Joint Military Intelligence College

June 1999

A FLOURISHING CRAFT: TEACHING INTELLIGENCE STUDIES

Occasional Paper Number Five

Papers Prepared for the 18 June 1999
Joint Military Intelligence College
Conference on
Teaching Intelligence Studies at Colleges and Universities

Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
JUN 1999		**00-00-1999 to 00-00-1999**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
A Flourishing Craft: Teaching Intelligence Studies	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **Joint Military Intelligence College,200 MacDill Blvd,Washington,DC,20340-5100**	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**	**Same as Report (SAR)**	**159**	

The Joint Military Intelligence College supports and encourages research on intelligence issues that distills lessons and improves support to policy-level and operational consumers

This series of Occasional Papers presents the work of faculty, students and others whose research on intelligence issues is supported or otherwise encouraged by the Joint Military Intelligence College through its Office of Applied Research. Additional copies of unclassified papers in this series are available through the National Technical Information Service (www.ntis.gov).

Occasional Paper Number Five

A FLOURISHING CRAFT: TEACHING INTELLIGENCE STUDIES

Edited by Russell G. Swenson, PhD

JOINT MILITARY INTELLIGENCE COLLEGE
WASHINGTON, DC
JUNE 1999

CONTENTS

A Flourishing Craft: Teaching Intelligence Studies

Foreword

This Conference on Teaching Intelligence Studies at Colleges and Universities establishes another benchmark in the advancement of thought on the democratization of the concept of intelligence and of the intelligence calling. In the tradition of Sherman Kent's *Strategic Intelligence for American World Policy* (1949) and Roger Hilsman's *Strategic Intelligence and National Decisions* (1956), and in the spirit of Klaus Knorr's F*oreign Intelligence and the Social Sciences*, Research Monograph No. 17 (Princeton, NJ: Center of International Studies, 1964), this collection of papers highlights the convergence of academic and applied factions in the pursuit of intelligence professionalism.

The environment of intelligence studies has been documented over the years by academic surveys and Conference proceedings. Bruce Watson and Peter Dunn's Mili*tary Intelligence and the Universities* (Boulder, CO: Westview, 1984) reflects on the status of intelligence studies from the perspective of the Defense Intelligence College, now the Joint Military Intelligence College. Their work was followed quickly by Marjorie Cline's *Teaching Intelligence in the Mid-1980s* (Washington, DC: National Intelligence Study Center, 1985), a review of College and University course offerings on an international scale. The Central Intelligence Agency's Center for the Study of Intelligence hosted a Symposium in 1993 that documented progress made toward the release of crucial historical material for understanding the contribution of intelligence to U.S. policymaking and implementation. The Center's *Symposium on Teaching Intelligence, October 1-2 1993: A Report* (Washington, DC: CSI, 1994) and subsequent stream of publications have dramatically improved scholarly access to important information. The Center has also made available many articles from *Studies in Intelligence* (see www.odci.gov/csi/studies/). Efforts now underway include an international survey for *Intelligence and National Security* of academic intelligence courses being offered and an even more comprehensive international survey of applied as well as academic intelligence study programs by Karen Frykfors von Hekkel of Sweden.

Authors in this volume merely represent the many others who harbor a boundless passion for learning and teaching about intelligence. Nearly all the authors come to the craft with years of experience in the application of intelligence principles and practices, usually but not always within government circles. Readers will note some very well-known names among these authors, and the College is pleased to count two of its own faculty among them. The Editor also notes that the next Occasional Paper in this series, *Intelligence Essentials for Everyone*, will continue the impulse toward convergence of government and private-sector reflection on the science and art of intelligence.

Russell G. Swenson, Editor
AFswerg@dia.osis.gov

TEACHING INTELLIGENCE: THE INTELLECTUAL CHALLENGES

Mark M. Lowenthal
Open Source Solutions, USA

INTRODUCTION

On its face, the teaching of intelligence should not be extremely difficult. Intelligence, as an enterprise and activity, has established norms, fairly well-accepted functions, and an ever-growing body of literature from which to draw. And yet, teaching intelligence in a way that gives a substantial appreciation for the subtleties, the nuances and the idiosyncrasies of the craft is, I believe, a challenge. Because intelligence remains a fairly closed enterprise, not all who teach intelligence will have had much exposure to it apart from their readings. This is not to suggest that only veterans of intelligence can teach it, but it does mean that there are significant issues that need to be highlighted for anyone teaching intelligence to enable them to portray it accurately.

In the pages that follow, I will identify those questions in the teaching of intelligence that seem the most problematical; discuss why these particular issues pose challenges, and suggest ways in which these challenges can be addressed. My views are drawn primarily from my experience with two graduate courses that I have offered over the years at Columbia University and George Washington University and from writing a textbook on intelligence.[1]

WHAT IS "INTELLIGENCE?"

This is, of course, the starting question. The very fact that it is a question is intriguing in and of itself. If one were conducting a course on defense or agriculture or transportation, very little time would be spent defining the nature of the subject matter. Intelligence is different. Virtually every book on intelligence seems to begin with a somewhat long and often tortured definition of "intelligence."

Thomas Troy is one of the few authors who tackles the question head on.[2] He argues that intelligence is, quite succinctly, "knowledge of the enemy." What Troy offers in brevity he lacks in depth. After all, we may not have "knowledge" but only well-based

---

[1] *Intelligence: An Introductory Text*, will be published by Congressional Quarterly Press during the 1999/2000 academic year.

[2] Thomas F. Troy, "The 'Correct' Definition of Intelligence," *International Journal of Intelligence and Counterintelligence 5* (Winter 1991/92): 433-54.

supposition. Intelligence is often imperfect, incomplete or subject to varying interpretations, all of which put intelligence in a category that is something other than "knowledge." And it may not be about "enemies." Rivals who are not enemies (the U.S. allies in the European Community come to mind on the issue of trade) or even peaceful but unstable neighbors are all legitimate intelligence concerns. "Interest" or "national security interests" (both of which would still require definition) may be better referents than "enemies."

Troy, unlike many others, does not emphasize the secrecy of sources in his definition.[3] But we must admit that to many it is the secret aspects of intelligence that seem to be essential and the most alluring. Secrecy plays a role, in that intelligence focuses on information that one nation would keep from another, or information that one nation has obtained from another by means it would rather not reveal. But there is more to intelligence than that. Intelligence is information that has a special and unique relationship to policy, whether that information is secret or not.

Interestingly, Troy has little use for the definition crafted by Sherman Kent, who defined the major activities of intelligence as knowledge, organization and activity.[4] His basic difficulty with Kent's definition is that it tends to reduce intelligence to a product. But if intelligence is to have any use in the policy process, it *is* a product that is delivered to policymakers.

The view here is that intelligence can and should be defined as organization, as process and as product resulting from the process — i.e., who does intelligence, what do they do and what do they produce. One way to express this is what I call the *Bull Durham* definition, based on the comment by the baseball manager in that movie who assures his hapless team that baseball is easy: You throw the ball; you hit the ball; you catch the ball. So too, with intelligence: You ask a question; you collect information; you answer the question. A more sophisticated definition is the following:

> *Intelligence is the process by which information is requested, collected, analyzed and provided to policymakers; the products of that process; and the carrying out of operations as requested by lawful authorities.*

INTELLIGENCE VS. POLICY

One of the most fundamental principles of intelligence as practiced in the United States is that intelligence is subservient to policy. There are numerous reasons for this principle. First and foremost, intelligence is supposed to be about those issues uppermost on policymakers' minds, and those issues about which policymakers should be aware

---

[3] Winn L. Taplin, "Six General Principles of Intelligence," *International Journal of Intelligence and Counterintelligence 3* (Winter 1989): 477-81.

[4] Sherman Kent, *Strategic Intelligence for American Foreign Policy* (Princeton: Princeton University Press, 1949), xiii.

even though they may not be working on them. If this connection is not being made then intelligence runs the risk of being irrelevant. Second, if one goes back to the 1947debates in Congress over the role of the CIA under the National Security Act, one sees a consistent concern that the CIA might turn into some independent "Gestapo." By keeping intelligence subservient to elected officials and their duly appointed subordinates, there is a check against this possibility.

To those with experience in the government — in either intelligence or policy — this principle is so fundamental as not to need debate or even mention. But its importance is such that it does need to be stressed in the classroom. It is also very difficult to convey. The concept of intelligence having a witting *subservient* role runs counter to popular (in both fiction and media) images of intelligence — talented free lancers, out on their own, always working on the edge, fighting against both their known enemies and, very often, the people back home who sent them out in the first place.

The full significance of the policy/intelligence relationship is somewhat difficult to convey. There are very real bounds on what intelligence can say: Policy recommendations by intelligence officers (on all issues other than those that are strictly intelligence; that is, collection operations) are strictly forbidden. On the other hand, policy makers are quite free to disagree with intelligence and to offer analyses of their own. The relationship is one-sided, as it should be in a government run by and for policymakers.

But there is yet another layer to this model. At the most senior levels, the line between policy and intelligence begins to blur. At the most senior levels it is difficult to imagine that intelligence officials would be able or willing constantly to demur when asked about different policy options.

Conveying these subtle shadings of relationships is difficult. One last aspect that is difficult to convey is the fact that personalities matter. With all due deference to some of my colleagues in the field of political science, government is not a series of little boxes interacting with one another. Those little boxes are inhabited by men and women with beliefs, histories, biases, strengths and weaknesses, friends and foes. These all enter into the equation as well and should be mentioned if the students are going to develop a true appreciation for how the policymaking/intelligence system works. Also, as I have pointed out elsewhere, the policymakers and the intelligence officers come at their relationship from two very different points of view and points of interest.[5]

There can be no more striking example of the real consequences of policy and intelligence discussions than the hearings on the second nomination of Robert Gates to be the Director of Central Intelligence.[6] Although it came as something of a shock to outsiders, there was ample testimony about the seriousness of analytical debates within the

---

[5] Mark M. Lowenthal, "Tribal Tongues: Intelligence Consumers, Intelligence Producers," *Washington Quarterly* 15 (Winter 1992): 157-168.

[6] U.S. Congress, Senate, Select Committee on Intelligence, *Nomination of Robert M. Gates*, Hearings. 3 vols. 102nd Congress, 1st session, 1991.

Intelligence Community, and the fact that these debates can have very real and often stark consequences for policy and for careers. There are winners and losers.

Covert Action

For all of the writing about and controversy over covert action, this is not as difficult a realm to interpret as some other aspects of intelligence. A central issue is a moral one: Does one accept or not the legitimacy of recourse by nations to covert action? Based on personal experience, I would argue that this depends more on the nature of the times than anything else. The question was more controversial among students in the late 1960s and 1970s and much less so in the 1990s. More important is the ability to stress that covert action makes sense — and can only be justified — if it is carried out in relationship to well-thought-out national security goals. That, to my mind, is the key issue. The complex and very sad Iran-Contra affair makes a useful case in point on several levels about how not to run a covert action.[7] Beyond that, one gets into interesting discussions of what works and what does not along the continuum of covert action, from propaganda and political intervention out to paramilitary operations.

Popular misconceptions about intelligence are a factor here as well, because these have undoubtedly served to raise the level of expectation as to what is possible, what is carried out whether it is permissible or not, and what is likely to work in covert action. It is important to make clear that expectations and planned outcomes vary with the types of operations being discussed. The derring-do aspect tends to overwhelm the real art: careful planning and experienced officers. Very few covert actions are sudden "come as you are" affairs. They are planned out for many months in advance. Indeed, this is a key element that needs to be stressed in the classroom.

Another important issue is the yardstick by which one measures the effectiveness of covert action. Is it success vs. failure? How long a period is valid for judgment? For example, the 1951 coup in Iran that overthrew Mossadegh achieved its aims. Some argue, however, that even though the Shah was restored, this still led to the Khomeini regime in 1979. Others (myself included) counter that maintaining a friendly regime in power for eight years in a region as volatile as the Middle East is still a positive achievement. Even without arguing causation, there is an interesting debate here between those who worry about the longer-term consequences of covert action and those who see policy in more finite time periods.

The issue of assassination as a covert action tool also reflects the times. Again, students seem more permissive in the 1990s than were their predecessors. One of the old chestnuts of this debate is the case of Adolf Hitler. Would not the world have been better off if Hitler

---

[7] Two useful sources are Theodore Draper, *A Very Thin Line: The Iran-Contra Affair* (New York: Hill and Wang, 1991) and President's Special Review Board [The Tower Commission], *Report of the President's Special Review Board* (Washington, DC: U.S. Government Printing Office, February 26, 1987), which has a very concise summary of its findings.

had been assassinated? Hitler actually makes an interesting instructional case when one asks students at what point in his career would Hitler have become a target, without the benefit of hindsight. From his accession to power in 1933 until 1939, Hitler was an accepted European statesman, the nature of his internal regime notwithstanding. There would have been no reason to contemplate his assassination. Once the war commenced, different rules begin to apply. Is Hitler a legitimate target as an enemy commander in chief? Is that the basis for his assassination or is it the heinous regime he embodies? It is interesting to point out the recent revelation that British intelligence considered assassinating Hitler as late as 1945, but gave up the effort after they concluded that Hitler's increasingly erratic decisions were of great benefit to the Allies![8]

One of the sad truths about assassination as a policy tool is that it is an act of desperation, something to come to when all else has failed. But that also underscores the very shallowness of the act and the distinct possibility that it will not solve the larger problem at hand.

Counterintelligence and Counterespionage

This murky world is among the most difficult aspects of intelligence to convey. Again, one is hobbled at the outset by persistent images from the fictional world of spies and double agents. A key point to be conveyed, I believe, is the ultimate fragility of a system that involves human beings in highly risky enterprises with access to information that they know is prized by those who have it, by those from whom it has been taken, and by those who may want it. Here we are on the edge of human behavior, facing issues of trust and betrayal. It is also important to point out the very real difficulties in determining on a timely basis when counterintelligence penetrations have been made, and the difficulties of dealing with the two most likely behaviors associated with this issue — absolute trust in one's subordinates or extreme paranoia. At a very basic level, people tend to trust those with whom they work; this leads to witting blindness to the shortcomings of others. On the other hand, vigilance can turn into paranoia, as some accused James J. Angleton of practicing.

Counterintelligence has become a more interesting issue in the aftermath of the Cold War. The various cases of "friends" spying on one another (Aldrich Ames for the post-Soviet Russians; France and the United States; Israel against the United States via Jonathan Pollard) raise important questions about the use of espionage, its role as an intelligence tool regardless of ideology, and the difficulties of counterintelligence. And not least, it is important to point out the counterespionage aspects of counterintelligence: i.e., learning about your opponents' methodologies, requirements, etc. by their efforts to penetrate your service. This is not to suggest that being penetrated by a hostile service is good, but there are things to be learned from the experience.

---

[8] T.R. Reid, "British Spies Planned Many Deaths for Hitler; Plots Halted When London Decided a Bumbling Fuhrer Was Better than a Dead One," *Washington Post*, 24 July 1998, A32.

The Role of Congress

To be blunt, much of the problem in portraying the legitimate role of Congress as an overseer (and sometime intelligence consumer) in the U.S. system derives from the fairly low opinion that most individuals have of Congress as an institution. Most students come to this aspect of intelligence with the same bias toward Congress as too many Executive branch officials: Congress is home to leak-prone busybodies who are more likely to gum up the works than to add anything of value to the process.

My own views are clearly formed to a large degree by the fact that much of my federal career was spent on Capitol Hill. But they are also formed by my belief that the drafters of the Constitution were serious when they created a government in which power was divided among the branches, which are to be viewed as both separate and equal.[9] Four points need to be made in teaching about Congressional oversight. First, the role of Congress as an overseer is not only legitimate, firmly based in the Constitution, but also necessary. The "checks and balances" system is central and it works, pretty much as intended. Second, for better or for worse, the key to oversight is the budget process. But here, it is important to remember that Congress is the branch that has the money; the Executive only has programs. Third, popular misconceptions notwithstanding, the Executive is the source of 90-95 percent of all the national security leaks in Washington. Most leaks are generated either by the need to show off or by a confession of bureaucratic impotence. Congress has better means at its disposal to affect policy — the budget! This is not to suggest that Congress is a pristine keeper of secrets. It is not. But Congress' record for keeping secrets far surpasses that of the Executive. Fourth, the Executive branch actually derives benefits from the oversight system, as it affords the Executive a means of co-opting Congress when sharing information. If Members or staff are briefed about some Executive initiative — be it policy or operations — and they do not react to it or oppose it, then they have tacitly given their support, whether they realize it or not.

Finally, it is important to discuss the ramifications of Congress becoming more of a day-to-day player in intelligence, and its growing role as another consumer of intelligence, once largely the preserve of the Executive branch.[10]

Analysis

I was and I am an analyst and so my teaching emphasizes analysis. But this emphasis is also based on my belief that the goal of intelligence is to put analysis (broadly defined) before policymakers so as to help them make informed decisions. Operations

---

[9] Fortunately, we have an excellent book on Congress' intelligence oversight role: Frank J. Smist, Jr. *Congress Oversees the United States Intelligence Community*. 2nd ed. (Knoxville: University of Tennessee Press, 1994).

[10] On this point see L. Britt Snider, *Sharing Secrets with Lawmakers: Congress as a User of Intelligence*. (Washington, DC: Center for the Study of Intelligence, 1997).

aside, intelligence activities that do not in some way contribute to this goal are largely pointless. There are at least three aspects of analysis that I find very difficult to convey: how to deal with the issue of "truth;" with uncertainty; and with the bureaucratics of analysis.

In a way, the issue of truth and analysis reflects the earlier "What is intelligence?" question. I firmly believe that the one thing that intelligence is *not* about is truth. If we knew something to be true it would not be a question for intelligence. (In that regard, I have always believed that the quote that Allen Dulles had inscribed at the entry to the old CIA building — "*And ye shall know the truth and the truth shall set you free.*" John VIII-XXXII" — is a nice sentiment but has nothing to do with what was going on inside the building itself.) Intelligence has long wrapped itself in the old saw that its role is "to tell truth to power." The image this attempts to convey is that of an entity that calls it as it sees it, no matter what the consequences. As noble as this is, it is both false and fraught with consequences.

Every intelligence analyst knows that there are times when analysis may need to pull a punch or run the risk of destroying future entrée to or credibility with policymakers. This reflects the real world versus the textbook. This is not to suggest that intelligence analysis can or should lie or even misrepresent, but it does mean that there are times when there are careful shadings to be made. Truth has a relentless and absolute quality to it. All too often, intelligence is about things that are only half-known, or based on intuitive leaps from fragmentary evidence. Also, if the goal of intelligence is truth, then are those who may oppose a certain analytical viewpoint the purveyors of falsehoods? Of course not, but this is the sort of intellectual trap into which "truth telling" can lead. Moreover, the constant claim by intelligence to being a truth teller in the corridors of power is almost comical: jesters had the same role in the Middle Ages!

The second problem with the "truth telling" model is more subtle. It places unacceptable and unattainable burdens on intelligence. As Walter Laqueur has pointed out, much of this derives from social science theories that were prevalent during the intelligence community's formative years.[11] Some practitioners and theorists in fields like international relations believed that various new methodologies (operations research, game theory, etc.) could be applied so as to give their pursuits the same "hardness" as the sciences. The view here is that intelligence analysis is more craft than science.

Indeed, the "truth" paradigm leads to the second problem in discussing analytical issues, the uses and abuses of ambiguity. There are inevitably issues on which the intelligence will remain ambiguous. This is problematical, but even more problematical is the issue of how to convey that ambiguity. English, as a Germanic language, does not lend itself well to this problem. Most of the words to which an analyst would likely be drawn (*"however; although; perhaps; on the one hand, on the other hand"*) come across more

[11] Walter Laqueur, *A World of Secrets: The Uses and Limits of Intelligence*. (New York: Twentieth Century Fund, 1985), 293-98.

as being pusillanimous than as efforts to convey uncertainty or ambiguity. This may seem like a grammatical nit that is being picked, but it can be a substantial issue in terms of both intelligence analysis itself and how policymakers view that analysis. Unfortunately, it can also become a crutch for some analysts.

Finally, there is the "bureaucratics" of analysis, the various games that get played in an enterprise that calls upon multiple authors from multiple offices or agencies. I have already touched on one aspect of this in my discussion of the "hard ball" aspects of analysis as revealed by the Gates' hearings — there are real winners and losers. Beyond that there are other tactics that are seen in the analytical world: back-scratching and logrolling on points of analytical differences; footnote swapping ("I'll take yours if you take mine."); false hostages (creating points of disagreement so as to have something to trade). The point, again, is that intelligence is not some abstract intellectual or political process. It is a human endeavor and must be understood on both the theoretical level and on the real level as well if students are to come away with an accurate appreciation for the subject.

"Pop" Intelligence

I have long eschewed the use of intelligence fiction — novels or movies — in my classes. My reasons for this are twofold. First, so much of it is so very bad as a means of conveying the real world of intelligence. The demands of fiction — characters who are too often "black or white," the need for action, the difficulty of conveying the complexity of many policy issues or of the likelihood that there may be more than one crisis brewing at a time — run counter to too many of the realities of intelligence. The closest I have come to a fictional source that I have liked is an old British television series, *The Sandbaggers*, which manages to convey some of the bureaucratic aspects of intelligence both internally and externally.

Second, the necessities of plot lead to an emphasis in novels and movies on espionage and covert action, which, taken together, remain a very small facet of intelligence. But let us face it head on: Intelligence analysis is not the stuff from which compelling fiction is made. Earnest people sitting at desks, reading, thinking, writing, and attending meetings for group editing sessions hardly make for a compelling book or movie.

There may be something to be said for an historical review of trends in the fictional presentation of intelligence, but that is a cultural issue that largely lies beyond the purview of the main themes that I try to teach.

Conclusion

To some extent, the teaching of intelligence has been hobbled by the fact that it is a relatively new academic endeavor. Prior to the late 1970s there were hardly any such courses at all, and almost no useful literature upon which a course could be built. The very great explosion of writings on intelligence that began in the aftermath of the investigations of 1975-76 both piqued interest in the subject and helped create a broader literature base —

albeit one fraught with danger, as I have pointed out elsewhere.[12]Thus, we are concerned with an academic subject that is barely 25 years old.

Beyond its relative academic novelty, there are at least two other factors that impede the teaching of intelligence: lack of exposure to its inner workings on a regular basis by some who teach the subject, and the effect of popular misconceptions, largely stemming from fiction.

But I return to the point with which I began: Intelligence can be taught in a serious way and with a good feel for its nuances and difficulties. This requires, first, an appreciation of those aspects of intelligence by the teacher, and second, a careful selection from among the still-growing literature. The proper teaching of intelligence — like any other subject — should have challenges and does have answers to those challenges.

[12] Mark M. Lowenthal, "The Intelligence Library: Quantity vs. Quality," *Intelligence and National Security 2* (April 1987): 368-373.

BIBLIOGRAPHY

Barry, James A. “Covert Action Can Be Just.” *Orbis 37* (Summer 1993): 375-390.

Chomeau, John B “Covert Action’s Proper Role in U.S. Policy.” *International Journal of Intelligence and Counterintelligence 2* (Fall 1988): 407-413.

Draper, Theodore. *A Very Thin Line: The Iran-Contra Affair*. New York: Hill and Wang, 1991.

Hilsman, Roger. S*trategic Intelligence and National Decisions*. Glencoe, IL: The Free Press. 1956.

Kent, Sherman. *Strategic Intelligence for American Foreign Policy*. Princeton: Princeton University Press, 1949.

Johnson, Loch. “Decision Costs in the Intelligence Cycle,” in Alfred C. Maurer, *et al*., Eds. *Intelligence: Policy and Process*. Boulder, CO: Westview Press,1985,181-198.

_____. “Making the ‘Intelligence Cycle’ Work.” *International Journal of Intelligence and Counterintelligence 1* (Winter 1986-87): 1-23.

Laqueur, Walter. *A World of Secrets: The Uses and Limits of Intelligence*. New York: Twentieth Century Fund, 1985.

Lowenthal, Mark M. “The Intelligence Library: Quantity vs. Quality.” *Intelligence and National Security 2* (April 1987): 368-373.

_____. “Tribal Tongues: Intelligence Consumers, Intelligence Producers.” *Washington Quarterly 15* (Winter 1992): 157-168.

President’s Special Review Board [The Tower Commission]. *Report of the President’s Special Review Board*. Washington, DC: U.S. Government Printing Office, February 26, 1987.

Reid, T.R. “British Spies Planned Many Deaths for Hitler; Plots Halted When London Decided a Bumbling Fuhrer Was Better than a Dead One,” *Washington Post*, 24 July1998, A32.

Smist, Jr., Frank J. *Congress Oversees the United States Intelligence Community*. 2nd ed. Knoxville: University of Tennessee Press, 1994.

Snider, L. Britt. *Sharing Secrets with Lawmakers: Congress as a User of Intelligenc*e. Washington, DC: Center for the Study of Intelligence,1997.

Taplin, Winn L. “Six General Principles of Intelligence, “*International Journal of Intelligence and Counterintelligence 3* (Winter 1989): 477-481.

Troy, Thomas F. “The ‘Correct’ Definition of Intelligence,” *International Journal of Intelligence and Counterintelligence 5* (Winter 1991/92): 433-454.

U.S. Congress. Senate. Select Committee on Intelligence. *Nomination of Robert M. Gates*. Hearings. 3 vols. 102nd Congress, 1st session. 1991.

Zuehlke, Arthur A., Jr. “What is Counterintelligence?” in Roy Godson, Ed. *Intelligence Requirements for the 1980s: Counterintelligence*. Washington: National Strategy Information Center,1980, 13-39.

TEACHING INTELLIGENCE: GETTING STARTED

John Macartney
American University and
Association of Former Intelligence Officers

Originally prepared for the 1999 Convention of the International Studies Association (ISA), held in Washington, DC, Feb 17-20, 1999. Condensed and updated for the Joint Military Intelligence College sponsored Conference on the Teaching of Intelligence, 18 June 1999.

INTRODUCTION

College courses on the CIA and/or intelligence were non-existent when I was an undergraduate back in the 1950's, and the same was true when I went to graduate school in the 1970's. Today, however, courses on the CIA and intelligence abound in this country and, to a lesser extent, abroad. Because most of us in today's professoriate never took courses on intelligence as students, there is some question of where to start. That's the subject of this paper.

WHAT IS INTELLIGENCE?

In the United States, intelligence information is collected, analyzed and disseminated for just one purpose — to support U.S. foreign policy. That is, intelligence is *information* about foreign affairs which is supplied to policymakers so they better understand the world and make better informed decisions regarding U.S. policy. Supplied by our intelligence agencies with information, it is up to our policymakers (not intelligence officers), to deal with the world. Intelligence is a very important input to foreign policy, but intelligence officers and agencies do not themselves make or even weigh-in on policy decisions. Spy novels, Hollywood movies and sensational headlines have given most a distorted picture. Stripped of its James Bond/Rogue Elephant mystique,

Why Study Intelligence?

Intelligence plays a critical support role in everything this country does in foreign affairs.

Unless one understands intelligence one cannot understand U.S. foreign policy. Moreover, because the U.S. is such a colossus on the world stage, it is difficult to understand international relations — how the world works — without a general knowledge of how the U.S. foreign policy community, and therefore U.S. intelligence, works.

Also, as intelligence has become integral to the function of the UN, UNSCOM, NATO, the IAEA and other IGO's it becomes important to understand the intelligence business if one is to comprehend how international institutions work.

Intelligence is a dedicated and usually tailored foreign information support service for government policymakers, planners and implementers.

That's my definition, which is shorter than but nevertheless very much in synch with the definition used by other scholars and by the CIA itself:

> *Reduced to its simplest terms, intelligence is knowledge and foreknowledge of the world around us — the prelude to decision and action by U.S. policymakers. Intelligence organizations provide this information in a fashion that helps consumers, either civilian leaders or military commanders, to consider alternative options and outcomes. The intelligence process involves the painstaking — and generally tedious — collection of facts, their analysis, quick and clear evaluations, production of intelligence assessments, and their timely dissemination to consumers. Above all, the analytical process must be rigorous, timely, and relevant to policy needs and concerns.* [1]

In short, intelligence is the processing of *information*. Functionally, intelligence is similar to journalism and academic research. Unlike the media, think tanks and other information producers, however, intelligence deals only in foreign information, providing it to a restricted government clientele, and often tailors its products (briefings, maps, reports, digitized data, etc.) to specific policymakers. Moreover, intelligence has its own dedicated and sometimes exotic information sources, including secret agents and elaborate systems of high-tech sensors.

And, of course, intelligence focuses primarily on foreign political, economic and military information that foreign governments, firms or NGO's may conceal and distort.

surprise attack	*weapons proliferation*	*terrorism*
human rights abuses	*unfair trade practices*	*peacekeeping violations*
drug smuggling	*treaty violations*	*international crime*
environmental threats	*bribes or kickbacks*	*natural disasters*

What About Covert Action?

In addition to supplying information and analysis to policymakers, the primary role for intelligence agencies, there are two related missions, covert action and counterintelligence. Although a small part of the intelligence business, these two provoke firestorms of controversy and are frankly, sexy and fascinating subjects. Either could be addressed by

---

[1] Central Intelligence Agency, *A Consumer's Guide to Intelligence*, PAS-00039, February 1994, vii. For more information on the academic debates over the definition of intelligence, readers are advised to consult Abram Shulsky, *Silent Warfare*, 2nd Edition, Revised (Washington, DC: Brassey's, 1993), especially chapters 1, 7 and 8. In brief, whereas the CIA and I both define intelligence in terms of information for policymakers, the definition advanced by Shulsky and some others conceives of intelligence more as a weapon in the struggle between nations. See also Thomas Troy, *The "Correct" Definition of Intelligence*, *International Journal of Intelligence and Counterintelligence* 5 (Winter 1991-92), 433-454.

an entire course, and both should be included in any course on intelligence. But they should be kept in perspective as "intelligence related"[2] endeavors that occupy only a small percentage of intelligence funds and personnel. [3]

Can A "Secret" Subject Be Studied?

Until the 1980's it really could not. There just was not enough information available. Today, however, there is a rich literature — indeed, we are awash in intelligence memoirs, studies, textbooks, government documents, web sites, professional and academic journals, newsletters, symposia and the like.

Approaches to Teaching Intelligence

The concept of teaching intelligence at the college level has two major connotations and several variants. In addition, several principles of teaching intelligence can be singled out, depending on what topics the instructor chooses to cover.

Full Courses and Subsets

There are courses like the one I teach at American University devoted entirely to intelligence, two or three hundred nationwide, and then there are the many thousands of courses on foreign policy or the Cold War which include one lesson or perhaps several lessons on intelligence, not to mention the attention to intelligence issues in increasing numbers of business courses, especially those on international business.

Historians, Political Scientists, and "X-Files" Fans

Three variants of teaching intelligence are worth noting. One arises from the dichotomy between the historian and the political scientist. While this paper will be of interest to those who teach from an historical perspective, my own approach takes a *political science*, or process, approach. That is, how is U.S. intelligence organized, what does it do, and what difference does it make? A second variant stems from another dichotomy — between U.S. intelligence and intelligence in the generic, comparative, or foreign, sense. I primarily address U.S. intelligence and, along with that, the U.S. foreign and defense policymaking milieu. Another variant, I am afraid, is related to the behavior of the few professors out there who approach (and teach) intelligence from what might be called an "X-Files" or Oliver Stone-type perspective. I would like to open their eyes, but in my experience, conspiracy mavens are not interested in facts, and they will find scant utility or comfort in my suggestions.

---

[2] This is the terminology Congress uses to differentiate intelligence *per se*, which is about collecting and analyzing *information*, from counterintelligence, which is akin to law enforcement, and covert action, which is a secret policy action where the hand of the U.S. government is concealed.

