## **EXECUTIVE BOOK REPORT**

2nd Lt Michael J. Castagna, USMC

## Alvin Toffler PowerShift:

Knowledge, Wealth, and Violence at the Edge of the 21st Century (Bantam Books, 1990, ISBN 0-553-05776-6)

This book is the third book in one of the most thought provoking trilogies of our time. This series began over a quarter century ago with <u>Future Shock</u>. The second book, <u>Third Wave</u>, followed in 1980. Both books received acclaim and incited great controversy and debate. The third book meets and exceeds the standards set by its predecessors.

♦ This is a radical book. It is a solid review of all aspects of the global information revolution--the "OODA Loop"¹ writ large--and should be read by every Marine officer. This book discusses concepts which can and should impact on how the Marine Corps trains, organizes, and equips expeditionary forces.

Alvin Toffler's latest has been described by one writer as "...pretensions, bombastic, repetitive, infuriatingly facile, shamefully simplistic and more or less right."<sup>2</sup>

Toffler claims that we are experiencing a global "power shift" which is a deep-level change in the nature of power. While his mass media and popularistic style may lead some to trivialize his effort, he offers too many insights to be ignored. His recommendations for coping with the unprecedented level of global change will prove useful for today's strategic thinkers. His work is particularly important to those responsible for planning and programming command and control, communications, computers, and intelligence (C41) capabilities.

♦ He augments our vocabulary with phrases that prove useful in identifying modern day occurrences.

Toffler is one of the first social thinkers to identify sometimes obvious but unnamed modern phenomenons, and has in the process armed us with a vocabulary for the future. Terms like "info-warrior", "eco-spasm", "fam-firm", "super-symbolic economy", and now "powershift" help us to better understand the changes sweeping every facet of society.

He concludes that we are in midst of a major <u>PowerShift</u> in which the traditional relationships between violence, wealth and knowledge are being transformed.

The very nature of power is being transformed. Power is defined as the "reciprocal of desire" or simply the ability to make people act the way you want them to. Toffler states, "Power, which to a large extent defines us as individuals and as nations, is itself being redefined.<sup>3</sup>

This new definition of power stems from a qualitative rather than the standard quantitative analysis of the nature of power. When one looks at the quality of power it is easy to see why knowledge has become the most salient facet of social control. Violence, preeminent during feudal times, has lost much of its utility today because it can only be used to punish and those it castigates often seek revenge. Unlike violence, wealth can be used to both reward and punish. However, wealth, an instrument of the industrial age, is an exhaustible resource and therefore is only rated as "medium-quality power." The highest form of power is knowledge which is able to reward and punish and is inexhaustible.<sup>4</sup>

Knowledge is quickly surpassing violence and wealth in importance. It is becoming the preeminent leg of the "power triad." Today we find that in the work place the mind is replacing muscle. In short, Toffler states that knowledge is becoming the "ultimate substitute," replacing the more traditional forms of power. Knowledge is a substitute for violence, wealth, labor, energy, space, and time. Indeed, "Knowledge is the crux of tomorrow's world-wide struggle for power."

As knowledge continues to grow in importance, a redistribution of power will take place that will rock the very foundation of the world economy. The old "smoke stack system" is being replaced by an entirely new "system of wealth creation".

According to Toffler, the span of the Industrial Revolution is finally entering its last stage. "The new system for making wealth is totally dependent on the instant communication and dissemination of data, ideas, symbols, and symbolism." This new "super-symbolic economy" will still maintain an industrial character, but advances in technology will revolutionize the current methods of production. "This new system takes us a giant step beyond mass production toward increasing customization, beyond mass marketing and distribution toward niches and micro-marketing, beyond the monolithic corporation to new forms of organization, beyond the nation-state to operations that are both local and global, and beyond the proletariat to a new "cognitariat."

Now that technology supports "information pull" as well as "just in time" delivery of services and products, an entirely new approach could be taken to the C4I mission and in turn impact on how other mission areas train, equip, and organize their capabilities.

The capital in this new economy is "super-symbolic." Due to the rapid rate of transactions in the new "super-symbolic economy" the medium of exchange will become electronic pulses racing from computer to computer. Only in this way, when the medium of exchange moves from the tangible to the intangible will it flow fast enough to keep pace with the rapidly paced economy. Paper money will be replaced by electronic money, this will allow an economy to operate with greater efficiency, thus requiring fewer resources.

Countries which attempt to ignore the new realities of this "super-symbolic is economy" will suffer the same fate as the Soviet Union.

♦ He sheds light on the causes of unemployment and suggests that monetary policy is no longer an effective instrument for curbing unemployment in a knowledge driven economy.

