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THE FUTURE OF THE SPY

CRTY MINUTES from the Metropole Hotel in Moscow, we approached the nondescript apartment building. We stamped the snow off our shoes and entered. Mailboxes lined one side of the darkened lobby, some open with papers stuffed in them. We took a small elevator up, then found a warm greeting on the landing. Soon we were comfortably seated in Oleg Kalugin's living room. A well-built man in his early fifties, Kalugin speaks perfect English. He smiles and hands you his name card, which identifies him cryptically as "Expert." It gives no hint of the kind of expertise he has.

Oleg Kalugin was the Soviet Union's chief spy in Washington during some of the hottest years of the Cold War. It is a far cry from the days when he "ran" John Anthony Walker, the American naval officer who peddled U.S. codes, from the days when Kalugin sat in the Soviet embassy on Sixteenth Street reading documents stolen from the super-secret National Security Agency, or later, when he would visit with Kim Philby, one of the master spies of the century. Today Kalugin, once the KGB's youngest general, makes appearances on CNN, meets with high officials of the CIA and FBI, and thinks back over his career.

In the course of several hours, we spoke about the possibility, which he regards as unlikely, that some Soviet spies and networks in various countries have shifted allegiance and gone to work for other nations. He gave us his private assessment of the attempted coup that led to the downfall of Gorbachev, and he described his hopes for a peaceful future.

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Kalugin has become a vocal critic of intelligence as it was practiced during the Cold War. He is even more critical of what he sees happening today - notably the Russian government's decision to create an "Academy for State Security" in which a new generation will be taught what he describes as "the same old approaches, the same disciplines" as in the days of the KGB. Some of his former colleagues are outraged at his public criticisms of the espionage agency he once served. But Kalugin is a living symbol of the remarkable changes transforming the world espionage industry.

Among all the "national security" institutions, none have a deeper need for restructure and reconceptualization than those devoted to foreign intelligence. Intelligence, as we've seen, is an essential component of any military knowledge strategy. But as the Third Wave warform takes shape, either intelligence itself assumes a Third Wave form, meaning it reflects the new role of information, communication, and knowledge in society, or it becomes costly, irrelevant, or dangerously misleading.

HOOKERS AND SPORTS CARS

Washington currently reverberates with voices crying for drastic reduction or even wholesale dismemberment of America's spy agencies. But, as with defense spending generally, most of the demands for crash cuts reflect short-range political pressures rather than any grand global strategy or reconceptualization of intelligence, as such.

Thus the ever-influential New York Times calls for a shutdown of satellites that monitor telephone calls and missile telemetry; praises the fact that the CIA has only nine analysts paying attention to the Russian military (down from 125); and thinks Iran bears watching, but casually announces that the rest of the world is "pretty well covered."

Such offhand confidence seems misplaced when the former Soviet military still controls thousands of both strategic and tactical nuclear weapons, when the country remains potentially explosive, and rogue elements of the old military could still play a revolutionary role in determining the future. Self-imposed deafness seems hardly sensible in a world that is proliferating missiles and warheads at high speed. In terms of potential for triggering global instability, Iran is not the only place that "bears watching." And the "rest of the world" is assuredly not "pretty well covered," as the pages of the Times itself reveal.

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Sung, the Communist dictator of North Korea, was grooming his son, Kim Jong Il, to succeed him in office. But almost nothing has been known about the son, beyond a reported penchant for imported cars and Swedish hookers. In March 1993 the *Times* reported that "the CIA apparently discovered only recently that he has two children, an important fact in a government with a dynastic tradition." That it took so long for Western intelligence to determine so basic a political fact hardly evidences good "coverage."

THE GM PROBLEM

For the United States, foreign intelligence was a \$30 billion-a-year enterprise. Its main institutions, the Central Intelligence Agency, the Defense Intelligence Agency, the National Security Agency, and the National Reconnaissance Office, were classical Second Wave organizations. They were huge, bureaucratic, centralized, and highly secretive. Soviet intelligence — the KGB and its military counterpart, the GRU — were even more so.

Today such organizations are just as obsolete in intelligence as they are in the economy. Exactly like General Motors or IBM, the world's major intelligence manufacturers are going through an identity crisis, desperately trying to figure out what went wrong and what business they are really in. And like the corporate dinosaurs, they are being forced to question their basic missions and markets.

Fortunately, like management theorists in the fast-changing business world, a new breed of radical critics is springing up determined not to destroy intelligence but to recast the concept in Third Wave terms.