[3] Robert Gates, "The CIA and Foreign Policy," *Foreign Affairs*, 66 (Winter 1987/88), 216.

In sum, this paper is addressed to professors who teach or would teach about intelligence, whether as a whole course or part of a course. It will focus on U.S. intelligence and take a political science approach — regarding intelligence as a part of the larger U.S. foreign policy process.

Ignorance, Conspiracies, and James Bond

Ignorance. Any course or discussion of intelligence must overcome two monumental barriers: ignorance & conspiracy theories. No other government function is so widely misunderstood. Americans know very little about their Intelligence Community and what it does. What is worse, instead of just lacking knowledge, many have wildly distorted views they have picked up from James Bond movies, Oliver Stone fantasies, or the "X-Files." Furthermore, that general ignorance is shared by many elites and opinion makers who should know better — journalists and professors and, surprisingly, by many government officials as well. Here are some common misconceptions:

Intelligence is not policy. U.S. intelligence officers do not make or comment on U.S. policy. Instead, their job is to provide information to the policymakers who do make, plan and carry out U.S. policy.

Intelligence is not covert action. Some equate intelligence with covert action, although covert action is a tiny element of the U.S. intelligence business as measured by funds and/or personnel. That is, the U.S. intelligence effort has little to do with "dirty tricks" — instead, it is about research — that is, collecting and analyzing *information* and delivering it to government policymakers.

Intelligence is not just CIA. Many students, like most Americans, equate the CIA with U.S. intelligence when the CIA is only one part, less that 15 percent by any measure, of the larger U.S. Intelligence Community.

Intelligence is not law enforcement. While the Nazi Gestapo and the Soviet KGB were domestic police agencies first and foremost with an additional mission of foreign intelligence, the same is not true of American (or British) intelligence services which have no law enforcement function. Although many students think otherwise, the CIA has no arrest, law enforcement or police authority, and CIA officers seldom if ever carry firearms.

Conspiracy theories are another problem. They offer the misguided notion that sinister, behind-the-scenes forces control important events, or rule the whole world. Although conspiracy bunk presents a troublesome problem for the legitimacy of all institutions, it is particularly damaging for U.S. intelligence in general and the CIA in particular. That's partly because of government secrecy, but also because Hollywood has made a cottage industry of churning out fictional stories of outrageous CIA treachery. Oliver Stone's movie, "JFK," which advanced the preposterous notion that the 1963 assassination of President Kennedy was part of a secret takeover of the U.S. government by the Pentagon and the CIA who then controlled President Lyndon Johnson and, presumably, all subse-

quent presidents, including Bill Clinton, is the best example. But there are many others including television's "X-Files" and movies such as "Three Days of the Condor," "Men in Black," "Conspiracy Theory," "Enemy of the State," "Area 51" and others.

James Bond. Heroic caricatures of incredible James Bond or Jack Ryan derring-do are another problem. Those noble Hollywood images are also false and equally misleading. Neither the heroic image fostered by Tom Clancy, nor the treacherous "beast" of Oliver Stone's fantasies, have any relation to reality. Those distortions make it very difficult to carry out a rational discussion of intelligence matters.

Overcoming wild conspiracy theories and James Bond or Oliver Stone type caricatures, as well as misconceptions about covert action, is integral to any course on intelligence. Somehow, professors have to tackle these misguided notions head on — not an easy task. Indeed, some of these lunatic ideas are so deeply ingrained that a few students never seem to grasp the truth.

Topics to Cover

What topics should a course on intelligence cover? Here's what I cover in my 14-week graduate course at American University:

1. Introduction & U.S. Foreign Policy *
2. What is Intelligence?
3. Intelligence History
4. Intelligence Community
5. Collection
6. Analysis & Dissemination
7. Midterm Exam
8. Review & Catch Up
9. "Spy Books" [book reports]
10. Case Studies
11. Case Studies
12. Counterintelligence
13. Covert Action & Oversight
14. Future

* *I start with U.S. foreign policy and the policy process because that is the arena where intelligence operates, and, while most of my students are international relations or political science majors, some come from journalism, business, economics or other disciplines and may not be up-to-speed on the Washington policy process machine.*

Other Topics. Several of the topics above, like history, collection, analysis, counterintelligence, covert action and oversight, could easily be expanded into entire courses or broadened into two or three lessons of a general course. Possible additional topics:

Intelligence & law enforcement
Effects or policy outcomes (*What is the impact of intelligence*?)
Intelligence failure (or abuse)
Intelligence reform, redirection or reorganization
Post-Cold War intelligence
Intelligence for peacekeeping; for the UN
"Internationalization" of intelligence
Business & commercial intelligence
Foreign (or comparative) intelligence

U.S. Law and legal aspects of intelligence
International law and intelligence
Civil War (or Gulf War, etc.) intelligence
Job & career opportunities in intelligence (*a student favorite*)

BOOKS AND OTHER COURSE MATERIALS

The bad news is that there is not a good, up-to-date, overall text available at this time. The good news is that one is in the offing, while there are numerous excellent books on the history of intelligence and various aspects of the intelligence business, such as collection, analysis, covert action, counterintelligence and so on. Also, the *Internet* is especially rich in intelligence documents and materials — so rich that it would be possible to offer a full course using only online readings. Also, intelligence is frequently the subject of TV documentaries, and some of these are very good. Additionally, there are a number of excellent case studies. Finally, there are many retired intelligence officers who are willing to come into college classrooms and talk about their experiences. In some cases, the CIA will send active-duty personnel to speak in classrooms, and the Agency itself is open to a limited number of class visits. Let's take those matters up one at a time

Basic Textbooks

As I see it, there are six choices currently on the market and all have drawbacks.

Bruce Berkowitz, Allan Goodman, *STRATEGIC INTELLIGENCE FOR AMERICAN NATIONAL SECURITY,* Princeton U Press, paperback, 1989, 183pp. *[Excellent and concise, but out of date. Also, rather dry reading. The authors are professors who once served in the CIA]*

Jeffrey Richelson, *THE U.S. INTELLIGENCE COMMUNITY,* 4th ed, Westview Press, 1999, 526pp. *[This is a gold mine of up-to-date information, and many professors use it as a basic course text. I do not, primarily because it is an almost encyclopedic source — it makes a better reference book than a text book. I recommend it to my students for that purpose and many choose to buy it]*

Michael Herman, *INTELLIGENCE POWER IN PEACE AND WAR*, Cambridge U paperback, 1996, 385pp. *[Written by a retired senior British intelligence officer, this is a very good book, but it is about British intelligence, or generic intelligence, as well as U.S. intelligence. Also, because it had to cope with Britain's Official Secrets Act, it is rather less revealing than comparable books by American authors]*

Loch Johnson, *AMERICA'S SECRET POWER*, Oxford U paperback, 1989, 271pp. *[A very good book, but out of date. Johnson, now a professor at the University of Georgia, served on the Church Committee and the later congressional oversight committee staffs — as a result there is a certain "distrusting inspector" flavor to this book. On the other hand, it is especially good about congressional oversight]*

Ronald Kessler, *INSIDE THE CIA*, Pocket Books, 1992, 253pp. *[Excellent and concise, but it is becoming dated, it is only about the CIA and is somewhat of a journalistic puff piece. On the other hand, it is especially readable and inexpensive — students like it. I use it every semester, but not as my basic text]*

CIA, *CONSUMER'S GUIDE TO INTELLIGENCE*, PB-95-928008, 64pp, $25.50 from NTIS, the National Technical Information Service, (703) 605-6000 / http://www.ntis.gov/ . [*Although I have not seen this CIA document, it is an update of an excellent, unclassified, 43-page 1994 publication that was produced to "educate" government policymakers about the CIA and U.S. intelligence. I have used that older version myself as a class reading and have been trying to persuade CIA officials to put the current version up on the Internet for academic use. They will do so, I am told, when they have an updated, 1999 version.]*

Dr. Mark Lowenthal has written a basic text on intelligence that should be available from CQ Press by spring semester 2000, if not sooner. *[Now the Director of OSS and a former Staff Director of the House intelligence committee, former Deputy Assistant Secretary of State for Intelligence, and former Chief of CRS's international affairs division, Mark teaches an intelligence course in Boston. He has written several books and numerous articles on intelligence. All were excellent, and this book will probably become the definitive textbook on intelligence.]*

In addition, I wrote an introduction to intelligence 12 years ago for my National War College students which was later published in updated versions as an International Studies Association paper [1987], journal article [*International Journal of Intelligence and Counterintelligence*, Winter 1988] and an AFIO monograph [AFIO #7, 1991]. I've continued to update that piece and have also added a glossary for my students at Syracuse and American Universities. I hope to publish it as an introductory text, perhaps next year. Together with the glossary, it runs about 100 pages and the December 1998 version entitled, The CIA & U.S. Intelligence: A Primer, is available at a nominal charge from AFIO.[4]

Books on the History of Intelligence

Christopher Andrew, *FOR THE PRESIDENT'S EYES ONLY: SECRET INTELLIGENCE AND THE AMERICAN PRESIDENCY FROM WASHINGTON TO BUSH*, Harperperennial paperback, 1995, 544pp. *[I did a 1998 survey of books being used in intelligence courses for AFIO, and for those professors who responded, this was the most widely used book. It is excellent.]*

Nathan Miller, *SPYING FOR AMERICA*, Marlowe, 1989, paper, 449pp. *[A bit out of date and perhaps less authoritative and "academic" than the Andrew, Richelson or*

[4] THE *CIA & U.S. INTELLIGENCE: A PRIMER*, The December 1998 version is available to AFIO members [AFIO, 6723 Whittier Ave, #303A, McLean, VA 22101; (703) 790-0320; http://www.his.com/~afio/] for $10 (to cover postage and handling) and, upon a specific request, I will authorize copies to be made for academic use. jdmac@erols.com

O'Toole histories, the Miller book is an especially good read — students like it, and for that reason I strongly recommend it.]

Jeffrey Richelson, *A CENTURY OF SPIES,* Oxford U paperback, 1997, 431pp.

GJA O'Toole, *HONORABLE TREACHERY,* Atlantic Monthly paperback, 1991, 494pp.

Government and Think-Tank Documents

As government documents are not copyrighted, they may be reprinted freely as student handouts or "Packet" readings. Also, many are posted on the Internet — making reproduction unnecessary. The best of these come from several reform commissions that were active in 1996 as well as congressional documents. And the CIA [http://www.odci.gov/cia/publications/pubs.html] and especially its Center for the Study of Intelligence (CSI) [http://www.odci.gov/csi/index.html] have published a number of useful papers and monographs about intelligence. Of particular note, the CIA/CSI web page has four volumes of declassified articles from *STUDIES IN INTELLIGENCE*, the CIA's excellent in-house academic journal.

CIA and NSA Documents

A visit to the CIA web page will lead to a number of monographs and books as well as congressional testimony and speeches available on line. Among the noteworthy:

L. Britt Snyder, *SHARING SECRETS WITH LAWMAKERS: CONGRESS AS A USER OF INTELLIGENCE*, monograph, CIA Center for the Study of Intelligence, February 1997, p 29-48.

Douglas J. MacEachin, CIA *ASSESSMENTS OF THE SOVIET UNION: THE RECORD VERSUS THE CHARGES,* CIA Center for the Study of Intelligence (undated)

Harold Ford, *CIA AND THE VIETNAM POLICYMAKERS: THREE EPISODES* 1962-1968, 1998.

VENONA: SOVIET ESPIONAGE AND THE AMERICAN RESPONSE 1939-1957, CIA/NSA document, 1997.

"*PERSONAL EXPERIENCES*" on the CIA/DI web page is useful to give students a word picture of what goes on at CIA and what it would be like to work there.

1996 Reform Studies

I regard the first three studies, below, as indispensable.

IC21: THE INTELLIGENCE COMMUNITY IN THE 21ST CENTURY, Staff Study, Permanent Select Committee on Intelligence, U.S. House of Representatives, 104th Congress, Apr 6, 1996. *Superb readings on the various "INT's" and other aspects of*

intelligence. Available from the Committee, (202) 225-4121, and on-line at
http://www.access.gpo.gov/congress/house/intel/ic21/ic21_toc.html

PREPARING FOR THE 21ST CENTURY: AN APPRAISAL OF U.S. INTELLIGENCE, Report of the Commission on the Roles and Capabilities of the U.S. Intelligence Community. GPO, Mar 1, 1996 *[Aspin / Brown Commission] Available from GPO or on-line:*
http://www.access.gpo.gov/congress/house/intel/ic21/ic21_toc.html

Alexander George and Jane Holl, *THE WARNING-RESPONSE PROBLEM AND MISSED OPPORTUNITIES IN PREVENTIVE DIPLOMACY,* A Report to the Carnegie Commission on Preventing Deadly Conflict, May 1997.
http://www.carnegie.org/deadly/0697warning.htm

THE FUTURE OF THE CIA, Panel Report of the Council on Foreign Relations, 18 Feb 1997.
http://www.foreignrelations.org/studies/transcripts/970218.html

Case Studies

There are books and articles available on many episodes of intelligence analysis as well as counterintelligence and covert action which make good fodder for case studies. In addition, the Case Study Program of the JFK School at Harvard [617/495-9523] offers 18 cases explicitly about intelligence.
http://www.ksgcase.harvard.edu/plist.asp?Search_Type=TOPIC&Topic=Intelligence+Assessment

Videotapes

There have been some excellent TV documentaries on intelligence and there will certainly be more in the years to come. "NOVA" often broadcasts intelligence documentaries, and the Discovery Channel has a "Spytek" series they rebroadcast from time to time. The *Showtime* premium movie channel broadcast an excellent documentary last November, "The Real CIA," by Tim Weiner, the *NY Times* reporter who specializes in intelligence matters. The Times has a web site on the subject:
http://www.nytimes.com/library/national/cia-invismain.html

Guest Speakers

Here in the Washington, DC area, it is easy to bring in guest speakers who have experience as intelligence officers, congressional overseers, or journalists who cover intelligence. Indeed, panels of such experts can be assembled for college classes. While it is not so easy to do that "outside the beltway," it is easier than you may think — and it does not hurt to ask. AFIO, the Association of Former Intelligence Officers, runs an academic outreach program that helps to locate retired intelligence officers who are available to speak throughout the country (202) 790-0320. Likewise, the CIA itself will provide guest speakers when possible (703-482-2030).

Visits and Field Trips?

Don't laugh. I have taken several of my foreign policy classes to the CIA. If you are anywhere in the mid-Atlantic region, you might want to try this. Call the CIA and see if they can accommodate you, (703) 482-2030. Another great place to take your class (also in the DC area) is the National Cryptologic Museum [http://www.nsa.gov:8080/museum/] which is located near the Baltimore-Washington International Airport (BWI).

The Teaching Environment: Lessons Learned

I offered my first course on intelligence at the National War College in Washington, DC in 1988 — I was then an Air Force colonel assigned by DIA to the war college as its first "Professor of Military Intelligence." Those students were mid-career military and State Department Foreign Service Officers and the course was at the top secret codeword level. From 1989 through 1995 and again this year (spring 1999), I have offered a graduate class on intelligence at American University also in Washington. (See syllabus below) which is, of course, unclassified.

Course Popularity. Intelligence courses are immensely popular. Several times, including this semester, my AU class has filled up (30 students) the first hour of the first day of advance registration. This is a subject students want, partly because it seems "sexy" and partly because many of them are international relations majors thinking about jobs with intelligence agencies.

Faculty Hostility? Friends and colleagues in and out of academe have asked me if I have experienced any resistance to having a "CIA course" on campus. The answer is no. (I am not only a former intelligence officer, but also a fighter pilot and Vietnam veteran.) Nevertheless, I and my course have been welcomed — indeed, several of those very professors who one might have expected to be hostile (leftist ideologues, pacifists, etc.) have instead befriended me, sent students to confer with me, and invited me to speak in their classrooms — and I have reciprocated.

Professionals. Every one of my classes at AU has had at least one professional intelligence officer enrolled — a surprise to me. This semester, for example, there is a young woman who is both a full time graduate student as well as a DIA analyst. In addition, there is another student who has worked, she says, two summers at CIA. There is also an active duty Army officer and a former Green Beret — both DESERT STORM veterans. In past years, there have been analysts from CIA, DIA and NSA, a Marine Corps intelligence officer who commuted from Quantico and two CIA clandestine service officers in training (that I know of). In 1995, I had a Washington Post reporter who was covering the Aldrich Ames trial. Except for the clandestine officers, who mostly remained silent in front of their classmates, these students have provided reality checks and first-hand stories.

Jobs and careers in intelligence are very much on the minds of my students. To respond to that, I address the matter directly — sometimes devoting a whole lesson to job prospects and bringing in as a guest speaker, when I can, a young person who has recently gone to work for one of the Agencies and can talk about job prospects, what it's like, give advice, etc. Several of my past students have gone on to work at intelligence agencies, while a couple of others are now working for contractors who specialize in business with the CIA or other agencies.

"The Grassy Knoll and Other Conspiracies." Unfortunately, there are always a few students who start the semester with wild conspiracy notions *(the CIA was on the grassy knoll in Dallas in 1963, or they're hiding flying saucers and aliens at Area 51, or flying around in black helicopters, and so on)* and gross misunderstanding of what intelligence is about. It is worth noting that a few of the mid-career military and State Department officials in my war college classes shared these misguided notions. I find it best to deal with this head on — I devote at least one class hour to conspiracy fallacies and have a few readings on the matter. That I have been able, for the most part, to dispel such nonsense I count as one of my life's little victories.

Vocabulary. The foreign policy community has its own vocabulary and scores of confusing acronyms that are little known outside the beltway. The Intelligence Community, a subset of that bureaucracy, has even more. Well, one cannot function in Washington foreign policy circles unless you speak the language, so I believe it is necessary to stress the language of foreign policy, and I do. The 50+ page glossary in my Packet, and my vocabulary quizzes, address this matter.

Guest Speakers. Students really appreciate guest speakers, and I try to have two or more each semester — retired case officers, journalists, congressional staffers, etc. When I began this course the Cold War was still underway, and I brought in a KGB defector each semester. That no longer seems relevant.

E-Mail & Internet. I send one or more "broadcast" e-mails to my students each week — reminding them of what will be happening at next Monday's class, assigning URL's of additional recommended readings, usually current events involving intelligence. Additionally, students communicate with me, and I with them, about their book reports, paper topics and to make office appointments.

Course Papers, for the most part, have been good. At my direction, most of the students manage to get interviews with retired intelligence officers, journalists, congressional staffers or others in the Washington area who can provide primary source material. Several of my students have managed to get interviews with former DCI's, with KGB defectors, and other interesting notables. One student who interviewed a former CIA officer among others, put together the best piece on current Japanese intelligence that I know of. Another young woman who later went to work at DIA wrote a superb Master's thesis for me on the history of that agency.

AMERICAN UNIVERSITY COURSE SYLLABUS

My own course at AU's School of International Service, *The CIA and Foreign Policy*, got underway in January 1999, and is an outgrowth of a similar course I taught at AU from 1988 through 1995. After gathering data about what others were using through the survey I did for AFIO, and going through my own library and the offerings of various publishers, I discovered there was not much available now that wasn't there in 1995 when I last offered the course. That being the case, the books I am using in 1999 are the same ones I used in fall 1995:

Required Books:

Abram Shulsky, *SILENT WARFARE: UNDERSTANDING INTELLIGENCE*, 2nd Ed revised, Brassey's, 1993, 197pp. [out of print]

Seymour Hersh, "*THE TARGET IS DESTROYED*," Vintage paper, 1986, 355pp. [out of print]

Ronald Kessler, *INSIDE THE CIA*, Pocket Books 1992, 253pp.

Goodman, Allan E. & Bruce D. Berkowitz (Eds), *THE NEED TO KNOW: TASK FORCE REPORT ON COVERT ACTION*, Twentieth Century Fund (paper, distributed by Brookings), 1992, 86pp.

About the Books Listed Above:

The Shulsky book is the best text we have. Nevertheless, it has problems. Number one, of course, is that is out of print. (The AU Campus Bookstore had "almost enough" used copies to supply my students.) Then, there's the problem that it is six years old. Which means it misses such developments as Aldrich Ames, the big increase in support to the UN and other international organizations by U.S. intelligence, growing use of UAV's, increased importance of MASINT, the decline of SIGINT (due to technology), Intelink (the Intelligence Community's intranet), information warfare, NIMA, and so on. In short, it is rather far out of date. Second, it has what I see as a serious distortion. That is, it tries to be two things: One of those is a text; the other is an argument for a particular view of what intelligence *should* be. Well, whether or not one agrees with the prescription, it is not and never has been how the U.S. Intelligence Community works. Students inevitably get confused with descriptions of what *is* intermingled with what Shulsky believes *ought* to be.

The Seymour Hersh book, which relates the story of the 1983 Soviet shootdown of Korean Airlines Flight 007 and how that episode played out within the U.S. intelligence and policy communities is, in my view, one of the best books ever written on intelligence. It is particularly good on SIGINT, the culture within the Intelligence Community, Cold War attitudes, and, most useful, the nexus between intelligence information and policy

outcomes. A great read, it was a best seller and sold a huge number of copies as a $5 paperback. I used it every semester in my AU course from 1988 through 1995. In the early 1990's, as the book became hard to find, I bought some of my students' used paperbacks — paying them the same $2 that the Campus Store then offered. I accumulated 20 copies that way which I have since used and am using again this semester. I place half of my horde on 3-day reserve in the campus library and loan the others out, one week at a time, directly to students.

The Kessler book, *Inside the CIA*, is good and it's cheap — only $5.59 from amazon.com. And it is an easy read with a lot of information, history, tradecraft and so on. Published in 1992, it too is getting out of date.

The Goodman and Berkowitz book is a report of a "task force" on the subject of covert action. The report itself is only 23 pages long and recommends keeping covert action — with dissenting views by Theodore Sorenson and Hodding Carter. Then there is a 53-page essay by Professors Goodman and Berkowitz (Goodman served on the staff of DCI Stansfield Turner and the two have written several books and articles about intelligence.) Their essay defines covert action, traces its bureaucratic history, summarizes arguments for and against, reviews the legal status, and outlines the planning and approval process in both the Executive Branch and Congress. Appendices summarize all publicly known covert actions since WWII, contain applicable Executive Orders and Legislation and reprint an actual "finding."

Recommended Books: (not required for the course, or for purchase)

Norman Polmar & Thomas B. Allen, *SPY BOOK: THE ENCYCLOPEDIA OF ESPIONAGE*, updated & revised edition, Random House, 1998, paper. (An excellent reference and only $15)

Christopher Andrew, *FOR THE PRESIDENT'S EYES ONLY: SECRET INTELLIGENCE AND THE AMERICAN PRESIDENCY FROM WASHINGTON TO BUSH*, 1995, Harperperennial Library paperback, 1996.

Jeffrey Richelson, *THE U.S. INTELLIGENCE COMMUNITY*, 4th ed, Westview Press, 1999, 526pp.

"Spy Books" — Book Reports

One of my 14 class sessions is devoted to students giving book reports, written and verbal, on intelligence books of their choice. From experience, I know this is a useful and interesting session and books reported on run the gamut — Pearl Harbor, Bay of Pigs, Aldrich Ames, business intelligence and so on. Each student thus reads an additional book and hears from classmate reports about another dozen or so, while the class as a whole touches on a number of issues not formally part of the syllabus.

Case Studies

We do case studies on (1) the fall of the Shah of Iran in 1979, (2) DESERT SHIELD / STORM and (3) the shoot down of KAL007. The latter is covered in the Seymour Hersh book, while readings for the first two are reprinted in the "Packet" and come from government documents.

Course Packet:

The AU-produced "Packet" is the heart of this course. I personally write or assemble its 394 pages, and it is then reprinted and sold to students for $23 as a spiral-bound book by the AU Campus Store. It has a "lesson plan" for each of the 14 weeks in the course as well as some public domain readings I have gleaned from government documents — especially the 1996 *Aspin/Brown Commission* and the House intelligence committee's IC21 reform studies. Although the AU Campus Store will go after copyright permissions, they are a bother, and I do not use copyrighted material. Other public domain readings in my Packet include the super CIA monograph by L. Britt Snyder, *Sharing Secrets with Lawmakers*, a Dept of Justice IG report on Aldrich Ames, and several articles from the unclassified annual editions of the CIA professional journal, *Studies in Intelligence*. The centerpiece of the Packet is my own 53-page AFIO monograph (updated in 1998) and its accompanying 54-page glossary of intelligence acronyms and terms. The latter is important because I stress vocabulary throughout the course. There are also reproductions of overhead slides I use to illustrate lectures as well as reprints of several A+ student papers and book reports from past semesters that honor the efforts of those students and provide guidance on what I am looking for and the level of my expectations.

Page

Spring Break Have fun! 

GETTING ONESELF UP TO SPEED ON INTELLIGENCE

Journals & Web Pages

In addition to the materials noted above, there are thousands of books on intelligence, several journals and numerous web pages. Some are conspiratorial fantasies, but many are good.

Intelligence Journals: There are five academic journals devoted to intelligence. If you are serious, you need to subscribe or get your college library to subscribe.

INTERNATIONAL JOURNAL OF INTELLIGENCE AND COUNTERINTELLIGENCE (IJICI), 47 Runway Road, Suite G, Levittown, PA, 19057-4700; (215) 269-0400. Quarterly, $50/year. *[In my view, this is the most useful of intelligence journals and the best place for intelligence scholars to publish.]*

STUDIES IN INTELLIGENCE, the CIA's in-house professional journal. *[Many articles are classified, so this is not publicly available, but each year the CIA publishes an unclassified volume. Also, articles that have been declassified can be obtained. Outsiders can and do publish in this journal. Articles that have been declassified, and there are many, are available on the internet.]*
http://www.odci.gov/csi/

AMERICAN INTELLIGENCE JOURNAL, published by the National Military Intelligence Association (NMIA); NMIA membership is $35/year (301-840-6641) and includes on-line access to back issues and other material on the members-only portion of the NMIA web page, http://www.nmia.org/. *[Articles in this journal are often written by the heads of government intelligence agencies or, more likely, by their PR staffs. Thus they tend to be authoritative but not academic, or provocative.]*

INTELLIGENCE AND NATIONAL SECURITY. Published quarterly in London and likely to have more historical material and more articles about non-U.S. intelligence. Frank Cass, (913) 843-121.

DEFENSE INTELLIGENCE JOURNAL. Quarterly journal published by the foundation that supports DIA's Joint Military Intelligence College. (703) 790-1428. *[Articles in this journal are often authored by serving government intelligence officers. Thus they tend to be authoritative but not very provocative.]*

Other Journals and Media: Journals that cover U.S. foreign policy, particularly, *FOREIGN AFFAIRS, FOREIGN POLICY* and *THE WASHINGTON MONTHLY,* often have good articles on intelligence. So do some newspapers, especially *THE WASHINGTON POST, WASHINGTON TIMES, NY TIMES, LA TIMES* and the *BALTIMORE SUN*, all of which have reporters who specialize in covering intelligence and all of which are avail-

able on-line. Material on technical sensors, reconnaissance aircraft and spy satellites can be found in *AVIATION WEEK & SPACE TECHNOLOGY* and *ARMED FORCES JOURNAL INTERNATIONAL*, both available on the Internet.

Intelligence Web Sites

BEST INTEL WEBSITE (in my opinion)
http://www.fas.org/irp/

GOOD LINKS TO MANY SITES:
http://mprofaca.cro.net/kimirror.html
http://www.loyola.edu/dept/politics/intel.html
http://www.columbia.edu/cu/libraries/indiv/dsc/intell.html
http://.kimsoft.com/kim-spy.htm

NY TIMES 1998 CIA PAGE (Tim Weiner)
http://www.nytimes.com/library/national/cia-diningmain.html

SEARCHABLE DATABASES:
http://intellit.muskingum.edu/intellsite/index.html (Ransom Clark)
http://webcom.com/%7Epinknoiz/covert/ciabasesearch.html (CIABase)

INTELLIGENCE REFORM (1996)
http://www.access.gpo.gov/int/report.html (Aspin / Brown)
http://www.access.gpo.gov/congress/house/intel/ic21/ic21_toc.html (IC21)
http://www.foreignrelations.org/studies/transcripts/970218.html (CFR)

SPECIAL REPORTS
http://www.carnegie.org/deadly/0697warning.htm (warning, 1997)
http://www.fas.org/irp/congress/1998_cr/s980731-rumsfeld.htm (Rumsfeld, 98)
http://www.seas.gwu.edu/nsarchive/news/19980222.htm (Bay Pigs)
http://www.fas.org/irp/cia/product/jeremiah.html (Jeremiah >98)
http://www.fas.org/irp/cia/product/cocaine2/index.html (cocaine)

BUSINESS (COMPETITIVE) INTELLIGENCE
http://www.lookoutpoint.com/index.html
http://www.scip.org/
http://www.stratfor.com/
http://www.opsec.org/
http://www.pcic.net/http://www.inel.gov/resources/newsletters/dragonsbreath/dragbreath.html
http://pathfinder.com/@@y7yrfauarijhm2qe/fortune/1997/970217/boo.html
http://www.fas.org/irp/wwwecon.html
http://www.asia-research.com/JI2000.html (Japanese)

JOBS & CAREERS
http://www.intelstudents.org/
http://www.pcic.net/
http://www.gworx.com/iisd
http://www.odci.gov/cia/employment/appframe.htm

HUMINT
http://www.fas.org/irp/wwwspy.html
http://www3.theatlantic.com/issues/98feb/cia.htm

SIGINT
http://www.fas.org/irp/wwwsigin.html

IMINT
http://www.fas.org/irp/wwwimint.html
http://www.fas.org/irp/imint/kh-12.htm

MASINT
http://www.fas.org/irp/program/masint_evaluation_rep.htm
http://www.fas.org/irp/congress/1996_rpt/ic21/ic21007.htm

OSINT
http://www.oss.net/
http://www.fas.org/irp/eprint/oss980501.htm
http://www.fas.org/irp/wwwecon.html

INTELLIGENCE ANALYSIS
http://www.odci.gov/cia/di/index.html
http://www.fas.org/irp/gentry/index.html
http://www.fas.org/irp/offdocs/int012.html

COUNTERINTELLIGENCE
http://www.nacic.gov/ (NACIC)
http://www.fbi.gov/ansir/ansir.htm (FBI)
http://www.dtic.mil/dodsi/researc2.html
http://www.loyola.edu/dept/politics/hula/hitzrept.html (Ames)
http://www.inel.gov/resources/newsletters/dragonsbreath/dragbreath.html

COVERT ACTION
http://www.nytimes.com/library/national/cia-invismain.html

INFORMATION WARFARE
http://www.infowar.com/

CIA, Center for Study of Intelligence
http://www.odci.gov/csi/

CIA FOIA documents
http://www.foia.ucia.gov/

CIA WORLD FACTBOOK (not about intelligence, but indispensable)
http://www.odci.gov/cia/publications/factbook/index.html

DIA
http://140.47.5.4/foia/foia.html

NATIONAL SECURITY ARCHIVE (declassified documents)
http://www.seas.gwu.edu/nsarchive/

CRITICS OF THE CIA & INTELLIGENCE
http://www3.theatlantic.com/issues/98feb/cia.htm (Shirley)
http://www.us.net/cip/cia.htm (Mel Goodman)
http://www.foreignpolicy-infocus.org/briefs/vol3/v3n20hri.htm (IPS)
http://www.members.tripod.com/CIABASE/index.html (McGehee)
http://www.angelfire.com/id/ciadrugs/
http://www.radio4all.org/crackcia/

SENATE INTELLIGENCE COMMITTEE
http://www.senate.gov/committee/intelligence.html

FOREIGN INTELLIGENCE SERVICES
http://www.cc.umist.ac.uk/sk/index.html (UK)
http://www.pro.gov.uk/releases/soe-europe.htm (SOE)
http://www.mi5.gov.uk/ (UK, MI-5)
http://www.open.gov.uk/co/cim/cimrep1.htm (UK)
http://www.gchq.gov.uk/ (UK, GCHQ)
http://www.csis-scrs.gc.ca/ (Canada, CSIS)
http://www.cse.dnd.ca/cse/english/home_1.html (Canada)

ON LINE JOURNALS
http://www.afji.com/ (AFJI)
http://www.awgnet.com/aviation/index.htm (Aviation Week)
http://www.milparade.ru/ (military-related publications)

SPECIAL REPORTS
http://www.carnegie.org/deadly/0697warning.htm (warning, 1997)
http://www.fas.org/irp/congress/1998_cr/s980731-rumsfeld.htm (Rumsfeld, 98)
http://www.seas.gwu.edu/nsarchive/news/19980222.htm (Bay Pigs)
http://www.fas.org/irp/cia/product/jeremiah.html (Jeremiah(>98)
http://www.fas.org/irp/cia/product/cocaine2/index.html (cocaine)
http://www.washingtonpost.com/wp-srv/national/longterm/drugs/front.htm

PRIVATE ORGANIZATIONS
http://www.his.com/~afio/ (AFIO)
http://www.nmia.org/ (NMIA)
http://www.xmission.com:80/~nip/ (NIP)
http://www.oss.net/ (OSS)
http://www.aochq.org/ (Old Crows)
http://www.opsec.org/ (OPSEC pros)
http://www.afcea.com/ (AFCEA)
http://www.cloakanddagger.com/dagger (Cloak & Dagger Books)
http://intelligence-history.wiso.uni-erlangen.de/ (history group, German)
http://www.covertcomic.com/CovertComicJokes.htm (CIA jokester)

LISTSERVS (discussion)
http://www.xmission.com:80/~nip/ (Naval Intelligence Professionals)
http://ourworld.compuserve.com/homepages/kies/kia4th.htm (Cloaks & Daggers)

Organizations You Might Join: There are several organizations of retired intelligence officers that take in Associate members, whether they have ever worked in intelligence or not. These are useful primarily because they publish newsletters and hold frequent luncheons and symposia with guest speakers that often are the best source on new developments in the U.S. Intelligence Community.

