Dreams of Global Hegemony and the Technology of War

By Jerry Harris

After W.W. II the U.S. had unquestioned hegemony throughout the capitalist world. But in the early 1970s U.S. power began a long decline, particularly as the economies in Europe and Japan recovered. Nevertheless, the confrontation with the Soviet Union allowed the U.S. to maintain leadership by providing military security for the West. But the collapse of the USSR created a crisis. U.S. military might was no longer needed and its economic hegemony had long passed its peak.

Alongside this strategic change was the emerging revolution in information technology. As information capitalism became firmly rooted in all the advanced countries a system of economic and political globalization rapidly developed. These changing world conditions presented two choices to the U.S. ruling class; either fully integrate into a globalized system of world capitalism or reassert hegemony through military power and war.

Globalization was the choice of consensus, backed by rapidly growing transnational corporations, the immense power of speculative finance, a surge in cross cultural exchanges and a technological boom that pointed to a new economy. But beneath the new global system remained a powerful nationalist wing within the U.S. capitalist class. These elements retained a solid base of support in the military/industrial complex (MIC), the structural heart of U.S. superpower status. Ideologically the hegemonists grouped around a circle of neoconservatives and geopolitical realists including Donald Rumsfeld, Paul Wolfowitz and Richard Perle.

Their views began to take shape during the first Bush administration at which time they occupied a minority position within the government. But after the election of George W. Bush the new president filled his administration with neoconservatives including all key positions in the Pentagon. This produced major policy shifts, displacing the globalists who had dominated Washington since the Reagan years. At first the globalist/hegemonist split was covered over by their initial unity in the post 9-11 period. But as hegemonist strategy unfolded the internal class consensus began to fray and differences crystallized over the war with Iraq.

For most economic and political leaders in the West the Soviet collapse created the conditions to build a multilateral system of global capital. But hegemonists held a different viewpoint, that the defeat of the USSR created an opportunity for a unilateral U.S. empire. This strategy was laid-out in a pivotal policy paper published in 2000 by the neo-conservative think tank Project for the New American Century, and signed onto by Rumsfeld, Wolfowitz, Dick Cheney and other top White House advisors. As the paper reads, "Having led the West to victory America faces an opportunity and a challenge…Does the United States have the resolve to shape a new century favorable to American principles and interests? What is required is a military that is strong…a foreign policy that boldly and purposefully promotes American principles abroad; and national leadership that accepts the United State's global responsibilities…At present the United States faces no global rival. America's grand strategy should aim to preserve and extend this advantageous position as far into the future as possible." This dominance rests on "a secure foundation (of) unquestioned U.S. military preeminence." A preeminence that will not "allow others an opportunity to shape the world in ways antithetical to American interests." In turn, military preeminence rests on the application of information technology to warfare, or what the Pentagon terms the "revolution in military affairs (RMA)." The ultimate aim is to build "a global security order that is uniquely friendly to American principles and prosperity." (1) This political vision drives U.S. policy today.

RMA is the key to Washington's strategic aims because such an extended empire is virtually impossible under the physical constraints of traditional military organization. Establishing a strong presence in countries extending from the African Horn to Indonesia, with the spread of possible armed conflicts, would simply over tax U.S. military manpower if these occupations were carried out under the "overwhelming force" doctrine of Colin Powell. This doctrine argues that the U.S. should only engaged when its vital interests are at stake and do so with such overwhelming initial force that resistance would quickly prove futile. It has widespread support inside the Pentagon because this approach protects big weapon systems, large troop size, and the budgets and careers of numerous top officers while providing a job base in many congressional districts.

But under the aggressive preemptive doctrine favored by Cheney, Rumsfled and their cadre of neoconservatives RMA makes military preeminence achievable. A hightech military creates smaller forces at less risk with the speed and flexibility to roam the world. With less troops and heavy equipment both the political and economic costs are lowered to an acceptable level at home, while the effectiveness of Special Forces and precision weapons leave a smaller footprint lowering the social and political costs of occupation. As pointed out by the Naval Postgraduate School, "RMA proponents argue the United States should take advantage of its current technological edge to accelerate a revolution in warfare that will sustain U.S. power and leadership into the future and can be exploited in U.S. foreign policy to build an international system to the nation's liking." (2)

These two doctrines, RMA and overwhelming force, with all their strategic political and economic implications have caused the swirling controversies that have swept through the halls of the Pentagon over the invasion of Iraq. Iraq was to be a showcase cementing new IT military theories, consolidating hegemonists/RMA leadership inside the Department of Defense and opening the door for further attacks against Iran and Syria. While the war was a significant step towards these aims the internal contradictions are far from resolved.