Today's major industrialized nations have already begun to feel the reverberations of shifting from a muscle driven economy to one in which the mind is predominant. One such by product of this change is an increase in unemployment. Those in the United States who have stakes in the Second Wave economy have attempted to ignore the obvious and inevitable transformations taking place in the economy. This has led to a much rougher transitory period for countries like the United States.

"The old Second Wave factories needed essentially interchangeable workers. By contrast, Third Wave operations require diverse and continually changing skills...And this turns the entire problem of unemployment upside down." Therefore, as the jobs become more technical there are fewer and fewer workers who have the requisite skills to match a company's needs. This will continue to plague nations caught in between the decaying infrastructure of the Second Wave economy and the somewhat ambiguous nature of the emerging Third wave economy.

Toffler also argues that the antiquated tools used by the Keynesians and the monetarists to stimulate the economy are no longer addressing the real problem. The problem with unemployment today stems from an inadequate knowledge base in the economy not from measures of M1. Therefore, monetary policy is simply an ineffective tool of the Third Wave economy. Today the Federal Reserve Bank seems almost powerless against a deteriorating economy. Interest rates are lowered, then

lowered again with seemingly little affect on the economy. "But any effective strategy for reducing joblessness in a super-symbolic economy must depend less on the allocation of wealth and more on the allocation of knowledge." 10

As knowledge replaces wealth as the new means of wealth creation, those in the establishment of the Second Wave economy will begin to feel the heat, causing information" wars" to break out all over the world. Indeed, some of these battles are already raging in both local and global arenas.

This new information in society is adding a new dimension to the spectrum of conflict. Conflicts of the future will revolve around the quest for knowledge. As technology speeds up the rate of communication and data transition, the skirmishes of the future, will be decided by those who can collect, analyze, and disseminate intelligence most effectively and efficiently. Information is quickly becoming more important than even brute military might.

Indeed, knowledge is becoming the deciding factor in all social interactions. Not only will countries desperately compete for information, but the importance of knowledge has become so wide spread that everyone from corporate CEOs to the family farmer will feel its effects. What is being realized is that "information has value." The not too distant future may very well require nations, and even some organizations to create a position like the Secretary of Information.

In fact, the competition for information has already reached such an intense level that corporations are now developing their own, independent, intelligence collection capabilities. "But total information war might not end with passive information collection. The temptation to engage in "commercial covert action" is growing.<sup>12</sup>

♦ This new fast paced economy, in which time is measured in millionths of a second, is bringing down still yet another giant of the Second Wave economy, the bureaucracy. Headquarters which cannot apply the "OODA Loop" to their own processes will fail to fulfill their missions.

According to Max Weber, a bureaucracy is a means of organization which allows for a rational and systematic means of operation. However, its systematic character is achieved at the expense of speed and efficiency. These slow and cumbersome organizations will no longer be able to compete in the new high paced economic jungle.

Toffler gives valuable insight on new methods of organization and the new styles of leadership which will be required in the information age. As Toffler points out, military officers are finding that their troops are more knowledgeable and thus, are less willing to blindly follow their leaders. In the age of knowledge, entirely new relationships between leaders and the led are required, relationships which nurture and build upon the subordinate's knowledge, rather than demand particular behavior or "blind obedience".

He shows that many governments are in need of drastic restructuring in order to keep pace with a new high speed, information-rich global environment.

Some world governments will face collapse as they attempt to manage the information of the future with ideas from the past. "The revolutionary economy will transform not only business but government. It will do this by altering the basic relationship between politicians and bureaucrats..." In order to handle the large amounts of information traveling at hyper-speeds, governments will be forced to streamline their operations substantially. In many cases, requiring rapid decisions, the bureaucratic structure will have to be cut back or simply bypassed. In this way governments will become less hierarchical.

Changes in the distribution of power in a country's domestic environment will also have effect on the role and size of government. As power is redistributed to "local, regional, and supranational" actors, governments will become more decentralized and rely to a greater extent on the private sector to fulfill traditional government responsibilities. "...As we move deeper into the super-symbolic economy, mounting pressures will force governments, like corporations before them, into a process of painful restructuring." 14

◆ Although democratic principles seem to be taking root all over the world, Toffler warns that democracy is not the panacea for the world's problems. Radical ideologies, "crazy" actors, cultural fragmentation (the "tribalization" of the world) all stand in the way of global democracy.

The nature of the strategic environment is also under going considerable change. The forty some years of super power brinkmanship, known as the Cold War, has come an end. A global redistribution of power is taking place on an unprecedented scale and is completely transforming the balance of power.

However, "So much has been written about 'peace breaking out' that world attention has drifted away from the menacing fact that as the two former superpowers scale down their arms, other nations are racing to fill the gap." 15 Weapons of mass destruction are proliferating at alarming rates to every corner of the

planet. In fact, the demand for smart-weapons has risen dramatically after the United States's brilliant victory in the Persian Gulf War.