AFIO, the Association of Former Intelligence Officers, publishes a bimonthly newsletter of 24+ pages and holds quarterly luncheons in Washington, DC plus one or more symposia each year. Also, there are chapters around the country which have similar activities. AFIO's most useful service, in my view, is their electronic WIN's, Weekly Intelligence Notes, delivered by e-mail and containing the latest developments in U.S. intelligence as gleaned from the media and AFIO's own luncheon and symposia speakers. AFIO also has an academic *outreach* program (AEP) that provides teaching professors with materials and guest speakers and maintains a repository of course syllabi. Membership is $40/year and affiliation with the AEP program is free to teaching professors. AFIO, 6723 Whittier Blvd, #303A, McLean, VA 22101; (703) 790-0320; http://www.his.com/~afioi/

NMIA, the National Military Intelligence Association, publishes the *AMERICAN INTELLIGENCE JOURNAL*, mentioned above, as well as quarterly newsletters and a daily e-mail newsletter that covers developments in international relations and information technology as well as intelligence. Like AFIO, it holds symposia and luncheons in the Washington area and also has chapter activities throughout the country. NMIA, 9200 Centerway Road, Gaithersburg, MD 20879; (301) 840-6642; http://www.nmia.org.

ISA, the International Studies Association, has an *Intelligence Studies Section* that is the premier forum for intelligence scholars. It has its own web page [http://iss.loyola.edu/], publishes a newsletter, and always has a great lineup of papers, panels and roundtables at ISA's annual conventions. To join the intelligence subsection, you must first be a member of ISA. ISA, 324 Social Sciences, University of Arizona, Tucson, AZ 85721; (520) 621-7715; isa@u.arizona.edu / http://www.isanet.org/

SAMPLE HANDOUT: INTELLIGENCE AND THE CIA

Dr John Macartney
Syracuse University, July 1997
jdmac@erols.com

INTELLIGENCE is MISUNDERSTOOD. Forget James Bond. U.S. Intelligence exists for just one purpose, to support U.S. foreign policy. Basically, intelligence is an INFORMATION support service for government policymakers. (Similar to a news bureau or think tank — more PhD's than cloaks and daggers). But unlike those others, intelligence deals only with *foreign* information, especially threats and other bad news. Also, intelligence *tailors* its products for specific customers.

- Contrary to fictional caricatures in books and movies, the CIA does not fight against the KGB, or drug traffickers, or anyone else. Fighting America's enemies is the job of U.S. policymakers, diplomats and military personnel. The CIA's job is to *support* those officials with *information*.
- Within the U.S. foreign policy process, intelligence plays a vital role. The intelligence officer is a "producer," who supplies relevant information about foreign matters to "consumers," the government policymakers, planners and operators who make, plan or carry out U.S. foreign policy. Increasingly, U.S. intelligence is also supporting international consumers at the UN, NATO, the IAEA and other IGO's.
- Intelligence supports policymakers, but is not allowed to make (or even comment on) U.S. policy.
- Two major divisions within the intelligence business are collection and analysis.
- *COLLECTORS* specialize in either technical sensors, such as spy satellites, or in human intelligence, spies. The TECHINT collectors are mostly engineers and scientists. HUMINT collectors, on the other hand, have engaging personalities and are skilled in handling people. They serve, for the most part, overseas where they recruit and handle agents, or spies, the foreigners who provide information to the U.S. government.
- *ANALYSTS* are basically intellectuals, very much like a university or think tank faculty. Employment in the U.S. Intelligence Community is very competitive, much like the State Department's Foreign Service. Thus, intelligence officers, especially CIA officers, tend to be sharp and very well educated.
- Most intelligence information comes from open, unclassified sources, although secret agents and elaborate systems of high tech sensors play a very important role, especially when foreign governments or groups try to deceive us, or conceal hostile or illegal activity.
- There are two categories of information, "secrets" and "mysteries." A secret is an item of foreign information that exists, but has to be uncovered, or stolen. Example: Does North Korea have nuclear weapons? A mystery, on the other hand, is a question about the future, the answer does not now exist; it can only be estimated.

Example: What will Mexico's inflation rate be next year? Policymakers need answers to both types of questions, and intelligence tries to provide both.

- Intelligence serves three categories of consumers: national policymakers, planners and operators. *National policymakers* include the President and hundreds of senior government officials, most of whom are based in Washington, like the Secretaries, Under Secretaries, and Assistant Secretaries of State, Defense, Treasury and Commerce, the Chairman of the Joint Chiefs and other Pentagon brass, the U.S.Trade Representative, senators and congressmen, and the deputies and *staffs* (many of them junior) of all of the above. They need broad geopolitical information. *Planners* are those junior and midlevel government officials, mostly in the military, who write and maintain the hundreds of U.S. contingency plans. Because they need so much detailed installation data (what is the refueling capacity at the Islamabad airport?), planners require by far the most intelligence support. *Operators* (or implementors) are the diplomats, trade negotiators, foreign aid officials, commercial attaches, immigration officials, attack pilots, soldiers and sailors who actually carry out U.S. foreign policy. As a result of shortcomings highlighted during the Gulf War, ongoing reforms are designed to increase intelligence support to military operations, or SMO.
- Again contrary to spy fiction, CIA officers do not themselves steal documents, crawl in windows, or break into safes. Instead, they recruit foreign "agents," or spies, who do that. The relationship between an intelligence officer and his or her agent is very much like that between an investigative reporter and his or her "confidential sources."
- U.S. intelligence officers are *not* policemen. They have no arrest authority, and they would very seldom, if ever, carry firearms (Exception: FBI counterintelligence agents).
- Because the future is basically unknowable and intelligence analysts have no crystal ball, we should not place too much faith in intelligence estimates

Congress puts intelligence in two categories: *intelligence* (as an information support service) and *intelligence related activities* — counterintelligence and covert action.

COUNTERINTELLIGENCE is protecting U.S. government secrets from espionage, or leaks. It includes physical or procedural safeguards, like locks and security clearances. It also involves counterespionage, which is trying to defeat or penetrate foreign intelligence services. This is more law enforcement than intelligence and the FBI has overall responsibility.

Aldrich Ames Case: Why didn't they catch him sooner? Because of malfeasance by Ames' supervisors plus a lax internal CIA culture, as well as an ingrained American tendency to not be a "snitch," or "tattle tale." Some things to keep in mind: The CIA is not a law enforcement agency, and there were legal protections that made it difficult for the CIA (or any government agency) to check up on any employee's personal finances. Spies are very difficult to convict and in order to make a solid case the Justice Department believed they needed to catch Ames in the act of communicating with, or passing documents to, his

Russian handlers. But Ames was an expert in tradecraft and the FBI never did catch him at it, although they had him under physical and electronic surveillance for about eight months.

Post Cold War Spies? Is spying a problem in the United States today? In a word, yes. The Russians are as busy as the Soviets were, while China also has extensive espionage networks in this country. And our friends want to know what's going on in the U.S. government and business world too. In the last decade, spies have been apprehended that were working for a number of countries including China and Russia, of course, but also Britain, France, Japan, Egypt, Israel, India, Argentina, Greece, and others.

Covert action, the other "intelligence related activity" is really policy rather than intelligence. One of six major foreign policy tools, CA is used by most governments, especially ours. Basically, covert action is one of the other tools, like diplomacy, public diplomacy, or foreign aid, done covertly. Examples: Secret diplomatic contacts; causing favorable stories to appear in foreign press; smuggling money, fax machines, counterfeit documents or guns to foreign dissidents; foiling illegal arms transfers, and so on. Covert action gets a great deal of press and congressional attention but represents only a small proportion of what U.S. intelligence does.

- The hand of the U.S. government is not to be revealed or acknowledged, ever.
- The CIA carries out but does not make CA policy. Senior policymakers do that. There is a formal review process and orders (findings) must be signed by the President and briefed to Congress

ORGANIZATION. The CIA is just one part of our "Intelligence Community," which is headed (really coordinated) by the DCI. Each of the armed services has its own intelligence organization, as do the State, Energy and Treasury Departments. All together, intelligence reportedly costs about $29 billion a year and employs over 100 thousand military and civilian personnel, including many women. The CIA is believed to account for about 15% of those totals. Culturally, intelligence officers, especially the analysts, tend to be, like others in the "knowledge industry," introspective, scholarly, tweedy, and often relatively liberal.

CIA	*FBI*	*Treasury*	*Navy*
DIA	*State/INR*	*Army*	*USMC*
NSA	*Energy*	*Air Force*	*DEA*

INTELLIGENCE OVERSIGHT. CIA officers are not above the law. They must obey all U.S. laws, and they are usually very careful about doing so. (*Their jobs, of course, may involve violation of foreign espionage laws.*) Nevertheless, secret agencies are hard to watch and there can be (and have been) abuses. Since the 1970's, an elaborate array of oversight mechanisms has been in place including various Executive Branch legal counsels, inspectors general and review committees, as well as the very active Senate and House select committees. Then there is the unending scrutiny of the press.

Note: If anyone wants to copy and use this handout, feel free to do so.

A VIRTUAL UN SECURITY COUNCIL: EDUCATING FOR MULTILATERAL STRATEGIC DECISIONMAKING

Perry L. Pickert
Joint Military Intelligence College

INTRODUCTION

The enhanced role of the UN Security Council in the post-Cold War world and the rapid progress of the UN into the information age presents a unique opportunity for educators. The use of actual UN Security Council meetings in the classroom bridges the gap between theory and practice in the study of international relations, international law, strategy and intelligence. This paper will briefly review developments in Security Council and UN Secretariat procedures, outline the recent advances in online technology at the UN, and discuss the implications for the classroom.

Under the UN Charter, the Security Council is charged with responsibility for determining threats to international peace and security and deciding the UN response, including whether to use force.[1] As a multilateral decisionmaking body, the Council monitors international developments, assesses treats to international peace, and with the Secretary General evaluates potential courses of action, conducts operational planning and defines the mission of the UN force.

The Charter provides for a Military Staff Committee (MSC) composed of the Chiefs of Staff of the Permanent Members of the Security Council (China, France, Russia, the United Kingdom and the United States), augmented by troop-contributing countries, to advise the Security Council on military issues. The MSC, according to the Charter, is responsible for the strategic direction of UN forces placed under UN control.[2] Bureaucratic posturing and superpower competition, however, have prevented the MSC from exercising its designated functions and the Secretary General himself has assumed administrative responsibility for peacekeeping, supported by a small staff in the Secretariat.[3]

---

1 Charter of the United Nations, Article 39.

2 Charter, Article 47.

3 Rostow, Eugene V., "Should the UN Charter Article 43 Be Raised From the Dead?" *Global Affairs 8* (Winter 1993): 109-124.

In January 1992 the United Nations Security Council, meeting for the first time at the Head-of-State level, recognized the favorable international circumstances that might allow the Security Council to assume its proper role in the international order and invited the Secretary General to recommend ways to improve UN peacekeeping capabilities.[4] Secretary General Boutros Boutros-Ghali responded with *An Agenda for Peace*,[5] which outlined a set of proposals to improve the UN. The Clinton Administration's "assertive multilateralism"[6] and the UN's expanded concept of peacekeeping increased the number and scope of UN peace operations. A series of setbacks in Somalia, Rwanda and Bosnia exposed the deficiencies of UN procedures and organizational structures to manage large, complex peace operations.

REFORMING UN PEACEKEEPING

The UN began an in-depth evaluation of peacekeeping operations, issuing a series of reports and recommendations,[7] and the Clinton Administration conducted a comprehensive review of U.S. policy. In May of 1994, the basic elements of Presidential Decision Directive 25 were published as a white paper entitled "Clinton Administration Policy on Reforming Multilateral Peace Operations."[8] In a parallel effort, the Security Council issued a presidential statement setting out a number of factors that should be taken into account when establishing a new peacekeeping operation.[9] The UN Secretariat underwent a significant reorganization and Kofi Annan was appointed Undersecretary General in charge of the new Department of Peacekeeping Operations.[10]

Although it is not possible to say the UN has solved the numerous practical and political problems associated with peacekeeping, the Security Council and the Department of Peacekeeping Operations have established guidelines and standardized documentation

---

[4] United Nations Security Council, S/23500, Note by the President of the Security Council, 31 January 1992.

[5] United Nations Security Council, S/24111, *An Agenda for Peace, preventive diplomacy and peace-keeping*. Report of the Secretary-General pursuant to the statement adopted by the Security Council, 31 January 1992. (New York, 17 June 1992); S/1995/1, *Supplement to an Agenda for Peace*. Position paper of the Secretary-General on the occasion of the fiftieth anniversary of the United Nations. (New York, 3 January 1995).

[6] Albright, Madeleine K., "Use of Force in a Post-Cold-War World." Speech at the National War College, 23 December 1993.

[7] United Nations General Assembly, A/RES/48/42, Comprehensive review of the whole question of peace-keeping operations in all their aspects, 10 December 1993; United Nations Economic and Social Council. E/AC.51/1995, Office of Internal Oversight Services, "Final report on the in-depth evaluation of peace-keeping operations: start-up phase," 17 March 1995.

[8] U.S. President. Presidential Decision Directive 25, "Clinton Administration's Policy on Reforming Multilateral Peace Operations," 3 May 1994.

[9] United Nations Security Council, S/PRST/1994/22, Statement of the President of the Security Council, 3 May 1994.

[10] United Nations Secretariat, Organizational Manual: Functions and Organization of the Department of Peace-keeping Operations. ST/SGB/Organization, 22 March 1995.

Heads of States Meeting of Security Council, 31 January 1992. *UN photo by M. Grant*

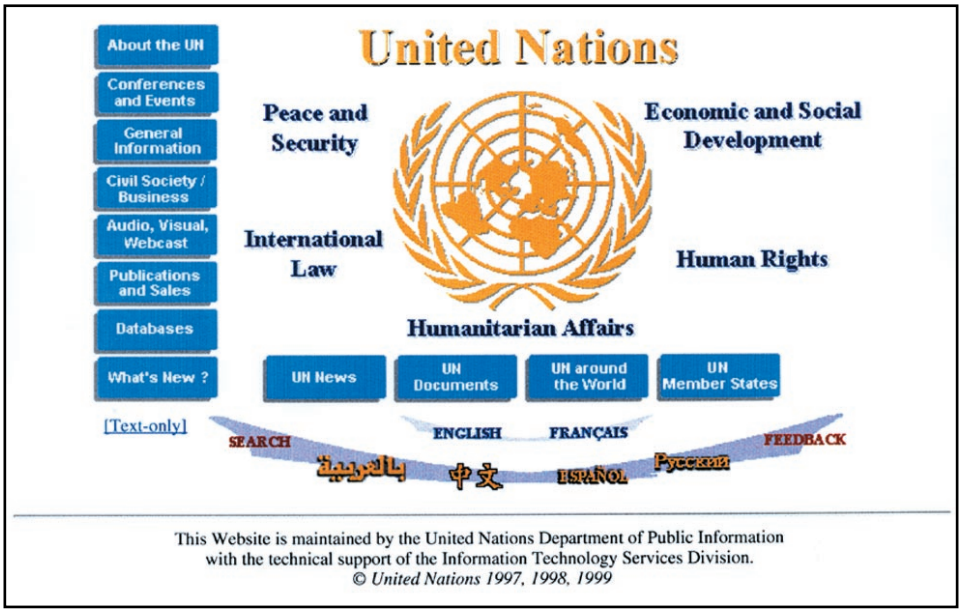
which have regularized the procedural aspect of decisions and the conduct of peacekeeping operations.

THE UNITED NATIONS ONLINE

As the 21st Century approaches, the UN has taken the initial steps into the information age. At first it made UN documentation available online to UN missions in New York and began putting historical records in electronic media. Today, more and more documentation has been placed on the World Wide Web. In the past few months a large proportion of the online documents previously available only to governments on the optical disk system (ODS) has been offered by the UN to non-profit and academic institutions by subscription. This system provides real-time daily documentation that had only been available to diplomats upon request at the UN Secretariat window at the UN headquarters building or, alternatively, distributed to the missions in New York.[11]

---

[11] United Nations. The United Nations Optical Disk System. ST/CS/SER.A/37/Rev.1/Add 1, 1997. United Nations, Department of Public Information, *A Guide to Information at the United Nations,* 1995; Dag Hammarskjold Library, United Nations Documentation: A Brief Guide, ST/LIB/34/rev.2, 1994.

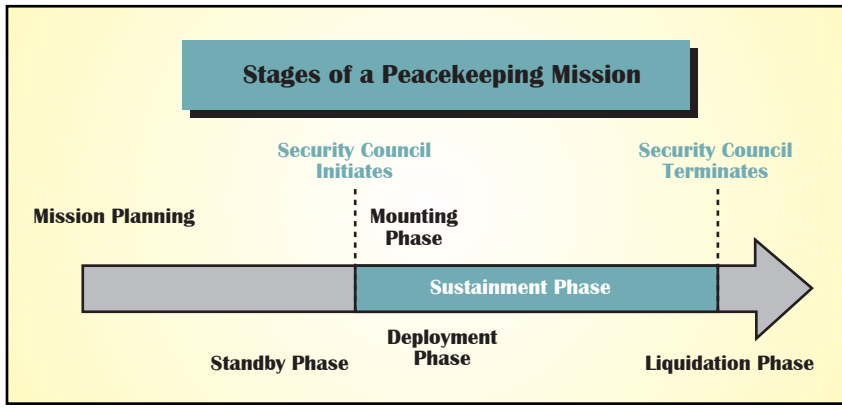


source: http://www.un.org, used by permission

In addition to documentation, the UN home page also has a wide variety of audio-visual material. Press briefings and the Secretary-General's news conferences are available with video clips and complete audio. When there is a crisis in the Security Council, photos and video clips are presented with rather complete speeches of key delegations.[12]

The UN's subsidiary organs and specialized agencies also have sites. Of particular relevance for Security Council deliberations in complex humanitarian emergencies are the UN High Commissioner for Refugees (UNHCR)[13] and UN Development Program (UNDP)[14] both with extensive material on the web. As the Kosovo crisis has demonstrated, the relationships between the Security Council, North Atlantic Treaty Organization (NATO)[15] and the Organization for Security and Cooperation in Europe (OSCE)[16] are part of a matrix of overlapping authority and cooperation. The International Atomic Energy Agency has played a key role in the UN deliberations on the crisis in Iraq and Korea.[17] The documentation that reflects these relationships resides on the web.

[12] URL: < http: //www.un.org
[13] URL: < http://www.unhcr.ch
[14] URL: < http://www.undp.org
[15] URL: < http://www.nato.int
[16] URL: < http://www.osce.org
[17] URL: <http://www.iaea.org



source: author

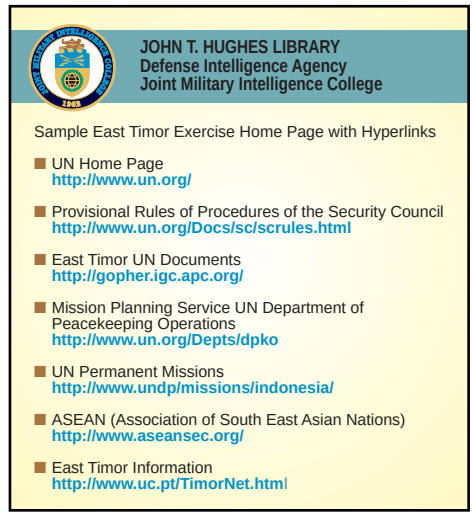
The increasing use of the UN Security Council as a forum to deal with the wide variety of political, ethnic and humanitarian crises in the world has prompted the Council to shift from meeting once or twice a week as it did during much of the Cold War to meeting every day and often on weekends. In early 1999, the Council was responsible for review and direction of 16 peace operations in the field and constantly monitors several crises such as Iraq, Kosovo and North Korea.[18] The Council and the Secretariat are watching several negotiations such as in Sudan, the Congo and East Timor for possible peacekeeping missions.[19] This worldwide activity has put the Security Council in almost continuous session.

The availability of UN multimedia and documentation on the World Wide Web makes it possible to track pending Security Council action for classroom use. By staying just ahead of the Council, students may be given assignments requiring the same analysis and products that are being produced in New York by the UN Secretariat and delegations in preparation for meetings. In the Security Council there is almost always a delay of a few days or a week before draft documentation appears, reflecting the tentative decisions of the Council. By picking an issue that has not reached the voting stage, students may conduct an exercise and within weeks the actual decision of the Council becomes available, providing real-world feedback.

The Mission Planning Service (MPS) of the Department of Peacekeeping Operations plays a crucial role in the staff planning process that leads up to the decision to deploy a UN peacekeeping operation. To integrate planning, MPS acts as the consulting and coordinating office integrating the work of all the UN departments that support peacekeeping operations. By having the class play the roles of Security Council delegates and potential contributors, the class can simulate the process of decisionmaking that is required for a particular delegation to support a peacekeeping operation, contribute forces or accept a

[18] URL: <http://www.un.org/pko accessed 4 April 1999.
[19] Annual Report of the Secretary General on the Work of the Organization (1998) A/53/1, 27 August 1998.

leadership role in the military command of the operation. Under the new Security Council guidelines, the MPS has the task of anticipating a crisis and initiating the planning process at an early stage, before the Security Council has given authorization for a peacekeeping operation. Thus, through material available on the internet, students are able use the same procedures as the UN in New York



source: author

SECURITY COUNCIL EXERCISE

To illustrate how this teaching strategy might work, an example may prove helpful. The issue of East Timor in Indonesia has been on the UN agenda since the mid-1970's when the former Portuguese colony was taken over by Indonesia. The prospects for a negotiated settlement were bleak until the President of Indonesia recently indicated a willingness to consider some kind of autonomy. The foreign ministers of Indonesia and Portugal met with UN Secretary-General Annan in New York on 5 May 1999 and agreed to hold an election in East Timor to determine its status. The Security Council welcomed the agreement and the Secretary-General offered to provide a UN presence to assist in conducting the balloting on 8 August 1999. Many of the details of the UN mission remain under negotiation.[20] An exercise may be conducted by simply assuming negotiations have successfully concluded and that the parties have requested a UN peacekeeping operation to monitor the human rights situation and facilitate the transfer of power to local officials by conducting an election.

All that is required to start the process is to draft a short mission statement for the UN operation as a simulated element of the peace agreement between the parties. The UN's task is to develop an operation plan as reflected in a report of the Secretary General, then draft and approve a Security Council resolution. The UN must also find a mission commander, commitments for troops, logistical support and the necessary financing.

In such a setting, the Department of Peacekeeping Operations would coordinate staff-level meetings of UN delegates to draft plans and obtain tentative commitments. On the political level, the delegations and the Secretary General and his political staff would coordinate in drafting a Security Council resolution to authorize the operation. All of this would be going on while the parties are in the midst of negotiations without any final decisions having been made. The whole process only comes together after all the parts

[20] UN Security Council Resolution 1236 (1999), 7 May 1999.

have been put together to await a final signature. Presented below is a series of assignments that might be used in the East Timor context.

Assignment # 1: Cable to the Foreign Minister

You are the Permanent Representative to the United Nations from an Association of Southeast Asian Nations (ASEAN) country. The foreign minister has requested your views on a UN role for an East Timor peacekeeping mission. Draft a 10-page cable for the foreign minister covering the following issues:

- Outline of the East Timor Problem
- United Nations Involvement in the Issue
- Your Country's Position on East Timor in the UN
- Should the East Timor PKO be a UN or ASEAN Operation?
- What Should be Your Country's Contribution?

Each part of this process, including the final vote on a Security Council resolution, provides opportunities for simulation exercises depending on the objectives of the instructor. If political-military analysis at the tactical level is desired, that student's task could be to estimate the threat and draft the concept of operations for the mission and put together a troop contribution list. The nature of the underlying political or ethnic conflict may also provide the educational focus. Planning for an administrative mechanism to conduct an election requires taking into account the power base and agenda of each of the internal domestic political actors. If strategic-level interaction of the great powers and regional states is of interest, a draft Security Council resolution containing elements objectionable to one of the permanent members could be introduced as the basis for a Security Council meeting in which the students as delegates must try to achieve compromise.

The Security Council as a setting for debate has several advantages. There are established rules and procedures that the students can learn and utilize. Because UN delegations act on instructions from their capitals, the meeting may be controlled by providing instruction to the student playing the role of the President of the Council or alternatively, specific substantive guidance for a particular country's position. The threat of a veto, for example, may require the rest of the Council to rethink initial positions and produce a fluid negotiation in which the students gain considerable leeway and have an opportunity to demonstrate creativity and political skill.

Assignment # 2: Troop Contribution

You are the Defense Attache at the UN Mission of an ASEAN member. There will be a meeting next week at the UN Department of Peacekeeping Operations to discuss troop contributions for a possible peacekeeping operation for East Timor.

The ambassador has directed you to prepare a memo outlining your country's past contributions to UN peacekeeping operations. In addition he wants a one-page point paper, coordinated with the foreign and defense ministries, that lists the number of personnel, type of units, and equipment your country is willing to contribute to a UN mission.

Because the UN has seen almost every kind of international crisis, there is probably a Secretary-General Report or Security Council document for a situation similar to the political debate in question, and therefore suitable as an example. Actual decisions of the Council are contained in operative paragraphs that contain one or two sentences. The Secretary-General reports that outline the mission statement or concept of operation for peacekeeping operations are usually a few short paragraphs. By putting on the table a similar resolution or UN report as an example for the group to use, and by selecting a key paragraph or two, the students are clearly informed of what is required and are focused on the core issues by the discipline of negotiating specific language.

The instructor need not be excessively concerned with student product during the classroom phase of the exercise. The individual student may turn in one-page talking points outlining the country's position for the Security Council. At the end the students merely turn in as a group task a hand-written draft of the key paragraphs that have been the focus of the negotiation. It is the process and not the student paperwork that reflects the important dynamics of the group session.

Assignment # 3: DPKO Meeting: Concept of Operations

You are the 1st Secretary of your country's Permanent Mission to the UN. Your country has tentatively committed one infantry battalion to a proposed UN mission for East Timor. The Department of Peacekeeping Operations has called a meeting next week to draft the concept of operations. Included in the material provided by the Secretariat was the Report of the Secretary General on Cambodia, S/23613 of 19 February 1992. Paragraphs 87-89 are highlighted as a starting point for discussion. Since your country will be providing combat-capable troops, you are to pay special attention to the security implications of the concept of operations, as your troops will likely play an enforcement role.

Beyond class participation, the UN structure provides an opportunity for research, for political and military analysis, teamwork, coalition building, negotiation and practice in writing. Playing the role of the UN delegate from another country requires research and the ability to enter another political culture. The need for a change of perspective in this arena is multiplied many fold because in the UN, negotiations require assessing the positions of all of the parties to the dispute and then all the other UN members, each of which has different interests. At the bottom of every crisis that makes its way to the UN Security Council is usually a serious bilateral or multilateral conflict between member states or an internal conflict between political or ethnic groups within a state. To prepare for a meeting of the Security Council, each delegate must analyze the underlying dispute, obtain the foreign ministry position, prepare a brief statement suitable for the Council, assess the positions of the other member states and often provide recommendation for the government on what position to take in the Council. Each of these actions may be used as the basis for a longer formal assignment for students.

Assignment # 4: UN Speech

You are the special assistant to an ambassador of a Permanent Member of the UN Security Council. Informal consultations will take place next week concerning a possible peacekeeping operation for East Timor. Your ambassador has instructed you to draft a short speech (5 minutes) covering the following points:

- Relations with Indonesia
- Position on a UN Peacekeeping Mission
- Attitude toward an ASEAN Leadership Role
- Chapter VII Authorization for the Mission
- Mechanism for UN Monitoring of Human Rights during the Mission
- Willingness to Contribute Troops

In addition, the UN Secretariat performs analytical written tasks which may form the basis for a student assignment. A student assignment to create a UN Secretariat product has the advantage of allowing the adoption of the UN perspective of impartiality. In general, UN products must objectively reflect the positions of members and avoid explicitly advocating positions until the Security Council has made a decision. The *Mission Planning Activities for a New Mission* provide a whole set of possible student assignments for a class linked to a particular issue under consideration by the Security Council.

Assignment # 5: MPS Analysis of the Situation

You are a Mission Planner in the Department of Peacekeeping Operations, Mission Planning Service. You have been instructed to prepare an analysis of the situation for a peacekeeping operation for East Timor. Below is the standard format for an assessment used by the MPS.

Analysis of the situation

- Background information
  - ❑ History
  - ❑ Geography
    - — terrain
    - — climate
  - ❑ Population
    - — ethnicity
    - — religion
  - ❑ Politics
    - — government
    - — political parties
    - — individuals
  - ❑ Economic
    - — Roads, Railroad networks
    - — Waterways, Seaports
    - — Airfields
    - — Communication: TV, Telephone, Radio, Press
- Current basis of dispute and population affected (percent)
- Agreement between parties involved in the conflict
  - — cease-fire
  - — peace
  - — other
- Military strength of the parties involved:
  - — government—army—police—paramilitary
  - — opposition—recognized—others
  - — weaponry
  - — operational capability
- Produce situation map

The UN Security Council as an online setting for simulation exercises provides an opportunity to bridge the gap between theory and practice in the teaching of international relations, international law, political and military analysis and intelligence. Students are able to deal with a real-world crisis and access directly the sights and sounds of conflict and the actions of the governments and international institutions as they react to crisis. By taking the role of Security Council delegates, the students are thrust into the crisis not from the perspective of the United States and their own community, but from the world as others see it. From the beginning they must track the crisis from the perspective of an enemy, a friend or a neutral. They must deal with U.S. policy as others do.