The Impact of Information Technology

The RMA military doctrine seeks to transform the command, communications and control of military organization in the same manner that information technologies transformed the organization of transnational corporations. Although microprocessors are thoroughly integrated into the production and products of the defense industry, military organizations are still debating how to expand and integrate their new weapons into warfare and organizational strategy. These weapons are designed to make use of information technologies but are often tied to non-informational warfare strategies. The effort is to switch from platform-centric models of operation that rely on large individual military assets that engage targets head-to-head, to decentralized networks of smaller, faster weapon nodes that engage more rapidly and maintain information awareness of the entire battlefield. This transformation parallels the period over a decade ago when corporations were tied to large mainframe computers and didn't understand how to structure themselves around PCs. Only when corporations learned to use networked productive capacities did informational capitalism take-off. They had to adopt their business strategies to their new organizational capabilities, not use the new technology with old strategies. This corporate debate was often structured around the transformation from industrial to informational capitalism.

The military faces this same debate today. As one study points out, "the growing ubiquity of personal computers and other information technologies is viewed not only as the basis for a new societal age but as the foundation for a new form of warfare as well." (3) While some question whether networked organizational methods can succeed in such a highly bureaucratic and hierarchical institution as the military widespread support for RMA is evident. An important Army project titled

'Force XXI,' states its goal "is to create the 21st century army that is 'digitized and redesigned to harness the power of information-age warfare.' " (4) Support is also evident in the Navy, as another study notes, " Every Sailor and Marine has an opportunity to be a part of something significant, since transformations of this magnitude—from an industrial-age Navy to an information-age Navy—rarely occur." (5)

Part of RMA is to create Networked Centric Warfare (NCW) that promoters believe will change "doctrine, platforms, training and culture." The core focus is on networked information of "unprecedented pace and intensity." This would give officers and troops real-time "situational awareness to rule the battlespace." (6) Just-in-time warfare could let commanders coordinate a vast system of troops and machines that rapidly respond to changing conditions and out maneuver their competition. In adopting NCW the military looks towards "applying the lessons learned from the commercial sector…to become a 'brain-rich organization." (7) This IT scenario has obvious links to transnational corporate strategies rooted in speed, creative intellectual capital and greater centralization of command.

But while some advocate "developing human capital" others see removing the "human element" and creating automated cybernetic systems to do much of the fighting. (8) This parallels corporate discussions on how to use intellectual capital to create machines that can minimize human labor and lower the cost of production. For the military IT fighting machines can minimize the cost of war with fewer U.S. casualties. Some in the military argue that "RMA with its prospect of 'immaculate' war-making (will) change the equation between cost and benefit, and make war more bearable in the public eye." (9). Such political considerations are important points in the military's long sought solution to the Vietnam syndrome of extended wars and high causalities undermining popular support. As another study notes, "the technological and organizational innovations springing from the RMA may make US military objectives attainable at lower costs than ever before—a consideration that stands to shape US commitment to military coercion…a President able to control casualties is in a better position to maintain popular support for his own war policy (and) domestic legitimacy for military intervention. " (10).

Corporate IT Links

Military Keynesianism has been an important part of the U.S. economy since W.W. II. With a stock market in decline and stagnating production government spending accounts for almost 25% of anticipated GDP growth in 2003. Most of this jolt has come through the nearly $400 billion defense budget and homeland security spending spree. This money is being put into key areas of the economy that were hard hit in the stock market crash, telecommunications, hightech electronics, information technologies and aerospace.

