by such key figures as Robert McNamara and Henry Kissinger as to their own doubts over the US nuclear commitment to Europe.

This caused evident unhappiness among Western European governments. However their freedom of manoeuvre to stand firm for the old orthodoxies was limited by the public support for reduced dependence upon nuclear weapons. When the anti-nuclear movement had been at its height in the early 1980s, governments had dissented from its methods (unilateralism) rather than its objectives (nuclear disarmament). When Chancellor Kohl and his Defence Minister expressed their doubt as to the wisdom of the "double-zero", they received little encouragement from their allies (Mrs. Thatcher was facing a general election), their Free Democrat coalition partner or the German electorate. Resistance soon evaporated.

There also appears to have been some reappraisal of strategy in the Soviet Union. One of the consequences of the arrival of cruise and Pershing was that they undermined Soviet hopes of keeping the Soviet Union a sanctuary in an East-West nuclear exchange. The Soviet Union did not share the anti-nuclear movements' concern that these missiles were part of preparations for a limited

nuclear war. The Soviet concern was exactly the opposite; that they were instruments of escalation from a limited to a more general war, because they were likely to get involved in a European land war *and* could hit Soviet territory. One perhaps should not underestimate the impact of the theories of "nuclear winter" and the very real experience of Chernobyl.

For whatever reasons, it would seem that from the early 1980s, the Soviet military has been putting a steadily greater stress on the conventional stage in a conflict, envisaging now not so much that a successful campaign in this stage could create the conditions for a decisive nuclear strike but that victory might be achieved without any resort to nuclear weapons. This was in a sense the presumption that many in NATO had long made about Soviet strategy, because of the assumed Warsaw Pact advantages in the conventional area. Only now was it starting to become a reality. This explains why the Soviet leadership was more relaxed about nuclear disarmament.

Leaving aside an interest in the ultimate goal of nuclear disarmament, it was still vital to eliminate the direct threat to Soviet soil posed by the new intermediate range missiles (threats to the soil of other Warsaw Pact countries were easier to tolerate). The zero option came to make sense because it meant trading alliance-threatening weapons (SS-20s) for superpower-threatening weapons (cruise/Pershing).

Thus the secular decline in nuclear deterrence is a transatlantic and East-West phenomenon and much more than a function of arms control agreements. The need to adjust NATO strategy would be there even without the INF Treaty. However, the decline is not without limits. While there is no longer confidence in a nuclear victory, or that there would be great military value in initiating nuclear hostilities, the principle of deterrence through uncertainty still applies. So long as nuclear weapons exist, their use in war cannot be precluded, whatever the peacetime assumptions or even declarations that nuclear weapons will not be used first. In addition, for the foreseeable future, there will be a need to maintain nuclear weapons to deter nuclear use by an adversary.

What then of the argument that the INF Treaty has set in motion a process of "denuclearization" through disarmament that is now likely to continue with short-range "battlefield nuclear weapons"? It is again important to maintain an historical perspective. The challenge to these systems is not new and has not solely been mounted by the Soviet Union.

These systems have included a great variety of types-artillery, air-defence missiles, short-range surface-to-surface missiles, medium-range aircraft, mines. At the end of the 1970s the number of US nuclear warheads based in Europe was put at some 7,000, which is where it had been at the start of that

decade. Although NATO governments did not attach the same importance to this number as they did to the number of US troops in Europe, it had taken on some political significance as a symbol of the American nuclear guarantee.

This political role was not readily matched by a military role. The European view has been that any use should be a signal to the aggressor that nuclear weapons could be used and that further escalation was possible. There was little confidence in using nuclear weapons on the battlefield as part of general purpose forces. It would be hard to contain "nuclear war-fighting" to the battlefield, and there was no reason to believe that NATO could expect to gain a serious military advantage by initiating nuclear use at this level because of the comparable capabilities of the Soviet Union and its potentially greater staying power in a war of attrition. Others feared that the forward deployment of these systems and their integration with general purpose forces could result in premature use (use 'em or lose 'em) that could turn a possibly manageable conflict into a nuclear holocaust.

These objections remain powerful. Indeed, one of the advantages claimed for the original INF deployments was that they would create the conditions for a shift in the NATO force structure away from the short to the longer range. In the Montebello agreement of 1983, the alliance moved in this direction. The decline in nuclear warheads was confirmed by a move down to 4,800. Much of the decline has been in obsolete systems, and by such overdue moves as the shift from the nuclear Nike-Hercules to the conventional Patriot air defence missile.

Many strategists remain unhappy about the destabilizing role these weapons might play in a conflict. There are those in NATO armies who would prefer to dedicate the artillery pieces to conventional tasks. The West German Government is unhappy about a class of weapons which can only be used on or against German soil. This has become a major issue in German politics, bringing together the left and the right in an exaggerated sense of being singled out for nuclear destruction. One reflection of this is a lack of enthusiasm for a replacement for Lance.

So even without an arms control interest, these systems would be challenged. In arms control terms, it is not self-evident that a deal would favour the Warsaw Pact. There are far more Soviet systems at stake than Western. Removing short-range missiles (and not just their warheads) would also remove some of the conventional and chemical options for attacking NATO's forward air bases that have been of concern to NATO planners.

This has helped to create interest in a "treble zero" to remove all the missiles below 500 kilometre range. However it is going to be extremely difficult to

deal with this problem directly through arms control. The boundaries of such a negotiation would be very difficult to draw. NATO might be content if only short-range missiles went. But the follow-on for Lance is not a missile system but a rocket-launcher and so any inclusion of future systems must go beyond missiles. Nor is it likely that the Warsaw Pact would be content with missiles alone. Not only would artillery soon be included but so would tactical air forces, which have now taken on a greater importance in the framework of nuclear deterrence as well as providing a key source of conventional strength. A further problem is that the question of warheads is quite separate from that of delivery vehicles, and this raises further problems of definition. As always, verification would also be extremely difficult.

This does not mean that there will be no further cuts in battlefield systems. NATO may still see advantage in continuing its own rationalization of nuclear systems. This may be politically necessary as part of a package of modernization that would include a replacement for Lance and still be tolerable to the Federal German Government. West Germany's allies accept that the Lance modernization issue can be postponed for a while; but this cannot be indefinite. They are also irritated with the "singularity" notion, which supposes a confined geographic vulnerability to nuclear war. The range of modern weapons and patterns of fallout mock the idea of "nuclear-dedicated zones" as much as "nuclear-free zones". More likely than an inter-alliance negotiation therefore, at least for the moment, is an intra-alliance one - a Montebello Two which would trade modernization for substantial reductions in nuclear artillery.

