relevance when there is the possibility of a two-sided adoption of that strategy.

The main results of the work — and they are highly relevant to the two-sided adoption of non-offensive defence — were, first, that the scope for changing the character of forces so as to make them more defensive and less offensive is greatest with respect to land forces. In order to undertake an offensive on land, you require bridging equipment deployed forward, logistics to support a rapid and deep advance into enemy territory and training in this kind of warfare. For defence it is appropriate to have greater reliance on deep defensive belts, consisting of minefields, dispersed anti-tank forces and light infantry; and, depending on the size and character of your opponent's forces, you will need some mobile armoured forces to back up the defensive forces and provide a capacity for counter-attack.

On the other hand, the air and sea pose rather different problems. Aircraft and naval vessels, which are means of bombarding your opponent on land or at sea, are inherently offensive. It is hard to achieve effective defences against them except by using your own aircraft and warships to fight those of the other side. Ground-based anti-aircraft weapons and shore-based anti-ship weapons have improved, but they are still a rather limited form of defence against aircraft or warships. This being so, a main issue, if strategy in general is to be made more defensive, is how to reduce the size of navies and air forces.

The difference in this respect between land warfare and warfare in the air or at sea is probably being accentuated by the advance of technology. The increase in the accuracy and lethality of weapons resulting from precision-guided munitions puts a premium on shooting first and a diminishing premium on repeated fire by massed forces.

This means that technology may not be unfavourable to the defence on land, if there is enough natural or man-made cover for dispersed forces to be able to conceal themselves. In those circumstances, the attacker has to show himself in order to advance in a vehicle or on foot, and the defender may be able to pick him off from concealed positions. This applies, for example, to anti-tank weapons against tanks. On the other hand, air bases and naval vessels cannot be concealed at all effectively. The premium on shooting first therefore tends to go to the attacker.

The adoption of non-offensive defence by two opposed nations or alliances, where that is technically and geographically possible, will mean they can achieve *mutual defensive superiority*, i.e., a condition whereby each side has a defensive capability greater than its opponent's offensive capability. Where one side has a strong offensive capability, the achievement of this condition may be

possible if that side reduces its offensive strength (so improving the security of its opponent) and increases its defensive strength to the extent necessary to preserve its own security. But except in cases of great asymmetry —not the case in Europe — the usual aim must be to generate moves by both sides towards defensiveness. Mutual defensive superiority is the aim to be achieved by non-offensive defence.

The consequences of moving towards mutual defensive superiority are:

- a) Crisis stability is increased. The pressure to pre-empt goes down as the offensive capability of your opponent goes down: if he cannot attack you, you do not feel pressure to rush to attack him as a preventative measure. And there will be further improvement if vulnerable rich targets are replaced by invulnerable dispersed forces. By and large, offensive forces offer vulnerable targets: e.g., airfields and concentrated tank parks. Defence can rely more on dispersed forces.
- b) The risk of escalation is reduced. The more defensive strength is increased relative to offensive strength, the greater the ability of each side to hold an attack by the other. In order to promote escalation stability, the aim in a nuclear setting should be to avoid decisive battle and try to bring fighting to a standstill, to generate a stalemate, and then solve whatever crisis has occurred by political means.
- c) If defensive strength is increased relative to offensive strength, a cumulative process can be started towards lower arms expenditures: a virtuous circle in place of a vicious one.

It is important to note that the application of nonoffensive defence to non-nuclear forces in Europe would diminish the risk of nuclear war. A plausible scenario for nuclear war between the United States and the Soviet Union is that they get engaged in a confrontation outside Europe, for example, in the Persian Gulf; that they then put their forces on alert as part of the process of challenging each other to back down; and that in Europe, where the forces of the two sides stand eyeball-to-eyeball, fighting develops and, as a result of crisis instability, escalates. If non-offensive defence were introduced at the non-nuclear level, this risk would be diminished. Indeed, if the Warsaw Pact and NATO adopted nonoffensive defence, first use of nuclear weapons by NATO would become a theoretical notion, whatever was said about it formally. Thus nuclear weapons might be pushed into the background as non-nuclear strategy was made defensive.

IMPLEMENTATION

The problem is how to get movement towards