The very notion of "national security," which these institutions claimed to serve, is being broadened to include not simply military but economic, diplomatic, and even ecological components. A former member of the U.S. National Security Council staff, John L. Peterson, argues that to head off trouble before it explodes the United States should use its intelligence and its military forces to help the world deal with problems like hunger, disaster, and pollution that can throw desperate populations into violent conflict. To do this would require more, not less, intelligence, but different types as well. Again, the parallels with business are striking. Thus, says Peterson, "As the security market moves and broadens, new 'products' will be required to cover the new segments."

Sounding exactly like a business marketing specialist, Andrew

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Shepard, a leading CIA analyst and manager, urges intelligence experts to de-massify their output: "To tailor routine intelligence to particular consumers' interests, we need the ability to produce different presentations for each key customer. We envision final assembly and delivery of routine finished intelligence at the 'point of sale.'"

Similarly mirroring Third Wave management thinking, other avant-garde intelligence thinkers speak about listening to "customers," cutting out "middle management," decentralizing, reducing cost, and de-bureaucratizing.

Angelo Codevilla of the Hoover Institution, in Berkeley, suggests that "each part of the government should gather and analyze the secrets it needs." The role of the CIA, he says, should be reduced to that of a clearinghouse. Codevilla urges the United States to retire thousands of spies and spooks stationed in embassies and pretending to be diplomats but collecting information readily available to any informed businessman, journalist, or foreign service officer. The 10 percent of spies operating under diplomatic cover who are useful, he says, should be reassigned to specific government departments, like Defense and Treasury.

More use should be made of part-time informants active in business and professional circles in target countries. If covert operations — foreign operations whose sponsorship can be denied — are needed, they should be carried out by the military or other agencies, not as a part of intelligence.

What's more, Codevilla claims, the technical means of intelligence collection, including some satellite systems, function as indiscriminate "electronic vacuum cleaners," picking up too much chaff along with any wheat. They, like military weaponry, need to be precision-targeted.

The "wheat" that users want is changing, too, even in the military. Thus an influential document circulated at the top of the Pentagon in January 1993 charged that senior military intelligence analysts were "still essentially chewing on" notions of large ground wars. They were focusing too narrowly on military factors, underestimating the importance of political strategy. "Analysts," it declared, "seem to have little feel for or data about the kinds of Third World opposition force we might encounter" and how "militarily insignificant opponents (such as the Serb forces in Bosnia) might pose extremely stressful problems."

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NEW MARKETS

According to Bruce D. Berkowitz, a former CIA analyst and Allan E. Goodman, formerly that agency's Presidential Briefing Coordinator, "Rather than detecting and analyzing a jet aircraft which emits a familiar visual, infrared, and telemetry signal . . . the intelligence community may have to detect and analyze old, small aircraft transporting drugs." Rather than spotting tank battalions in movement, it may have to spot guerrillas. And rather than dissecting a Soviet arms-control proposal, it may have to assess a country's attitude toward terrorism.

Fighting terrorism, in particular, requires extremely fine-grained information and new, computerized techniques for getting it. The words of Count de Marenches, former chief of French intelligence, ring true: "Precision personal intelligence can be more critical than precision-guided munitions."

At a March 1993 meeting of AIPASG (the intelligence community's Advanced Information Processing and Analysis Steering Group), Christopher Westphal and Robert Beckman of Alta Analytics described new software to help authorities zero in on terrorist groups by searching out concealed relationships in multiple data bases. Using it, an anti-terrorist squad could, for example, ask the computer to show all locations frequented by six or more selected people. The idea is to let the user "quickly discover and expose critical associations that would otherwise go undetected."

The reasoning is clear. "When vehicles, telephones, or locations are featured in a group, the question must be asked, 'Why is this node here?' and 'Who is the person behind/associated with this node?' " It is claimed the program, called NETMAP, can even locate "emerging" groupings.

Presumably by combining such data with information drawn from bank accounts, credit cards, subscription lists, and other sources, such software can help pinpoint groups — or individuals — who fit a terrorist profile. (Not mentioned in the presentation was the less benign possibility that the same program might help governments pinpoint other, nonviolent political dissidents, mildly oddball religions, or legitimate groups fighting for civil rights.)

At the same conference, Marc R. Halley and Dennis Murphy of the Analytic Sciences Corporation (TASC) proposed software to help track arms sales in the world. The system, they suggested, would

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collect data about buyers, sellers, items, dates, and quantities. In an era of rising intangibility in warfare, however, it may be equally important to monitor "knowledge factors" like the enemy troops' religious views, culture, time perspective, level of education and training, their sources of information, the media they watch when off duty, and other elements related to knowledge power. In short, knowing the knowledge terrain will be as important for Third Wave armies as knowing the geography and topology of the battlefield was in the past.