Nor does it mean that nuclear-capable delivery systems will escape inclusion in arms control. NATO has already accepted that artillery pieces must be covered in an eventual conventional force agreement. It is also likely that a seductive conventional disarmament deal offered by the Warsaw Pact, promising for example to reduce dramatically its armoured divisions in Eastern Europe, would be conditional on NATO concessions in tactical air forces.

While short-range missiles may prove to be a controversial issue for some time to come, they do not constitute NATO's only options for providing for nuclear deterrence in the aftermath of INF. One possible reinforcement, which has the advantage of greater survivability than land-based systems and longerrange than battle field weapons, are submarine-launched cruise missiles (SLCMs). There were widely canvassed as an alternative to GLCMs (ground-launched cruise missiles) in the 1970s and serious consideration is now being given to assigning a number to SACEUR (Supreme Allied Commander, Europe). Apart from giving the US Navy a role for these missiles it is not altogether clear what would be accomplished by such a step. SLCMs lack political presence, and unlike SLBMs (a number of which are already assigned

to SACEUR) have problems with penetrating defences and their dual-capability. Considerable difficulties could develop in the command of cruise-missile carrying submarines if they were required both to engage in their maritime roles and remained available to SACEUR. It is now also likely that SLCMs will be restricted in any future START Treaty, although the difficulties with this issue mean that it has to be postponed until negotiations resume under the next US Administration.

In practice, the main responsibility for nuclear deterrence in Europe is now passing to aircraft. Their flexibility and versatility make them more suited than artillery and short-range missiles to this task, as does their more straightforward command and control arrangements. NATO's tactical air forces have been strengthened in recent years, most notably with the F-16 and the Tornado, so there is no real problem with means of delivery. The exception to this is the longer-range category. Now only the F-ll1 poses a serious threat to Soviet territory and this is limited because of problems with penetrating air defences.

Aircraft are still not ideal in this role. The vulnerability of their bases to surprise attack remains a problem. They are needed in conventional roles. Whatever the attractions of dual-capability in principle, in practice there will be a tendency to devote aircraft to urgent conventional tasks even if this means using up a nuclear reserve. There are known forms of defence against aircraft and this creates the risk of an offence-defence duel taking the form of a technological arms race, leading to considerable expense and uncertainty.

The optimum approach might be to put more emphasis on nuclear roles for longer-range aircraft, and accept that the shorter-range will be largely if not wholly dedicated to conventional tasks. The problem here is the lack of a successor to the F-111. The best solution would probably be the development of a new stand-off missile for use with the F-15. Britain and France have an interest in a stand-off missile to improve the effective range of their aircraft. Of all the modernization options currently under consideration this is the least controversial.

A final source of nuclear deterrence that deserves mention is that provided by the strategic forces of Britain and France, which are now both undergoing substantial modernization. Here the trend is to more rather than less. During the 1990s they will both be accumulating warheads and strengthening their numerical position vis-à-vis the superpowers. Both countries also deploy substantial numbers of medium-range aircraft. In addition France has 18 land-based missiles, which will soon be unique on the continent, and short-range missiles (Pluton/Hades).

If strategic arms control makes progress then there will be pressure to include aBritish and French missiles in an arms control regime. Neither country precludes this possibility although neither is enthusiastic. Both stress the need for substantial cuts in superpower offensive forces and no expansion of Soviet defences, and would prefer that little is done before there has been a redress of the conventional imbalance. It is not altogether clear what they would do should their conditions be met, as they cannot reduce their forces significantly without effectively abandoning nuclear status. In practice they will be unable to offer much other than a warhead ceiling. Should this be agreed it would probably be in the form of a bilateral agreement with the Soviet Union, rather than as a result of direct participation in arms control talks. There is also a very slight possibility of Britain's hand being forced by the United States conceding the Trident programme in a future START deal.

While doubts about the durability of the American nuclear guarantee help explain the attachment to these systems, neither Britain nor France nor their European allies has shown great enthusiasm for an alternative to the US nuclear guarantee. On the other hand Britain does deploy a substantial portion of its nuclear assets on German soil, with the Tornado squadrons, and this constitutes a significant commitment to West German security.

II. The Shift to Conventional Deterrence

The logic of the whole trend of developments within the alliance (and not just the INF Treaty) is that NATO should rely more on conventional forces in the coming years. NATO strategy must be sensitive to the political context, and there is clearly no longer a sufficient consensus behind the threat to initiate nuclear hostilities as a deterrent to all war. The most important nuclear requirement now is to ensure attention to the problems of providing a credible second-use threat, and to remind that war moves in unexpected directions and there could never be confidence that a major East-West conflict would not take on a nuclear character.

The unavoidable logic is that we should now attend to the conventional balance and "raise the nuclear threshold", the point at which the fateful choice between defeat and nuclear escalation becomes unavoidable. Three problems are normally identified with the movement in this direction; the conventional balance finds NATO at a severe disadvantage; the resources will not be available to correct the balance; even if a balance were obtained this would not constitute a sufficient deterrent. It should not be supposed that arms control provides an easy way out of conventional force problems.

The position of those standing firm against further denuclearization is that there should be no more nuclear cuts until something drastic is done about the Warsaw Pact's conventional superiority. This reinforces the erroneous view that nuclear weapons would not be needed should a satisfactory conventional balance be created. There would still be a need to deter nuclear threats against Western Europe. More seriously, despite the terminology, while a nuclear balance may be stable in that it creates new incentives to strike first, conventional balances are much less stable.

The March NATO statement on conventional arms took care to make the case that nuclear deterrence is more than simply a response to conventional imbalances, but that should reinforce the argument for considering proposals for nuclear arms control in Europe on their own terms and not simply as a means of avoiding the nuclear issue. Nuclear disarmament is not a prize we hand to the Soviet Union once it has paid a price in conventional disarmament. Great strides in the conventional sphere still leave a requirement for the nuclear sphere, just as a good nuclear deal should not be hostage to progress elsewhere. These are familiar problems with "linkage".

