

Is arms control soluble in the revolution in military affairs?

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The revolution in military affairs (RMA) has not yet taken place. The coining of its name was supposed to convince the administration and Congress to invest enough financial resources in the new platforms, new weapons and new forms of training entailed. But according to its advocates, the revolution in military affairs has not yet received from Washington the recognition it is entitled to. This is one of the premises of the Bush Administration, which would like to make up for the 'shortcomings' attributed to President Clinton in this field. The novelty of the operational concepts covered by RMA could therefore become apparent over the next few years and decades. The literature on the subject is sufficiently abundant, however, to catch a glimpse of the new directions opened up by the predicted upheavals. The main objective of the revolution in military affairs is for the American armed forces to make the best of information sciences. They are to acquire the greatest possible battlefield transparency and to achieve an effective integration of each combatant on vast theatres of operation. Indeed, forces need to be dispersed because of the dangers incurred by troop concentrations in environments where the use of weapons of mass destruction (WMD) cannot be ruled out. Whereas the watchword had long been the concentration of forces, it is now their dispersal along with maximal flexibility. In the future, information and communication systems will be increasingly necessary for intelligence and detection, which goes without saying, as well as for the management of means of interception and for the deployment of forces during regional crises. The effects of this revolution on arms control are poorly known. They are hardly a subject of predilection for the advocates of RMA.

The philosophy behind RMA hinges on the notion of dominance. This is scarcely conducive to negotiation, which posits, if not an equal footing, at least some mutual recognition. If the ambition is to develop instruments of power, or even of supremacy, with the help of technologies in whose military applications the United States has a clear lead, then the negotiation of offensive or defensive arms limitations is not a self-evident requirement. The aim of battlefield dominance is nurtured by a part of American public opinion that is hardly favourable to arms control, portrayed as a largely 'obsolete' leftover from the Cold War. Whereas it used to be necessary in order to maintain communication channels with the main adversary, the former USSR, thus reducing that state's unpredictability and avoiding excessive military investments, arms control is claimed to have lost its *raison d'être*. It is now argued to be used mainly as a device for countries lagging behind American technology to halt its progress and prevent it from stretching its lead. Arms control is therefore often looked upon within the new administration as contrary to the defence needs of twenty-first century America. This trend is illustrated by the non-ratification of the Comprehensive Test-Ban Treaty, hostility to the verification protocol on biological weapons, as well as the intent to withdraw from the ABM Treaty. In the last case, one of the main concerns relates to the ABM Treaty's limitations not just

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on deployments, but also on testing of defensive systems, since the tests required for the development of mobile systems or of systems combining ABM and non-ABM means are prohibited. Granted, a member of the National Security Council delivered a very open-minded speech at the Carnegie International Non-Proliferation Conference in June 2001 on the importance of multilateral treaties. But this was not the expression of a consensus, nor even of a prevailing position. The difficulties of verification, the absence of agreement among the five permanent members of the Security Council on proliferation, the impossibility of bringing the most determined proliferators to heel, and the constraints imposed by treaties on promising technological developments, all of these factors tip the scales heavily away from arms control.

Besides, the instruments for controlling the technologies involved in the revolution in military affairs, notably information technologies, are practically non-existent, especially in a world bearing the hallmark of globalization. Whether in computing or in cryptography, today's civilian needs are such that they become increasingly indistinct from military applications. Export control thresholds for large computers have been raised considerably over the last ten years (by a factor of the order of twenty) and this is bound to be a continuing trend. Portable terminals requiring protected transactions now have cryptographic thresholds very close to, if not in excess of, military ones. In sum, effective controls on such technological instruments appear increasingly illusory. This fact will have to be at least taken into account, if not fully accepted, in future conflicts.

Contrary to the nuclear era, the information age would then seem to be inauspicious for arms control for a series of political and technical reasons. Reality, however, is more complex than what a superficial view would indicate. To begin with, the verification procedures for disarmament

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agreements do—and will continue to—benefit from advances in the information sciences. This applies to intelligence operations as well as to remote surveillance, on the ground or from space, whether or not the verification is consensual. These operations are no substitute for on-site inspections, especially in the case of WMD programmes, even more so in the biological and chemical realms, although they can provide valuable information that can then be verified if the co-operation of states can be relied on. In such non-cooperative settings as Iraq and North Korea, however, it is even more important to make the best possible use of means that do not require state consent. After almost three years without inspections in Iraq, this has become an unavoidable issue and is all the more so in the present circumstances.