THE HUMAN FACTOR

The need for a vast, highly automated network of satellites and sensors to monitor Soviet nuclear and missile development resulted in a de-emphasis on "humint" — the collection of information from human sources. What that meant was a heavy focus on the adversary's capabilities, as distinct from its intentions.

It is true that sometimes the development or deployment of "capabilities" — read tanks, missiles, planes, divisions, and other material elements — can suggest the other side's intentions. But the best satellites can't peer into a terrorist's mind. Nor can they necessarily reveal the intentions of a Saddam Hussein. Satellites and other technical surveillance technologies told the United States that Saddam was massing troops near the Kuwait border. But the United States — short on spies in Baghdad's inner circles — brushed aside such warnings as alarmist and mistakenly concluded the troop movements were just a bluff. One human spy in or near Saddam's inner circle might have cast light on his intentions and changed history.

The shift to a Third Wave intelligence system, paradoxically, means a stronger emphasis on human spies — the only kind available in the First Wave world. Only now, First Wave spies come armed with sophisticated Third Wave technologies.

THE QUALITY CRISIS

The Second Wave stress on mass collection of data by technological means has also contributed to "analysis paralysis." So much chaff has come streaming in from the existing sensors, satellites, and sonars, that it is hard to find the "wheat" mixed with it. Extremely sophisticated software helps scan telephone conversations for keywords. It monitors types and levels of electronic activity, scans for missile

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technological uch chaff has and sonars, tely sophistikeywords. It s for missile plumes, photographs nuclear facilities, and does much else besides. But the analysts have been unable to keep up with the "take" and convert it into timely, useful intelligence.

The result has been an emphasis on quantity rather than quality—exactly the problem faced by General Motors and many other corporations now trying to survive global competition. Because of overcompartmentalization of information, even high-quality analytic "product" frequently failed to reach the right person at the right time. The old system did not provide "just-in-time" intelligence delivery to those who needed it most.

For all these reasons intelligence product has been losing value in the eyes of many of its "customers." Not surprisingly, many users, from the U.S. president on down, simply ignore the classified memos piling up in their in-boxes and the secret briefings they receive. Indeed, secrecy, itself — including the assumptions behind it — is coming under review.

Says a high officer in the Office of the Secretary of Defense, "There was an enormous cult of secrecy — and secrecy itself became a litmus test as to the validity of ideas." If it wasn't secret information, it wasn't important or correct.

In 1992 the U.S. government produced 6,300,000 "classified" documents. The least restricted — not technically classified — bear the stamp "For Official Use Only," otherwise known as FOUO. The next category, which is more restricted and is classified, is termed "Confidential." Above that come documents that are "Secret" — some of which are "NATO Secret," meaning they can be shared with other nations who belong to NATO. Others cannot be shared. Then comes "Top Secret" and "NATO Top Secret." But we are only halfway up the mountain so far and still well below the celestial reaches of secrecy. Above "Top Secret" there is a category known as "SCI," or "Sensitive Compartmented Intelligence," open to still fewer people. It is not until we clamber up this peak that we reach information that can only be distributed to so-called BIGOT lists — persons armed with specific code words.

Lest this system seem too simple, it is further matrixed with qualifiers like "NOFORN," meaning no distribution to foreigners; or "NOCONTRACT," which, not surprisingly, means not to be handed out to contractors; or "WNINTEL," which stands for "Warning Notice — Intelligence Sources or Methods Involved"; or "ORCON," which means "Originator Controls Further Dissemination."

This entire dizzying, high-cost edifice is now under sustained attack. When does secrecy increase military strength and when does it, in fact, weaken security? In the words of G. A. Keyworth II, former science adviser to President Reagan, "The price of protecting information is so high that classification becomes a handicap." The new skepticism about secrecy is a direct result of today's Third Wave changes and the competition they have produced.

THE RIVAL STORE

What the Third Wave has done is explosively expand the amount of information (including misinformation) moving around the world. The computer revolution, the multiplication of satellites, the spread of copying machines, VCRs, electronic networks, data bases, faxes, cable television, direct broadcast satellite, and dozens and scores of other information handling and distributing technologies have created many rivers of data, information, and knowledge that now pour into a vast, constantly growing ocean of images, symbols, statistics, words, and sounds. The Third Wave, to switch metaphors, has touched off a kind of informational "big bang" — creating an infinitely expanding universe of knowledge.