As noted earlier, it is by no means clear that conventional and nuclear disarmament will be exclusive. Most of the remaining nuclear systems are dual-capable. It would be more fruitful to identify those nuclear-delivery vehicles that are considered essential and ensure that sufficient remain, and so acknowledge that others could be removed, rather than clinging on to every nuclear system in a last stand against denuclearization. The alliance needs a firmer idea as to what is and is not dispensable in its force structure.

Slowly but surely NATO and the Warsaw Pact are drawing up the terms of reference for a grand new arms control negotiation on conventional forces. The more optimistic see these talks as a means of giving arms control a push in an area which has hitherto been unpromising. The more cautions see the new talks as a means of testing Soviet intentions. NATO has begun to sketch out what it would mean to redress this imbalance, with a particular stress on cuts in tanks and artillery. Some analysts have argued that NATO should be satisfied with nothing less than five Warsaw Pact divisions being removed for every one of NATO's. For its part the Warsaw Pact has agreed in principle to the need for asymmetrical reductions and for a more defensive orientation but has not begun to be specific about what this might mean in practice. The Warsaw Pact may offer to make the greatest cuts but not to the extent that will satisfy the NATO establishment although this might be quite appealing politically. It will also insist that the process be extended into naval and air forces - areas of Western advantage which NATO is seeking to insulate from arms control.

If NATO really wants a deal, then it will have to be forged on the basis of a compromise that could pose some awkward questions for NATO. Should the alliance be satisfied with a deal which only moderates but fails to eliminate proved Warsaw Pact superiority? Would not that risk freezing that superiority in perpetuity? If this superiority has been overstated, and is therefore strategically far less important than often supposed, is the effort of a major negotiation actually necessary?

The theoretical basis for conventional arms control is even less satisfactory than it is for nuclear arms control. A conventional "balance" is not inherently stable - superiority is far more stable than a situation in which the outcome of a clash of arms is uncertain. The current Western approach puts a lot of stress on the possibility of major force restructuring as the objective of the new conventional stability talks, when a more fruitful approach might have been to persevere with the development of confidence-building measures. Experience with MBFR (Mutual and Balanced Force Reductions) warns that the complex nature of negotiations in this area could mean years if ever before any agreement is reached, let alone implemented.

This question of the costs of a successful negotiation is no small matter. Should the two sides agree on the mutual regulation of force structures, then they will also set up an apparatus to monitor compliance. If this apparatus is to be as intrusive as required, then it will need to be vast. One can imagine any new British Army divisions withdrawn from the Central Front being turned immediately into a new Royal Corps of Inspectors. It may be argued that this mutual inspection is valuable in its own right, but if that was the objective it could be achieved in a far less cumbersome manner. Verification is in danger of becoming an enormous tail wagging a very small dog, regulating all military activity in Europe in a way that will be expensive in both human and financial resources.

It is doubtful that either East-West relations or the defence planners of either alliance can wait for the outcome of these talks. A degree of force restructuring will be necessary on both sides during the 1990s with or without arms control. At issue is not whether there will be reductions but their degree and where they will fall. Negotiations in this area could soon turn into an excuse for not addressing the most difficult questions and become a cause of rigidity rather than flexibility, a reason for inertia and not making the adjustments which make sense for both sides. Unilateral reductions do not preclude a continual dialogue between the two alliances on rendering each side's military posture less threatening to the other. The early response in some NATO capitals to Warsaw Pact calls for discussions relating to military doctrine were too dismissive.

However, there is a need to discuss doctrine to inject some realism into discussions that risk being dominated by simplistic notions of true "defensiveness". These notions are normally addressed by pointing to the extraordinary difficulty of distinguishing between defensive and offensive forces. However the problem goes beyond that, for to the extent that it is possible to define such a thing, a defensive force that is non-provocative has to be extremely robust in that it has conceded many of the defender's traditional means of relieving pressure upon itself and so must compensate in men on the ground. In an odd sort of way these ideas encourage the restructuring of forces as if war was also imminent, and through the concession of the initiative, they require continual alert and high combat readiness.

But in current circumstances, this seems ludicrous. It is undoubtedly the case that thinning out of the Soviet armoured divisions in East Germany would ease many NATO concerns, and that there are a number of measures that might be taken to limit further the possibilities for surprise attack, but the greatest reassurance will come with palpable deterioration in combat readiness. If a combination of demographic and budgetary pressures leads to this, then much of the arms controllers' work has been done without exceptional measures. When relations are deteriorating an arms race can aggravate the problem. In current political conditions and with military budgets at most held steady or declining, the risk of an arms race is reduced.

There is an obvious temptation to use the new talks as a means of deterring the US Congress from unilateral reductions in American force levels. For Western Europe the presence of substantial American forces on the continent has become even more important as a result of the INF Treaty. Yet at the same time budgetary pressures are liable to encourage a contraction in American force levels. This worked well enough with the move towards MBFR in the early 1970s which did help in the defeat of the Mansfield Amendment. However the experience of MBFR is unlikely to make this gambit very convincing this time around. Nor is it necessarily advisable to discourage the United States from a serious restructuring of its force in the light of current budgetary realities. Perhaps a better approach would be to diminish the symbolism attached to a specific number when discussing future force levels, and accept that there might have to be some reduction in overall numbers - a 5,000 troop cut introduced to "send a message to Europe" would be more damaging than a 50,000 troop cut as a result of the need for the sort of adjustments that budgetary pressures impose on all NATO countries at some time or other.

A final point to note is that any dramatic achievements at the new talks will depend on whether the new Soviet leadership is reappraising the role of its military might in Europe. There are plenty of economic reasons for saying

that it *should*, and some public statements to confirm that it *is*. However, there is precious little evidence on the ground as yet to suggest that it *has*. Nonetheless the European political situation is clearly more fluid now than it has been for some time. The agreements on confidence-building measures reached at Stockholm in 1986 are now working well and, coupled with the more relaxed Soviet attitude towards intrusive verification, there is now much greater military transparency in Europe. How much further this can go will depend on political changes far beyond the scope of this paper. All I would argue is that arms control negotiations have rarely served well as a means of forcing the pace of political change, and that attempts to use them in this way have proved counter-productive.