Over the next five years the Bush administration has earmarked $136 billion for new military technologies. Rumsfeld has called for a 125% increase in spending for information technology, a 145% increase in space capabilities, and a 28% increase in programs that can attack enemy information networks. This budget is a major boom to the military industry that saw procurement spending drop an average of $40 billion a year under Clinton. Much of the new spending is headed for southern California, which already employs 50,000 workers in the defense industry. Companies that focus on high-tech weapons are seeing their stocks jump. Raytheon is up 30%, Northrop Grumman by 72%, and TRW stocks rose 75%. (11)

Palmdale's Plant 42 is a key production center that gathers together over 7,300 workers from Boeing, Lockheed Martin and Northrop Grumman. As one executive commented, "you have just about the

whole modern Air Force in one place being worked on." Everyone recognizes the new emphasis on high-tech weapons, says business executive David Myers, "Before it was more production oriented, and now the people are more R&D type engineers. They're more specialized." Northrup's spokesperson adds, "The hottest job now is software engineers." (12)

New defense spending has also revived the sinking fortunes around Silicon Valley in northern California. Over 900 Bay Area companies have recently received $4 billion in Pentagon contracts. Lockheed Martin, whose Space and Strategic Missile division is housed in Sunnyvale, received $2.2 billion and now employs more area workers than Intel, Apple or Yahoo. As Business Week commented, "Silicon Valley is more than a business center now. It's an arsenal." (13)

With the Pentagon's need to analyze and integrate huge amounts of information they need many of the same servers, fiber-optic networks and software developed by the private sector. But most Pentagon high-tech contracts go through MIC connected companies. The biggest in-house producer is Northrop Grumman whose IT division Logicon Inc. employs 23,000 workers. Since 1991 it has acquired 16 companies, mostly focused on IT specialties, with revenues jumping 150% in the last two years. Raytheon runs America's largest electronic intelligence downlink facility at Buckley Air Force Base in Colorado, and General Dynamics has undergone a major shift creating a $3.7 billion Information Systems and Technology unit. Lockheed Martin has also joined the race for new IT contracts. Its expanded Systems Integration section accounted for 36% of the company's total revenues, 48% of its operating profits and brought in $9.6 billion in sales. (14) Besides the big players the Pentagon has handed out IT jobs to Booz Allen and Hamilton, The Schafer Corporation, SRS Technology, SRI International, CACI Dynamic Systems, Adroit Systems, Syntek Technologeis and Asi Systems International. (15) Not your usual line-up of global IT leaders.

Much of the work is focused on "interoperability and connectivity" which integrates intelligence, surveillance and reconnaissance in computerized systems. Other areas specialize in unmanned vehicles and planes, precision-guided bombs, and space. For example, in Iraq a soldier using laser binoculars with a global positioning device could transmit the coordinates of a target back to military headquarters in Qatar from a field computer via a Boeing satellite. An unmanned predator drone could then capture video of the same target giving commanders in Qatar a live picture. Using a satellite the command center quickly sends the coordinates to a nearby B-2 bomber whose pilot, using a Lockheed Martin global positioning satellite, can then drop his bomb correcting its course and guiding it to the target. (16) Fast, precise and interconnected RMA was proving itself in Iraq.

Missiles and Space

A new generation of missiles is an essential element for the offensive capabilities of preemptive war. This is the reason that Bush declared the ABM Treaty with Russia null and void. It prevented the development of missiles and spaced based technologies that will be used in military theaters throughout the world. As argued by Rumsfeld and his cohorts conventional warfare needs to be replaced by a "new paradigm, marked by long-range precision strikes and the proliferation of missile technologies…. that will be the central element in the exercise of American power and the projection of U.S. military forces abroad." (17)

This system would include continuous targeting information, reconnaissance from a "global constellation of satellites" and spaced-based interceptors of high-energy lasers. Here hegemonists make clear their differences with the Clinton globalists. "It is misleading to think of such a system as a 'national' missile defense system, for it would be a vital element in theater defense, protecting U.S. allies or expeditionary forces abroad…the Clinton Administration's differentiation between theater

and national missile defense systems is yet another legacy of the ABM Treaty, one that does not fit the current strategic circumstances…Building an effective, robust, layered, global system of missile defenses is a prerequisite for maintaining American preeminence." (18)

The strategic drive to militarize space is best seen in the call to create a new service under the Department of Defense responsible for space warfare doctrines, organization, and training. This would replace the current U.S. Space Command with U.S. Space Forces. Its purpose would be to control the "new international commons" as "key to world power in the future…(with) the ability to deny others the use of space an essential element of military strategy. (19) But space commons are currently open to competitive commercial operations from over 1,000 companies from some 50 countries. This presents a challenge to Pentagon RMA planners who argue that commercial and security interests are interconnected because communications, imaging satellites and global positioning systems are used for military purposes. According to hegemonists "the distinction between military and commercial space systems – combatants and noncombatants – will become blurred." (20) Therefore dominating commercial technologies becomes necessary to ensure military preeminence.