For students the experience is almost always rewarding. They get to deal with a current crisis. They do original research on relevant topics. Rather than sitting passively in an input mode, they must define a policy and interact with fellow students to reach a conclusion. For most students it is the first time they are placed in the position of looking into another country's cultural and historical past, assessing its strategic position in the world of multilateral world politics and predicting its future behavior.

For teachers, the Security Council as educational setting presents great opportunities. The new availability of UN documentation online allows the student to go directly to primary source material. The requirement to make statements and vote in the Security Council reveals positions, makes members take sides and forces decisions. The considerable gap between posturing before TV cameras for the domestic audience and negotiating language for Security Council action reveals the difference between the appearance and reality of international politics. The difficulty of achieving consensus brings a clear realization of the limits of multilateral actions which seem at first glance so obvious and necessary.

TEACHING INTELLIGENCE STUDIES BY DIAGNOSING THE THREAT OF WEAPONS OF MASS DESTRUCTION

RE Burnett and Robert Pringle
Patterson School
University of Kentucky

INTRODUCTION TO THE PROBLEM

The military forces of the United States are being directed to a new mission broadly defined as Homeland Defense. The mission presupposes that a major threat in the first decade of the millennium will be to the territory and people of the United States. Weapons of Mass Destruction (WMD) are the greatest threat, which may come from traditional opponents, renegade nuclear powers, or domestic terrorists. As one intelligence officer noted "If a country wants to challenge or hurt America, it is not going to use conventional weapons." Instead the threat will come from the "little man with the heavy suitcase." In coping with this threat the Intelligence Community and our counterintelligence services face a new set of collection and analytic problems, as well as the legal and ethical questions posed by their role in our democratic society.

TEACHING AND LEARNING STRATEGY

Political Science 491 (National Intelligence and Decisionmaking) is offered to graduate students and upper-level undergraduate students by the Patterson School of Diplomacy and International Commerce at the University of Kentucky. The two three-hour classes that make up the exercise on weapons of mass destruction occupy the final two classes in the semester, and follow blocks of instruction in HUMINT, counterintelligence, technical intelligence, analysis, and intelligence and warning. The major textbooks for the class are: Christopher Andrews' *For the President's Eyes Only*, and Michael Herman's *Intelligence Power in Peace and War.* The instructor supplements the textbooks with readings from CIA publications, the Cold War International History Project, and memoir literature.

In these two three-hour seminars, the instructor first examines nuclear intelligence in the Cold War, and then divides the class to investigate three post-Cold War scenarios 1) Recent Russian nuclear weapons testing; 2) the development of nuclear weapons by an "outlaw" state; and 3) the threat from a domestic terrorist organization.

1. Did Russia test a small (3 MT) warhead in the waters off Novaya Zemlya in the summer of 1997? Issues:

- The threat of small man-portable WMD;
- Intelligence and the arms control process after the collapse of the Soviet Union; and
- "Loose nukes" (Does the Russian government have control of its nuclear weapons?)

2. What evidence is available that North Korea is continuing to develop WMD and the capability to deliver them? Issues:

- Collection and analysis of information from a very hard target.
- How to reach a policy consensus with limited and contradictory intelligence information.

3. Could a domestic terrorist organization build and deploy a biological or genetic weapon? Issues:

- Intelligence and warning of a domestic terrorism incident;
- The operational, legal, and ethical questions of collecting intelligence/counterintelligence information about U.S. citizens.

Placing the class exercise at the end of the course allows students to pull together the major elements of the course, and to prepare a mock national intelligence estimate and a professional-level *Powerpoint* briefing for the instructor and classmates. The seminar/exercise accounts for one-third of a student's final grade. The exercise progresses through the following elements.

Introduction: Cold War Nuclear Intelligence (Time 90-minutes)

Nuclear intelligence preoccupied the Soviet and American intelligence services from the early 1940s to the 1990s. Intelligence from a network of agents in the Anglo-American nuclear weapons program, as well as analysis of unclassified information, gave Russian nuclear scientists a critical head start in building the bomb that made Stalin's Soviet Union the world's second nuclear power.[1]

In understanding the role of intelligence in building the Russian nuclear weapon, students consider several critical themes:

1. Collection: The NKVD (later the KGB) developed a network of agents in the nuclear program, as well as the Departments of State, Treasury, and the Army. Soviet tradecraft was highly professional in managing men and women recruited for ideological reasons.[2]

---

[1] Allen Weinsteinn and Alexander Vassilev, *The Haunted Woods: Soviet Espionage in America — The Stalin Era* (New York: Random House, 1999), and Joseph Albright and Marcia Kuntel, BOMBSHELL: The *Secret Story of Ted Hall and America's Unknown Atomic Spy Conspiracy* (New York: Times Book, 1997) are the two best recent studies of Russian nuclear intelligence.

2. Open Source Information: The NKVD also benefited from its ability to collect unclassified material about nuclear weapons, and to interview world-renowned scientists.

3. Analysis: NKVD information reached critical consumers, including General Secretary Stalin and the leading members of Soviet bomb-maker Igor Kurchatov's design team. Kurchatov, the "father of the Soviet nuclear weapons program," reportedly gave Soviet intelligence 50 percent of the credit for the development of nuclear weapons.[3]

Following the explosion of the first Soviet nuclear device in 1949, American intelligence became fixated on the Soviet nuclear weapons program and the development of delivery systems. Declassified Central Intelligence Agency national intelligence estimates for the first four decades of the Cold War demonstrate how the United States Intelligence Community struggled to develop and improve its capacity to collect and analyze intelligence information.[4]

In understanding the development of the United States Intelligence Community's capacity to monitor Soviet nuclear programs, students are asked to consider:

1. Collection: Given the nature of the Soviet counterintelligence regime, the United States had to rely on technical intelligence. Students, who have previously read about satellite imagery, are directed to the role of imagery and telemetry intelligence (TELINT).

2. Analysis: On many occasions, intelligence analysis was hampered by the lack of sources. To cope with this generic problem, intelligence analysts had to develop methodologies to apply to the material that had been collected. The best example of this was the melding of the HUMINT from a CIA agent in Moscow with photographic intelligence from U-2 aircraft to produce an accurate analysis of the Soviet nuclear forces in Cuba.[5]

3. Intelligence Coordination: The production of finished intelligence (National Intelligence Estimates, or NIEs) led to battles among the State and Defense Department and the CIA. Former Director of Central Intelligence Robert Gates said that these battles were more serious than those between Soviet and U.S. arms control negotiators.[6]

---

[2] Robert Louis Benson and Michael Warner (Eds.), *VENONA: Soviet Espionage and the American Response*, 1939-1957(Washington, DC: National Security Agency and Central Intelligence Agency, 1996).

[3] Richard Rhodes, *Dark Sun: The Making of the Hydrogen Bomb* (New York: Simon and Schuster, 1995), 83-92.

[4] Donald P. Steury, Ed., *Intentions and Capabilities: Estimates on Soviet Strategic Forces, 1950-1983* (Washington, DC: Central Intelligence Agency, 1996), vii-xix.

[5] Jerrold L. Schecter and Peter Deriabin, *The Spy Who Saved the World* (New York: Charles Scribner, 1992), 318-352. Despite the "wrong" title, this is an excellent study of the Penkovsky case.

[6] Robert Gates, *From the Shadows* (New York: Simon and Schuster, 1996), 39-52.

Introduction to the Scenarios (90 minutes)

Following the lecture on intelligence and weapons of mass destruction, The instructor divides the class into three teams of five to seven students, appoints team leaders, and assigns them one of the scenarios. The last 60 minutes of the class are used to acquaint the students with the scenarios, provide reading packages, and give specific instructions for each team. Students are cautioned that preparations for the exercise will require intensive reading as well as team meetings.

The role of the instructor is critical. He/She must insure that the teams are relatively equal and that they understand their specific responsibilities. Each team will produce a 10-page "national intelligence estimate" and a 20-30 minute Powerpoint briefing. All team members will participate in the research and writing. Students disagreeing with the estimate will be allowed to write "footnotes" to the estimate, and if time allows, present their views following their team's briefing.

Scenario I: **Nuclear Test at Novaya Zemlya?**

In the summer of 1997, CIA analysts reported that the Russian government probably had tested a 3-MT weapon on or near the island of Novaya Zemlya in the Russia Arctic.[7] The reading package given students in this group provides a synopsis of the information available to U.S. Intelligence:

- Seismographic information suggested an explosion near Novaya Zemlya.
- Satellite imagery indicated that the Russians were carrying out activities seen prior to previous tests on the island.
- The minister responsible for the nuclear industries visited the island only days before the "test". (The minister has been identified as strongly opposed to the Yel'tsin government's pro-American policies.)
- Articles from the American press critical of CIA analysis, as well as PBS Frontline's "Russian Nuclear Weapons," that aired on 21 February 1999, suggest an intense level of debate within U.S. intelligence and policy communities about the security of the Russian nuclear program.

Following the CIA warning and an emotional disclaimer from Moscow that a test had not taken place, CIA came under heavy criticism for its "alarmist" conclusions.[8] According to critics, CIA ignored political information that indicated that the Yel'tsin government was totally opposed to clandestine nuclear testing.

Nevertheless, there is growing concern in the United States that the Russian government may have lost control over its stockpile of tactical nuclear weapons, especially the

---

[7] "Testing the CTB Regime," *Arms Control Today 27*, no. 7 (1997): 2-3; "Aftershock from the Novaya Zemyla Earthquake," *Arms Control Today 27*, no. 5 (1997): 2-3.

[8] R. Jeffrey Smith, "Nuclear Incident or Earthquake," *Washington Post* (weekly edition), 27 October 1997, 30.

so-called "suitcase bombs." Testimony before Congressman Weldon's subcommittee by President Yel'tsin's former scientific adviser has indicated that as many as 80 of these small 3-kiloton weapons may be unaccounted for.

Team I is required to provide a written estimate and briefing to the national security council addressing the following points:

- Based on the sources available how sure can U.S. intelligence be that the Russians tested a nuclear device in the Arctic?
- What is the evidence that the Russian military, security services, or nuclear industry have possession of "suitcase" nuclear weapons?
- Does the Russian government have control of "suitcase" weapons?
- How should the U.S. Intelligence Community improve its intelligence on "loose nukes?" How should technical and human intelligence be improved?

Scenario II: **Have the North Koreans Continued to Build Nuclear Weapons?**

News reports as well as intelligence reporting suggest that North Korea is continuing to build nuclear weapons and is developing a primitive delivery system. Satellite imagery of an underground factory, and the test of a medium-range rocket have raised concerns that the North Koreans misled the United States, South Korea, and Japan when it pledged to give up its nuclear weapons program in exchange for assistance.[9]

U.S. intelligence and the media also have a growing body of evidence that despite the food aid, famine conditions continue to exist inside North Korea, and that as many as three million people may have already perished. Organizations such as Doctors without Borders have abandoned their humanitarian policy of providing food to North Korea because of their strong concern that their food is going only to the Communist Party elites, the armed forces, and the police. The former head of World Vision estimates that as many as one million hungry people are being held in concentration camps known as 9-27 facilities. There have also been credible reports that the regime spent $100 million for a birthday party for its current "Beloved Leader."[10]

The U.S. Intelligence Community, as well as its allies, is having difficulty collecting information about North Korean WMD programs and assessing the limited and contradictory information. There is a virulent debate within the policy and intelligence communities on the North Korean threat, which is being fueled by criticism from Congress and the media. Recent articles and editorials in *The Economist* and the *Wall Street Journal* have been critical of the Administration's failure to counter the potential threat to U.S. troops in South Korea and Japan.[11]

---

[9] "The Koreas: Across The Divide," *The Economist*, 23 January 1999, 37-38; "North Korea Throws A Party, *The Economist*, 20 February 1999, 38.

[10] Barbara Slavin, "Refugees, Misery 'Beyond Imagination'," *USA Today*, 17 March 1998, 11A.

[11] "The Koreas: Across the Divide."

Team II is required to provide a written estimate and briefing to the National Security Council addressing the following points:

- What information can the Intelligence Community develop on the status of the North Korean weapons program?
- How serious are famine conditions in North Korea? What is the available OSINT (Open Source Intelligence) on the situation inside North Korea?
- Is it possible to reach a consensus within the Intelligence Community and between the intelligence and policy communities about the threat of North Korean weapons and delivery systems?

Scenario III: **The Threat of Domestic Terrorism Involving Weapons of Mass Destruction (WMD)**

Over the last year, a number of articles have appeared in the mainstream media on the threat of domestic terrorists using WMD within the United States. This concern has been fed by a number of "hoaxes" — efforts by unidentified organizations to use the threat of anthrax to intimidate politicians, the media, health providers, and educators.[12]

Scientists are concerned as well with the rapid development of new generations of chemical and biological weapons, including so-called genetic weapons that could be used to target ethnic groups. The use of *sarin* in the Tokyo subway by a Japanese terrorist organization raised concerns about the ability of a non-state group to conduct terrorist operations using weapons of mass destruction.

Nevertheless, within the United States there is little support for intensified counterintelligence surveillance of suspected terrorists. Critics of U.S. Intelligence and the Federal Bureau of Investigation (FBI) on both the right and the left believe the threat of WMD to be overblown. They note that more Americans have died from lightning strikes than terrorist incidents in the 1990s. They cite the way that the FBI, the CIA, and Military Intelligence violated U.S. citizen's rights in the COINTELPRO program of the 1950s and 1960s, and believe that close public, media, and Congressional scrutiny must be maintained of all U.S. counterintelligence initiatives.

Team III is required to present a written estimate and briefing to an *ad hoc* White House committee on the threat of weapons of mass destruction to the continental United States. Both the estimate and briefing must begin with the long-term impact of COINTELPRO on U.S. counterintelligence and the associated, unresolved legal issues. The White House is interested in the following questions.

---

[12] Gideon Rose, "It Could Happen Here: Facing the New Terrorism," *Foreign Affairs*, 78 (March/April 1999): 131-137 is an excellent review of recent literature on the threat of domestic terrorism. David E. Kaplan, "Terrorism's Next Wave," *U.S. News and World Report*, 17 November 1997, 26-31 is the best "popular" survey of weapons and terrorists involved.

- Is there evidence that domestic terrorist organizations have acquired the capability to buy or build chemical or biological weapons?
- How does the Intelligence Community plan to track the efforts of domestic terrorist organizations to gain access to the material needed to build weapons? How does it plan to monitor these organizations?
- What private human rights organizations currently track domestic terrorist organizations? How can the Intelligence community build bridges to these organizations?

Grades

Students are graded based on their individual performance and the performance of their team. A primary mission of the Patterson School is to teach students to operate as members of a team: in short, "The strength of the pack is the wolf and the strength of the wolf is the pack." The instructor will consider the following factors in grading the teams:

- Development of sources of information, especially the use of the internet. Students are expected to be familiar with CIA, FBI, NSA, and other Intelligence Community websites.
- Understanding of the links between intelligence and policy. For example, students in Team II will be judged on their ability to produce an estimate useful to State Department negotiators dealing with the North Koreans, the South Koreans, and traditional U.S. allies, and to American military commanders.
- Presentational skills. The national intelligence estimate should be based on the format of the CIA national intelligence estimates during the Cold War. The briefing must involve the use of Powerpoint. Students are expected to be time conscious. Long, disorganized briefings are unacceptable.

Readings

Readings for the two-week seminar are divided into general readings for all students, and "packages" for the members of each of the three teams.

1. Ashton B. Carter, John M. Deutch, and Philip D. Zalikow, *Catastrophic Terrorism: Elements of a National Policy* (Harvard University, Belfer Center, 1998).

2. Central Intelligence Agency, *Venona: Soviet Espionage and the American Response, 1939-1957.* pp. vii-xxxiii

Reading Package for Scenarios:

Articles from the press and websites that provide information about each case study. This information will act as a "teaser" for the teams, forcing them to broaden the scope of their research.

Team I:

"Testing the CTB Regime," *Arms Control Today 27*, No. 7 (1997): 2-3.

"Aftershock from the Novaya Zemyla Earthquake," *Arms Control Today 27*, no. 5 (1997): 2-3.

Smith, R. Jeffrey. "Nuclear Incident or Earthquake," *Washington Post* (weekly edition), 27 October 1997, 30.

Nuclear Spin-Control, Washington, DC: The Center for Security Policy, no. 97-D, 20 October 1997.

Students are also directed to two important websites: Radio Europe/Radio Liberty (rferl.org) and David Johnson's List (davidjohnson@erols.com) for information on Russian foreign policy and security developments.

Team II:

Betts, Richard K. "The New Threat of Mass Destruction," *Foreign Affairs*, 77 (January-February 1998): 26-41.

Noland, Marcus. "Why North Korea Will Muddle Through," *Foreign Affairs*, 76 (July/August 1997): 105-118.

"The Koreas: Across the Divide." *The Economist*, 23 January 1999, 37-38.

"North Korea Throws A Party." *The Economist*, 20 February 1999, 38.

Slavin, Barbara. "Refugees, Misery 'Beyond Imagination'," *USA Today*, 17 March 1999, 11A.

Team III:

Barnett, Randy. "Guns, Militia and Oklahoma City," *Tennessee Law Review* 62 (Spring 1995): 443-460.

Rose, Gideon. "It Could Happen Here: Facing the New Terrorism," *Foreign Affairs*, 78 (March/April 1999): 131-137.

Kaplan, David E. "Terrorism's Next Wave," *U.S. News and World Report*, 17 November 1997, 26-31.

BIBLIOGRAPHY

The following bibliography includes works cited in recent academic, policy, and Intelligence Community publications. In the past decade, the U.S. Government and interested scholars have begun to tackle the collection, analysis, and dissemination of intelligence on weapons of mass destruction. Some of these studies deal with historical successes and failures, while others outline the threat of proliferation after the Cold War and within the United States.

Albright, Joseph and Marcia Kunstel. *BOMBSHELL: The Secret Story of Ted Hall and America's Unknown Atomic Spy Conspiracy*. New York: Times Books, 1997.

Benson, Robert Louis and Michael Warner (Eds.). *VENONA: Soviet Espionage and the American Response, 1939-1957* (Washington, DC: National Security Agency and Central Intelligence Agency, 1996).

Falkenrath, Richard A., *America's Achilles Heel: Nuclear, Biological and Chemical Terrorism and Covert Action*. Cambridge, MA: MIT Press, 1998. Contains an excellent section on the role of intelligence in coping with the threat of weapons of mass destruction.

Gates, Robert M. *From the Shadows*. New York: Simon and Schuster, 1996.

Heyman, Philip B., *Terrorism and America: A Commonsense Strategy for a Democratic Society*. Cambridge: MIT Press, 1998. Excellent study of how the United States should respond to domestic terrorism.

Lamphere, Robert J., *The FBI-KGB War*. New York: Random House, 1986.

Rhodes, Richard. *Dark Sun: The Making of the Hydrogen Bomb*. New York: Simon and Schuster, 1995.

Steury, Donald P., Ed., *Intentions and Capabilities: Estimates on Soviet Strategic Forces, 1950-1983*. Washington, DC: GPO, 1996.

Weinstein, Allen and Alexander Vassilev, *The Haunted Woods* (New York: Random House, 1999).The best and most recent study of Soviet collection of intelligence to build nuclear weapons.

Wolkomir, Richard and Joyce, "Where Staving Off Armageddon Is All In A Day's Task." *Smithsonian* 27 (February 1997): 114-129. An excellent article on how unclassified research at the Center for Nonproliferation Studies can help the policy community cope with nonproliferation issues.

TEACHING VISION

Mark G. Marshall
Joint Military Intelligence College

This paper has been approved for unrestricted public release by the Office of the Secretary of Defense (Public Affairs)

A CHALLENGE

Looking for a teaching challenge? Try conveying the finer points of visual evidence to a class of "blind" adults educated in a Western culture, most of whom work in a military hierarchy, and all of whom have been indoctrinated in intelligence production as a sequential assembly line.[1] As a component of intelligence analysis, visual evidence is distinct from the descriptive evidence and the linear processes with which students are most familiar. The art of image visualization requires distinct training for professional interpreters, distinct education for conventional analysts who would appreciate visual evidence, and distinct mentoring for exceptionally visual students.

Before describing how image teachers can address the challenge, the author will first illustrate the nature and magnitude of the problem by highlighting the parallel patterns[2] of diversity and domination that run through human cognition, within human culture, and between modes of intelligence evidence.

PART I
PATTERNS OF DIVERSITY AND DOMINATION

Cognitive Diversity

Could there be a more fundamental place to begin an investigation of the profession of "Intelligence" than intellect itself? Considering the similarity between the results of human intelligence and the objectives of organizational intelligence, the latter can reasonably be expected to learn much from the former.

A Pair. The human mind operates in combinations of two distinct modes of thinking. Our ability to comprehend the pictures in this article depends on the intellectual dimension that uses wholeness, simultaneity and synthesis. The other mental mode is characterized by sequence, analysis and abstraction, and dominates when one reads this line of

---

1 See Christopher Andrew's description of the intelligence assembly line in *For the President's Eyes Only: Secret Intelligence and the American Presidency from Washington to Bush* (New York: Harper Collins Publishers Inc., 1995), 426.

2 Pattern recognition is one of the favorite tricks in image research. See William A. Kennedy and Mark G. Marshall, "A Peek at the French Missile Complex." *Bulletin of the Atomic Scientists* 45, no. 7 (September 1989): 21-22.

text. This diversity of intellect is so fundamental to human thought it has a neurobiological basis and an association with the two hemispheres of the brain.[3]

Except for varying opinions among psychologists about the complexity of this asymmetry and how best to describe it,[4] the distinction between the two styles and the neurobiological basis is noncontroversial. Harvard psychologist Stephen M. Kosslyn illustrates the consensus by writing "Probably the least controversial claim in neuropsychology is that the left hemisphere is critical in language production and comprehension...[and] that the right hemisphere plays a special role in navigation."[5]

Psychologists refer to this asymmetry variously as two "modes," "styles," or "subsystems."[6] Words adequately describe subsystems associated with the left hemisphere, but aptitude associated with the right hemisphere "is not so easy to label."[7] Because words cannot adequately describe a nonverbal dimension, many authors resort to using antonyms (See Table 1). Interestingly, the "not left" dimension of the Table represents survival aptitudes.

Left	:	Not Left
verbal	:	nonverbal
sequential	:	simultaneous
serial	:	parallel
temporal	:	spatial
digital	:	analog
logical	:	Gestalt
analytical	:	synthetic
rational	:	intuitive
local	:	global
detailed	:	holistic

Table 1: Efforts to Label the Asymmetry

Sources: David A. Kolb, Experiential Learning: Experience as The Source of Learning and Development (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1984), 48-49; Restak, 216-217; Springer and Deutsch, 76, 129, 195, 272; Kosslyn, Image and Brain, 295-298; Ornstein, 37.

---

[3] Leonard Shlain, *The Alphabet Versus the Goddess: The Conflict Between Word and Image* (New York: Viking, 1998), 5, 17-23; Sandra Blakeslee, "New Theories of Depression Focus on Brain's Two Sides," *New York Times*, 19 January 1999, URL <*http://nytimes.com/library/national/science/011999sci-brain.html*>, accessed 1 March 1999.

[4] For several qualifiers see Richard B. Ivry and Lynn C. Robertson, *The Two Sides of Perception* (Cambridge, Massachusetts: Massachusetts Institute of Technology (MIT) Press, 1998), 2, 33, 35, 126.

[5] Stephen M. Kosslyn, *Image and Brain: The Resolution of the Imagery Debate*, 1st paper ed. (Cambridge, Massachusetts: The MIT Press, 1996), 179.

[6] Quotes from Sally P. Springer and Georg Deutsch, *Left Brain, Right Brain*, 4th ed. (New York: W.H. Freeman and Company, 1993), 76, 68, 274; David Galin quoted in Richard M. Restak, T*he Brain: The Last Frontier* (New York: Doubleday & Co., Inc., 1979), 199; Kosslyn, *Image and Brain*, 40-42; Robert E. Ornstein, *The Psychology of Consciousness*, 2d ed. (New York: Harcourt Brace Jovanovich, Inc., 1977), 26.

[7] Springer and Deutsch, 17.

Domination. Psychologists also recognize that the mental style favoring sequence thoroughly dominates the synthesizing dimension. Michael S. Gazzaniga and Joseph E. LeDoux remark that when first suggested, "the view that the mute [right] hemisphere was also deserving of conscious status was widely criticized and generally rejected."[8] Accordingly, psychologists Sally P. Springer and Georg Deutsch characterize the right side of the brain as the "neglected hemisphere."[9]

(Western) Culture

Culture exerts such strong influence on thinking that it may be regarded as a corporate brain. Because the physiology of childbirth limits the size of a baby's skull, the human brain arrives in the world only partially formed. To name the pieces of intellect added after birth, author Leonard Shlain uses the word "culture."[10] Because thinking and learning result in a physical realignment of our neurons, Shlain's point is no exaggeration. It is a bad joke among educators that every teacher is a brain surgeon.

A Pair. In a 1959 essay, Charles Percy Snow described the characteristics of two cultures between which, he wrote, "the intellectual life of the whole of Western society is increasingly split." In Snow's characterization, a "traditional" culture lacked foresight, was slow to change, and turned its back on art while a "natural" culture was always reaching, did not hesitate to cut across mental patterns, and had a taste for color photography. Snow's description of this pair parallels the dimensions of cognitive diversity, and even Snow speculated that the basis for this diversity could include different kinds of mental activity. [11]

Domination. Paralleling the mental model, traditional Western culture thoroughly dominates natural culture. One of the most important aspects of this domination is the control conventional thinking exerts over the education systems that are rewiring the corporate brain. Mathematician Keith Devlin writes

> Western culture is dominated by an approach to knowledge that goes back to Plato, and to his teacher, Socrates. Their love of mathematics and of precise definitions led them to discount any human talent, ability, activity, or skill that could not be defined and explained and subjected to rational argument.

Devlin illustrates with the example of the German academy that "introduced the distinction between the natural sciences (Naturwissenschaften) and the humanities (Geisteswissenschaften) and gave the former higher status."[12] Shlain draws the mental parallel by

---

[8] Michael S. Gazzaniga and Joseph E. LeDoux, *The Integrated Mind* (New York: Plenum Press, 1978), 5.

[9] Springer and Deutsch, 13.

[10] Shlain, 12-13.

[11] Charles Percy Snow, *The Two Cultures and the Scientific Revolution* (New York: Cambridge University Press, 1959), 2-8, 10, 12, 14, 15, 17, 23, 47.

[12] Keith Devlin, *Goodbye, Descartes: The End of Logic and the Search for a New Cosmology of the Mind* (New York: John Wiley & Sons, Inc., 1997), 102, 182.

describing how introducing a child into "alphabet arcana numbs her to the fact that she supplants all-at-once gestalt perception with a new, unnatural, highly abstract one-at-a-time cognition."[13]

The style of traditional Western education enforces an objectivism[14] that separates the student from the topic and results in a kind of cultural blindness. C.P. Snow writes that it is as though "over an immense range of intellectual experience, a whole group was tone deaf. Except that this tone-deafness doesn't come by nature, but by training, or rather the absence of training."[15] Ten years later, Berkeley Professor Rudolf Arnheim characterized the lack of art education in American education as an "educational blackout."[16] In *Frames of Mind*, Harvard Professor of Education Howard Gardner observes that Western schools continue to place a premium on logical-mathematical and linguistic ability while other intellectual capacities are "consigned to after-school or recreational activities, if they are taken notice of at all."[17]

This blindness extends to the present. When Professor Gregory D. Foster of the Industrial College of the Armed Forces describes education he selects terms associated almost exclusively with the left side of Table 1: *read*, *discuss*, investigate (by *asking*), and *write*.[18] When the author's local government lacks the foresight to match housing construction to necessary infrastructure, some school courses are considered for reduction to make way for more sections of preferred ones: those on the losing end come exclusively from the "not left" side of Table 1: "art, music, and physical education."[19]

Modes of Intelligence Evidence

The respective characteristics of visual and descriptive evidence parallel the diverse dimensions within both cognition and culture. Psychologist Robert Zajonc notes that "Pictorial information is organized in a synchronous and spatially parallel manner, whereas verbal information is discrete and sequential."[20] Psychologist Richard Gregory ties this diversity to the mental model when he writes that visual and verbal skills are not simply different; "they are handled by different brain processes."[21]

---

[13] Shlain, 67, 122.

[14] See Parker J. Palmer, *To Know As We Are Known: A Spirituality of Education* (New York: Harper & Row, 1983), 29.

[15] C.P. Snow, 15.

[16] Rudolf Arnheim, *Visual Thinking* (Berkeley, California: University of California Press, 1969), 3.

[17] Gardner, 353.

[18] Gregory D. Foster, "Research, Writing and the Mind of the Strategist," *Joint Force Quarterly* no. 11 (Spring 1996): 111.

[19] David Nakamura, "School Budget Deal Saves Teaching Jobs," *Washington Post Loudoun News Extra*, 5 April 1998, 3.

[20] Robert Zajonc, "Feeling and Thinking," *American Psychologist*, 1980, 168, quoted by Kolb, 50.

[21] *The Artful Eye*, eds. Richard Gregory and others (New York: Oxford University Press, 1995.), vii.

A Pair. Descriptive evidence may be understood or searched piecemeal, but an interpretable image must be perceived as a whole. A group of analysts cannot "read" a frame of film in unison as they can this paragraph. Because descriptive evidence is segmentable, readers may understand this sentence by reading one word at a time, sequentially, but because image perception requires simultaneity, one cannot achieve image comprehension by viewing pixels sequentially. Data are plural, but an image is singular. Chipping out a piece of film can result in a smaller, but nonetheless complete and unitary image in its own right.[22]

Descriptions are finite; visual evidence is not. A page of text can be read in its entirety, but skilled interpreters can make significant discoveries using the same frame of film, decade after decade (after decade). Descriptive evidence typically refers to one topic, but a frame of film can support research into dozens of issues. To test Loch K. Johnson's estimate that "a professional photo-interpreter may require four hours to decipher fully a single frame of satellite photography,"[23] the author totaled the time required to answer questions that could be addressed by one frame, but quit after the count climbed past 1,000 hours.[24] Arthur C. Lundahl, the first Director of the National Photographic Interpretation Center (NPIC), estimated the Intelligence Community benefited from only 15 percent of the information potential within even the small amount of satellite photography available in the 1960s.[25]

The "process" of visual research is subjective and (ironically) invisible. Remote Sensing specialist Robert A. Ryerson emphasizes that descriptions and definitions of image interpretation "do not provide an explanation of the process" itself.[26] The reports of two interpreters differ even when each studies the same image data, and while "human interpretation contains less errors than [linear analysis], it is not reproducible."[27]

---

[22] Experimentally, image data may be reduced to a few hundred pixels and still trigger object perception in a human mind. Leon D. Harmon chased the number of pixels a person required to recognize a human face down to 16 x 16, or only 256 pixels. Leon D. Harmon, "The Recognition of Faces," *Scientific American*, November 1973, 74.

[23] Loch K. Johnson, "Making the Intelligence 'Cycle' Work," *International Journal of Intelligence and CounterIntelligence* 1, no. 4 (Winter 1986-87): 10.

[24] This statistic and the other Intelligence Community material in this paper was approved for public release by Department of Defense case 98-S-1060, 16 March 1998 in Mark G. Marshall, *Round Peg, Square Holes: The Nature of Imagery Analysis*, (Washington, DC: JMIC, December 1997), 98-99; In *Envisioning Information*, Edward Rolf Tufte writes "Same picture, but many stories," (Cheshire, Connecticut: Graphics Press, 1990), 108.