Chapter 6

Arms Control: A View from NATO

Ambassador Henning Wegener

It is difficult under any circumstances to take the floor after a scholar of the distinction of Professor Freedman. Today I do so with particular trepidation because of the constraints of my rôle at NATO. Not only am I to reflect a strong institutional bias, but I must be careful in my remarks not to overstep the boundaries of consensus among NATO's 16 equal and sovereign nations. Like all institutions, NATO takes care to envisage change only in a gradual process of evolution and on the prudent basis of consensus. Especially on our core subject of strategy and arms control, rapid shifts are not in the game. And rightly so. A premium is placed on consistency and consensus. Originality plays a key rôle, but NATO's rôle is not to dazzle a waiting world with dramatic schemes. Two years at NATO, however, have reconciled me with the fact that, in presentations like the present one, I sound even more pedestrian than I would otherwise.

The strong cohesive force of NATO as an institution provides a number of comforts to governments. Ministers can find reassurance and mutual support on the part of their peers when they come to NATO, and they can use NATO demonstrations of collective firmness as political tools against the temptations and pressures of policy at home. NATO, indeed, has become quite a bulwark against those recurrent waves of fashionable doubts regarding our strategic tenets and our policies, on which the strategic and arms control community appear to feed. This bulwark often holds surprisingly firm against the oscillating constraints of domestic politics of the members. At Evere, these are much less felt than they are outside and only rarely recorded in documents, excepting an occasional timid footnote.

The gradual, carefully prepared approach to NATO's collective work has particularly characterized the field of arms control. Here NATO's various highlevel bodies have a record of thorough work. Any responses - for instance to Gorbachev's rapid fireworks of arms control proposals - are likely to be stately and measured. I fully realize the price in public glamour which the alliance thus has to pay. But I would argue that NATO's gain in the process is a level of conceptual soundness of its arms control views and proposals that

is much more difficult to find on the other side. NATO's arms control stance is anchored in hard, joint work on the part of all allies, in the involvement of all governments. Promulgated views have already stood the severe test of arriving at a consensus among 16 free nations. Arms control proposals by the alliance are consistent and durable - once agreed, they hold up at the negotiating table and provide the allies with a firm negotiating framework and mutual cohesion.

With this painstaking and laborious procedure, it must seem to various political pundits almost surprising that NATO's arms control proposals at the same time are as creative as they are. Be it the INF or the START negotiations, confidence-building in the Helsinki process and at the Stockholm conference, the basic principles - and many details - that underlie the Geneva negotiations on chemical weapons, MBFR, or the current move towards a process of wider conventional arms control, the approaches that tend to succeed in the negotiations and which allow a consistent treaty framework to go forward are almost exclusively of NATO origin. This is not the paper to make the point in detail, but I do not think that anybody could contradict my basic affirmation that the alliance, for all the deliberateness of its procedures and despite the lack of dramatic fanfare in which proposals are offered, has consistently maintained the conceptual edge in arms control negotiations, between the alliances and worldwide. We are not quick; we are solid. We are not splashy, we are sure. In the long-run, the rewards cannot fail to accrue.

With all its sense of excitement and opportunity, the INF Treaty has also brought to us - and I presume to everybody - the sudden realization of the extent to which arms control touches on vital prerequisites of core security. After the INF Treaty, arms control has ceased to be an opportunity for welcome moral gestures and a more or less gratuitous capturing of popular goodwill. The Reykjavik summit especially revealed breathtaking perspectives, frightening for many, and all of a sudden opened the possibility that arms control would cease to be a marginal rectification of certain security policies and could impinge on the very essence of the strategic and political order.

The INF agreement has ushered in a new era of arms control. Not only has it restored the credibility of the arms control notion and aroused the hopes and wishes which the terms "arms control" and - even more - "disarmament" conjure up, it has also highlighted the intimate relationship of the arms control process with some of mankind's fondest dreams: the INF Treaty has given this process a new set of guiding principles and has given these hopes a new order of concrete magnitude. The triple novelty - effective destruction of weapons, disparity of the contribution by the two sides, and intrusive verification - sets the INF Treaty off from all former arms control ventures.

Since the INF Treaty, the members of the alliance have been searching for a conceptual overall approach to arms control, suitable for this new era, which binds arms control firmly to the principles of their security, to their strategy and to their overall political purpose, while at the same time capturing the promise of a reduction of weapons, seizing political opportunities and meeting heightened public expectations.

This review is still in course.

While one cannot predict its detailed outcome, one thing is already certain: it is not intended to yield earthshaking new insights or discover truths somehow overlooked all these years. In keeping with the alliance's tradition of gradual evolution and circumspect progress, it will rather reconfirm and consolidate proven principles. After all, the alliance is engaged, not in the creation ab ovo of an arms control concept, but in its further development.

Among the simple truths that have already found specific expression in the documents of the recent NATO summit, the following have emerged as perfectly uncontroversial:

- Arms control can serve to enhance the security of the alliance at lower cost, improve military and political stability, lower the probability of conflict, raise confidence and encourage greater co-operation with the East.
- In this multiple function, it provides advantages not necessarily found in unilateral moves, however stabilizing these may be individually.
- Arms control can serve as a vehicle to demonstrate to public opinion the
 peace-oriented, defensive and politically well-intended thrust of alliance
 policy, and it can at the same time generate a more realistic view of defence
 needs and political possibilities.
- However, security cannot be entrusted to arms control alone, and arms control alone cannot resolve the political problems between East and West.
- Arms control must thus be inserted in a broader political and security agenda.

As the summit documents spell out in unequivocal detail, arms control agreements are attractive to the alliance, only

- if its ability to implement an effective and credible strategy of deterrence and defence is not impaired, i.e. if an appropriate and effective mix of nuclear and conventional weapons remains available;

- if flexible response and forward defence, including adequate readiness and response time, can continue to function;
- if, given the alliance's geographical situation and its undertaking to secure indivisible security for all allies, reinforcement across the Atlantic and transatlantic coupling remain intact; and
- if they yield militarily-significant results that reduce or eliminate those Eastern military capabilities that are most threatening to the security of the alliance.

These tenets imply - and the implications were clearly spelt out in the summit documents - that the alliance will not entertain proposals for a zero option of nuclear weapons on European soil, that it will not renounce the possession of short-range nuclear forces for which there is a clear and agreed rationale, and that it will not renounce its right to update all conventional and nuclear forces, where necessary. For the nuclear forces in Europe, this holds true across the entire spectrum of ranges, commensurate with the scale and quality of the threat.

Arms control agreements must be accompanied by effective verification regimes and must foreclose opportunities for circumvention.