Because satellites are essential military assets the government's commitment to space supremacy has helped consolidate control of the industry under the four big weapons manufacturers, Boeing, Lockheed Martin, Northrop-Grumman/TRW and Raytheon, and given them a boost past international competition. In fact, Peter Teets, former Lockheed CEO, is now chief procurement officer for the Air Force in charge of military space with a budget of $65 billion. The Pentagon has also revived failing space programs such as Motorola's Iridium Satellite LLC, a phone and navigation system in bankruptcy that has received a new $252 million contract. As noted by Loring Wirbel, "The overwhelming role played by large U.S. corporations in building space systems that only the U.S. government is permitted to use represents the backbone of U.S. unilateralism in space." (21)

One of the most dangerous high tech space weapons under development is the High-frequency Active Aural Research Program (HAARP) housed under the Strategic Defense Initiative popularly known as the "Star Wars" system. This is a weapon of mass destruction capable of causing floods, droughts, hurricanes and earthquakes through the use of Extremely Low Frequency radar waves. The program is run jointly by the Air Force and Navy and based in Gokoma, Alaska. A study by the U.S. Air Force called for "U.S. aerospace forces to 'own the weather' by capitalizing on emerging technologies and focusing development of those technologies to war-fighting applications (such as) disrupting enemy operations via small-scale tailoring of natural weather patterns to complete dominance of global communications and counterspace control…In the United States, weather-modification will likely become a part of national security policy." (22)

Sci-Fi Warriors and Weapons

HAARP isn't the only science fiction like weapon under development. The Army's "Land Warrior" program may remind one of Robocop. Driving this vision is the use of Special Forces capable of greater independence and long range operations. These forces have been qualitatively expanded and played a key role in the invasion of Iraq. Eventually these "soldiers may operate in encapsulated, climate-controlled, powered fighting suits, laced with sensors, and boasting chameleon-like 'active' camouflage. 'Skin-patch' pharmaceuticals help regulate fears, focus concentration and enhance endurance and strength. A display mounted on a soldier's helmet permits a comprehensive view of the battlefield – in effect to look around corners and over hills – and allows the soldier to access the entire combat information and intelligence system while filtering incoming data. Individual weapons are more lethal, and a soldier's ability to call for highly precise and reliable indirect fires…allows

each individual to have great influence over huge spaces. Under the 'Land Warrior' program, some Army experts envision a squad of seven soldiers able to dominate an area the size of the Gettysburg battlefield – where, in 1863, 65,000 men fought." (23) Although these futuristic soldiers aren't roaming the Iraq desert some of these technologies already exist and aspects of this program are at work.

Another part of this futuristic vision is "advanced forms of biological warfare that can 'target' specific genotypes (that) may transform biological warfare from the realm of terror to a politically useful tool." (24) The idea of using biotechnology as a weapon of racial genocide and political assassination is astounding in its amoral arrogance. Certainly the entire world would view this as a weapon of terror rather than a "politically useful tool." Such statements expose how far removed hegemonists are from the international community, having lost all moral guidance in their dreams of power.

The Iraq War

Every new military technology and doctrine needs a war. The interwoven dreams of world dominance and precision RMA warfare came together in the drive to invade Iraq. Technological fascination with military weapons was seen in the first Gulf War in 1991when millions of Americans sat on their couches watching video footage of precision bombs speeding to their targets. CNN even sold tapes of Desert Storm highlights featuring bombing strikes as if they were the latest game entertainment. But only 10% of the bombs used in Gulf War were precision guided, while in Gulf War II this number rose to about 90%. The exciting promise of a bigger and better war featuring new and revolutionary military products was pushed to convince Americans that precision warfare doesn't kill civilians. Newsweek's special feature "The War Plan" titled its lead article "Boots, BYTES and Bombs." Colorful pictures and glowing reports of new killing weapons promised readers that this would be the "first war of the Information Age," while Major General Robert Scales asserted that Desert Storm was "the last of the machine-age wars." (25)