This has essentially opened a rival store next door to the spy shop — a Third Wave competitor that makes information available faster and cheaper than the Second Wave intelligence factories. Of course, it cannot supply everything needed by a government or its

military. But it can provide a vast amount.

In turn, the Third Wave explosion of information and communication means that more and more of what decision makers need to know can be found in "open" sources. Even a great deal of military intelligence can come from the wide-open store next door. To ignore all this and base analyses on closed sources alone is not only expensive but stupid!

Few have thought as deeply of inastinatively about such questions as a super-smart, forty-one-year-old former Marine and intelligence expert named Robert D. Steele. In 1976 at Lehigh University, Steele wrote his master's thesis on "predicting revolution." Soon he had a chance to find out firsthand what revolution was all about. A tall, chunky man with a bouning voice, Steele purportedly served as a political officer in the U.S. embassy in El Salvador during the civil war, although his later career suggests he had intelligence duties in that country. He later returned to Washington, shifted career paths,

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uestions elligence y, Steele he had a . A tall, ved as a the civil luties in er paths, and became a team leader responsible for the application of information technology to foreign policy issues.

Along the way he graduated from the Naval War College and the Harvard Executive Program in Public Management (Intelligence Policy), and came to represent the Marine Corps on the Foreign Intelligence Priorities Committee and other defense intelligence bodies. Most recently he served as a senior civilian in Marine Corps intelligence, immersing himself in computers, artificial intelligence, and the broader questions of knowledge policy.

Steele wouldn't agree with the *Times* editorialist's throwaway notion that the world is "pretty well covered" by U.S. intelligence. He argues that the United States is, in fact, pitifully short of good linguists, area specialists with actual on-the-ground experience in the areas of their expertise, and even shorter on "indigenous" agents — spies — in critical regions of the world. Nor do Americans, he says, have the patience needed to develop such resources.

Sounding like the new breed of CEO in American business, he complains of organizational short-term-itis. U.S. intelligence, he says, usually places too much emphasis on immediate payback, not enough on long-term nurturing of its secret foreign assets.

Steele takes seriously the new threats posed by today's world. He believes the United States is hopelessly ill-equipped for a reality in which ideological, religious, or cultural warriors roam the planet, and computer "crackers" can turn up in countries like Colombia or Iran, placing their talents at the service of criminals or fanatics.

So Steele doesn't want to shut down U.S. intelligence. Nor does he want the bloated dinosaur shrunk down into a mini-dinosaur. What he calls for, instead, is a profound restructure so that what comes out may be small, or smaller, but will not look like a dinosaur at all.

He believes that much of the U.S. intelligence community will, in fact, eventually disappear down the black hole of budget cuts. A second part, he says, will be privatized. For example, the U.S. Foreign Broadcast Information Service listens to hundreds of foreign radio and television broadcasts and transcribes them for political, diplomatic, and military analysts. Functions like these, he argues, ought to be contracted out to private enterprise. You don't necessarily need government spies to listen to the radio or TV.

A third part of existing intelligence operations — analysis — will be decentralized. Instead of giant pools of analysts working in a central agency, many will be reassigned to work inside government departments like Commerce, Treasury, State, or Agriculture, as has been suggested by Shepard, Codevilla, and others, tailoring analysis on the spot to the needs of the users.

But none of this is central to Steele's one-man campaign. He has, as it were, a bigger whale to harpoon — the Leviathan of secrecy. Indeed, Steele may well be the single most forceful enemy of secrecy in Washington.

"If there is a terrorist group and it has a biotoxin that could cause a catastrophe and you have managed to plant an agent in the group, of course, you need to keep his identity secret. Of course, some secrets are necessary. But the hidden costs of secrecy are so immense they often outweigh the benefits by a wide margin," Steele contends.

For example, armies like to keep their "deficiencies" secret so that the enemy can't target their weaknesses. But the same restrictions that keep the enemy ignorant often deny information to the very people who might fix the deficiency. So weaknesses are discovered late if at all. Because information is compartmentalized in the interests of secrecy, different groups in an agency pursue different solutions to similar problems, and the information they develop is harder to synthesize, disseminate, and utilize. Worse yet, Steele argues, the analysts are cut off from the external world and live in what he calls "virtual unreality."