As these tenets demonstrate, the belief of the alliance in the strategy of deterrence as the basis for arms control relief is unshaken. The occasional anxieties that have spilt over to Europe from the US strategic debate and the periods of self doubts and questioning which have permeated public discussion after the INF agreement or in connection with the SDI issue, in short, the ebb and flow of public opinion on either side of the Atlantic, have never pierced this institutional consistency. NATO has always believed that there is no alternative to the nuclear element in its strategy and that the deterrence principle and its implication of incalculable and unacceptable risk to a potential aggressor work, and work with a huge margin of security. Doubters who have periodically revived the debate about the effectiveness of extended deterrence have had little effect on the alliance. Their learned speeches have been perceived as gratuitous reflections by intellectual thinkers, given that the effectiveness of deterrence can never be tested in real life. NATO thrives on the firmly documented resolve of all nations and on the military conviction that all elements of NATO's defence will be applied in case of an attack. From a NATO standpoint, I would thus tend to contest Professor Freedman's thesis of a "secular decline" of deterrence, in however nuanced a way that thesis is offered. From a NATO viewpoint, flexible response is not imperilled, but undergoes normal processes of adjustments - in the changing combinations of conventional and nuclear, in the trend towards fewer and safer nuclear

weapons, in attempts at reconfiguring the nuclear component subsequent to the INF agreement or, more generally, in the force adjustments recommended in the General Political Guidelines.

In its concrete arms control policies, NATO is at present following a three-fold agenda:

- the quest for a stable nuclear order in the START negotiations,
- the attack on the core problem of European security, Warsaw Pact conventional superiority, and
- the pursuit of global concerns, especially with relation to chemical weapons.

For each of these I now will attempt briefly to describe the state of negotiations and Western proposals. I will then sketch out what successful conclusions may mean for NATO security. I will then, finally, explore their longer-term implications for NATO's political agenda.

The START negotiations are obviously bilateral, between the two major holders of strategic weapons. The US rôle in the alliance and its obligations as nuclear guarantor of European security, which form the essence of the "transatlantic bargain", however, also involve the allies. In notable contrast with the SALT process, the START negotiations have from their inception been marked by an exemplary intra-alliance consultation which has seen new heights since the Reykjavik summit.

At almost monthly intervals, US START negotiators meet with the NATO Council and take the views of the other allies back to the negotiating table. From recent consultations it emerges that the duration of the START negotiations is still uncertain, but that much of the work has been done; the outlines of the agreement are becoming visible. The question has been raised, speculatively, whether the negotiations will be led to a speedy end under the Bush Administration. At NATO the view is that the US will not slacken in its negotiating effort, even though renewed emphasis is also placed on the importance of conventional arms control negotiations. Thus the President-elect's utterances may not betray a lesser significance for START, but rather a balanced view. The prediction at this time is that START will soon resume, essentially with the same objectives.

It can thus be safely predicted that the reduction to 6,000 strategic warheads - including a 50% reduction of warheads on Soviet ballistic missiles - with appropriate subceilings, will remain the centrepiece of the START project. The Soviets will also reduce the throw-weight of their weaponry dispropor-

tionately, and they will conduct a considerable, if partial, shift away from heavy land-based systems, mainly to sea-based strategic missiles.

This allows for a prediction that START will leave forces on either side that are more symmetrically structured and provide a higher degree of equality of options. The START reduction of strategic systems will also lead to relief in the INF range, since a formerly excessive number of long-range systems will then not impinge to the same extent on European security by targeting at lower than the maximum ranges. Lower START ceilings will relieve the implied theatre threat of current Soviet strategic systems. One can also expect that the new level and configuration of strategic forces will significantly restrict the ability of either side to attack the strategic weapons of the other side, thus virtually eliminating the first strike scenarios which - based on the excess number of Soviet heavily MIRVed, land-based missiles - have created phobias and strategic instabilities for such a long time. The prediction is that the START agreement will better respond to pure deterrence requirements and, as a practical matter, deprive both sides of the hypothetical incentive to attempt a pre-emptive attack on the opponent's strategic forces.

In addition, the START agreement could have built-in incentives to produce over time more stabilizing features within the Treaty framework. Tendentially, it would motivate the Soviets to deMIRV and the US side to lower the warhead-per-submarine ratio in order to put relatively fewer eggs in each floating basket.

The outstanding issues of the current negotiations are well known: The airlaunched cruise missile (ALCM) counting rules may be closest to settlement and perhaps the least significant of the open problems. Inclusion of SLCM in some way may be unavoidable, but it would likely happen only at relatively elevated numbers and, failing reliable agreed verification of strategic submarines, by agreed unilateral declarations. The very mobility of inter-continental ballistic missiles (ICBMs) that provides greater invulnerability of weapons conflicts sharply with the need to verify their numbers. Some big issues loom here, and the possible matching of great numbers of reload warheads with non-verified mobile launchers could considerably mess up strategic calculations. But here again some verification modes - designated deployment areas and agreed numbers of mobiles to be captured by verification in their semi-stationed state - have been conceptually explored and do give some promise.

The overriding condition under which a START agreement can come about would be some agreement on the offensive-defensive relationship, i.e. an understanding on the future rôle of the ABM Treaty and on testing of defensive weapons in space. On the basis of the first lines of understanding at the

Washington summit, the hope is not ill-placed that the interest of both sides will lead them to agree on a fixed-term extension of the ABM Treaty and a package of conditions that would also define permitted activities in space and co-operative controls under the ABM regime. This, of course, assumes that the controversy about the Krasnoyarsk radar, a clear Soviet violation of the ABM Treaty, will be settled and remains a temporary episode.

There is thus considerable hope that a START Treaty will come about in the not-too-distant future and, given its beneficial features, that the US Congress will consider it in a perhaps complex and time consuming, but in the last analysis successful, procedure.

The core problem of European security is the massive conventional superiority of the Warsaw Pact, and mainly the forward-stationed Soviet conventional troops. The conventional disparities in Central Europe are the key feature of the postwar East-West relationship. The elaborate system of Western Treaty arrangements, the cohesion and incipient unification of Western Europe, both underpinned by the presence of US nuclear weapons and the strategy of deterrence, have contained this superiority and welded the East-West relationship into a relatively stable military system, however undesirable many of its features.

The INF Treaty and the new perspectives of the East-West relationship, specifically a number of forthcoming declarations on conventional arms control by Gorbachev himself, have now made negotiations on the European security issues a meaningful endeavour.