Iraq was to be a showcase for these new IT military theories. In his opposition to Powell's "overwhelming force" doctrine Rumsfeld reduced the number of troops for the planned invasion on at least six occasions. (26) In turn, RMA critics charged the difficulties faced by soldiers in the first weeks of action were a result of too few troops. Instead of Iraqi's being "shocked and awed" it was the Rumsfeld team who were surprised and roundly criticized in a blizzard of leaks from the Pentagon. By the third week of the invasion Rumsfeld's techno-war was getting better results, but the mixed success of the operation left the door open for further internal Pentagon struggles. Even as fighting tapered off the looting in major cities was blamed on the lack of sufficient U.S. troops to insure public safety.

The Bush administration insisted the overthrow of Saddam Hussein was necessary for world security and democracy in the Middle East. With no trace of Orwellian irony the Pentagon dubbed the invasion "Iraq Freedom." But we can again turn to the Project for the New American Century to reveal the true purpose of U.S. strategy. As stated; "the United States has for decades sought to play a more permanent role in Gulf regional security. While the unresolved conflict with Iraq provides the immediate justification, the need for a substantial American force presence in the Gulf transcends the issue of the regime of Saddam Hussein." In fact, the need for bases throughout the region "would endure even should Saddam pass from the scene…and even should U.S.-Iranian relations improve… because of longstanding American interests in the region. (27)

In fact, both the U.S. and U.K. have "longstanding interests" in the Middle East. All the talk of bringing democracy to the region seems taken from Rudyard Kipling's "white mans burden" and the colonial project to "civilize" the Third World. U.S./U.K relations not only rest on a common racist cultural history but are embedded in a mutual imperialist model. Thatcher and Reagan pioneered current neo-liberal economics and New York and London are the world's largest centers for speculative finance. The U.K. and U.S. are also home to the largest private transnational oil corporations. This alliance is best exemplified by the BP/Amaco merger and such giants as ExxonMobil, Anglo-Dutch Shell and Chevron-Texaco. But among OPEC members and Middle East countries oil resources and production are owned and run by the state. When Washington speaks about democracy it means the free market, neo-liberalism and privatization of the region's oil. As oil-industry consultant Rob Sobhani has said, "The beginning of liberal democracy (in the Gulf) can be achieved if you take the means of production out of the hands of the state." (28)

Such concerns are one reason Fadhil Chalabi, an ex-royalist banker, is the Pentagon's favorite Iraqi political operative. Chalabi advocates an independent oil corporation that will sell 40% of its shares on the international market. Under his plan the Iraqi government would simply regulate and tax the industry. But the invasion goes beyond oil contracts and Western equity ownership. In fact, many oil executives expressed doubts about going to war while at the same time trying to position themselves for future deals. For the industry fear of political chaos competed with their hunger for profits and access.

But hegemonists have greater strategic goals. Military occupation and political domination means unrivaled geopolitical power over other competitors who need oil resources. In the short run the U.S. can demand more political obedience from Russia and the E.U. reconfiguring globalization under unilaterial U.S. leadership, with their longer view focused on China's rapid industrialization and growing energy needs. According to one CIA study, by 2015 three-quarters of the region's oil will go to Asia, the greatest part to China. Neo-conservative theorist Robert Kagan links U.S. strategy, RMA and China all together writing, "concern about China was one of the driving forces behind the demand for technological modernization of the American military; it was, quietly, one of the motives behind the push for a new missile defense program; and in a broad sense it had already become an organizing principle of American strategic planning." (29)

But globalist's strategic planning defines China as the largest 21st century market, not a strategic threat. In fact, alarms are going off about U.S. political and military unilaterialism disrupting the transnational economic system. Writing for Business Week, Jeffrey Garten, dean of the Yale School of Management, worries that tensions over U.S. arrogance will affect international trade, finance and growth. As he points out, "The global framework of trade and finance has relied on shared perceptions that the world economy should be organized according to a U.S.-style capitalism and led by Uncle Sam. This view can no longer be taken for granted against the backdrop of such widespread international resentment of U.S. foreign policy… Multilateral economic diplomacy has never been more important. (30) Another editorial warns that a "unilateral policy is economic suicide" and may result in trade and financial boycotts. As Business Week points out, "The currency markets, always a volatile arena, could punish the dollar if political rifts that threaten trade and capital flows aren't mended quickly." (31) Indeed, if the political disagreements between globalists and hegemonists develop into economic retaliation the whole international system will be in upheaval.