[25] Dino A. Brugioni, "The Art and Science of Photoreconnaissance," *Scientific American*, March 1996, 82. Massachusetts Institute of Technology Professor of Architecture and Media Arts and Sciences William J. Mitchell writes "there is an indefinite amount of information in a continuous-tone photograph. William J. Mitchell, *The Reconfigured Eye: Visual Truth in the Post-Photographic Era*, 1st paper ed. (Cambridge, Massachusetts: The MIT Press, 1994), 6.

[26] Robert A. Ryerson, "Image Interpretation Concerns for the 1990s and Lessons from the Past," *Photogrammetric Engineering and Remote Sensing* 55, no. 10 (October 1989): 1427.

[27] A. Legeley-Padovani, C. Maring, R. Guillande and D. Huaman, "Mapping of Lava Flows Through SPOT Images — An Example of the Sabancay Volcano (Peru)," *International Journal of Remote Sensing* 18, no. 15 (October 1997): 3125-3126.

Working in the "other" dimension, professional imagery analysts often "know" but cannot easily "say." Former NPIC imagery analyst Kris Stevens admitted she sometimes clearly understood an observation yet had trouble finding the words to explain it.[28] Another former NPIC Senior Analyst was exasperated by the inability to describe image research to nonpractitioners: "You don't know how you do it, you just do it."[29] To communicate what words cannot, the *NPIC Update* typically filled its pages with photographs.[30]

Domination. Paralleling both cognition and culture, within the Intelligence Community, the use of linear evidence completely dominates the use of visual evidence. The ethereal characteristics of image comprehension make its learning, teaching and use especially troublesome. The standard of Cartesian science is to remain on the left side of Table 1 — what cannot be explained and duplicated is not real.[31] For Westerners whose understanding of "comprehension" is restricted to the mode of verbal logic, visuospatial skill is "incomprehensible."[32] Keith Devlin complains of his students "My attempts are generally quite in vain; most of my students remain unconvinced. The ones who most steadfastly stick to the [linear] rule-based view are invariably the ones who have had a solid science education."[33]

The domination of linearity and rules in intelligence production manifests itself in the recurring demise of Imagery Intelligence. Following every major conflict, skilled image research is not merely reduced, it is practically eradicated. Between the World Wars, U.S. Imagery Intelligence became so incompetent the British had to retrain us after scrambling to revive their own capabilities.[34] The lesson unlearned, by the beginning of the Korean Conflict the craft had again returned "to its pre-World-War II status of 'military stepchild',"[35] with the few remaining practitioners scattered among the military services and barred from conducting effective research.[36] Those who are familiar with the current disarray in American Imagery Intelligence recognize this cycle repeating itself in the present era.

---

[28] Kristina M. Stevens, Staff Officer, Central Imagery Office, interview by author, 6 May 1996.

[29] David Sullivan, former National Photographic Interpretation Center (NPIC) Senior Imagery Analyst, interview by author, 2 April 1998.

[30] *NPIC Update*, September 1996.

[31] Lorraine Daston, "Fear and Loathing of the Imagination in Science," *DAEDALUS* 127, no. 1 (Winter 1998): 75.

[32] Arnheim, 31; Ornstein, 125. Barbara L. Forisha, "Mental Imagery and Creativity: Review and Speculations." *Journal of Mental Imagery* 2 (1978): 211; Gregory observes that some theorists continue to deny the importance of top-down (human mind) knowledge. Gregory, 13.

[33] Devlin, 181. The author feels strangely relieved to learn he is not the only teacher with this problem.

[34] Constance Babington-Smith, *Air Spy: The Story of PhotoIntelligence in World War II*, (New York: Ballantine Books, 1957), 27.

[35] Brugioni and Robert F. McCort, "Personality: Arthur C. Lundahl," *Photogrammetric Engineering & Remote Sensing* 54, no. 2 (February 1988): 270.

[36] Eliot A. Cohen, "Only Half the Battle: American Intelligence and the Chinese Intervention in Korea 1950," *Intelligence and National Security* 5, no. 1 (January 1990): 133; Andrew, 194.

The NPIC Update.

Source: NPIC Update, September 1996, cover

PART II
TEACHING THE "OTHER INTELLIGENCE" [37]

Because it represents a distinct form of evidence that faces special challenges in a Western society, visual evidence requires distinct training for professional interpreters, distinct education for conventional analysts who would appreciate visual evidence, and distinct mentoring of highly visual students. In short, visuospatiality is a performing art one learns, or learns to appreciate, by doing, and this "doing" requires shelter from segmentation.

Many authors acknowledge the need to use nonlinear techniques to teach the "other intelligence." Psychologist Robert E. Ornstein illustrates with bodily kinesthetic examples: "A written description of ski lifts, bindings, equipment, and intermediate ski techniques does not substitute for the experience of skiing down the slope."[38] Physicist Richard Feynman observes that he tells students how to do things with math, but that "the drawing teacher has this problem of communicating how to draw by osmosis and not by instruction."[39] Gardner notes that apprentices learn a craft by "watching the master at work [and] forming bonds with the other apprentices and those who have already become journeymen."[40]

Training Professional Visualizers

Those who teach image research in the Intelligence Community are consistent in the view that one learns the craft by performing it. NPIC image trainer Chuck Norville questioned whether high-end imagery analysis was "teachable."[41] The author's instructor and predecessor at the Joint Military Intelligence College (JMIC), Lieutenant Commander Thomas J. McIntyre, U.S. Navy (Ret.), observed that the techniques of image research are not stored in books, but are passed down from generation to generation.[42]

Accordingly, image training employs the language of the craft guilds. The title of the U.S. Air Force interpretation course is "Imagery Analysis Apprentice."[43] For a 1996

---

[37] Gardner, xiii, xx, 177-178, 284.

[38] "One cannot learn to ride a bicycle purely from verbal instruction." Ornstein, 33, 126.

[39] Richard P. Feynman, "Surely You Are Joking, Mr. Feynman!" (New York: Bantam Books, 1985), 240.

[40] Gardner, 333-334.

[41] Charles R. Norville, NPIC Training Division Instructor, interview by author, 11 July 1996. Psychiatrist Robert U. Akeret appears to agree when he writes "the best way to learn photoanalysis is through example and actual experience." Robert U. Akeret, *Photo-Analysis: How to Interpret the Hidden Psychological Meaning of Personal and Public Photographs* (New York: Peter H. Wyden, Inc., 1973), 36.

[42] Thomas J. McIntyre, Lieutenant Commander, U.S. Navy (Ret.), interview by author, 21 October 1997.

[43] 315th Training Squadron, U.S. Air Force, *Imagery Analysis Apprentice*, Training Plan X3ABR1N131 006 (Goodfellow Air Force Base, Texas, 22 January 1997).

documentary, NPIC specified that image research requires one to two years of on-the-job training (OJT) before reaching an initial apprentice level.[44] After three years experience, national imagery analysts are eligible for a course in *Imagery Analysis Tradecraft*.

Those who have learned to perform expert visualization acknowledge the same principles. Among NPIC Senior Analysts the most frequent response to a question of how they had learned their craft was "On-The-Job Training."[45] In response to a Central Imagery Office (CIO) survey of the entire U.S. Imagery System, when asked if they thought their training prepared them to conduct imagery analysis, practitioners responded: "This requires OJT." "OJT is the best form." "It was all OJT." "OJT was first and foremost." "OJT was the most useful tool." One used the metaphor "learning by osmosis."[46]

Blinded. In 1998 the Department of Defense closed the Defense equivalent of the National Imagery Analysis Course, the Defense Sensor Interpretation and Applications Training Program (DSIATP). The substitute for this 11-week resident program is an electronic correspondence course. Senior craftsmen are dismayed at this development.[47] After 17 months and 47 enrollments, one of the best reputed Unified Commands for image research had yet to graduate a single analyst from even one module of the new course (and knew of no other command that had succeeded). To help three students complete part of the program the Command had to exempt them from other duties and assign an image-qualified teacher to work with the students full time.[48]

Educating Nonpractitioners

The skills that define the intelligence collection disciplines are art forms beyond full explanation. Allen Dulles emphasizes this in the title of his book *The Craft of Intelligence*.[49] The Intelligence Collection Department of the JMIC represents a de facto Art Department. "At art schools, a Ph.D. is not the union card it is at universities"[50] and none of the JMIC Collection instructors is a Ph.D. Instead, each has practiced the craft he teaches. Mary McCarthy reaffirms the point when she writes that real intelligence work is distinct from academic analysis.[51] If the objective methods of Western academia were

---

[44] Martha Ostertag and Kurt Sayenga, prods. "Spies Above," The Discovery Channel, February 1996.

[45] NPIC, *Senior Imagery Analyst Questionnaire Survey*, 1 July 1992, 46 respondents, each at grade GS-14 or GS-15, tabulated results provided by Norville.

[46] "Respondents believe the most effective imagery training is on-the-job (OJT.)" Central Imagery Office (CIO), *Imagery Community Training Needs Survey*, 1995, 20 and Appendix P, "Sampling of Comments," P-1 through P-4.

[47] McIntyre interview.

[48] Joint Intelligence Center, Pacific message to 315 TRS, subject: "Joint Imagery Analysis Course (JIAC) Critique," 152141Z January 1999.

[49] Allen Dulles, *The Craft of Intelligence*, (Westport, Connecticut: Greenwood Press, 1963.)

[50] Daniel Grant, "Fine Arts and Liberal Arts," *Washington Post Education Review*, 5 April 1998, 11.

[51] Mary O. McCarthy, "The Mission to Warn: Disaster Looms," *Defense Intelligence Journal* 7, no. 2 (Fall 1998): 20.

adequate to study and teach strategic intelligence, there would be no Joint Military Intelligence College.

The nondescriptive nature of visual evidence means that even within this art department, image courses represent an inner core. Colleagues can teach the other intelligence disciplines without conducting real debriefings or breaking real ciphers in class, but to understand Imagery Intelligence, students must interpret, if only at a novice level.[52] To help conventional analysts gain an appreciation for the "other intelligence," the author eases students along a spectrum from numbers and words, through symbols and drawings, to a place where they can experience image appreciation.

Pregame. The environment must suit the topic. Image classes sit in a symbolic circle, not hierarchical rows.[53] Opening the room unchains both the instructor and the class. The teacher must often relinquish the stage, and because visual evidence is so context-sensitive that the meaning of a print can change depending on the location from which it is viewed, students must also be free to move about.

Only the best tools can support a course about skilled image research. Most presentations require the display of 25 million bits of image data on a 10x20-foot screen, with split-second staging of any of a hundred scenes, in any order, in color, with effortless rotation and focus. The equipment must be able to store hundreds of gigabytes of data, be fully compatibility with every organization in the Intelligence Community, Y2K compliant, virtually crash-proof, and light enough to carry in one hand. To meet these seemingly impossible requirements the author uses 35mm slides[54] — when working in the other dimension, less is more.[55]

Showtime. Borrowing from professional image instruction, the author teaches non-practitioners in a style that requires internalization. His image classes are not Western-style seminars that exchange symbols, but visual demonstrations accompanied by story-telling designed to make an end-run around each student's verbal intellect.[56]

The opening lectures appear conventional on the surface but are salted with hidden lessons. At the beginning of the course, the teacher displays different representations of the Imagery Intelligence "process" graphically so students can practice "reading between the curves." To test their progress, the midterm examination asks students to speculate on the authorship of the figure on page 67 based on its visual clues:

---

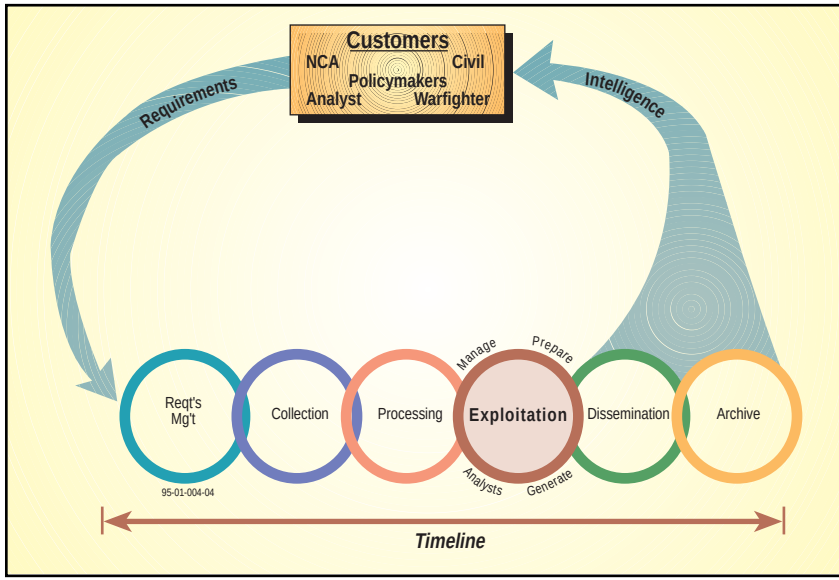
[52] "Learning from Photographs;... Charts, Graphs, Maps, and Diagrams;... Visual Comparison and Analogy;... Film and Television." Deane W. Hutton and Jean Anne Lescohier, "Seeing to Learn: Using Mental Imagery in the Classroom," in *Mental Imagery and Learning*, eds. Malcolm L. Fleming and Deane W. Hutton (Englewood Cliffs, New Jersey: Education Technology Publications, 1983), 117.

[53] Palmer, 75.

[54] See Edward Rolf Tufte, Envisioning Information (Cheshire, Connecticut: Graphics Press, 1990), 49.

[55] David Shenk, *Data Smog*, 1st paper ed. (San Francisco, CA: Harper Edge, 1998), 198.

[56] "Listening takes the burden off our eyes.... It allows us to 'picture' the events in space as they occur." Ornstein, 147.



Imagery Production Cycle *Source (and answer):*

Annette J. Krygiel, Director, Central Imagery Office, "Exploiting the Picture Through ExPReS," 1995, 6. Observe the controlling function placed on top, that the production line is disappointingly linear, the embellishment of the Exploitation (image visualization) function, and the up-echelon, high-resource characteristic of passing all outputs through professional exploitation.

Similarly, a lecture on the History of Imagery Intelligence contains dozens of nonverbal lessons, not all of which the teacher stops to explain.[57] Niepce's garden is the first recorded "picture," but the pewter plate also serves to demonstrate how a blurry scene can become more meaningful when the teacher takes the class on a visual tour pointing out trees and buildings. Daguerreotype "cities of the dead" are highly interpretable (to use the jargon), but the traffic missing from the streets demonstrates that images, even those involving visible light, are never real, never "literal."[58] Neubrauner's cameras strapped onto pigeons provide comic relief but also illustrate the aspect of nonverbal intellect that "whatever works is good."[59]

Only after five weeks of surreptitiously setting the stage does the course openly turn the mental corner. At the center of the course (figuratively and literally) students comprehend Imagery Intelligence by experiencing images. The principal textbook for the central

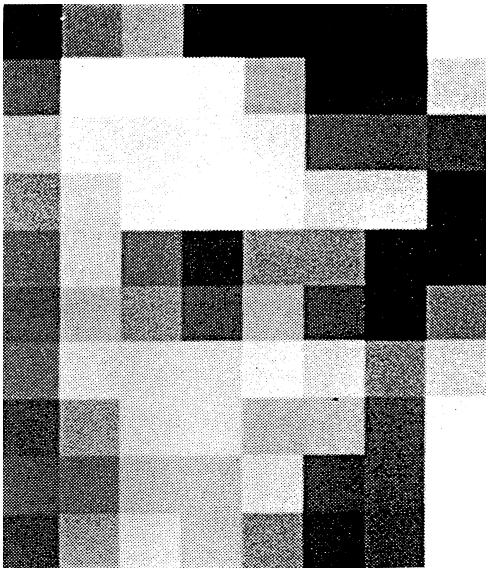
---

[57] "Teaching stories purposely contain certain specially chosen patterns of events. The repeated reading of the story allows these patterns to become strengthened in the mind of the person reading them. The stories take the mind along unfamiliar and nonlinear paths. Thus it is not necessary to 'understand' the stories in the usual intellectual and rational mode." Ornstein, 146.

[58] Carolyn M. Bloomer, *Principles of Visual Perception*, 2d ed. (New York: Design Press, 1990), 151.

[59] Quote adopted from Philip K. Howard, *The Death of Common Sense: How Law is Suffocating America* (New York: Random House, 1994), 185-186.

class is Robert L. Solso's *Cognition and the Visual Arts*,[60] selected because Solso, like the present author, is seeking an intellectual balance between seeing and science. The difference is that we are trying to move our respective classes in "opposite" directions. Solso is teaching fine arts students about the scientific dimension of visual perception; the author is teaching M.S.S.I. students about the art of seeing.



80 Pixels, but not an Image *source: author*

The first overt class in the art of Imagery Intelligence begins with a demonstration of the difference between data and an image. This consists of displaying increasing numbers of pixels sampled from Leon D. Harmon's famous print: 9 pixels, 50 pixels, 80 pixels... Removed from context and viewed sequentially the image data mean nothing. Invariably, some students jump the gun and guess, Western style (hurry, hurry, rush, rush). This introduces the explanation that image comprehension is intuitive, but that contrary to Western misinterpretation, intuition is not a guess.[61]

As the number of pixels increases, shown enough of the display simultaneously, the viewer's intellect perceives more than the sum of the details and creates an image. Most students can make this mental leap when they view the figure on page 69. When someone perceives the object, they *know* they see it. As Solso writes "It cannot be explained, but when attained cannot be confused."[62] Harmon found that his test subjects could perceive a pixelated print even more clearly when they squinted their eyes or viewed the print from a distance — either of which accentuates the scene's whole while reducing the prominence of the details.[63] Contrast the effectiveness of this demonstration with the futile attempts described on page 63 to represent an "image" with text.

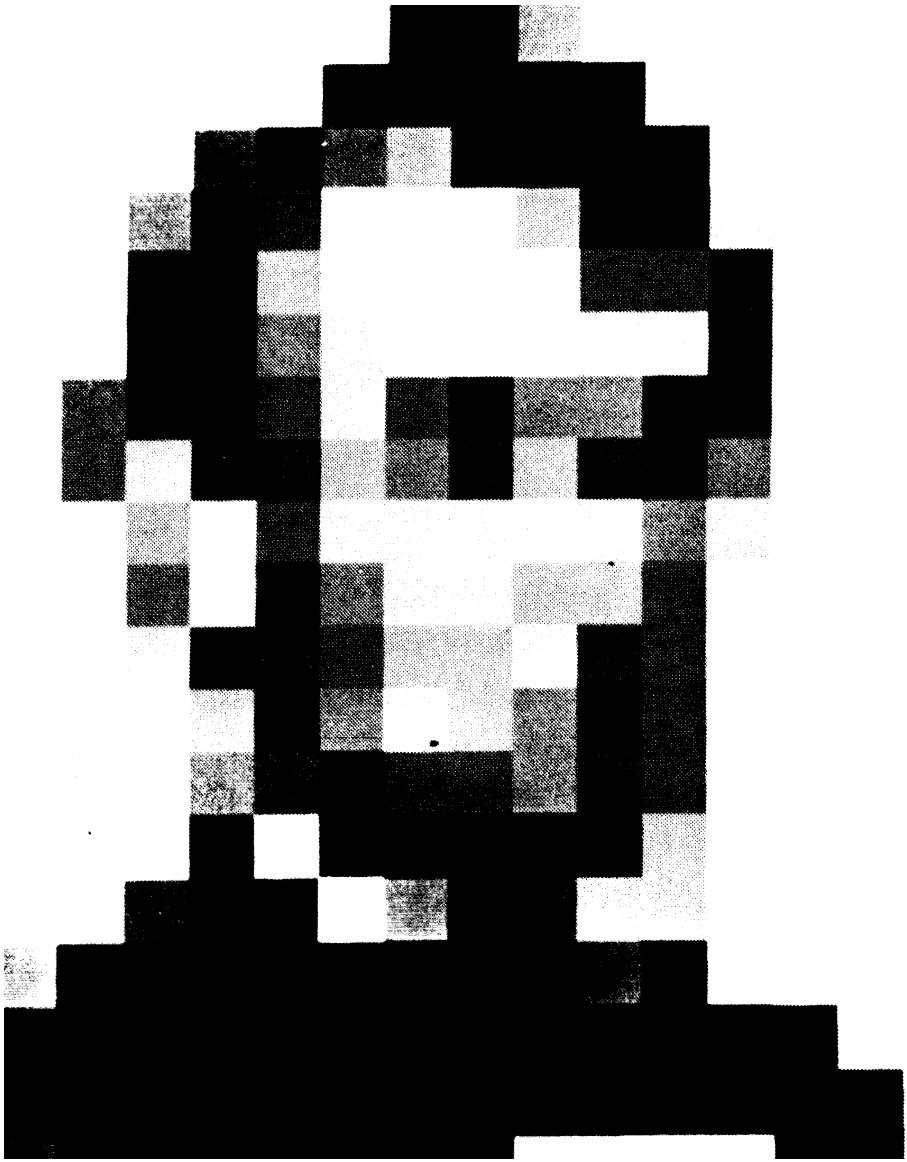
---

[60] Robert L. Solso, *Cognition and the Visual Arts* (Cambridge, Massachusetts: The MIT Press, 1994). *The Artful Eye* is excellent, but too long for one class period.

[61] For an example, see the misrepresentation of "counterintuitive" as "not what you might guess" in Brooke A. Masters, "Domestic Violence Programs Save Men's Lives, Study Says," *Washington Post*, 14 March 1999, C1.

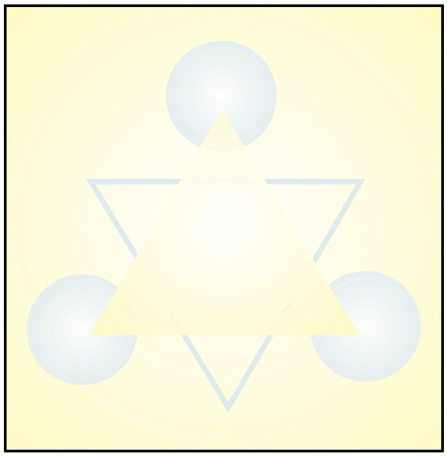
[62] Solso, 256.

[63] Harmon, 71, 76. Bloomer, 118, and Ivry and Robertson, 199, both more recently republished Harmon's print. For other examples see William J. Mitchell, 68-77.



Harmon's Version of a Famous Face *Source: modified from Harmon, 74; Bloomer, 118; Ivry and Robertson, 119.*

After demonstrating the nature of an "image," the course takes a step backward to employ line drawings of optical illusions that demonstrate visual principles. It was a signals student who first suggested the use of optical illusions as an analogy for image research. Having come to the teaching job directly from imagery analysis, the author's first

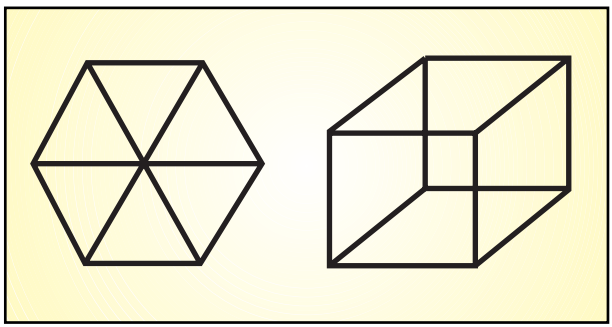


Kanizsa Triangle *Source: modified from Gregory, 24, 42.*

classes were far too visual. While line drawings appear crude to professional interpreters, they are ideal for teaching nonpractitioners, and the course now incorporates many of the classics: The Kanizsa Triangle demonstrates the subjective nature of seeing. There is no triangle; there are three chevrons and three Pac-Man symbols, but any triangle exists only in the observer's mind.

Psychologists Vicki Bruce and Patrick Green write that visual ambiguity is uncommon in the real world,[64] but behind the veil of Imagery Intelligence, visual ambiguity is the norm. A minute spent mentally reversing a Necker Cube demonstrates visual ambiguity. Students who are better-than-average visualizers can also experience the hypnotic effect of image research by mentally manipulating the cube(s) for several minutes.[65] Students who are not strong visualizers have an opposite reaction; for them, several minutes of silence feels uncomfortable.[66]

After explaining the lesson behind each optical illusion, the author displays prints selected from real national security research to illustrate how each principle influenced intelligence analysis. "Is this blur a bomb hit or a miss? (Hint: it is usually a miss.)" After warming up on optical illusions, it takes very few prints to illustrate why image researchers are always arguing among themselves and changing their own reports — and why the various agencies of the Intelligence Community desire control over Image Intelligence in order to specify the meanings they prefer.



Necker Cube (right) and Friend *Source: modified from Imagery, ed. Ned Block (Cambridge, Massachusetts: The MIT Press, 1981), 71; Bruce and Green, 109.*

Students indicate they have learned a central lesson when they hesitate to guess at challenging prints — a level of visual sophistication achieved by only a small minority of

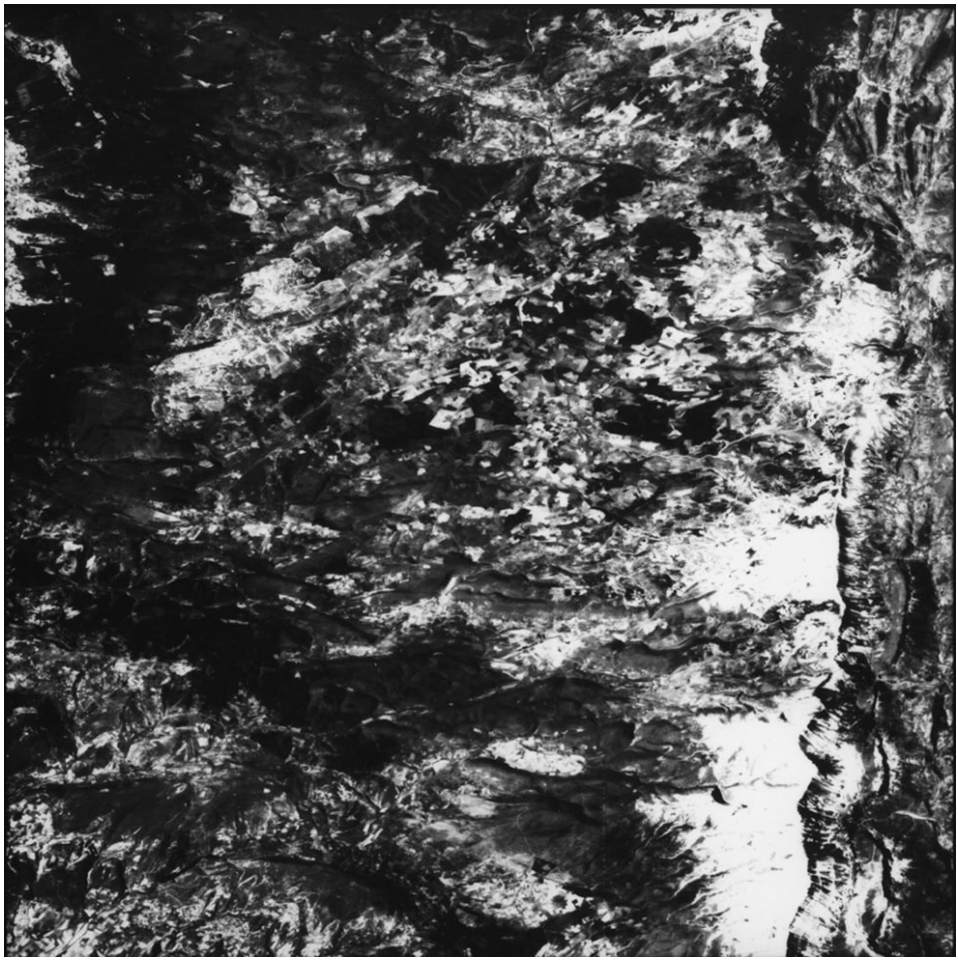
---

[64] Vicki Bruce and Patrick Green, *Visual Perception: Physiology, Psychology and Ecology*, 2d ed. (London: Lawrence Erlbaum Associates, 1990), 109.

[65] Ornstein, 140-141.

[66] Palmer, 73, 81.

the Intelligence Community. As the students change into professional intelligence officers, they no longer believe what they see and no longer believe that untrained observers can match the effectiveness of qualified image practitioners. Doubters may attempt to refute this point by picking out the Intermediate Range Ballistic Missiles in the unannotated print here. Take your time; turning the page represents concession.



A Visually Noisy Frame

Source: Systeme Probatoire d'Observation de la Terre (SPOT) 1, High Resolution Vehicle (HRV) 2, 051-261, Quadrant 3, 22 March 1986. Reprinted Courtesy of SPOT Image Corporation.

Without explaining why, the author plays his videotape of *A Bridge Too Far* during a class break.[67] As the students return, they end up watching the World War II Intelligence Chief of the British 1st Airborne Corps, Major Brian Urquhart, warn that the paratroopers

[67] *A Bridge Too Far*, prods. Joseph E. Levine and Richard P. Levine, dir. Richard Attenborough, United Artists, 1977.

preparing for Operation MARKET GARDEN are about to jump onto German armor. Urquhart's principal evidence are photographs of the German tanks, but the Corps Commander does not want to see the problem. Urquhart is relieved from duty and Operation MARKET GARDEN suffers more casualties than the Normandy invasion.[68] This is a 20th century retelling of the myth of Cassandra who was blessed with clairvoyance but cursed that no one would believe her.[69] It is also a daily experience in professional image research.

The next hour of the class is a demonstration of the enduring image "Characteristics" described in the original *Manual of Photographic Interpretation*: Size, Shape, Shadow, Tone and Color, Texture, and Pattern.[70] An example is that the solution to the problem above depends on recognizing the incriminating *pattern* of the missile launch positions. Because of the depth of visual evidence, much of the Characteristics presentation can be demonstrated on a single print where the missile pads are the right Size and the associated roads have an appropriate curved Shape. The Tone and Texture of the pads differ from the surrounding fields. Demonstrating so many points using only one scene also serves to illustrate the infinite nature of visual evidence. There is no way to fully "translate" prints into descriptions for subsequent analysis on an intelligence production assembly line.

The crescendo of the course is a class consisting of a series of case studies selected to help students appreciate the emotional content of visual evidence, to experience Imagery Intelligence during high-intensity war, and to join the community of Defense Intelligence — all at the same time. The nominal topic is an explanation of how the military services failed to deliver image-derived knowledge to their tactical forces during Operation DESERT STORM,[71] but the emotional lesson hinges on learning what was published, when, and that the "customers" who failed to receive these reports were fellow students and teachers. To increase the intensity of the experience, the author sets the stage by playing Gulf War newscasts of tank battles and airstrikes before class. By this point in the course, many students begin to recognize this is a visual manipulation to carry them mentally back to 1991.