The highest priority from NATO's viewpoint belongs to the impending negotiations on conventional arms control. They are specifically designed to remedy the inherent deficiencies of the earlier futile attempt in the MBFR talks to move towards a conventional balance. Moving away from the relatively pointless territorial limitations of MBFR, from the sole concentration on troop strengths, from limited participation and from the fruitless haggling on the data issue, these new negotiations offer infinitely more promise, while, at the same time, allowing East and West to benefit from the MBFR learning experience, for instance in the area of monitoring and verification.

With these new negotiations, NATO, as cogently spelt out in its summit declaration of last March, intends to capture key features of the conventional threat: the massive forward-stationing of Soviet troops, the capability of the Soviet Union to use the high mobility and fire power of its troops, to execute surprise attacks and to seize and hold land, underpinned by a unique reinforcement capability from the depth of its territory.

The new talks commence under encouraging circumstances. The Soviet Union in the mandate talks that now visibly approach their end has accepted, up to minor details, the negotiation approach which NATO had put forward and publicized in various NATO documents.

I need not recite the basic features of NATO's negotiating stance in great detail, but limit myself to a brief list. We aim at the following:

- The concentration on key weapon systems, especially those of ground forces, which comprise the highly mechanized attributes of modern Soviet forces, like tanks, armoured infantry-fighting vehicles and artillery.
- Starkly asymmetrical reductions to eliminate the existing disparities.
- As a major technique for these reductions, equal entitlements on both sides, which in substance means equal ceilings, regionally or perhaps even for the entire European zone to the Urals.
- Strict and detailed verification measures at the reduced, equal levels.
- Limitation of forward-based "stationed" Soviet forces as the key element enabling surprise attacks and the capability to seize and hold foreign territory.
- Relegation to internationally supervised storage of a high percentage of the allowed residual equipment.
- A package of stabilizing measures to prevent destabilizing shifts of the remaining forces which would reconstitute asymmetries at regional levels.

These conceptual elements are all supported in the alliance, but it is not surprising that they are difficult to package in a first comprehensive negotiating document. It is firmly agreed that the alliance will put on the table one consolidated negotiating proposal, all elements of which are to be negotiated and to be concluded interdependently and simultaneously. What is less clear is how at the same time to stress the unity and indivisibility of NATO's security and territory and to provide for remedies to specific, regionally threatening force configurations. There is no doubt that the proposal must address individual regional grievances and that a proposal without regional force requirements would be unsuitable to prevent destabilizing shifts of forces of the other side along the long-drawn dividing line of the alliances. Whatever these difficulties of packaging, the alliance is certain to come forward with a unified and quantified proposal in the nearest future.

One of the difficult tactical issues is how much to ask for. Arms control moves by stages. In principle the alliance endorses a gradual, phased approach to redressing the conventional imbalance. But at this juncture much speaks for a dramatic, drastic first proposal. Small changes of the force relationship would only aggravate the problem and create the illusion of improvement. Public opinion needs to be impressed by an alliance that sets its sights high and at the same time bolsters government and public resistance to facile proposals, which only sound seductive, that might come forward from the Eastern side. The alliance cannot afford to accept limited asymmetric but not sufficiently asymmetric reductions, quite independently of the question of whether Gorbachev can afford to and will move forward rapidly on a unilateral basis. A major comprehensive proposal from the West that sets the problem of disparities in the right perspective and requires major sacrifices from the Soviet side will convey an educational message to the population and demonstrate that the Warsaw Pact cannot be given any credit or be offered any discount solution as an implied reward for its reckless unilateral armament policy over so many years. Eastern claims that an "approximate overall balance" already now exists belong to the realm of pure propaganda and will not survive a comparison of realistic force data.

In parallel with negotiations on conventional arms control, the second act of the Stockholm conference on confidence- and security-building measures is to start including Europe's non-aligned and neutral countries. This continuation of Stockholm, already foreseen in the concluding Document itself, testifies to the immense success of the Stockholm conference, which indicated for the first time a loosening-up of Soviet security thinking. The practice with Stockholm over almost two years has provided excellent implementation results and has propagated a sense of real reassurance. Observers have been able to verify that exercises have been carried out without hostile intent. Their mandatory presence has made troop training for surprise attacks more difficult. Building on Stockholm, there are at least three areas of confidence-building measures in which more can be done: measures relating to military activities and aiming at openness and mutual information; so-called predictability measures which would prohibit - within the limits of required and indispensable military behaviour - certain potentially provocative military activities without substantial advance notice, and, thirdly, some joint educational measures of a seminar- or discussion-type which might enhance the knowledge of what the other side thinks.

The Warsaw Treaty Organization has recently afforded us a glimpse of the measures that might be proposed from the East. Some of these stem from a parallel philosophy; others will from the beginning not be acceptable. Among

these I would particularly like to single out the inclusion of naval forces which, because of their central rôle in reinforcement and the maintenance of the geographical cohesion of the alliance, cannot be considered in this framework. Equally, proposals concerning certain zones of reduced military activity, a concept incompatible with the principle of ensuring indivisible security for all allies in all parts of their territory, have little chance of being entertained.

Yet, confidence-building will again demonstrate a large margin of negotiating possibilities and is likely to yield measures that will have a real effect in reducing tension and providing reassurance to the participating countries. There is of course a tendency for monitoring and verification measures in this context to become ever more complicated and elaborate. Professor Freedman has done well to question the long-term cost/benefit ratio of an enlarged inspection regime. If a huge network of monitoring measures becomes a self-propelling and costly exercise in activism, which would not further the popular conviction that security is enhanced and confidence actually built, the project would certainly be counter-productive. Yet, the relative cost and inconvenience of these measures is still extremely low, given the overall purpose. The political effect of international inspectors serving the cause of peace on the potential adversary's territory still has a tremendous future potential.

The question of European security would obviously not be complete without consideration of short-range nuclear weapons. There is no doubt in the alliance that this question must be separated, and addressed separately, from conventional arms control. It is equally clear that redressing conventional instabilities can lead to a highly desirable degree of stability but that this stability can only be relative. The final contribution to stability will continue to come from diversified, reliable and responsive holdings of nuclear weapons of all ranges, an arsenal structured with circumspection and restraint. In this scenario short-range weapons play an indispensable rôle to underpin the concept of forward-defence and to deter the possibility of massive conventional attack. This deterrence effect accrues not from the precise numbers of weapons but from their generic presence.