One of the things the Marine Corps did while Steele was a senior civilian in its intelligence arm was to give SPARC workstations to its analysts. The computers provided them instantaneously with the highest-level secret material. But the Marines also built a separate small glass-walled room nearby and put an ordinary PC into it. Using that machine, an analyst could link up with Internet to access thousands of data bases around the world — all filled with open, publicly available, nonsecret information. The analysts discovered to their surprise that much of what they needed to know could not be found in the secret material. Because of secrecy requirements, their workstations were not hooked up to open or public networks. As a result they turned to the modest little PC, which was connected to the world outside, and they found much of what they needed in easily available open material.

Steele became so convinced of the intelligence value of open source information that he talked the Marines into allowing him, on his own time, and at his own expense, to organize what became the first Open Sources Symposium — a conference held in Virginia in November 1992. The ironic play on the initials of the Office of Strategic Services (forerunner of the CIA) could not have been lost on his audience and

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open source on his own e first Open November egic Services udience and speakers who included the chief of staff of the Defense Intelligence Agency, a former science adviser to the president, the deputy director of Central Intelligence, and a surprising mix of people from the information industry, as well as members or observers of the far edge of the computer hacker community. Present also were John Perry Barlow, lyricist for the Grateful Dead, and Howard Rheingold, author of *Virtual Reality* and *The Virtual Community*.

It is unlikely that anyone less committed to the concept of open sources, less brash, or less bound by military and intelligence community convention could have pulled off such an event. But Steele is

driven by a vision that reaches far beyond the immediate.

"Imagine," he exhorted that first Open Sources Symposium, "an extended network of citizen analysts, competitive intelligence analysts in the private sector, and government intelligence analysts — each able to access the other, share unclassified files, rapidly establish [computer] bulletin boards on topics of mutual interest, and quickly pull together opinions, insights, and multimedia data which is all the more valuable for being immediately disseminable without restriction. This is where I think we need to go." He wants intelligence to draw on all the "distributed" knowledge available in society.

But even this does not capture the breadth of his vision. Steele wants more. He proposes to "link national intelligence with national competitiveness..., making intelligence the apex of the knowledge infrastructure." He not only believes intelligence should draw on public sources but that it should also, for the most part, be made available to the public. He speaks of using intelligence to provide valuable information "from schoolhouse to White House."

Steele sees "intelligence as part of a continuum, or a larger national construct, which must also include our formal educational process, our informal cultural values, our structured information-technology architecture, our informal social and professional networks for information exchange, our political governance system." He sees intelligence, in short, not just as a source of cloak-and-dagger information massaged into "estimates" for a handful of top policymakers but as a vibrant contributor to the knowledge system of society as a whole.

Steele's vision will thrill many — and send a nervous quiver down the spines of others. It has cracks and unfilled gaps in it that critics may be quick to seize on. His direct manner may put people off. And his dream, like most dreams, is unlikely to be fully realized. But it positions intelligence within a vastly larger framework than any previously discussed. His campaign is one of the forces aimed at adapting intelligence to the realities of the Third Wave.

To worry about war or anti-war in the future without rethinking intelligence and seeing how it fits into the concept of knowledge strategy is an exercise in futility. The restructure and reconceptualization of intelligence — and military intelligence as a part of it — is a step toward the formulation of knowledge strategies needed either to fight or forestall the wars of tomorrow.

You may not be interested in war, but war is interested in you.

-Trotsky

WAR AND ANTI-WAR

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AT THE
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21ST CENTURY

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Authors of FUTURE SHOCK and THE THIRD WAVE

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Alvin and Heidi Toffler are the world's most influential futurists. Their prizewinning works, including Future Shock, The Third Wave, and Powershift, have been published in more than fifty countries and thirty languages, and have been cited by presidents and prime ministers, business leaders, educators, and critics alike for their striking insights and their contributions to social thought. These books became the bible of democratic intellectuals in China. In Japan they helped shape business and political strategies. In France the Tofflers won the Prix du Meilleur Livre Etranger. In the United States their varied awards include the McKinsey Book Award for contributions to management literature and the Centennial Award of the Institute of Electrical and Electronic Engineers (IEEE). The authors hold or share many other honors, including honorary doctorates in science, letters, and law.

War and Anti-War, in form and subject a departure from the authors' other books, began with a meeting a decade ago with two American generals, brilliant planners who themselves had been influenced by the Tofflers' work.

The authors are members of the National Committee for U.S. China Relations and the U.S. Committee for UNIFEM, the United Nations Fund for Women. The Tofflers were married in 1950, have a grown daughter, and continue to travel, think, and write together.

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