The indirect effects of the revolution in military affairs on disarmament must also be taken into account. These apply first and foremost to nuclear weapons. The growing use of information technologies and the development of accurate, long-range conventional weapons can contribute to reducing the salience of nuclear weapons in American military doctrine, and can buttress the case of those who advocate unilateral reductions. Although not ideal, since they are unverifiable and reversible, such initiatives do contribute to disarmament efforts. The prospect of an American arsenal of 2,000 nuclear warheads might be announced after the Nuclear Posture Review that concludes in late 2001, thus allowing Russia to announce comparable cuts. These reductions are deemed feasible by the Pentagon, not just because of major global changes and the disappearance of the USSR, but also as a result of prospects for the revolution in military affairs. It is indeed these prospects that allow missile defences to make constant progress and that enable the development of increasingly accurate medium- and long-range missiles. Some of the missions currently earmarked for nuclear weapons could henceforth be attributed to conventional ones. The Soviets, in fact, had quite clearly grasped the risks that such new weapons could bring to bear on their silos and on deterrence by increasing the probabilities of a victorious first strike. These conventional missiles can be seen as the logical outcome of a process that had already led the United States to shift its nuclear doctrine from a

counter-value to a counter-force strategy. The first change had contributed to downgrading the role of nuclear weapons, as rightly pointed out by George A. Keyworth, one of President Reagan's advisers. Increasingly accurate missiles with multiple warheads already escalated the possibility of a first strike, and hence the risk of a confrontation. In this respect, and contrary to conventional wisdom, the ABM Treaty has encouraged the modernization of offensive nuclear weapons, which in turn has reduced strategic stability in as much as it rested on neither side possessing an advantage allowing a first strike against the adversary's nuclear forces. The Strategic Defence Initiative (SDI) purported to draw the appropriate conclusions from such developments: since the risk of attack had increased, the time had come to give some thought to defence. At the very same time, long-range missiles became accurate enough to be equipped with conventional warheads.

Since the end of the nuclear rivalry with the USSR, long-range conventional weapons have acquired other rationales than the destruction of the adversary's silos. The quest for accuracy has long since been motivated, at least in part, by the wish to avoid resorting to nuclear weapons, which even in their most accurate versions involve very significant collateral effects. If these effects can be eliminated by using conventional warheads capable of reaching and destroying their designated targets, nuclear use could be commensurately reduced. Some even argue that accurate long-range weapons spell the demise of nuclear weapons and of deterrence. Such a radical view is unlikely to prevail in the Pentagon, but the revolution in military affairs unquestionably plays a part in American plans for unilateral nuclear cuts. In his speech in Annapolis on 25 May 2001, President Bush announced the conversion of a number of nuclear submarines into carriers of accurate conventional weapons. Even if this move remains very fragmentary (it could involve a mere four vessels), it points to a trend. In a more radical version, core nuclear missions would be tightly restricted to hardened targets immune to conventional weapons. A gradual evolution of American forces along these lines cannot be excluded in the decades to come, given the military's enduring hostility towards nuclear weapons (which are largely the preserve of political authorities), especially at a time when the American arsenal comprises fewer and fewer tactical weapons. Lastly, the American propensity to wage war in the air with as little deployment of ground forces as possible could also reinforce this trend. America dreams of the ability to hit distant targets with increasing accuracy and without 'collateral damage'. Such a sanitized version of warfare has little chance of materializing in the real world of conflict, but it holds a potent and understandable fascination in a highly developed society less and less tolerant of the pain of warfare—an illusion swept away by the tragic events of September 2001 in New York and Washington. In one of his first speeches on the war America and its allies were to wage against terrorism, President Bush made it clear that it would inevitably entail casualties.