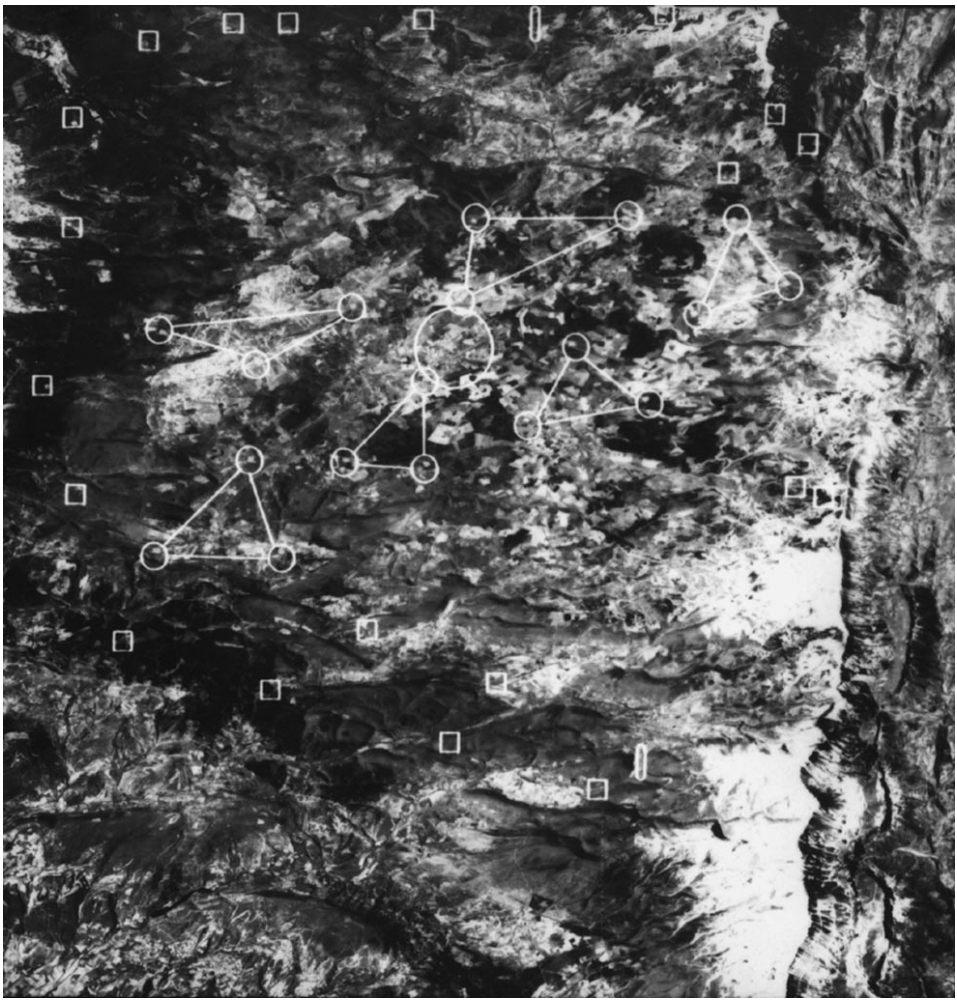
---

[68] Cornelius Ryan, *A Bridge Too Far* (New York: Simon and Schuster, 1974), 131-133, 159-160, 599, 625.

[69] Shlain, 127.

[70] Ellis L. Rabben, "Fundamentals of Photo Interpretation," in *Manual of Photographic Interpretation,* ed. Robert N. Colwell (Washington, DC: American Society of Photogrammetry, 1960), 100-105.

[71] "A worrisome trend...emerged during the course of the war — namely, the hoarding of intelligence by [service] component command staffs who failed to pass a variety of useful intelligence reports and analyses downward to the ground units and air wings." U.S. Congress, House Committee on Armed Services, Subcommittee on Oversight and Investigations, *Intelligence Successes and Failures in Operations DESERT SHIELD/STORM*, 103rd Cong., 1st sess., 16 August 1993, 24.



Pattern *Source: Kennedy and Marshall, 23.*

During the Gulf War, Major Michael D. Kuszewski was the intelligence officer for the 8th Regiment, 2d Marine Division. Due to a delivery disconnect, Kuszewski never learned the results of image reports that specified the Iraqi front lines had pulled back several miles. Instead, he learned of the change by accident when he saw a photomap annotated with enemy positions. The 2d Division received 60-85 copies of these elaborate products, but no staff officer could resist them, and only one copy reached Kuszewski's Regiment.[72]

[72] Major Michael D. Kuszewski, U.S. Marine Corps, Intelligence Officer, 8th Regiment, 2d Marine Division during Operation DESERT STORM, interview by author, 29 October 1992.

Major Michael Kuszewski (right)
Source: Major Michael D. Kuszewski, personal photograph, February 1991. The picture was taken during daylight but appears dark under the smoke from hundreds of burning oil wells.

After the war "Major K." graduated from the Naval Postgraduate School and served on the Defense Intelligence College Faculty from 1992 to 1995. He died in a helicopter crash out of Camp Lejeune, North Carolina in 1996 and the College Award for the Outstanding Master's Thesis on Operations-Intelligence Partnership is named in his honor.

First Lieutenant Matthew S. Weingast was the executive officer of B Troop, 4th Squadron, 7th Cavalry. During Operation DESERT SHIELD Weingast's Troop received a few prints depicting enemy forces. These raised morale, but conveyed little practical information. During the 26 February 1991 tank battle, the squadron did not understand where the adversary was last seen, and even broke into a trot based on a report that the Iraqi Republican Guard was in withdrawal. The ground troops ran smack into defending enemy forces. Out of range of supporting artillery, having outrun a U.S. tank battalion that was trailing them, and with no aircover due to the bad weather, the squadron's lightly armored vehicles were shot to pieces by Iraqi tanks.[73] Shades of *A Bridge Too Far.*

[73] Captain Matthew S. Weingast, U.S. Army, executive officer, B Troop, 4th Squadron, 7th Cavalry during Operation DESERT STORM, interview by author, 15 October 1992.

First Lieutenant Matt Weingast (left) *Source: Captain Matthew S. Weingast, personal photograph, 24 February 1991.*

Matt Weingast survived the battle and was in the Defense Intelligence College class of 1993. He served two years in image research before leaving active duty, and was College Adjunct Faculty from 1994 to 1998. He is now practicing law in Princeton, New Jersey.[74]

When joined with the classified details of image reporting that was available but not delivered prior to each battle, cases such as these can be so emotionally powerful they have moved some classes almost to tears. Students connect to the topic and to their colleagues. The class will forget some of the facts, but they have joined the community of military intelligence.[75]

Out of the Trance. With classes such as these, the image course strays so far from the dispassionate, objectivist style of conventional education that the author feels compelled to bring students back out of the trance. To this end, the course closes with a Western-style verbal and numeric description of the difficulties of transmitting prints (moving hundreds of millions of pixels multiplied by hundreds of shades of gray through a telephone line takes several *days*). Students who were less comfortable with the visual material in the course seem happy to be back among their old friends words and numbers.

---

[74] Weingast, telephone interview by author, 4 February 1999.
[75] See Palmer, 30, 42.

Blinded. As Devlin cautioned, many Western students have been so thoroughly indoctrinated in segmented thinking that they do not appreciate the alternative. When the author asked one student to add material from the course to his image paper, the student did not fuse the ideas, but literally stapled his notes to the last page. Even after experiencing the Harmon/Lincoln demonstration, confronted with a choice between a data stream and a picture, some students have difficulty understanding which of these represents an "image." Some highly analytic students are unsettled by the idea of simultaneous thought as an alternative to sequential thinking. One "A" student was so uncomfortable with the new idea he felt compelled to leave the classroom. "After a lifetime of rationalizing the right brain's contributions as its own, the left brain now goes to extreme lengths to keep together the single-mind model."[76]

Mentoring Visual Talent

As they include "art teacher," the duties of an image instructor include mentoring students with exceptional visual talent.[77]This task parallels the care that must be shown members of other more "natural" cultures, but with none of the legal protections.

The association between vision and nondominant culture is downright unsettling. Sociologist Parker J. Palmer acknowledges the relationship between more natural cultures and "other ways of knowing."[78] Shlain characterizes the mental asymmetry in terms of male versus female, and spatial aptitude does vary between the sexes by a relatively small amount,[79] but psychologists have found much larger differences between Western and non-Western cultures.[80] In skills associated with the "not left" side of Table 1, Hopi Indian and Black populations outperform Caucasian populations, male or female.[81] On spatial aptitude tests, Australian aborigine children consistently score three years ahead of their white Australian peers.[82] "At least 60 percent of Eskimo youngsters reach as high a score on tests of spatial ability as the top 10 percent of Caucasian children."[83] With

---

[76] Inventor Thomas R. Blakeslee commenting on Gazzaniga's findings, *The Right Brain: A New Understanding of the Unconscious Mind and Its Creative Powers*, (Garden City, New York: Anchor Press/Doubleday, 1980), 17.

[77] "All too often the encouragement of visual thinking and communication has been left to the teachers of the obviously 'visual' subjects, such as art, photography, film making, and media studies." Hutton and Lescohier, 115.

[78] Palmer drew similar parallels between feminist insight, "Native American and other aboriginal ways of knowing." xii, 65-66.

[79] Lauren Julius Harris, "Sex Differences in Spatial Ability: Possible Environmental, Genetic and Neurological Factors," in A*symmetrical Function of the Brain*, ed. Marcel Kinsborne (Cambridge, UK: Cambridge University Press, 1978), 405; Restak, 228-231; Forisha, 224-225, 229-230; Gardner, 184; Springer and Deutsch, 201-218.

[80] Harris, 432-522; Gardner, 202.

[81] Springer and Deutsch cite Joseph E. Bogen, R. DeZare, W.D. Ten-Houten, and J.F. Marsh, "The Other Side of the Brain. IV: The A/P Ratio," *Bulletin of the Los Angeles Neurological Societies* 37 (1972): 49-61. Springer and Deutsch, 276.

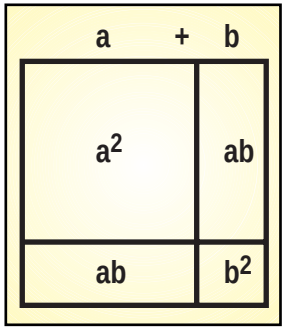
[82] Restak citing Judy Kearns, 202-203.

[83] Gardner, 201-202.

emotional baggage like this, helping a visual student graduate with intuition intact can feel like operating a station on the Underground Railroad.

The trick to mentoring visual students is to act as an agent working on their behalf, not a foreman trying to bring them under control. The first image-peculiar task is to reaffirm the value of visualization, which in turn reaffirms the visual student's self-worth. The second task is to shelter the student's skill from a less than accommodating environment. Finally, the author gives rounder students advice on how to survive in a straighter world, but emphasizes that regardless of the consequences, withholding their best work is not an option.

Mentoring visual talent begins with reaffirming the value of seeing. Having been ravaged by conventional education, some intuiters arrive in the College as disoriented as survivors of a mental train wreck. These students seem surprised to hear a teacher tell them that the subjective aspects of their work that other teachers and supervisors have been so consistently criticizing are actually a gift. Some are thrilled to learn that in addition to doing research *about* imagery, they are also permitted to make discoveries *with* imagery.



(a+b)□ = a□ +b□ +2ab

Source: modified from Arnheim, 221.

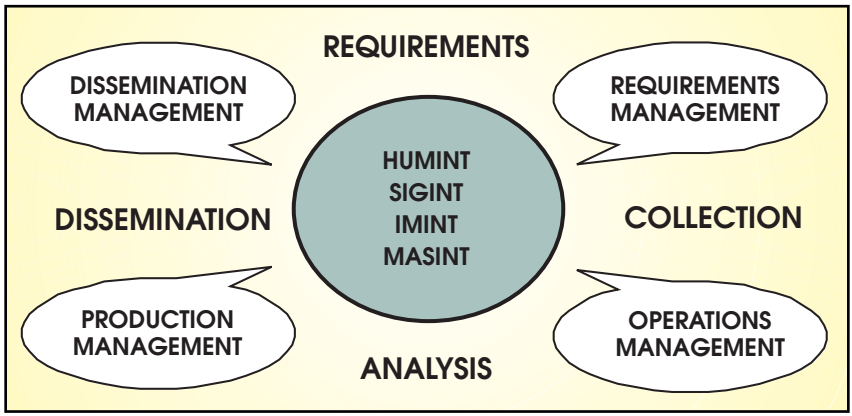
To make this point quickly, the author repeats an example selected by art professor Arnheim. To learn the equation $(a+b)^2 = a^2 + b^2 + 2ab$ one may either memorize the formula, Western-style, or with a "picture." If the style of seeing works for you, use it.

A second aspect of image agency is to defend visual students from an environment that can be openly hostile to the "other" intellect. To prepare for an examination, one student *drew* his notes. His test response matched the material flawlessly, but an instructor objected that the answers were not written in Western-style lines (see illustration on next page). The author defended the technique by pointing out that this student's graphic representation was more complete than the lines written by other students. Strong visualization is not limited to the formal image career field; the student in this case was not an image practitioner, but had learned the trick as an amateur actor in order to remember long scenes.[84]

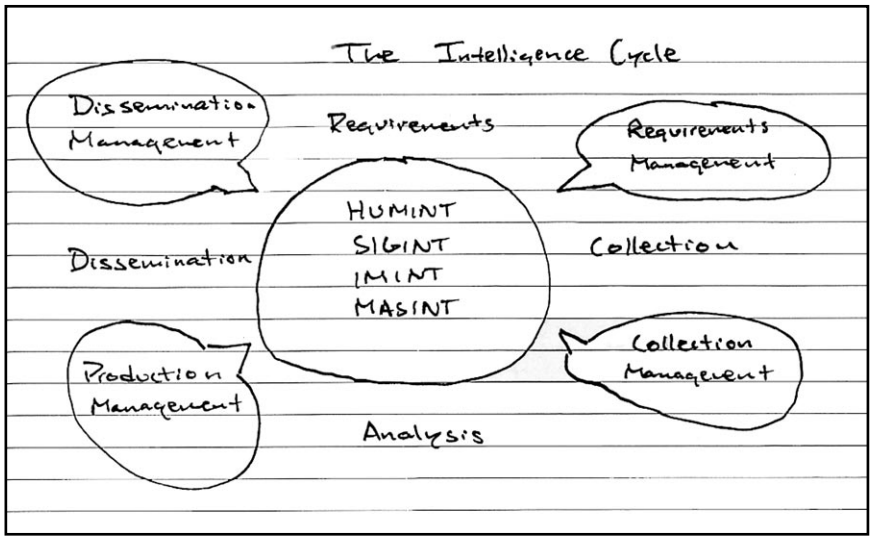
When gifted seers depart the College, the author shares an unvarnished warning about the negative aspects of their circumstances. In the modern workplace, open disparagement of age, sex, or race is rare, but diversity of intellect remains subject to all manner of abuse, and traditional thinkers will go to great lengths to defend the unnatural monopoly they have constructed for themselves. When he inconvenienced his commander's preconception with photographs, Major Urquhart was not only railroaded off the staff, the British army had him committed.

---

[84] Staff Sergeant Paul R. Wilson, U.S. Army, interview by author, 12 January 1999.



Study Notes



Test Response

Source: JMIC, Collection 600 Final Examination, Fall 1998.

Despite this opposition, for those who work in image research, silence (ironically) is not an option — analysts who see have a duty to enlighten those who do not. The blindness resulting from conventional thinking provides something of an excuse for conventional analysts — they are not intentionally obstructing the mission; they really believe they are doing the right thing. However, for an imagery analyst who sees a threat there is no excuse for not sounding an alarm. To provide this service, image practitioners must optimize their ability to see despite the words or numbers that would obstruct them. Even in today's degraded Intelligence Community, expert image visualization remains important to our national survival.

Blinded. As a predominantly conventional institution, most of the Joint Military Intelligence College strongly favors the left side of Table 1 and typically seeks to confine student thinking to this dimension. Of 129 citation formats in the College *Style Guide*, only four pertain to visual evidence.[85] Dozens of students have completed thesis research *about* imagery, but in the entire history of the College, only three have demonstrated a thesis primarily *with* imagery. Following his graduation, Bill Brei wrote that the Joint Publication on *Intelligence Support to Operations* was "weakened because it actually promotes intuition over reason" and that intelligence customers would be better served by the fictional character Mr. Spock's Vulcan Logic than the character Yoda's intuitive "Force."[86] Shortly after his own graduation, the author wrote a paper on imaging platforms that did not include sample frames — as though images were optional in an image paper. The remarkable aspect of these two examples is that both Brei and the author had served as qualified image intuiters before the College "straightened them out."

CONCLUSION

Visual evidence is distinct from descriptive evidence. As such, it requires distinct training for image interpreters and imagery analysts, distinct education for conventional analysts who would appreciate the advantages and disadvantages of visual evidence, and special shelter for analysts with visual talent. These three tasks are especially challenging in a Western culture that prefers descriptive evidence and assembly line processes.

Two patterns of diversity and domination parallel each other within the human mind, among human cultures, and between types of intelligence evidence. In each of these three arenas, one dimension of an asymmetry appreciates wholeness, simultaneity and synthesis while the other favors sequence, analysis and abstraction.

The problem is that in all three arenas, the sequential dimension dominates almost to the complete exclusion of the synthesizing dimension. Mentally, verbal intellect rationalizes its way into such total control that we deny intuition as a type of thinking. Culturally, the domination manifests itself in education systems that consist almost entirely of literacy and numeracy. Within intelligence analysis, the rule of sequential research leads to the cyclic demise of skilled image simultaneity.

Learning and teaching the "other intelligence" requires techniques distinct from traditional Western methods. Seeing is not something a teacher can verbally explain or something a student can learn from a book. In contrast to objectification, image comprehension requires internalization and subjective experience. People learn to see by creating images in their mind. Professional image practitioners learn their craft though years of on-the-job training, and even conventional intelligence analysts can learn more about visual evidence

---

[85] James S. Major, *The Style Guide*, 2d rev. ed., (Washington, DC: JMIC, August 1996), 158-240.

[86] Captain William S. Brei, U.S. Air Force, *Getting Intelligence Right: The Power of Logical Procedure*, Occasional Paper Number Two, (Washington, DC: Joint Military Intelligence College, January 1996), 1.

by conducting novice interpretation. Serving as an instructor for such an unusual topic includes the additional duties of reaffirming the value of visualization, sheltering visual talent, and advising members of the "other" intellectual culture how to survive in a square Intelligence Community.

The tone-deafness that confronts image students and teachers in our Western culture is daunting, but learning to see is worth the struggle. Within the Intelligence Community, the survival skill of expert visualization contributes to nothing less than the national survival. Furthermore, despite the challenge, it is not impossible to teach seeing, and every so often a blind student learns to *draw*.

BIBLIOGRAPHY

315th Training Squadron, U.S. Air Force. Imagery Analysis Apprentice. Training Plan X3ABR1N131 006. Goodfellow Air Force Base, Texas, 22 January 1997.

Akeret, Robert U. *Photo-Analysis: How to Interpret the Hidden Psychological Meaning of Personal and Public Photographs*. New York: Peter H. Wyden, Inc., 1973.

Andrew, Christopher. *For the President's Eyes Only: Secret Intelligence and the American Presidency from Washington to Bush*. New York: Harper Collins Publishers Inc., 1995.

Arnheim, Rudolf. *Visual Thinking*. Berkeley, California: University of California Press, 1969.

Artful Eye, The. Ed. Richard Gregory and others. New York: Oxford University Press, 1995.

Asymmetrical Function of the Brain. Ed. Marcel Kinsborne. Cambridge, UK: Cambridge University Press, 1978.

Babington-Smith, Constance. *Air Spy: The Story of Photo Intelligence in World War II*. New York: Ballantine Books, 1957.

Blakeslee, Sandra. "New Theories of Depression Focus on Brain's Two Sides." *New York Times*, 19 January 1999. URL <http://nytimes.com/library/national/science/011999sci-brain.html>. Accessed 1 March 1999.

Blakeslee, Thomas R. *The Right Brain: A New Understanding of the Unconscious Mind and Its Creative Powers*. Garden City, New York: Anchor Press/Doubleday, 1980.

Bloomer, Carolyn M. *Principles of Visual Perception.* 2d ed. New York: Design Press, 1990.

Brain and Language. Ed. Harry A. Whitaker. New York: Academic Press, Inc., 1981.

Brei, William S., Captain, U.S. Air Force. *Getting Intelligence Right: The Power of Logical Procedure*. Occasional Paper Number Two. Washington, DC: Joint Military Intelligence College, January 1996.

Bridge Too Far, A. Prods. Joseph E. Levine and Richard P. Levine, Dir. Richard Attenborough. United Artists, 1977.

Bruce, Vicki and Patrick Green. *Visual Perception: Physiology, Psychology and Ecology*. 2d ed. London: Lawrence Erlbaum Associates, 1990.

Brugioni, Dino A. "The Art and Science of Photoreconnaissance." *Scientific American*, March 1996, 78-85.

Brugioni and Robert F. McCort. "Personality: Arthur C. Lundahl." *Photogrammetric Engineering & Remote Sensing* 54, no. 2 (February 1988): 270-272.

Central Imagery Office. *Imagery Community Training Needs Survey*. Vol. 1-3. 1995.

Cognitive Process Analyses of Learning and Problem Solving. Vol. 2 of Aptitude, Learning, and Instruction. Ed. Richard E. Snow. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1980.

Cohen, Eliot A. “Only Half the Battle: American Intelligence and the Chinese Intervention in Korea 1950.” *Intelligence and National Security* 5, no. 1 (January 1990): 129-149.

Daston, Lorraine. “Fear and Loathing of the Imagination in Science.” *DAEDALUS* 127, no. 1 (Winter 1998): 73-95.

Devlin, Keith. *Goodbye, Descartes: The End of Logic and the Search for a New Cosmology of the Mind*. New York: John Wiley & Sons, Inc., 1997.

Dulles, Allen. *The Craft of Intelligence*. Westport, Connecticut: Greenwood Press, 1963.

Feynman, Richard P. “*Surely You Are Joking, Mr. Feynman*!” New York: Bantam Books, 1985.

Forisha, Barbara L. “Mental Imagery and Creativity: Review and Speculations.” *Journal of Mental Imagery* 2 (1978): 209-238.

Foster, Gregory D. “Research, Writing and the Mind of the Strategist.” *Joint Force Quarterly* no. 11 (Spring 1996): 111-115.

Gardner, Howard. *Frames of Mind: The Theory of Multiple Intelligences*. 2d ed. New York: HarperCollins, 1993.

Gazzaniga, Michael S. and Joseph E. LeDoux. *The Integrated Mind*. New York: Plenum Press, 1978.

Grant, Daniel. “Fine Arts and Liberal Arts.” *Washington Post Education Review*, 5 April 1998, 9+.

Harmon, Leon D. “The Recognition of Faces.” *Scientific American*, November 1973, 70-82.

Howard, Philip K. *The Death of Common Sense: How Law is Suffocating America*. New York: Random House, 1994.

Imagery. Ed. Ned Block. Cambridge, Massachusetts: The Massachusetts Institute of Technology (MIT) Press, 1981.

Ivry, Richard B. and Lynn C. Robertson. *The Two Sides of Perception*. Cambridge, Massachusetts: MIT Press, 1998.

Johnson, Loch K. “Making the Intelligence ‘Cycle’ Work.” *International Journal of Intelligence and CounterIntelligence* 1, no. 4 (Winter 1986-87): 1-20.

Joint Intelligence Center Pacific. Message to 315 TRS. Subject: “Joint Imagery Analysis Course (JIAC) Critique.” 152141Z January 1999.

Kennedy, William A. and Mark G. Marshall. “A Peek at the French Missile Complex.” *The Bulletin of the Atomic Scientists* 45, no. 7 (September 1989): 20-23.

Kolb, David A. *Experiential Learning: Experience as The Source of Learning and Development.* Englewood Cliffs, NJ: Prentice-Hall, Inc., 1984.

Kosslyn, Stephen M. *Image and Brain: The Resolution of the Imagery Debate*. 1st paper ed. Cambridge, Massachusetts: The MIT Press, 1996.

Krygiel, Annette J., Director, Central Imagery Office. “Exploiting the Picture Through ExPReS.” 1995.

Kuszewski, Michael D., Major, U.S. Marine Corps, Intelligence Officer, 8th Regiment, 2d Marine Division during Operation DESERT STORM. Interview by author, 29 October 1992.

Legeley-Padovani, A., C. Maring, R. Guillande and D. Huaman. "Mapping of Lava Flows Through SPOT Images — An Example of the Sabancay Volcano (Peru)." *International Journal of Remote Sensing* 18, no. 15 (October 1997): 3111-3133.

Major, James S. *The Style Guide*. 2d rev. ed. Washington, DC: JMIC, August 1996.

Manual of Photographic Interpretation. Ed. Robert N. Colwell. Washington, DC: American Society of Photogrammetry, 1960.

Marshall, Mark G. *Round Peg, Square Holes: The Nature of Imagery Analysis.* Washington, DC: JMIC, December 1997. (Unpublished paper)

Masters, Brooke A. "Domestic Violence Programs Save Men's Lives, Study Says." *Washington Post,* 14 March 1999, C1+.

McCarthy, Mary O. "The Mission to Warn: Disaster Looms." *Defense Intelligence Journal* 7, no. 2 (Fall 1998): 17-31.

McIntyre, Thomas J., Lieutenant Commander, U.S. Navy (Ret.). Interview by author, 21 October 1997.

Mental Imagery and Learning. Eds. Malcolm L. Fleming and Deane W. Hutton. Englewood Cliffs, New Jersey: Education Technology Publications, 1983.

Mitchell, William J. *The Reconfigured Eye: Visual Truth in the Post-Photographic Era*. 1st paper ed. Cambridge, Massachusetts: The MIT Press, 1994.

Nakamura, David. "School Budget Deal Saves Teaching Jobs," *Washington Post Loudoun News Extra*, 5 April 1998, 3.

National Photographic Interpretation Center (NPIC) Update, September 1996.

Norville, Charles R. NPIC Training Division Instructor. Interview by author, 24 January 1996.

Ornstein, Robert, E. *The Psychology of Consciousness*. 2d ed. New York: Harcourt Brace Jovanovich, Inc., 1977.

Ostertag, Martha and Kurt Sayenga, prods. "Spies Above." The Discovery Channel. February 1996.

Palmer, Parker J. *To Know As We Are Known: A Spirituality of Education*. New York: Harper & Row, 1983.

Restak, Richard M. *The Brain: The Last Frontier.* New York: Doubleday & Co., Inc., 1979.

Ryan, Cornelius. *A Bridge Too Far*. New York: Simon and Schuster, 1974.

Ryerson, Robert A. "Image Interpretation Concerns for the 1990s and Lessons from the Past." *Photogrammetric Engineering and Remote Sensing* 55, no. 10 (October 1989): 1427-1430.

Sergent, Justine. “The Cerebral Balance of Power: Confrontation or Cooperation.” *Journal of Experimental Psychology, Human Perception and Performance* 8, no. 253 (1982): 253-272.

Shenk, David. *Data Smog*. 1st paper ed. San Francisco, CA: Harper Edge, 1998.

Shlain, Leonard. *The Alphabet Versus the Goddess: The Conflict Between Word and Image*. New York: Viking, 1998.

Solso, Robert L. *Cognition and the Visual Arts*. Cambridge, Massachusetts: The MIT Press, 1994.

Springer, Sally P. and Georg Deutsch. *Left Brain, Right Brain*. 4th ed. New York: W.H. Freeman and Company, 1993.

Stevens, Kristina M. Staff Officer, Central Imagery Office. Interview by author, 6 May 1996.

Sullivan, David. Former NPIC Senior Imagery Analyst. Interview by author, 2 April 1998.

Systeme Probatoire d’Observation de la Terre (SPOT) 1, High Resolution Vehicle (HRV) 2, 051-261, Quadrant 3, 22 March 1986.

Tufte, Edward Rolf. *Envisioning Information*. Cheshire, Connecticut: Graphics Press, 1990.

U.S. Congress. House. Committee on Armed Services, Subcommittee on Oversight and Investigations. *Intelligence Successes and Failures in Operations DESERT SHIELD/STORM.* 103rd Cong., 1st sess., 16 August 1993.

U.S. Congress. House. Permanent Select Committee on Intelligence. *IC21: Intelligence Community in the 21st Century.* 104th Cong., 2nd Sess., 9 April 1996.

Weingast, Mattew S., Captain, U.S. Army, Executive Officer, B Troop, 4th Squadron, 7th Cavalry during Operation DESERT STORM. Interview by author, 15 October 1992 and telephone interview by author, 4 February 1999.

Wilson, Paul R., Staff Sergeant, U.S. Army. Interview by author, 12 January 1999.

STRUCTURE AND CORE COMPETENCIES OF DREXEL UNIVERSITY'S COMPETITIVE INTELLIGENCE CERTIFICATION PROGRAM

Katherine M. Shelfer
Drexel University

INTRODUCTION

This paper provides a brief overview of the structure, core competencies and learning reinforcements that form the basis for the graduate curriculum in competitive intelligence (CI) at Drexel University. For the past five years, the College of Information Science & Technology has offered a CI track within its graduate degree programs. Drexel is able to focus on developing core competencies and avoid pitfalls common to "islands" of information-related disciplines by (1) blending coursework in the requisite reference disciplines with internships, practicums and projects; and (2) incorporating guest presentations in business and technical disciplines. For the purpose of this paper, CI is defined as the process of evaluating the actual condition of the competitive environment; however, this external focus relies heavily on knowledge management (KM), or the organization's capability to manage its accumulated information and intellectual assets.

Drexel's goal is to prepare proactive CI professionals who are able to facilitate and coordinate the functional aspects of acquisition, analysis, delivery and protection of actionable intelligence[1] in order to support the strategic objectives of the organization. Coursework covers but *is not limited* to the ability to (1) define requirements; (2) specify, design, procure and implement information systems and technologies (IS/IT) to streamline and enhance the continuous collection and dissemination of intelligence; and (3) analyze, package and deliver intelligence in a format that meets the needs and learning styles of the appropriate users. Therefore, prior to entering the certification program, students are required to take courses in information systems analysis, information resources and analysis (I and II), action research, and professional and social aspects of information services. Students must generally spend at least four hours in advance outside preparation for each scheduled hour of class. Three courses form the required core of the certification program:

Business Resources. A wide variety of electronic and print resources are introduced, evaluated, compared and used in information sleuthing exercises that are designed to provide additional insights into factors that drive the query and impact

[1] William S. Brei, *Getting Intelligence Right*., Occasional Paper Number Two. (Washington, DC: Joint Military Intelligence College, January 1996), 1.

the results. Students prepare and present an executive briefing accompanied by an annotated research guide for topics requested by senior managers of regional, national and global companies.

Information Services to Organizations. Through the classics, students are introduced to the strategic and tactical importance of intelligence. Through case reports and other assignments, students evaluate human and economic factors in addition to the technological parameters related to the design and implementation of IS/IT. Students may choose between either a class term project or an IS/IT practicum in which they negotiate, develop, manage and assess projects for senior managers in, for example, technology transfer centers and virtual corporations.

Competitive Intelligence. This course provides immersion, guided practice and immediate feedback. Choreographed cases focus on the unique challenges related to dynamic and discontinuous environments such as merging technologies, merging industries and emerging global competition. Topics include (1) needs assessment; (2) acquisition, preparation and delivery of actionable intelligence; (3) models; (4) metrics; (5) war games; (6) ethics; (7) counterintelligence; and hands-on use of CI software(s). Practicums are currently offered with companies in medical and health-related industries, electronic commerce, technology transfer, and smartcard systems, among others.

Students are encouraged to take additional courses in both resources and information technology, and to become proficient in appropriate foreign language(s). Drexel's CI students founded the second student chapter of the Society of Competitive Intelligence Professionals (SCIP) and are expected to participate in related professional organizations.

THE BUSINESS RESOURCES COURSE

Course Description And Exit Competencies

This course emphasizes use of value-added print and electronic resources to meet user needs for information related to (1) companies, industries and markets; (2) corporate and international finance and investments; and (3) economic and demographic statistics. One or more of the following topics are included as time permits: accounting; human resources; insurance and risk management; intellectual property, information systems; and/or operations and logistics. The exit competencies for this course are to:

1. Acquire a basic vocabulary and conceptual awareness of various aspects of general business research.
2. Identify and use major sources for company, industry and market research.
3. Identify and select the best source from similar sources in various formats.
4. Analyze queries in preparation for searching.
5. Select appropriate methods and sources to respond to these queries.
6. Be aware of the significance, use and misuse of economic and demographic data.