Conclusion

The drive for an imperialist empire has strong appeal to important sections of the U.S. capitalist class and poises a serious challenge to the globalist bourgeoisie. Kagan proudly defends the imperial quest

stating, "The ambition to play a grand role on the world stage is deeply rooted in the American character…For those early generations of Americans, the promise of national greatness was not merely a comforting hope but an integral part of the national identity, inextricably entwined with the national ideology. The United States must become a great power, and perhaps the greatest power, they and many subsequent generations of Americans believed, because the principles and ideals upon which it was founded were unquestionably superior..." (32)

These "unquestionably superior principles" are now being exported through the barrel of a gun. A gun reengineered by RMA. Although much faith has been invested in achieving military hegemony through technological superiority such faith has proven misplaced before. The same U.S. arrogance was present in Viet-Nam, a country seen as backward, poor and weak. Often the brilliance of technological engineering blinds would-be world rulers to the more fundamental force of politics. Imperialism inevitably engenders opposition. Its clear that Washington has been surprised by the widespread opposition to war, not only from the world's people, but from their friends and allies.

History also shows that technological advances are hard to maintain. Developed states tend to rapidly emulate and adopt military innovations while weaker nations focus on defensive measures to counter advanced technologies. In modern times the diffusion of revolutionary military doctrine and technology occurs rapidly. The German advantage in W.W. II of using lighting mobile warfare lasted only two years and the spread of nuclear weapons undercut the American monopoly in a mere four. Today the technological diffusion of IT weapons is beginning to take place, as with Boeing's Joint Direct Attack Munition bomb. This is simply a general-purpose bomb with a Global Positioning Satellite receiver strapped to it fins for guidance. At $25,000 each it's considered inexpensive. As John Pike director of GlobalSecurity.org, points out "I think any country with a self-respecting military in fairly short order is going to get in line to buy the genuine American article or is going to have to build their own copy." (33)

Buying the "genuine American article" is a problem for Washington because foreign military sales are important for corporate profits and war is the best showcase for new weapons. After Desert Storm foreign sales doubled to $20 billion. Although network centric warfare is based on a monopoly over certain information technologies, globalization is spreading knowledge-intensive tools across national borders. While the U.S. guards its monopoly over key systems many commercial technologies can easily be converted for military use, and for some corporations the profits are just too big to turn away from. Evidence of this is already present as Frank Lanza, CEO of L-3 Communicatons Holdings Inc. notes, "The commercial world has permitted access by rogue nations to some very high technology. It's made the enemy smarter." (34) Its well known that much of Iraq's chemical and biological weapons were supplied by the U.S. and Europe.

As studies have pointed out, unlike massive and expensive industrial technologies it is much easier and quicker to assemble very advanced software with a small team of experts. (35) A number of third world countries already have significant computer based technology including China, India and South Korea. Even relatively poor countries may develop defensive measures that concentrate on producing disruptive computer viruses with a small band of hackers. Military technologies may also be sold to third world countries by advanced powers to counter U.S. unilaterialism. And non-state terrorists using networked organizational methods combined with low-tech weapons have already proven all too successful.

Considering all the above factors the U.S. lead may be relatively short. Unilaterialism will only drive other powers to rapidly develop countermeasures creating an insecure world difficult to control. The Iraq War showed that high-tech network centric warfare has its low-tech network warfare counter.

The most successful Iraqi defense was guerrilla attacks based on a network of independent nodes acting with speed and flexibility. With greater popular support (as in Viet-Nam) the guerrilla operates in an information rich environment with hundreds of interconnected routes almost impossible to totally disrupt. Many information theorists believe simple systems tend to win out against more complex systems that are subject to a greater number of glitches and problems. Perhaps the experience of 20th century "people's war" can be remodeled to counter 21st century technology. If so, the dream of world dominance will ultimately reveal itself as a virtual fantasy, seemingly real only to fade when the machine is unplugged.

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