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RMA in the Emerging Strategic Environment: Can the US win future wars?

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The lopsided victories of the United States' two recent wars, against Afghanistan in 2001 and Iraq in 2003, have been held up as outstanding examples of the transformation of warfare brought about by the Revolution in Military Affairs (RMA). Indeed, right from the 1991 Gulf War, military analysts have been convinced that the character and conduct of warfare was being fundamentally transformed.

But how effective is military strategy predicated on the technological determinism of the so-called RMA against 'asymmetric threats' such as those posed by terrorists and the proliferation of weapons of mass destruction (WMD)? The RMA discourse is technology driven and pays insufficient attention to the changed geopolitical conditions. Today, the international strategic environment is characterized by the proliferation of WMD, cruise missiles, ballistic missiles, and missile defenses.

The outcome of both the Afghanistan and the Iraq wars show that the effects of the RMA were less than overwhelming. Operation Iraqi Freedom against conventional Iraqi military forces last year was a success simply because it was waged against a conventional opponent. It was the world's first counter-proliferation war even though Saddam's nuclear or chemical weapons have not been found (assuming they ever existed.) How effective would such a technologically advanced form of warfare be against an opponent armed with WMD, be they nuclear, chemical, or biological weapons? Or even against an opponent armed with cruise and ballistic missiles? How effective is conventional strategy based on the RMA in an environment where the sole military superpower, the United States, has been pursuing ballistic missile defenses, bunker-busting nuclear/conventional weapons as well as low-yield tactical nuclear weapons? Coupled with the US administration's pre-emptive approach to dealing with enemies, modern strategic warfare is bound to substantially increase the destructiveness of a military conflict.

RMA Technologies in a WMD-Capable Environment

RMA and 'Transformation' are military buzzwords for the change from heavy, slow-moving forces to lighter, agile, and swift units employing cutting-edge high-technology, including information technology, to wage warfare. Transformation involves everything from satellites, ships, manned aircraft, and unmanned vehicles to ground soldiers being networked together, with the growing realization that superior information (i.e., dominant battlespace knowledge or DBK) together with precision guided munitions (or PGMs) is the key to quick and decisive victories. In a nutshell, militaries of advanced economies are asking for C4ISTR, which stands for command, control, computers and communications, intelligence, surveillance,

reconnaissance, and targeting, i.e., features at the heart of network-centric warfare. Transformation is not an end-state but a process that requires doctrinal and organizational changes as well as a hi-tech military force backed by efficient logistics.

RMA makes militaries stronger and in the case of the US, it is likely to ensure that the US prevails militarily against any adversary provided the latter remains only conventional. However, these very capabilities are likely to lower the threshold of a state to use missiles armed with WMD against the US if its survival were at stake. In such a situation, the opposing state might be driven to 'use' rather than 'lose' its WMD. These states are likely to use their WMD against US troops and allies, or even continental USA as a last resort. Once a state possesses even a small nuclear/WMD stockpile, it becomes extremely difficult and dangerous to carry out a disarming first-strike against it, as it can relatively easily deploy "dummies" at known military bases while deploying its WMD at an isolated military base to launch retaliatory (or pre-emptive) strikes. This fact of the nuclear age will prevent the US from taking military action against states capable of retaliating with WMD-armed missiles without functional ballistic missile defense systems (and even then success would not be guaranteed). This strategy coupled with bunker-busting weapons (whether conventional or nuclear) also blurs the distinction between conventional and nuclear strategies.

RMA's Limits

A cursory look at military threats the world over reveals that a strategy based on a conventional war waged by RMA-capable militaries is insufficient to counter the new challenges posed. Iran and North Korea, the other two countries in George W Bush's "axis of evil", are near-nuclear capable if not already undeclared nuclear weapons states. The rationale behind America's abrogation of the 1972 Anti-Ballistic Missile treaty and the acquisition of ballistic missile defenses was the threat posed by these states as well as proliferation of missiles and related technology.

The proliferation of WMD and missile technology means that more countries and groups will have the ability to inflict mass destruction on their adversaries within their region as well as those at great distances. About a dozen countries have offensive biological weapons programs and some 17 countries were said to have had chemical weapons when the Chemical Weapons Convention went into effect in 1997. Over 80 countries possess cruise missiles of which almost 62 import these weapons. During the war in Iraq, Saddam's forces fired five modified HY-2 missiles at US forces; the first time that US ground forces had ever been attacked by enemy cruise missiles. 16 countries currently produce ballistic missiles, which have proliferated widely, in part because of their prestige value. The Iran-Iraq war of 1980-88 showed that ballistic missiles armed with conventional high-explosive warheads could be important weapons of terror when used against cities.