7. Identify and use core value-added print and electronic resources to prepare and present an analysis of a specific business research need.

The ability to select and use appropriate secondary business resources requires a conceptual awareness of topics and tools, but expertise requires a total immersion experience. This is due to the differences in (1) similar content; (2) economic, nationalistic and regional data collection and dissemination; and (3) distribution channels. Students compare results extracted from different resources to gain insights into content quality, methodology, vocabulary, hierarchy, interface options and biases.

Course Materials

A brief list of readings, including assigned and supplemental print texts, is given in section one of the accompanying bibliography. The College provides access to DIALOG, LEXIS-NEXIS and Dow Jones Interactive. The Hagerty Library (*http://dulib.library.drexel.edu/* provides additional electronic resources and cooperates with the LeBow College of Business to provide students access to workbench software for market research and financial analysis, such as Simmons' *Choices* and Compustat's *Research Insights.*

Investment Exercise

Students are asked to select, manage and report weekly on a virtual investment portfolio using either of the following options to: (1) trade celebrities using web sites such as *www.wallstreetsports.com* or *roguemarket.com* or *www.hsx.com*; or (2) choose a web site and trade "virtually" in their choice of specific securities using "funny money."

Term Project: An Executive Briefing And Research Guide

Three deliverables are produced for the term project: (1) a briefing on the topic (8-10 pages + bibliography); (2) a separate annotated research guide (1-2 pages); and (3) a 10-15 minute presentation with supporting media. An electronic copy of all three deliverables is required. Students are expected to summarize the key elements in no more than ten minutes. They are to expected to introduce the current thinkers, theories, problems, etc. of the negotiated topic, beginning with a concise "state of the art" overview that includes the:

- Nature and significance of the information need
- Key players
- Relevant current financial/marketing information
- Legal/regulatory and ethical considerations trends, with sources/strategies to follow such trends

Sample papers (with proprietary information extracted) and research guides are on reserve in the library and on the instructor's web site.[2] Guides are also available through libraries, the Clearinghouse (www.clearinghouse.com) and in the literatures of librarianship and the topic areas.

Weekly Annotations And Queries

Using the guidelines below, students are expected to prepare detailed annotations and written comparisons of at least three selected sources and to provide short answers to assigned queries each week.

Guidelines for Annotations and Queries

I. Annotations: *Use a spreadsheet/database format that covers the basics* below
   a. Coverage, focus, interesting points/unique features
   b. Origin of data, methods of calculation, presentation style
   c. Currency, e.g. data in relation to copyright of source, frequency of source updates
   d. Formats available, costs; how content varies by provider, interface, format

II. Queries
   a. Repeat question verbatim; address ambiguities and define terms if necessary
   b. Give strategy, full documentation for answer — clear high-lighted photocopy
   c. Limit your answers to the problem at hand — no "war stories"

III. Analysis
   a. Give a 1-sentence evaluation of your success — how long it took and whether your customer would wait or pay what it cost for the answer?

Queries are designed to drill the students in the resources and to help them recognize any blind spots caused by preconceived notions. For this reason, queries are rarely straightforward and contain multiple lessons to be learned. Students are expected to (1) select the *best* strategies and resources; and (2) consider *resource costs* and *time constraints* in evaluating their results. This class requires the use of library-based value-added reference tools (regardless of location or format). Such deep "tools" courses are unique to library and information science programs, so a discussion with detailed examples follows. It should be noted that at first students feel overwhelmed, but as their proficiency improves, so does their enthusiasm.

To help students develop quantitative and qualitative filters, they begin with such deceptively simple question as:

- Which Congressional staff members have expertise related to E-commerce?

Query analysis helps students develop an increased awareness of the multi-dimensional nature of queries. For example, if asked to choose between two job offers in different cities, they quickly realize that merely generating comparable cost of living statistics or a salary calculation is not an acceptable approach.

---

[2] Although available for the past four years, the instructor's web site is being reconfigured to support the distance education CI certification program that begins Fall 1999. As a result, access is unstable at the time this paper was prepared.

Source Comparisons. Source comparisons are requested in the tabular format shown to provide target practice in techniques of resource analysis, data extraction and filtering.

SOURCE	TARGET MARKET	CONTENTS	DISTINCTION(S)	COST by FORMAT
a. ABI/Inform (UMI)				
b. Business Index (IAC)				
c. Business Periodicals Index (WILSON)				
d. Business & Industry (RDS)				
e. TableBase (RDS)				
f. Predicasts (IAC)				

1. Which executive department(s) contribute to STAT-USA?
2. What is its focus? How does STAT-USA differ from the databases above?

Market Information. The ability to quickly produce relevant general market information can prevent myopia that leads to disaster — like a famous fast food chain's decision to sell non-Kosher beef in Israel on the Sabbath! The following examples are real queries:.

- How has the Fortune 500 ranking methodology changed between 1987-1997? How could this mean anything to marketing?
- What is the market share for bottled water?
- What is a Zons [or *Moon Tank* [or.....]?. Who makes it? Who else makes it?
- My company makes great earthworm pizzas. Please help me create a marketing plan.

Though speed is often essential, CI specialists cannot afford to jump to conclusions based on limited data, nor can they presume that similar questions (How many dogs/horses in Florida?) will have simple or even similar answers. Basic tables such as the one below are used to prepare students for class discussion of franchises, co-branding, *zaibatsu* and the role of history in market dynamics.

Restaurant	Coke or Pepsi?	Reason(s)
Wendy's		
McDonalds		
Burger King		
Pizza Hut		

Finance and Accounting. Drexel CI students often have background in business and scientific disciplines where the important information is numeric. However, CI specialists cannot afford to be spreadsheet junkies who ignore significant cultural, historical or

methodological factors. To better prepare those students who lack backgrounds in finance and accounting, there are additional readings, instructor's notes, guest experts and supplemental videos. Selected "awareness" queries follow:

- For a Fortune 100 company, annotate the various entries of its most recent income statement and balance sheet. What do these records indicate? How are they used?
- Calculate "the" P/E ratio for a Fortune 100, then explain **Value Line's** different P/E ratios. Is **Value Line's** good reputation deserved? Find out.
- Explain the impact of the different data sets used by three major financial ratio tools.
- What impact would (1) Euro dollars and/or (2) ECUs have on treasury management?
- Articles on S&L scandals also mention real estate, junk bonds and accounting changes. Why? What impact did changing "goodwill" on the balance sheet have on banks? (Hint, Anchor Bank in Florida)

Students are also encouraged to appreciate the difference a major market upheaval makes by examining common stock quotations for both a Fortune 500 and a Global 1000 company for specific trading dates that bracket events such as Black Monday. Use of financial analysis is covered in greater detail in the CI course.

Statistics and Statistical Abuses. In working with statistics, qualitative analysis is rarely attached to the original numeric data. Updates, retractions and even definitions may be as informative as the numbers themselves. The following three examples illustrate this point:

- As a shortcut to improve their statistics, the Philadelphia police reportedly downgraded crime categories — strong-arm robberies became "lost" items, for example. The data are reported in one location and the newspaper reports in another. Students examine how such misleading statistics might make comparisons difficult.
- Students suggest definitions for "unemployed" that they think are reflected in the Unemployment Rate. They then retrieve the actual definitions and evaluate them against their assumptions.
- Students are asked to find reasons for opposition to the census sampling techniques the Bureau wants to use for the 2000 Census of Population. (One supporting online exercise requires that students extract data from nine separate Census files in order to find what appears to be a simple answer.)

Relevant, deceptively simple economic queries such as these are used to help students develop a heightened awareness of the frailty of statistical information:

- What percentage of general merchandise stores in the U.S. sold cigarettes and tobacco in 1987? in 1997? Can you explain any changes?
- What was the total number of retail establishments in Philadelphia in 1990? How many hardware stores were there in 1990 and how many people worked in them?

- Find the most recent annual expenditures for the police department for Jacksonville, FL. Compare with another city of similar size.
- A client needs the most recent yearly figures for (select one): Life insurance sold in the U.S., or PVC materials manufactured in the U.S. *and* any projections for the amount manufactured after 1996.

Intellectual Property. Intellectual property issues are covered in several courses in the College; for example, patents are included in at least two others — science and technology tools and CI. In this course, there are also trademark exercises such as:

- What year did Coca Cola register its first trademark? Its newest trademark? Can you verify this in a second source? Can you find a trademark for ***Surge***?
- Where can you find the most comprehensive list of Products/Trademarks for Hallmark Cards?
- Pick two of the trademarks given and find the following — when filed; when filed for opposition; when first issued. ***Land's End; Cover Girl; Kiss; Bitrex; Jetform***

Strategic and Operations Management. The management exercise below is based on an assignment in a sophomore management course at The Florida State University College of Business. Using the following chart, students are asked to identify the (1) people and (2) project management tools and to give the significance of each.

Identify the person and his/her significance		Identify the acronym and its importance.	
Person	**Hint**	**Acronym**	**Hint**
Deming	Process, 14 points	JIT	Flow
Juran	Process or people Review/reward, quality	SPC	Pareto
Taguchi/Ishikawa	Process control	NPC (tricky)	Control
Peters	Excellence	SQC	Trends
Albrecht/Zemke	Service America	ISO 9000	Histogram
Drucker	Influence on U.S. Mgmt	TPM	?
Taylor	Scientific Management		

As time permits, additional topics are covered such as management information systems, or insurance and real estate. In addition to having fun, students gain an appreciation of context in learning about headhunters or how umbrellas work.

INFORMATION SERVICES IN ORGANIZATIONS COURSE

Course Description, Content and Exit Competencies

This course examines innovative approaches to information services in organizations. The exit competencies are to:

1. Understand the structures of organizations and the functions of information acquisition, storage, retrieval and analysis within them.
2. Know the information needs in strategic organizational planning and management.
3. Analyze organizations in terms of information life cycle and information processes.
4. Develop information services for organizational problem solving.

Principal topics of this course include: (1) perspectives of important military strategists and others regarding intelligence; (2) elements of information systems and services; (3) strategic use of information systems; (4) operational uses of information systems and services; (5) implementation of information systems and services; (6) technology selection and assessment; and (7) related ethics and cost-benefit issues. Classic readings related to strategy, business, communication and sociology are used to foster critical thinking skills useful in case analysis and to prepare for the CI course.

Supplemental Activities in the Course

In addition to class presentations, there is a class term project that uses Microsoft Access as well as about a dozen short goal-seeking exercises using Microsoft Excel to evaluate and present various Information Systems/Information Technology (IS/IT) options. To encourage students to grasp the significance of the course materials, short videos on intranets, push/pull technology, Ecommerce and similar topics are available. Guest speakers from innovative Knowledge Management (KM) and Competitive Intelligence (CI) solutions providers also spend time with Drexel students.

Course Materials

This course continues to evolve in the direction of KM for competitive advantage. There are usually about a half-dozen cases which are studied in greater detail, but to support the most recent term project, an undergraduate management information systems (MIS) text provided the desired quantity of case reports on use of internets, intranets (internal networks) and extranets (external interorganizational networks). This text and examples of supplemental materials are listed in section two of the accompanying bibliography.

Presentation and Evaluation

Course evaluation is based on class participation, individual presentations, case analysis, and the term project or practicum, course logistics are managed each term by the class

and the teams. The term project is either a class/team effort such as the database design project discussed below or an individual practicum related to information technology assessment that has received prior approval of the instructor. Oral presentations are accompanied by written documents that vary with the nature of the negotiated activity. All students make at least one class presentation related to assigned materials. All assignments are submitted in electronic form.

Because each student is evaluated on both the presentation and the degree of involvement, skills in project design, project management, resource allocation and speech communication are embedded in the course design. This model may be common in other disciplines, but is difficult to implement successfully in information science programs. Successful outcomes are generally due to the leadership initiative of the library science students, the design initiative of the information science students, and the maturity level of these advanced graduate students.

Term Project

The most recent term project was the design of an Access database "toolkit" of IS/IT concepts, tools and techniques (current to 1998) that were considered and either used or rejected by the companies included in the case reports. The goal of this particular database was to document class insights into strategies for the implementation and use of IS/IT to solve business problems and create competitive advantage. The general goals of term projects are to enable students to:

- Develop proficiency in planning, designing and implementing a relational database
- Develop an awareness of information services in organizations
- Enable students to approach IS/IT problems in an analytical and strategic fashion
- Encourage students to become familiar with E-commerce information systems technology linkages with legacy systems, and strategic implementation issues that benefit from internet, intranet and extranet solutions.

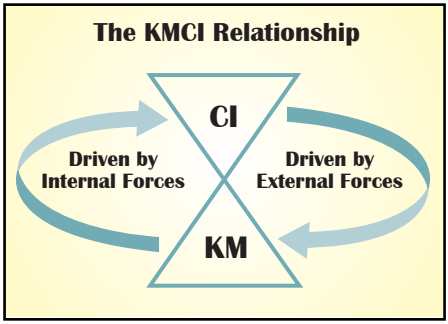
Evaluation of the term project is generally based on how well students are able to:

- Use the terms, data and concepts in the examples and case reports from the selected texts as their framework.
- Design the table(s) in which they input key concepts and identify key field(s) that will allow them to relate the tables and retrieve information on specific questions such as (in this project):
  - Which of the companies studied have extranets?
  - Which softwares are used for e-banking?
  - What are some examples of custom business applications?
  - How do Data Marts provide competitive advantage?
  - With which companies does company [x] have a relationship — e.g. an alliance or merger/acquisition?
  - How can a company use IS/IT to plan and provide for expansion/growth?

Students are advised not to presume to know what their users know or need. They are encouraged to plan for quick revision of the prototype.[3] To prevent term projects from becoming useless data dumps, students must (1) manage interdisciplinary collaboration using virtual teams; (2) consider differences in perspective and cognitive style, and (3) work through the obvious technical and design issues. In this class, students found the project both challenging and humorous — as happened when they realized the control vocabulary for both problem and solution were identical. Project teams generally come to appreciate the advantages that accrue to cross-functional and cross-disciplinary teams, as it inevitably streamlines the process of linking functional imperatives to competitive advantage.

Discussion

The functional approach to KM views the mission and structure of IS/IT from the context of support for the functional imperatives and operational goals of the organization, so IS/IT texts usually examine the various organizational structures that (along with environment) influence system design, implementation and utilization. The KMCI model below is used to orient this course in a more holistic fashion:



source: author

Military and business classics are first surveyed for what they teach about the (1) importance of using external intelligence to drive internal information systems design and implementation; and (2) the importance of the human dimension. This perspective is incorporated into dozens of short case reports on the design, implementation and integration of internet, intranet and extranet services that are intended to solve business problems and provide competitive advantage.

Whereas the "tools" course previously discussed relies on a lecture/discussion model, this course is experimental and continually evolving due to advances in IS/IT. Initially it focused almost entirely on using legacy systems to support functional imperatives. Today, it is a study of the competitive advantages to be obtained through use of IS/IT to create strategic linkages between internal (KM) and external (CI) information; that is, between functional areas, suppliers, and customers. Since this course provides insights into the strategic and tactical advantages to be obtained through KM, Blue Angel (*http://www.blueangeltech.com*) software is scheduled to be integrated into the course in '99-'00 so that this course will *de facto* become a course on the role of KM in CI, and provide greater emphasis on improving the strategic value of legacy systems.

The term project in time will be replaced with lab work related to the strategic use of (primarily) structured data. While retaining the current emphasis on internets, intranets

[3] For example, the Prince of Wales' web site deals with hermetically sealed foods.

and extranets, additional topics planned for next year are (1) the use of KM software; (2) the importance of interoperability; and (3) strategic advantages and legal/ethical constraints related to the mining of integrated customer, company and supplier data. Regardless of the specific content included, this course will retain a strong emphasis on importance of the IS/IT relationship to CI.

As the instructional approach in this course is generally experimental, students are able to participate in enterprise collaboration and self-directed learning using the *teacher as coach* method. Students are sent the syllabus and an assignment matrix (a piece of one is shown below) about two weeks in advance. By the end of the second week of class they must decide for themselves how they will structure the learning process to teach themselves the material.

Chapter	Discussion Questions	Real World Problems	Application Exercises
1	3,5,6,9	1,4	1,2,4; design your main Access tables*
2	4,5,7,9	4,5	Discuss 1-3, do 4-5. For #5, complete a chart with 1997, 1999. How much 1999 data can you add? Where did you find it?
3	3,6,7,9,10	1,3,4	Discuss 1,2, do 3,4
4	4,6,7,8	1,2,4	1,2

During the first class, the instructor provides an overview of the course content, a walk-through on the term project, a short presentation on strategy and tactics, and a fly-by on the classics to be used in the course. During the second class, the instructor leaves the room during the planning session — in other words, there is no "higher authority" to which students can appeal. In the third session, the instructor contributes insights by leading sociologists and business writers, presents an overview of the first few chapters of the text, hands out selected case reports and moderates the discussion that follows. From that point on, the instructor injects occasional insights and shares relevant current news and events. Otherwise, the instructor is a (relatively) silent observer until the wrap-up in the last class session.

Students in the course often have deep backgrounds in Structured Query Language (SQL), a 4th-generation specialized data manipulation language used for ad hoc queries in very powerful relational database management systems. SQL program statements allow users to work with "many-to-many" table relationships rather than the limited "one-to-many" relationships used in Microsoft *Access* In this class, the sophisticated students usually consider themselves severely hampered by the limitations of Microsoft's current product. However, once the project is underway, students are introduced to relevant examples that demonstrate the power of common commercial software for solving simple problems. A future term project will be to update and combine multiple projects and make the master file available via the web. This will give Drexel affiliates long-term access to the work of other Drexel students, as well as the opportunity to monitor the long-term effectiveness of the solutions implemented in the case reports studied.

When used with the advanced graduate students in this course, the results of the *teacher as coach* method are positive. During the most recent term, for example, the teacher was forced to miss a class. Students chose to hold the class, make the scheduled presentations and use the remaining time to revise their project plans. The "admin" team then prepared and presented a report to the instructor. By the end of the course, students had bonded within and among teams, and across sub-discipline, ethnic and gender lines. The students suggested and strongly support the creation of a class contact management system to provide them with program news and continued access to a network of peer consultants. This was selected as the next term's project.

COMPETITIVE INTELLIGENCE COURSE

Course Description, Major Topics And Exit Competencies

This capstone course presumes the student comes prepared with (1) ability to effectively use appropriate secondary resources, (2) basic knowledge of key business topics; (3) skill in information needs analysis; and (4) basic understanding of information services in organizations. After a brief introduction to the process of establishing and managing the continuous process of CI, the balance of the course covers the identification, extraction, filtration and analysis of relevant patent, financial, production, and market data useful for an organization's strategic, tactical and operational decision-making. Case choreography, discussed in a separate section below, is used to encourage students to effectively prioritize, analyze, integrate, document and present the intelligence value extracted from hidden knowledge. The course concludes with a discussion of CI ethics and the various security issues related to acquiring and protecting key business information.

The major topics covered in the course are identified below:

- Introducing and Establishing The CI Process. Subtopics include an introduction to CI, organizing the team(s), performing a needs assessment, and developing an implementation plan.
- The Internal Intelligence Effort (KM). Subtopics include establishing focus, engendering stakeholder support, selecting and using KM and CI software, and the continuous marketing effort that is required to acquire, filter and share CI.
- Gathering Published Information. Expanding on tools covered previously, this one includes use of additional print and electronic data available through commercial and government sources.
- Gathering External Information. Subtopics include a variety of human intelligence gathering activities such as professional meetings, trade shows, human networks and interviews.
- The Intelligence Effort. Sessions cover competitor profiling, acquisition, analysis and use of patent, financial, production, & market information, and use of specific CI Models & Metrics.
- Packaging Intelligence. Subtopics include packaging, timing and presenting intelligence reports.

- Ethics and Security. Subtopics include ethics and counterintelligence and a few final caveats.
- Critical Thinking Skills. This course concludes with several sessions on competitive strategy using scenarios, war games and other exercises designed to encourage students to think ahead and out of the box. Strategy games vary but examples are *Go, Civilization II*, and the Fuld War Room, among others.

- The exit competencies for the course include the ability to:
  - identify the applications of CI/analyzed information
  - analyze existing data of four types: patent, financial, production, market
  - fit the presentation to the particular audience or need

Presentation And Evaluation

Lectures, multimedia, invited guests, case choreography, CI software, war games, and various exercises are used to support the goals and objectives of the course. Students are evaluated based on a combination of weekly case assignments, team participation and either a comprehensive competitor profile or a special topical intelligence briefing.

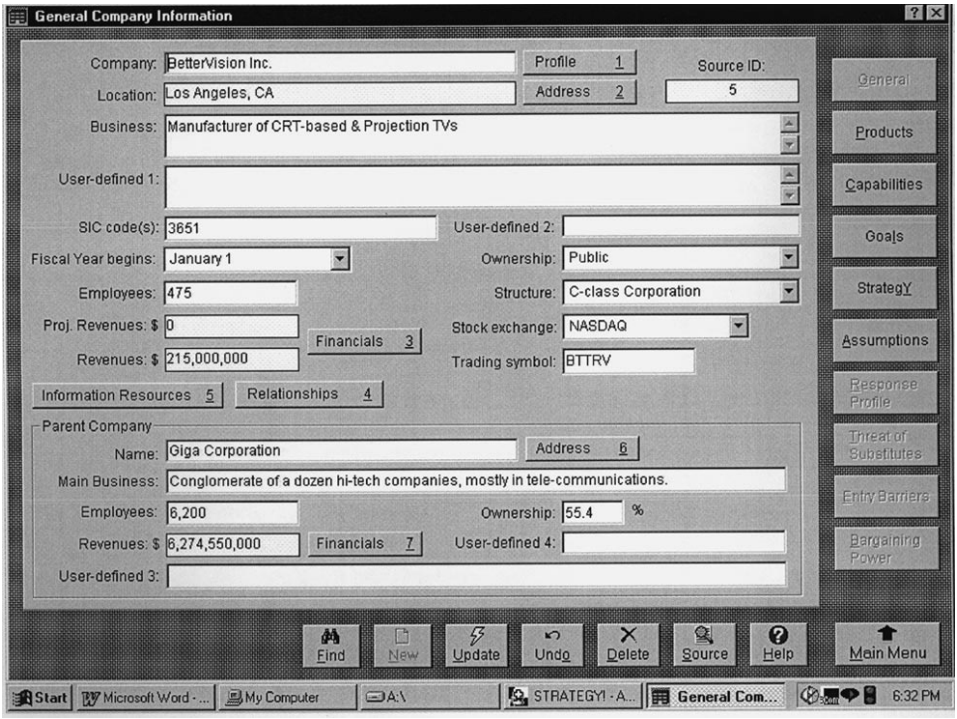
Course Materials

With the exception of certain proprietary information, the materials used in this course are primarily produced by the Society of CI Professionals (SCIP), leading CI consulting firms, scholars and respected practitioners. Readings are designed to provide a balanced view of hard and soft intelligence, and to examine the relative effectiveness of various tools and techniques. A list of the major sources used in the course is contained in section three of the accompanying bibliography.

CI Software Used in the Course

Students are expected to become familiar with how CI software(s) can streamline and assist the intelligence process. This course currently uses *Strategy!(http://www.strategy.cc)* and *IntelAssist (http://www.cipher-sys.com)*. Strategy! is a highly-regarded commercial package that focuses on low costs, fast start-up, simplicity and ease of use. This database design uses the Porter model and others as a framework to assist CI specialists in focusing on filtering and working with relevant internal and external information. This software can easily be customized for different companies and different industries. An example customer profile screen used in the tutorial is shown below.

An important new addition to the CI course is the availability of *IntelAssist. IntelAssist* is part of a powerful suite of intelligence softwares developed by Cipher Systems. This sophisticated and highly customizable CI groupware is developed on both *Lotus Notes* and *Microsoft Exchange* and can be viewed in those environments or as an intranet application. It includes navigator, mail gateway, competitor WWW monitoring and information refinery features. Its intelligent agents are capable of working with sophisticated search criteria to mine internal data warehouses as well as external supermarkets, specialty shops and flea markets of secondary information. The results are then refined and



source: Strategy! online, used by permission.

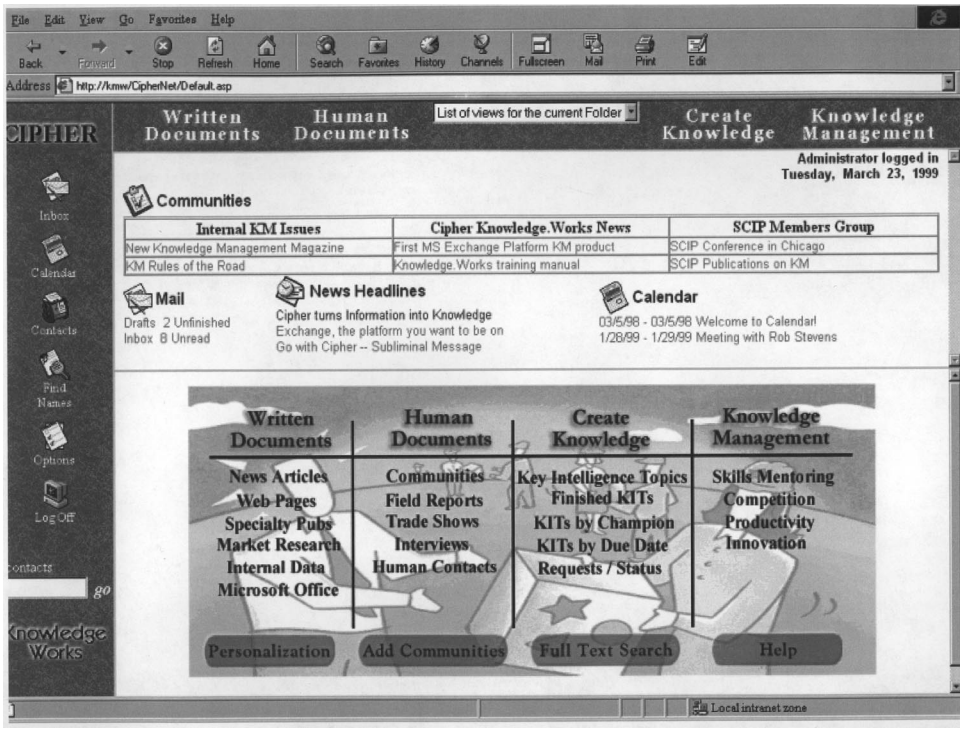
delivered to specified locations on the analyst's workbench. (Cipher's local office is in Arnold, Maryland and their employees possess compartmented clearances.)

Case Choreography

The CI specialist is charged to provide actionable intelligence in the right format to the right decisionmaker at the right time in the most cost-effective manner. Most senior executives want a two-page summary of the situation with recommendation(s). However, senior managers come from different functional areas. They have different degrees of comfort with formats and prefer different levels of detail. Since CI professionals must perform optimally at a very high rate of speed, it follows that effective and efficient CI requires skill and practice. Rangan[4] believes that choreographing a case is the most successful way to help students learn to identify and manipulate relevant data in order to

> learn inductively....In comparing a series of cases and contrasting them with each other, students should learn to slowly construct a framework built out of relevant information, consolidate it and sharpen it as a robust way of under-

[4] V. Kasturi Rangan, "Choreographing a Case Class" available from Harvard Business School http://www.hbs.edu/.



source: Cipher Systems, used by permission.

standing not only the case issues discussed, but also as a useful platform to support future thought on related issues.

Rangan believes that the instructor should not intellectually dominate the learning process. Instead, students should be encouraged to use an existing framework to converge on a problem and develop actionable intelligence. In the case-based class, there are no bad answers — but he acknowledges that there can be faulty premises based on sloppy preparation. The successful CI practitioner must be self-directed and prepared. By framing the major ideas, resources, and practices around the three companies described below, student teams gain an acute awareness of the different intelligence needs of companies and industries as well as the degree of utility of the major resources, tools and techniques when applied to various situations.

Case choreography is used in CI education at Drexel to hammer home the point that precision is an unaffordable luxury in an environment where overnight dislocations of entire industries are commonplace. Soft intelligence requires confirmation, but there is no time to triangulate CI to the "third decimal point." Students are encouraged to become aware of the utility of traditional top-down and bottom-up analysis models and metrics. However, these are not substitutes for mental agility, critical thinking skills, or expanded awareness of the tremendous impact of the instructor's famous "four 'ics'" emphasized

through Drexel's CI program — demographics, psychographics, geographics and politics. Students are pushed to identify trends and predict competitor behaviors.

Students are provided the opportunity to use IS/IT for CI as a means of streamlining data collection and stimulating their awareness of "soft" variables. The exercises are designed to (1) encourage critical thinking skills; (2) provide practice using information related to the assigned cases, and (3) encourage the development of communication skills that convey an awareness of the strategic and tactical value of CI. Since lack of preparation by one hinders the effective learning experience of all, advance preparation is required to effectively examine cases such as those outlined below.

Merck & Co., Inc. Merck is an established public company in the pharmaceuticals industry. Merck *discovers, develops, manufactures and markets a broad range of innovative products to improve human health,* according to the company's central web site (*http://www.merck.com/about/*). According to data published in *Business Week*,[5] Merck is in the top ten in earnings among all U.S. Companies, and the only one in its industry so positioned. Advances in the life sciences increasingly challenge the synthetic chemicals industry, and although Merck leads its industry, it is only slightly ahead of Johnson & Johnson.[6] CI is important in this well-established industry because product development is time-consuming, highly regulated, requires good science and is very expensive. Merck's CI operations are well-defined.

Dreamworks SKG. Dreamworks is a private company with a major presence in the entertainment industry. It was founded in 1994 by Steven Spielberg (a successful movie producer), Jeffrey Katzenberg (a former Disney executive responsible for Disney's successful re-entry into movie animation), and David Geffen (a music industry executive with access to the stars). The first new studio to be founded in 65 years, DreamWorks rapidly raised $2.7 billion and *promised to rewrite the rules of Hollywood*.[7] Microsoft cofounder Paul Allen owns approximately 18% of Dreamworks. The partners' synergism is responsible for much of the success of the enterprise. The construction of a competitor profile is difficult for Dreamworks because it is a highly diversified private company with a wide range of overlapping products and market segments and company policies that inhibit data-gathering by outsiders.

Cybermark L.L.C. Founded in 1996, Cybermark (http://www.cybermark.com) is a joint venture of three large and very diverse partners: Sallie Mae (formerly the Student Loan Marketing Association), Battelle Memorial Institute, and Huntington Bancshares. Cybermark is a smartcard solutions provider of chipcards designed to be *a one-card solution for retail point-of-sale purchases, identification, secure access to buildings and computer networks, and an array of banking, telephony and customer loyalty functions.* Cybermark is a virtual corporation that is not ISO 9000 certified, but it must watch for

---

5 "Bumping Against The Ceiling," *Business Week*, 1 March 1999, 72.

6 "World News: Can Carton Makers Keep up with Pharma Industry?" *Paperboard Packaging*, 84 (January 1999): 13.

7 "Face value: How well Mr. Spielberg wears a suit," *The Economist*, 1 August 1998, 58.

challenges from global corporations such as Group Bull who often play by different rules. Cybermark uses alliances and strategic partners to serve a market niche that is below the radar of most analysts. Microsoft has recently teamed up with Cybermark to pilot use of Cybermark's smartcard technology and Microsoft's chip-card operating system.[8] Very little information is available in secondary sources about Cybermark. Its web site is deliberately vague — e.g., only a handful of its clients are even listed on the site.