At the Reykjavik Ministerial conference the alliance agreed that, in conjunction with the other items on its arms control agenda, an arms control solution should also be sought for the current alarming disparity in the realm of short-range nuclear weapons, and that here again equal ceilings would be the aim of negotiations. However, the alliance has not gone beyond this basic agreement, and it is not clear when, how, under what mandate and with what relation to either the conventional arms control negotiations or to the implementation of the Montebello decision such arms control solutions should be considered. One can, however, say that an immediate opening of negotiations

is not likely and that, if they are undertaken, they would intervene at a time when the negotiations on conventional arms control have already started or have yielded some intermediate results. There is thus likely to be a phase shift between the conventional and the nuclear aspects of negotiations on European security, testifying to the basic incomparability of the nuclear and the conventional element of European defence.

The quest for a permanent worldwide chemical weapons ban touches on a both European and global concern. Recently the global aspect has moved to the foreground.

The European dimension of the chemical weapons threat is characterized by the long-standing one-sided superiority of the Warsaw Pact in chemical weapons and is compounded by a long-standing Pact tradition in chemical weapons training. Chemical weapons have always formed an integral part of Soviet military planning, together with the conventional and nuclear. However, the West has always managed to contain this threat in deterrent terms, by holding out the prospect of earlier nuclear use. There is also on the part of the alliance a limited chemical means of retaliation.

There are indications, not least under the impact of increasing chemical weapons proliferation outside of the East-West relationship, that the Soviets have come a long way in accepting all basic Western requirements for a chemical weapons ban. The case is often made persuasively that the Soviets are now ready - in real terms, not only verbally - to abandon chemical weapons entirely, cutting them out of their war planning scenarios. It can safely be said that most of the issues that characterize the current Geneva negotiations do not have the Soviet Union as the stumbling block it once was.

Three major but residual problems beset the negotiations at this time:

- the difficulties to verify future non-production, a problem that has increased with the advent of modern chemical process technologies;
- the question of how non-chemical weapons holders can preserve their security during the presumably long lead- time until the agreement can enter into force and other signatories are formally subject to the constraints of the Treaty; and
- the question whether universality of the agreement can be achieved and Third World proliferation be successfully contained.

NATO allies are unanimous in desiring a rapid completion of the negotiations. It is a logical consequence of this stand that they accept that these three over-

riding problems can be solved in a satisfactory manner. The verification hurdles will be complex and difficult but the ambition must of course be to attain not a perfectionist solution - but rather an adequate level of confidence, adequate to make breach of contract unlikely and, if it happens, visible and subject to sanction.

At this juncture most allies appear to believe that a multiple strategy for bringing about early closure is needed: the Paris conference, which is to strengthen the current regime of prohibition of use but which is also to generate momentum for speedy progress in the Geneva negotiations; an effective embargo policy preventing Third World countries from equipping themselves for chemical weapons production and use; and a marked acceleration of the treatment of remaining technical issues at the Geneva conference site itself.

A forceful impulse to the early conclusion of the agreement should also issue from the fact that the first years of the CW convention will see the disappearance of all chemical weapons stocks in the East-West relationship, thus eliminating reliably the current intensely-perceived Eastern chemical weapons threat to Western Europe.

Beyond the global concerns relating to chemical weapons, the allies currently devote their attention to the parallel threats arising from the spread of missile technology and new forms of non-open nuclear proliferation. But these have not yet translated into precise alliance negotiating proposals.

Let us now cast a glance beyond the hardware aspects of the ongoing and impending arms control negotiations. What do we expect? What security structures are we aiming at? What is in store for us beyond the direct results of successful arms control, the lowering or better regulation of weapons holdings? True enough, arms control may be a good by itself. But obviously the true reward to reap is stability in a larger sense.

Even here there is nothing hidden in NATO's agenda. I can speak openly if I explore NATO's overriding purpose in pursuing arms control.

Obviously for both START and the negotiations concerned with European security, the real question is that of the long-term evolution of Soviet policy. And that long-term thrust and evolution will also tell us how far the negotiations will be able to reach. Are the Soviets likely to offer us more than a simple quid pro quo? Is there behind the seemingly-interminable process of arms control a larger shared vision of a more stable and more positive world? Are we aiming at temporary, well-circumscribed relief from the burden of specific armaments, or is there the chance of a more fundamental reconstruction of security relationships?

It is important in this inquiry to tell certainty from speculation. On the part of certainty it is now unquestioned that the Soviet leadership is involved in a major restructuring of the Soviet state. By the logic of things it must ask the question of the degree of competitiveness of its empire, as a world power. in the 21st century. That poses the question of economic performance, and by implication that of whether world power status can be maintained by a power with declining economic indicators and a 15 - 17 % investment in the military factor, which, if severe resource maldeployments are also counted, may well attain over 20%. NATO's research has shown that, given the stickiness of systemic deficiencies, the Soviet economy cannot hope, even under optimum circumstances, to achieve more than a 2.8 percentage point annual growth rate over the next 20 years or so. Under less than optimum conditions this growth average may fall to under 2%. In the competitive world of existing and emerging economic empires, this would not be enough to sustain a world power claim and may indeed presage increasing economic decline. This, as a matter of pure logic, means that the Soviet Union has to look into internal resource distribution and thus into the priorities of military expenditure. There is no doubt that the excessive reliance on the military as the basis for Soviet world power status has achieved only mixed results. Parity with the US has come in sight - but only on the weapons side. By any other count the Soviet Union has mainly reaped economic and political penaltics from its attempt to underpin world power merely by the military instrument. At this point the Soviet leadership clearly feels that excessive expenditure on its military might is counter-productive in that it bars the very access to economic and technological co-operation with the West on which economic recovery and progress depend. This dilemma may indicate that many arms control proposals are solidly anchored in a fundamental analysis of Soviet future needs.

Beyond this point of analysis there is uncertainty. How far will Gorbachev succeed? To what extent will the military factor remain predominant, even after considerable pruning? To what extent is it the Soviet Union's hidden agenda to weaken the West, without the kind of institutional sacrifice, to the detriment of the military, which we want the Soviet Union to go through?

These issues are elaborately discussed in the West, including at this conference. No confident prediction is possible. But it is NATO's agenda to probe the future by testing the uncertain Soviet future with arms control proposals, on the basis of a firm and credible Western defence.