WMD Proliferation

A number of factors have been helping the spread of dangerous technology. These include growing disparities in conventional military capabilities due to the technology driven RMA and the perceived utility of WMD and missile threats to deter US intervention. An Indian General is reported to have observed that the lesson of the 1991 Gulf War was 'Never fight the US without nuclear weapons'. From the perspective of a weaker state, there is no compelling rationale for banning chemical and biological weapons, and intermediate range nuclear forces, while the stronger powers continue to invest in and maintain significant levels

of strategic nuclear forces and enhance RMA-type capabilities.

With globalization, advanced weapons and technology now enter global commerce more freely than at any time previously, thanks to the 'dual' (civilian as well as military) nature of this technology. Much of the material and equipment used to produce WMD has legitimate medical, agricultural, and industrial purposes. Cruise and ballistic missiles use technologies well established in civilian aviation and space industries respectively. The prominent use of cruise missiles and unmanned aerial vehicles (UAVs) by the US in recent conflicts has increased their appeal to other nations. Even advanced conventional arms are proliferating. It's inevitable that rival militaries will seek to balance what they perceive as regional imbalances if not US military superiority.

RMA in East Asia

In Northeast Asia, China, Taiwan, Japan, and South Korea are all making steady progress (some faster than others) towards taking advantage of the RMA. China's People's Liberation Army has a new strategic doctrine of fighting a 'modern limited war under high technology conditions'. The PLA's strategic doctrine is guiding its modernization efforts as is evidenced by its enormous hardware inventory, almost exclusively of Russian origin, with some purchases from Israel and Western Europe. Over the past decade, China has imported Russian Su-27 and Su-30 fighter aircraft, Kilo-class submarines, and Sovremenny-class destroyers together with some technology transfer from Russia. The PLA is also developing its information warfare capabilities against weak links in US and Taiwanese military C4 systems. In turn, Taiwan, which faces a missile threat from China, is busy developing defensive information warfare capacity aimed at defending its C4 systems against offensive Chinese operations. Further and more importantly, Taiwan intends to spend over US\$20 billion over the next decade or so on military hardware including diesel-electric submarines, anti-submarine warfare aircraft, and possibly ballistic (theater) missile defense system.

Tokyo's possession of the world's second largest info-communications technology industrial base has led Japan to emphasize the development of an advanced strategic C4I capability. Tokyo is also pursuing digitization of its ground forces and is acquiring tactical PGMs. To defend itself against a North Korean nuclear threat, Tokyo is jointly developing ballistic missile defenses with the United States. South Korea is increasing its military spending by 8% in 2004 and plans to invest US\$17 billion in modernizing its armed forces between 2003 and 2007. Seoul also plans to acquire advanced early warning (AEW) aircraft in the near future. However, in spite of its march towards transforming its military, South Korea faces a potential nuclear threat from North Korea.

Diplomacy, Strategy, and RMA

It is evident that the RMA discourse cannot afford to ignore the perils of WMD proliferation, missile proliferation, and ballistic missile defenses as well as the challenge posed by terrorism and other asymmetric threats. The capabilities that RMA provides the militaries of advanced economies are no substitute for skilled and judicious statecraft in the emerging strategic environment. As seen in the Libyan case, active diplomacy will be a key component of strategy in the coming decades as military confrontation involving hi-tech belligerents is likely to witness a quantum increase in the destructiveness of a modern war.

If a military conflict does break out between them, the stronger power is likely to pursue a

strategy of limited political gains (e.g., avoiding regime change as it might prompt the losing regime to use its WMD). Modern strategy is likely to be a mix of carrot and stick that would include economic aid or sanctions, multilateral export control regimes, confidence building measures, military exercises and even military training. Military action would be the last resort. It is apparent that serious thinking is needed as the rapid spread of technology means that the 1991 Gulf War cannot be relied upon as the main yardstick for thinking about future warfare.

At this stage it would be useful to remember that technology is just one of the many dimensions of strategy (albeit an important one) that includes people, society, culture, geography, chance etc. amongst many others. A sound strategy in the future would have to take into account the technological interaction of RMA capable militaries with WMD proliferation, missile proliferation, and ballistic missile defenses. The impressive capabilities of the RMA notwithstanding, the law of unintended consequences is creating a strategic environment fraught with new dangers. The RMA alone is incapable of redressing the dangers in such a world. American strategic culture, which is machine-minded, is in need for a revolution.

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