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In Asia, where the United States is preparing for probable confrontations in the next decades, RMA developments will play an important role given the fragility of American ground bases in the region. But information technologies and the revolution in military affairs can be expected to play an increasing part especially in regional scenarios in which the involvement of American forces would be most likely. American strategy towards regional powers will indeed rest more on considerable conventional forces and limited defences than on nuclear forces—except, perhaps, for miniaturized nuclear weapons for use against bunkers or clandestine underground installations not vulnerable to conventional explosives. There are several reasons for this: one is that the legitimacy of nuclear use in situations not involving actual state survival will be increasingly contested. Secondly, with the emergence of methods for forgoing nuclear weapons, the area of applicability of these weapons will shrink. Lastly, it is becoming increasingly accepted that nuclear weapons are to be restricted to major

conflicts, chiefly to deter their use by other nuclear powers. Nuclear use by regional powers would expose them to similar treatment, but only massive chemical or biological attacks on deployed expeditionary forces or on the populations of neighbouring allied countries could justify a nuclear response. Passive and active defences should deal with other contingencies. Already during the Gulf War, when the first actual use was made of information technologies to destroy the opponent's defences, American threats to Saddam Hussein should he have used chemical weapons against coalition forces or civilian populations were not backed by any detailed targeting plan for nuclear weapons. This does not necessarily mean that President Bush's message was pure bluff, as some have mistakenly claimed, but it was at least an indication that the planning for such a nuclear scenario had not been taken very far.

Anti-missile defences, whose capabilities are narrowly linked to satellites, powerful radars and computers, are often perceived as a challenge to deterrence for reasons easily explained by the genesis of SDI. But they would only pave part of the way towards the end of the nuclear era. Genuine military superiority, according to RMA advocates, would be attained only by those who, having understood the full use of information technologies, would be capable of denying the adversary's very ability to wage war. By nurturing the hope of a near-immediate ability to destroy the adversary's most sensitive targets, in conjunction with the protection of homeland systems, RMA would put an end to the cycle of deterrence, and even to warfare itself in international relations. By the same token, arms control would be made obsolete.

What credence should be given to such views? Short of postulating a war between America and an opponent with similar capabilities and equally dependent upon information technologies, this is scarcely a convincing portrayal of future conflicts, as will probably demonstrate the forthcoming events in Afghanistan. Even in the probable case that considerable improvements are made in force co-ordination, power projection and observation and surveillance operations, the 'fog of war' will persist in new and different guises. Post-Cold War conflicts often resort to conventional weapons, even rudimentary ones. It is obvious enough that the increasingly important issue of small arms is little affected by such high-tech daydreaming. In the course of one and the same conflict, as in Kosovo, new generation American weapons can be deployed in the air even as knives are used to massacre civilians on the ground. In the conflict between the Taliban and the forces in the North of Afghanistan, Bin Laden's soldiers regularly cut the throats of male villagers. The conjunction of increasingly protected American and Western soldiers and defenceless civilians, was up till now one of the

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characteristics of 'post-modern' conflicts. But the new campaign against terrorism could mark the end of this situation, with American soldiers incurring risks and with no guarantee for the security of civilians from threat of new attacks. The United States is fully aware of it. Anti-terrorist programmes in the United States are now backed

up by significant financial resources (10 billion dollars in 2000 and probably more in the coming years). But the protection of allied populations and of armed coalitions should also be borne in mind. All the more so if the adversaries of the United States, being unable to measure up to American power (owing, precisely, to the use of information technologies), should choose to resort to WMD to strike at what is seen as America's main weakness—its fear of human losses. The indirect but genuine incentive to acquire weapons of mass destruction in a hyper-technological setting should not be overlooked. This was actually one of the lessons that some countries drew from the Gulf War; it must have been reinforced by the Kosovo war. And now everyone fears the possible use of WMD by non-state actors. Whereas Western countries have all forgone chemical and biological weapons and although they have all downgraded the role of nuclear weapons in their military doctrines, the same does not apply to other parts of the world. This is an excellent reason to care for, and to reinforce, multilateral treaties, the verification they entail, and the rule of law in international

relations—even if this means strengthening other types of efforts to protect soldiers and civilian populations from attacks that can no longer be considered as rash hypotheses. In this respect, Europe is seriously lagging behind.

The revolution in military affairs now comes up against a revolution in violence. Victory will not necessary be achieved thanks to information technologies, which proved incapable to prevent the terrible terrorist attacks on New York and Washington. The overconfidence of the United States in its command of information sciences, especially with regard to their military and intelligence applications, brought about an entire generation of strategists who disregard the more basic techniques used by their adversaries (terrorist networks using communication means as discrete as those of spy rings, for example) as well as disinformation, which always played an essential role in conflicts. The ability to listen to every single telephone conversation worldwide does not mean being informed and even less being able to convert this information into knowledge of the adversary. This is a harsh lesson from the conflict that has started. The issue is no longer arms control, rather what will be the limits of a conflict that promises to be ruthless.

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