Thus alliance arms control negotiators have the larger security picture in view. What we are looking for in arms control is the larger stake beyond the hardware aspect. Testing the Soviets, testing the hypothesis that they are prepared to rethink their security requirements fundamentally allows one to be relatively

bold and to entertain some prudent flights of fancy on what the higher meaning of arms control could be.

Thus the START negotiations, on the basis of the incipient agreements, could indicate, in spite of tough bargaining of details, that now for the first time both superpowers accept and acknowledge the principle of nuclear parity with one another. They may be looking not for a temporary *modus vivendi*, but for a long-term stable strategic relationship, convinced that neither can achieve strategic superiority over the other and that their relationship can in a meaningful sense develop only towards increased management of mutual interests and more co-operative behaviour. A successful outcome of the START negotiations could mean, far from a quest for nuclear dominance, a long-term commitment to shared responsibility in the nuclear era, where both parties would benefit equally from the reassuring fact of deterrence and co-operate, by mutual restraint and a mutually-reinforcing quest for stabilizing solutions, in managing the nuclear era as the foundation for a more peaceful world.

If this hypothesis turns out to be true, a START Treaty could usher in an era of nuclear condominium in the shared interest of preventing all large-scale conflicts. Such indeed is the stake of START.

Such a global approach may come relatively easy to the Soviet Union - a world power that painfully perceives symptoms of decline - since it constitutes a perfectly honourable position compatible with Soviet world-power aspirations. It may also be easily acceptable to the Soviet Union, after the Chernobyl disaster has made Soviet nuclear decision-makers - already prudent and circumspect, as the holders of all nuclear weapons are - even more careful and more perspicacious.

Could the same insight and self-restraint be expected to emerge also in the realm of European security, given the dominant Soviet power position in Eastern Europe and its consideration of Western Europe as the real prize of world domination?

Here the test is even more significant - not least because the sacrifice which the Soviet Union would have to make for the successful conclusion of the conventional arms control negotiations would be more important.

If the West sizes up its bargaining position in conventional arms control, it looks very poor at first blush. NATO has precious little to offer in exchange for heavy asymmetrical reductions. The bargaining stakes look better, however, if the larger possible offerings of the West are considered. The Soviet Union can hope to accomplish its reforms only with the West, benefiting from its immensely superior economic and technological prowess. Co-operation with

the West is the indisputable prerequisite for Gorbachev's economic success. It is thus not by accident that Gorbachev has deliberately projected *perestroika* onto the Western world and has in a way made Western public opinion the judge of *perestroika*'s credibility. We are actors in an interesting action/reaction scenario, a phenomenon which is not always fully realized. If it is true that the overwhelming military presence of the East in Europe is an essential hurdle to the kind of co-operation the Soviet leadership envisages, then reductions, in both perceived and real terms, are a must on the way to economic progress - more than the eventual savings from arms control and from the establishment of force structures at a lower level. This would be the West's real bargaining advantage, if the test of arms control is to succeed.

Obviously, even after successful negotiations, the Soviet Union will not be a demilitarized or amilitary power. It will remain a mighty power factor, requiring a considerable defence effort of the West in the long term. But the test here again is whether the military factor will be cut back to a level where the residual threat - in terms of surprise attack and seizing territory - ceases to be a crucial threat to survival and can be contained in a mutually agreed, more defensive framework.

That would be a new military environment in which the process of confidence building would also acquire its real meaning.

The test will also relate to the timeframe of Soviet arms control concessions. Gorbachev has spoken of major structural military change in the next two or three years. And indeed this would be needed to persuade the West and to substantiate the credibility of *perestroika*, notwithstanding the difficult Soviet internal power process and the long pipelines of arms procurement and comprehensive military restructuring.

A test is also approaching on issues concerning global security: chemical weapons and missiles. Recent incidences of determined Soviet involvement in regional conflict solving and a series of more co-operative steps in the United Nations and elsewhere may indicate that the Soviet Union is now better prepared for the joint pursuit of mutual interests with the West and the international community at large. This again must be tested by swift and determined united alliance moves.

There is a larger NATO agenda yet.

A new security architecture would only be a basis for an improved political architecture.

NATO is a political alliance. From the signature of the Washington Treaty on, the allies have expressed their quest of security and defence in terms of shared political ideals, stressing "their desire to live in peace with all peoples and all governments". In the Harmel report it is most clearly spelt out that, beyond the task of self defence and prevention of conflict, NATO aims at overcoming the division of Europe and at creating a more stable and durable East-West relationship and international environment.

Today the arms control opportunities may open a historical phase in which this world view of the allies is shared by a broader community. Human rights and openness are now more actively pursued in the Soviet Union as well their legitimacy is not questioned any longer. NATO has no strategy of anticommunism or rollback. By the free persuasion that emanates from their own system, NATO's nations wish to create a society in the Soviet Union and Eastern Europe that will support reform, decrease tension and increasingly realize values comparable to our own. The US Government in its recent summit diplomacy has well captured the larger political agenda of the alliance in its "4 point" agenda. All allies pursue the same goals within the Conference on Security and Cooperation in Europe (CSCE) process. Consolidated security, in the strategic relationship and in the European power equation, is seen by us as the base for political movement on a path towards durable relationships and peaceful competition of societies to mutual benefit. From the preamble to the Washington Treaty via a new security architecture we intend to proceed to a new political order. Such is NATO's interpretation of the true purposes of the arms control agenda. If it has too long been hidden, it deserves to come into the open.

RECENT AND FORTHCOMING CEPS PUBLICATIONS

Beyond 1992: Europe and Its Western Partners, by Peter Ludlow, CEPS Paper No. 38, February 1989.

The Future of US Nuclear Deterrence in Europe: Problems and Prospects, by Wolfgang Heisenberg, CEPS Paper No. 39, December 1988.

NATO and the Extended Alliance Forty Years On: Selected Papers from the 1989 Quadrangular Forum, with an Introduction by Peter Ludlow, CEPS Paper No. 42, July 1989.

Macroeconomic Papers from CEPS, CEPS Paper No. 43, August 1989.

The European Community and the Uruguay Round: An Interim Assessment, by Anna Murphy, CEPS Paper No. 44, September 1989.

EC-EFTA Relations, by Alistair Sutton, CEPS Paper No. 45, October 1989.