The power vacuum created by the demise of the Soviet state, is also bringing to the surface ancient cultural, ethnic, territorial, and linguistic disputes which threaten to ignite into bloody conflicts. In Yugoslavia the conflict continues to rage and is beginning to involve the world's major powers. As the need to prepare for high intensity conflict diminishes, the need to prepare for conflict at the lower end of the spectrum increases. This will require that cultural realities are assessed into any equation for strategic action.

"Because of an out-of-date conception of progress, many in the West assume the fanatic, irrational, hate-mongering ideologies, will vanish from the earth as societies become more 'civilized.' Nothing, says Professor Yehezkel Dror of Hebrew University in Jerusalem, is more misleadingly smug." <sup>16</sup> Toffler feels the military forces of the future should flexible and capable of rapid deployment.

A new power triad is emerging which will dominate the international environment. However, the Third Wave will empower many non-state actors--"Global Gladiators"--to challenge the world's standard power arrangements.

Toffler predicts that power in the international environment will emanate from a power triad composed of the United States, Germany, and Japan. The power struggles between these three actors will shape the world to come.<sup>17</sup>

However, with the proliferation of knowledge, the world seems to be fragmenting into new independent entities. Power is also shifting away from the nation state to the "Global Gladiators". These groups, such as religions, the multinational corporations, drug lords and terrorists seem to be gaining more and more power. The interest of the Gladiators will undoubtedly clash with the nation-state ushering a new period of conflict.

♦ In order for nations to maintain their strategic edge, an effective intelligence apparatus will be a necessity.

As one can see, many places in the world will remain a dangerous place in which the United States will be unwelcome. Toffler stresses the need to revolutionize intelligence in an environment where both the policy maker and collectors are inundated with information. "For among the boom businesses of the decades ahead, espionage will be one of the biggest."

Toffler sees the intelligence community playing a larger role in economic intelligence as economic power surpasses military power in importance. He also

mentions that as the intelligence community may begin subcontracting out to private intelligence firms.

◆ The "privatization of intelligence" capabilities, including overhead imagery and signals collection, processing, and dissemination, will significantly influence the nature of government-sponsored intelligence activities at the strategic, operational, and tactical levels. Third world actors--including non-governmental actors--will be able to buy all-source capabilities previously available only to the major powers.

In conclusion, those who prove capable of managing and effectively using knowledge will lead the nations of the world into the 21st century. As the Marine Corps refines its own C4I plans and programs, it must be visionary and aggressive in considering how best to nuture and take advantage of commercial capabilities, while also being sensititive to the fact that low-intensity conflicts are likely to be characterized by high-intensity intelligence available to all parties from multiple governmental and non-governmental sources. The age of constabulary warfare against relatively ignorant opponents is over--the age of information warfare has begun.

## **End Notes**

- <sup>1</sup> "Orient, Observe, Decide, Act", as articulated by John Boyd.
- Curt Suplee, "The Times They are A-Changing." The Washington Post. (Book World) 18 November 1990, pages 14+. Emphasis added.
- Alvin Toffler. Power Shift: Knowledge, Wealth and Violence at the Edge of the 21st Century. (New York: Bantam Books, 1990) page 7. Other writers, such as Joseph Nye, have noted that power is being transformed from the more traditional "hard" power (i.e. military and economic) to "softer" forms of power (such as technological and communications capabilities). See Bound to Lead (Basic Books, 1990), passim.
- <sup>4</sup> <u>Ibid</u>., page 15.
- <sup>5</sup> <u>Ibid</u>., page 84.
- bid., page 20.
- <sup>7</sup> <u>Ibid., page 23.</u>
- lbid., pages 23-24.
- ! Ibid., page 69.
- 10 <u>lbid., page 73.</u>
- 11 <u>Ibid.</u>, page 155.
- 12 <u>lbid.</u>, page 161.
- 13 <u>lbid.</u>, page 251.
- 14 <u>Ibid.</u>, page 258.
- 16 <u>lbid</u>., page 416.
- 18 <u>Ibid</u>., page 248.
- 17 <u>lbid.</u>, page 422.
- 18 <u>lbid.</u>, page 288.

## FIRST INTERNATIONAL SYMPOSIUM: NATIONAL SECURITY & NATIONAL COMPETITIVENESS: OPEN SOURCE SOLUTIONS Proceedings, Volume I - Link Page

Previous OSS '92 Robert David Steele, Executive Book Report: Paul A. Strassman, Information PayOff: The Transformation of Work in the Electronic Age,

Next OSS '92 John L. Petersen, Staying in the National Security Business: New Roles for the U.S. Military,

**Return to Electronic Index Page**