Procedures and Sample Exercises.

The members of the class form virtual teams to identify and track one of these three companies throughout the term. Students are given a very limited space in which to present their results, as the goal is quality, brevity and clarity, not quantity! The Case assignment for the first unit is given below.

Unit I. Use FREE internet sites only. You will build on these results throughout the term.

- Assume you are a top executive in ***AmpRamp***, [your company]'s major competitor. Complete the Tyson Diagnostic Questionnaire from the point of view of [your company]'s senior management team. Be prepared to discuss the following:

  a. For [your company], briefly describe your business and the markets in which it competes.

  b. Who are [your company]'s key competitors?

  c. What are [your company]'s main competing products?

  d. How do these (competitors/products) compete? e.g., cost, differentiation, innovation, other?

  e. What are the key success factors in [your company]?

  f. What is [your company]'s overall market strategy?

  g. What does [your company] think is its strongest competitive advantage?

  h. What types of competitive information are important to [your company]?

  i. Which competitor or competitive situation(s) are keeping you awake at night?

- For [your company] be prepared to discuss the priority and availability of the types of information listed below (taken from the Tyson Diagnostic Questionnaire). Include any important information you feel is missing from this list. You will probably revise this list several times during the term!

---

[8] Steven Marlin, "Pilots upcoming for Microsoft chip-card OS," *Bank Systems + Technology* (February 1999): 24.

RANK	Importance	Availability	Category
—	1 2 3 4 5	1 2 3 4 5	Competitive Strategies
—	1 2 3 4 5	1 2 3 4 5	Political/Cultural
—	1 2 3 4 5	1 2 3 4 5	R&D, Product Plans
—	1 2 3 4 5	1 2 3 4 5	Legal/Regulatory
—	1 2 3 4 5	1 2 3 4 5	Market Position/Shares
—	1 2 3 4 5	1 2 3 4 5	Organization Structure
—	1 2 3 4 5	1 2 3 4 5	Customer Information
—	1 2 3 4 5	1 2 3 4 5	Market Strategy
—	1 2 3 4 5	1 2 3 4 5	Sales Activities
—	1 2 3 4 5	1 2 3 4 5	Pricing
—	1 2 3 4 5	1 2 3 4 5	Product information
—	1 2 3 4 5	1 2 3 4 5	Other: _____

Conclusion

The accompanying bibliography provides an idea of the type of materials used to prepare lectures and assignments. No current articles are included. Before they enter the CI track, students are expected to know how to locate and judge the quality of current literature for themselves. Reference master works and literary classics are used to give students an orientation, a tutorial, or a starting point for their efforts. CI specialists are often generalists who facilitate the movement of information, so Drexel's CI program provides an overview of a wide variety of functions, tools and techniques while focusing on the development of critical thinking skills and the stimulation of creative approaches to problem-solving.

There are a number of firms that provide specialized training in many aspects of intelligence. For example, Washington Researchers provides training in company and industry research. Although their publications are relatively expensive, they are easy to read and very valuable for the novice. Many of them are available in the reference department of the Hagerty Library at Drexel, and students find them helpful in the Business Resources course as well as the CI course. A complete list of titles currently in print is located on the Washington Researchers web site, at *http://www.researchers.com/full_list.html*.

According to a recent survey,[9] Drexel is currently ranked among the top ten library and information science programs, and ranks first in the nation among information science programs. Drexel is the second oldest library and information science school in the U.S. and the oldest still in existence. With the support of the Kellogg Foundation, it is a leader in revolutionizing library science curricula. Within that framework, Drexel's CI program is equally committed to the preparation of informed, teachable and proactive CI specialists who provide significant value to their organizations. This author wishes to compliment the excellence of the student body, thank Drexel's current partners and welcome the insights, comments and suggestions of others who are interested in the continuous improvement of CI education.

---

[9] *U.S. News Online*., "2000 Graduate School Rankings," *http://www.usnews.com/usnews/edu/beyond/bcrank.htm*, accessed 31 March 1999.

BIBLIOGRAPHY

Section One: Business Resources

Accounting. The Standard Deviants Video Course Review. 2v. 3 Hours and 30 mins. Cerebellum Corp. http://www.cerebellum.com. Videocassette.

Accordine, John J. *The United States in the Global Economy: Challenges and Policy Choices*. Chicago: American Library Association, 1992.

Argenti, Paul. *The Vest Pocket MBA.* New York: Wiley, 1997. (recommended text)

Bentley, Linda Holman and Jennifer J. Kiesl. *Investment Statistics Locator*. Rev. and Exp. Phoenix: Oryx, 1995.

Bernstein, Peter L. *The Portable MBA in Investment.* New York: Wiley, 1995.

Brewer, James K. *Everything You Always Wanted to Know About Statistics, but Didn't Know How to Ask.* Dubuque, IA: Kendall Hunt, 1978.

Business Cycles and Depressions. Ed. by David Glasner et al. New York: Garland Pub., 1997.

Business Information Alert. Chicago, IL: Alert Publications, 1989-.

Daniel, Wayne W *Applied Nonparametric Statistics* 2d ed. Boston: PWS-KENT Pub., 1990.

Daniells, Lorna. *Business Information Sources,* 3d ed. Berkeley: University of California Press, 1993.

Directory Of Business Periodical Special Issues: the Definitive Guide to Indexed Business, Science, and Technology Periodicals. Comp. and ed. by Trip Wyckoff. Austin, TX: The Reference Press, 1995.

Encyclopedia of Business Information Sources. Detroit: Gale Research Co., 1970-.

Finance. The Standard Deviants Video Course Review. 2v. 5 Hours and 15 mins. Cerebellum Corp. http://www.cerebellum.com. videocassette.

Foster, Pam. *Business Information Sources*. London: Bowker-Saur, 1997.

Hafner, Arthur W. *Descriptive Statistical Techniques for Librarians.* 2d ed. Chicago: American Library Association, 1998.

Lavin, Michael R. *Business Information: How to Find It, How to Use It.* 2d ed. Phoenix: Oryx Press, 1992. (required text)

Lavin, Michael R. *Understanding The Census: A Guide For Marketers, Planners, Grant Writers, And Other Data Users*. Kenmore, NY: Epoch; Phoenix: Oryx, 1996.

Liu, Lewis-Guido. *Internet Resources and Services for International Business*. Phoenix: Oryx, 1998.

Marketing. The Standard Deviants Video Course Review. 1 Hour and 45 Mins. Cerebellum. http://www.cerebellum.com. videocassette.

Murphy, Dallas. *The Fast Forward MBA in Marketing*. New York: John Wiley, 1997.

O'Hara, Frederick M. And Robert Sicignano. *Handbook of United States Economic and Financial Indicators*. Westport, CT: Greenwood Press, 1985.

Pagell, Ruth And Michael Halperin. *International Business Information*, 2d ed. Phoenix: Oryx Press. (recommended text)

Scanlan, Jean Et Al. *Business Online: the Professional's Guide to Electronic Information Sources*. NY: Wiley, 1989.

Schlessinger, Bernard. *The Basic Business Library: Core Resources*. 3rd Ed. Phoenix, AZ: Oryx Press, 1994.

Sheehy, Carolyn. *Managing Business Collections in Libraries*. Westport, CT: Greenwood Press, 1996.

Shelfer, Katherine M. and Jennifer Nguy. "Business." In *Magazines for Libraries*, 9th ed. Ed. By Bill Katz and Linda Sternberg Katz. New York: Bowker, 1997.

Shelfer, Katherine M. And Jennifer Nguy. "Finance." In *Magazines for Libraries*. 9th ed. Ed. By Bill Katz And Linda Sternberg Katz. New York: Bowker, 1997.

Shelfer, Katherine M. *Recommended Resources for the Thomas College MBA Program*. August 1997. Special Report to the Provost. Photocopied.

Shelfer, Katherine M., Ed. *How End-Users and Librarians Work Together*. New York: Haworth Press, 1997.

SI: Special Issues. Houston, TX: PRS, Vol. 1, No. 1 (Aug./Sept. 1995)-.

Siegel, Sidney and N. John Castellan, Jr. *Nonparametric Statistics for the Behavioral Sciences*. 2d. ed. NY: McGraw-Hill, 1988.

Sobel, Michael E. *Lifestyle and Social Structure: Concepts, Definitions, Analyses*. New York: Academic Press, 1981.

Stratford, Jean Slemmons And Juri Stratford. *Major U.S. Statistical Sources*. Chicago: American Library Association, 1992.

Washington Researchers Ltd. *How To Find Information About Companies*. 3v. Washington, D.C.: Washington Researchers Pub., 1995.

Williams, Frederick, Ed. *Measuring the Information Society*. Newbury Park, Calif.: Sage Publications, c1988.

Wren, Daniel A. and Ronald G. Greenwood. *Management Innovators: The People And Ideas That Have Shaped Modern Business*. New York: Oxford University Press, 1998.

Section Two: Information Services to Organizations

Aburdene, Patricia and John Naisbitt. *Megatrends for Women*. New York: Villard Books, 1992.

Bennett, Amanda. *The Death of the Organization Man*. Morrow, 1990.

Clausewitz, Carl von. *On War*. Indexed ed. Ed and trans. By Michael Howard and Peter Paret. Princeton, NJ: Princeton University Press, 1976, 1984.

Clausewitz, Carl Von. War, *Politics And Power: Selections From 'On War' And 'I Believe And Profess.'*. Trans. and ed. by Edward M. Collins. Washington, D.C.: Regnery Pub., 1997. (required text — but most translations are acceptable)

Cortada, James W. *Best Practices in Information Technology: How Corporations Get the Most Value from Exploiting Their Digital Investments*. Upper Saddle River, NJ: Prentice Hall, NJ: 1998.

Davenport, Thomas H. and Laurence Prusak. *Information Ecology: Mastering the Information and Knowledge Environment*. New York: Oxford University Press, 1997.

Davenport, Thomas H and Laurence Prusak. *Working Knowledge: How Organizations Manage What They Know* Boston, Mass: Harvard Business School Press, 1998.

Dizard, Wilson P. *Meganet: How the Global Communications Network Will Connect Everyone on Earth*. Boulder, CO: Westview Press, 1997.

Dizard, Wilson P. *The Coming information Age: An Overview of Technology, Economics and Politics*. 2d ed New York: Longman, c1985.

Fine, Charles H. *Clock Speed: Winning Industry Control in the Age of Temporary Advantage.* Reading, MA: Perseus Bks, 1998.

Grenier, Ray and George Metes. *Going Virtual: Moving Your Organization into the 21st Century*. Upper Saddle River, NJ: Prentice Hall, 1995.

Grossman, David. *The Yellow Wind*. Trans. By Haim Watsman. New York: Farrar, Strauss, Giroux, 1988, 1998.

Hamel, Gary and C. K. Prahalad. *Competing for the Future*. Boston: Harvard Business School Press, 1994.

Hart, Claudia. *A Child's Machiavelli: A Primer on Power.* Expanded ed. New York: Penguin, 1998.

Innis, Harold Adams. *Empire and Communications*. Rev. by Mary Q. Innis. Foreword by Marshall McLuhan. Toronto: University of Toronto Press, 1972.

Jay, Antony. *Management and Machiavelli: An Inquiry into the Politics of Corporate Life.* New York: Holt, Rhinehart and Winston, 1967.

Jensen, De Lamar. *Machiavelli: Cynic, Patriot or Political Scientist?* Boston: D. C. Heath, 1960.

Journal of Knowledge Management. MCB Press, Vol 1, no.1, 1998-.

Krause, Donald G. *The Art of War for Executives.* New York: Berkley Pub. Group, 1995.

Machiavelli, Niccolo. *The Prince. With Selections from the Discourses. Ed. and trans by Daniel Donno*. New York: Bantam, 1966. (required text — but most translations are acceptable.)

MacIntosh, Morgan, "Comprehensive Bibliography." *Knowledge Management for the Information Professional*. Ed. by Kanti Srikantaiah and Michael. E. D. Koenig. Medford, NJ: Information Today, 1999. (in press)

McLuhan, Marshall. *The Gutenberg Galaxy*. Toronto: University of Toronto Press, 1962.

Naisbitt, John and Patricia Aburdene. *Megatrends 2000: Ten New Directions for the 1990's*. New York: Morrow, 1990.

Naisbitt, John and Patricia Aburdene. *Re-inventing the Corporation: Transforming Your Job and Your Company for the New Information Society*. New York, NY: Warner Books, 1985.

Naisbitt, John. *Megatrends Asia: Eight Asian Megatrends that are Reshaping Our World.* New York: Simon & Schuster, 1996.

O'Brien. James A. *Introduction to Information Systems: An Internetworked Enterprise Perspective* 2d alt. ed., 1998.

Paulsen, Brad. *Information, Communication and Power with Respect to Organizations and Automated Information Processing*. Ph.D. Diss. Univ. Of Colorado, 1980.

Portable MBA in Strategy. Ed. by Liam Fahey, Robert M. Randall. New York: Wiley & Sons, 1994.

Sun Tzu, *The Art of War*. (Translations By James Clavell, R. L. Wing Or Samuel Griffith or Ralph D. Sawyer are acceptable.)

Toffler, Alvin. *Powershift: Knowledge, Wealth and Violence at the Edge of the 21st Century*. New York: Bantam, 1990.

Weber, Max. *Max Weber on Capitalism, Bureaucracy, and Religion: a Selection of Texts*. Ed by Stanislav Andreski. London; Boston: Allen & Unwin, 1983.

Whyte, William Hollingsworth. *The Organization Man*. Garden City, N.Y., Doubleday, 1957.

Zuboff, Shoshana. *In the Age of the Smart Machine: the Future of Work and Power.* BasicBooks, 1988.

Section Three: Competitive Intelligence

Art and Science of Business Intelligence Analysis. Ed. by Ben Gilad and Jan P. Herring. Greenwich, Conn.: JAI Press, 1996.

Berinstein, Paula. *Finding Statistics Online: How to Locate The Elusive Numbers You Need*. Ed by Susanne Bjorner. Medford, NJ: Information Today, 1998.

Bygrave, William D. *The Portable MBA In Entrepreneurship*. 2d Ed. New York: J. Wiley & Sons, 1997.

Competitive Intelligence Magazine. Society of Competitive Intelligence Professionals. Vol.1, no.1, 1998-.

Competitive Intelligence Review. Society of Competitive Intelligence Professionals. Vol. 1, no.1 (1990)-.

Davenport, Thomas H. *Information Ecology: Mastering the information and Knowledge Environment.* New York: Oxford University Press, 1997.

Edvinsson, Leif and Michael S. Maline. *Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Roots*. New York: HarperBusiness, 1997.

Fuld War Room. Ironhorse Multimedia, http://www.ironhorsemultimedia.com/. Content provided by the Fuld Group. 4 CD-ROMS and 2 manuals. (used in class)

Fuld, Leonard M. *The New Competitive Intelligence: the Complete Resource for Finding, Analyzing and Using Information about Your Competitors.* Wiley, 1995. (recommended text)

Gilad, Benjamin. *Business Blindspots: Replacing Your Company's Entrenched and Outdated Myths, Beliefs and Assumptions with the Realities of Today's Markets.* Chicago: Probus Pub. Co. 1994.

Goldman, Steven L., Roger N. Nagel And Kenneth Preiss. *Agile Competitors and Virtual Organizations.* NY: Van Nostrand, 1995.

Global Perspectives on Competitive Intelligence. Ed. by John E. Prescott and Patrick T. Gibbons. Alexandria, VA: Society of Competitive Intelligence Professionals, 1993.

Handbook of Statistical Modeling for the Social and Behavioral Sciences. Ed By Gerhard Arminger, Clifford, C. Clogg, and Michael E. Sobel. New York: Plenum Press, 1995.

Jackson, Jr., Harry K And Normand L. Frigon. *Achieving the Competitive Edge: a Practical Guide to World-Class Competition*. NY: John Wiley & Sons, 1996.

Jaworski, Bernard and Liang Chee Wee. *Competitive Intelligence: Creating Value for the Organization*. Final Report On SCIP Sponsored Research. August 1993.

Kahaner, Larry. *Competitive Intelligence: How to Gather, Analyze and Use Information to Move Your Business to the Top*. Simon & Schuster, 1996. (recommended text)

Kelly, John M. *How to Check Out Your Competition: a Complete Guide for Investigating Your Market*. NY: John Wiley & Sons, 1987.

McConagle, Jr., John F. And Carolyn M. Vella. *A New Archetype For Competitive Intelligence*. Westport, CT: Quorum Books, 1996.

McConagle, Jr. John F. and Carolyn M. Vella. *Protecting Your Company Against Competitive Intelligence*. Westport, CT: Quorum, 1998.

Meyer, Herbert E. *Real-World Intelligence: Organized Information for Executives*. NY: Weidenfeld & Nicholson, 1987.

Morehead, Joe. *Introduction to United States Government Information Sources.* 5th ed. Englewood, CO: Libraries Unlimited, 1996.

Porter, Michael E. *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: Free Press; London: Collier Macmillan, 1985.

Prescott, John E. And Patrick T. Gibbons. G*lobal Perspectives on Competitive Intelligence.* Alexandria, VA: Society of Competitive Intelligence Professionals, 1993.

Reibstein, George S. and David J., with Robin Gunther. *Wharton on Dynamic Competitive Strategy*. NY: John Wiley & Sons, 1997.

Robinson, Judith. *Tapping the Government Grapevine: the User-Friendly Guide to U.S. Government Information Sources.* 3d ed. Phoenix: Oryx, 1998.

Schweitzer, James A *Protecting Business Information: A Manager's Guide*. Boston: Butterworth-Heinemann, c1996.

Sears, Jean L. & Marilyn K. Moody. *Using Government Information: Print and Electronic*. 2d ed. Phoenix: Oryx, 1994.

Senge, Peter, et al. *The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organization*. New York: Doubleday, 1994.

Shaker, Steven M. and Mark P. Gembecki. *The War Room Guide to Competitive Intelligence*. New York, McGraw-Hill, 1999.

Sveiby, Karl Erik. *The New Organizational Wealth: Managing and Measuring Knowledge Based Assets*. San Francisco: Berrett-Koehler 1997.

Tyson, Kirk. *Complete Guide to Competitive Intelligence*. Lisle, ILL: K. Tyson International, 1998.(required text)

Tyson, Kirk. *Competition in the 21st Century*. Delray Beach, FL: St. Lucie Press, c1997. (required text)

Wharton on Dynamic Competitive Strategy. Ed. by George S. Day, David J. Reibstein, and Robert E. Gunther. New York: J. Wiley, 1997.

Yin, Robert K. *Case Study Research: Design and Methods*. 2d ed. Thousand Oaks, CA: Sage, 1994.

OUTSIDERS AND OUTSIDE INFORMATION: TOWARD SYSTEMATIC ASSESSMENT

Davis B. Bobrow and Michael J. Rattie
University of Pittsburgh

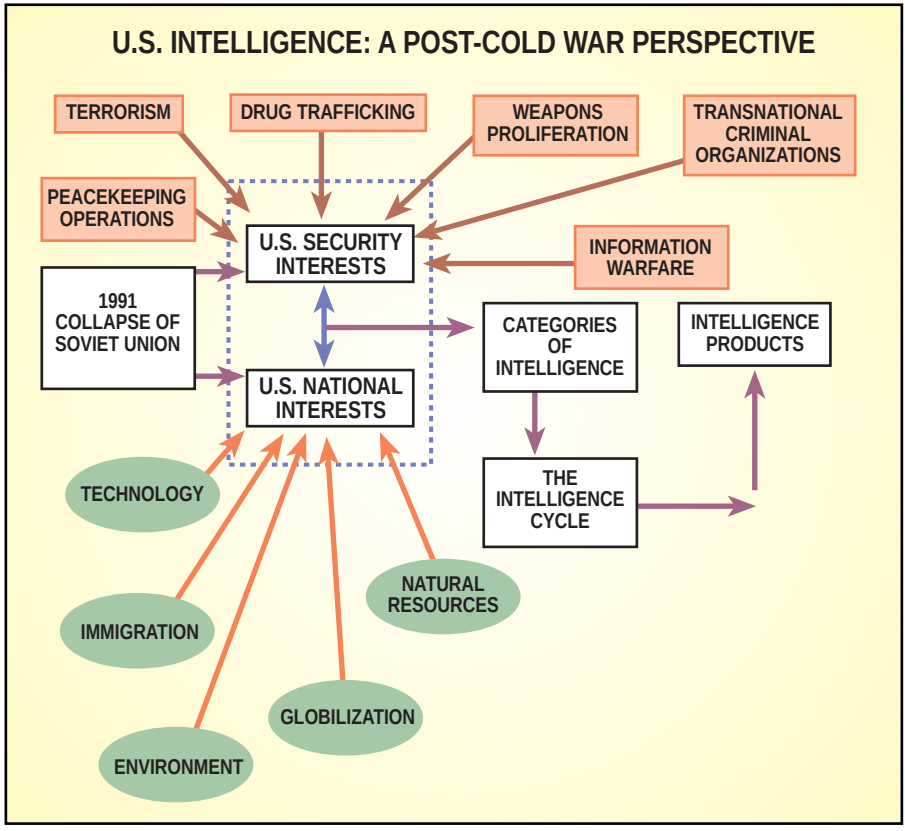
INTRODUCTION

It is widely recognized that the U.S. National Foreign Intelligence Community (IC) faces challenges and opportunities that cannot be met adequately simply by higher budgets. We suggest that one element of a more comprehensive strategy to meet them would involve the discriminating and disciplined use of outside academic experts and open source information. Our ability to use these sorts of non-governmental national assets wisely would require systematic understanding of whether they could enhance the value of intelligence products and at the same time allow more efficient use of government analysts and classified means, methods and information. It is past time to move beyond an unrewarding, anecdotal debate between extreme optimists and pessimists on this question. Accordingly, we will summarize the factors at play and outline a program of "experiments" to help in resolving this persistent subject of debate.

BACKGROUND: CHALLENGES AND OPPORTUNITIES

Intelligence, regardless of the changed environment commonly labeled the post-Cold War world, still has as its *raison d'etre* provision of "the knowledge and foreknowledge of the world around us — the prelude to decision and action by U.S. policy-makers."[1] It provides "warranted expectations" about the "what," "when," "why," and "how" of actions by others affecting the United States to officials who formulate, choose and implement tactical, operational and national-level actions to be taken by the U.S. That mission does, however, face new and continuing challenges and opportunities. The newer challenges of greatest importance are the vastly greater and more varied requirements for knowledge and anticipation, and limited in-house resources (especially human resources). As stylized in the figure below, intelligence involves a great number of actors and a diverse set of them (governments, Non-Governmental Organizations (NGO's), International Government Organizations (IGO's), firms, and illegal and disruptive networks). They also involve a broad range of issues and information associated with them reaching well beyond governmental military capabilities into commerce, the environment and natural

[1] Central Intelligence Agency. *A Consumer's Guide to Intelligence*. Washington, DC: Public Affairs Staff, July 1995, vii.



source: authors

resources, and public health. As intelligence questions multiply, so too do the range of official consumers the Intelligence Community is expected to serve.

Ironically, this increase in demand has been accompanied by a decline in human resources to meet it. In part, that reflects general constraints on Intelligence Community budgets, and in part the allocation of resources toward advanced means of collection and away from processing and exploitation of the "take" from those means. For example, the DIA workforce will probably be one-third smaller in 2000 than it was in 1991. The NSA workforce in 1998 was about one-third less than in 1985, and Army intelligence personnel were reduced by about 40 percent during the same period.[2] When combined with requirements multiplication, the consequence is a decline in the feasible degree of analyst specialization in favor of reassigned generalists who hop-scotch from one to another salient policy issue or actor.

---

[2] Katherine McIntire Peters, "Downsizing: Intelligence Lost," *Government Executive 28* (November 1996): 20-24; AFIO Intelligence Notes, Issue 24, *www.his.com/wafio/notes24.htm*

At the same time, older challenges to the production of quality intelligence products retain their vitality. Some are inherent to large organizations[3] such as politically induced distortions to support preferred policies of their highest officials,[4] and tendencies to favor estimates compatible with previous judgments.[5] These are of course classic arguments against total reliance on "insiders." These biases affect not only estimates but also present resource allocation partiality in favor of some intelligence collection disciplines over others. Those biases can only matter more in periods of tight budgets, especially as they work against "outside" information.

In the context of these choices, the Intelligence Community is also faced with opportunities provided by the new information technology, non-government collectors (e.g., commercially available satellite imagery) and analytic organizations (e.g., the research departments of international banks), and the vastly increased numbers of persons and organizations who work directly with foreigners and often directly in foreign territory. These developments combine at least to increase the volume of "outside" information and the criticality of timely access to it.

Examples of the growth in quantity of open sources are many:[6]

- Over 8,000 commercial data bases, most of which have potential intelligence value.
- The number of periodicals worldwide has grown from 70,000 in 1972 to over 116,000.
- The explosion of open source information is most apparent in the Commonwealth of Independent States, where there are over 1,700 newspapers that were not published eight years ago.
- While the number of TV and radio stations around the world has not experienced rapid growth, the broadcast time and breadth and depth of their coverage, and the availability of cable TV are clearly on the upswing. A number of them are relatively independent of government control, as with Belgrade's B-92.
- The sources of "gray literature," (i.e., private or public symposia proceedings, and academic studies) around the world are also increasing dramatically.

---

[3] Wilensky, Harold L. *Organizational Intelligence; Knowledge and Policy in Government and Industry* (New York, Basic Books, 1967).

[4] Hans Heymann, Jr. "The Intelligence-Policy Relationship," *Studies in Intelligence 28* (Winter, 1984): 57-66.

[5] See, for example, Roberta Wohlstetter, "Cuba and Pearl Harbor: Foresight and Hindsight," *Foreign Affairs* 43 (July 1965): 691-707; Abraham Ben-Zvi, "Hindsight and Foresight: A Conceptual Framework for the Analysis of Surprise Attacks," *World Politics* 26 (April 1976): 381-395; Amos Perlmutter, "Israel's Fourth War, October 1973: Political and Military Misperceptions," *Orbis* 19 (Summer 1975): 439-460.

[6] Federation of American Scientists, Intelligence Resource Program, FBIS and Open Source Intelligence, "Teaching the Giant to Dance: Contradictions and Opportunities in Open Source within the Intelligence Community," Speech by ADM William Studeman, December 1992, www.fas.org/irp/fbis/studem.html.

■ Satellite imagery is increasingly available on a commercial, "buy-by-frame" basis.

The combination of challenges new and opportunities old has led to increased attention to open-source information[7] which goes well beyond long-established efforts such as the Foreign Broadcast Information Service and the unclassified foreign text collection efforts of the Library of Congress. While open-source intelligence (OSINT) has been pushed from various quarters, as by the Aspin-Brown Commission on Intelligence, the Community's COSPO (Community Open Source Program Office) has had little impact in part for reasons referred to in the last paragraph. In addition, OSINT sources have been and are criticized because of their alleged vulnerabilities. These are held to include unhelpful transparency to any foreign intelligence officers worldwide, and unvalidatable sourcing. However, those vulnerabilities may also be tied to a variety of intelligence input streams from satellite imagery to human sources.[8]

The result has been for government analysts to avoid the hard work necessary to use OSINT wisely to address the challenges posed by requirements proliferation and insider resource constraints. The provision of "warranted expectations" has not been sufficiently and systematically addressed as a "national system" problem calling for the best possible use of government and academic capabilities, and open source as well as confidential sources processing and analysis. Subsequent sections of this paper suggest one important avenue to make progress in that direction.

Our suggestion draws on a potential synergy between outsiders, largely academically based, and insider Intelligence Community analysts who both function as puzzle-solvers or intellectual detectives.[9] The notion of such a nexus is familiar in the history of Western intelligence organizations.[10] The Office of Special Services (OSS) Research and Analysis (R&A) Branch was often referred to as "the Campus." Sherman Kent wrote that "The main difference between professional scholars or intelligence officers...and...all other people...is that the former are supposed to have more training in the techniques of guarding against their own intellectual frailties."[11] The difference outsider perspectives can make was central to the famous 'Team A-Team B" effort of more than a

---

[7] Mark Lowenthal of OSS USA defines open source information as "any and all information that can be derived from overt collection: all types of media, government reports and other documents, scientific research and reports, commercial vendors of information, the Internet, etc." in his "Open Source Information: New Myths, New Realities," www.defensedaily.com/reports/osintmyths.htm. For more on OSS, see Vernon Loeb, "Spying Intelligence Data Can Be an Open-Book Test," *Washington Post*, 22 March 1999, A17.

[8] For example, see Vernon Loeb, "Hobbyists Track Down Spies in the Sky," *Washington Post*, 20 February 1999, A1, A16.

[9] For suggestions about this synergy, see Robin W. Winks, ed. *The Historian as Detective: Essays on Evidence*. New York: Harper & Row, 1968.

[10] Robin W. Winks, Cloak & Gown: Scholars in the Secret War, 1939-1961. New York: Morrow, 1987.

[11] Quoted in Captain William S. Brei (USAF), *Getting Intelligence Right: The Power of Logical Procedure*, Occasional Paper Number Two, Washington: Joint Military Intelligence College, January, 1996.

decade ago. Outsiders have frequently been the developers of analytic methods subsequently adopted, and perhaps then discarded, by the Intelligence Community from Bayesian decision analysis through network methodologies.[12]

Now seems an opportune time to extend university-intelligence community relationships beyond the traditional roles of the former serving as a provider of supplementary expertise and analytic techniques and a trainer of future government personnel. The extension we have in mind involves an experimental "shadow system" to examine the potential of open-source information exploited by uncleared university based analysts. The main working hypothesis underlying the experimental program is that for some, but not all types of analytic products, university-based analysts processing open-source information can at least match closed-source exploitation by Community analysts with regard to accuracy, certainty, cost, and timeliness.

Taking our hypothesis seriously in no way requires viewing outside analysts as superior to insiders or invulnerable to widely recognized threats to valid inference about "the foreign."[13] We only assume that they are competitive in germane expertise and no more prone to be led into error by those threats.

If our hypothesis gains support, it obviously has important implications for the provision of "warranted expectations" to intelligence consumers. Given the fact that it would support "outsourcing" of analysis, it also has implications for Community managers. It may suggest that the government relax the constraints imposed by ceilings on government personnel and allocate resources to areas of unique benefit.

THINKING EXPERIMENTALLY

Formal, quasi-scientific or even quantitative approaches are often neglected in intelligence analysis because they require more time, more stable priority questions, and more freedom from political and institutional predispositions than the reality of life in the Intelligence Community tends to provide.[14] Unless new approaches are tried out for other reasons, as in so-called natural experiments, interesting hypotheses will go untested in a systematic manner especially in a climate of resource scarcity relative to product demand — as the COSPO experience suggests. That is why we propose a "shadow system" to test and provide operational specification of our main hypothesis. In effect, we want to go substantially off-line from the Intelligence Community to conduct a series of trials of what can be achieved using academic analysts treating open-source information. Those trials amount to producing estimates (intelligence products) under carefully controlled conditions so that we infer with confidence the extent to which their differences, if

---

[12] For example, see Richards J. Heuer, Jr., *Quantitative Approaches to Political Intelligence*: *The CIA Experience*. Boulder: Westview Press, 1978.

[13] Brei, pages 10-14, provides a useful brief summary of some of the major threats and writings exploring them.

[14] Clark, Robert M. *Intelligence Analysis: Estimation and Prediction*. Baltimore: American Library Press, 1996.

any, are caused by factors we have deliberately varied. That is why our proposal adapts the logic of experimental thinking to our main concern.[15] A brief explanation of what that logic involves will set the stage for the specific sets of experiments involving intelligence that we suggest in the next section.

Thinking experimentally converts problems into carefully designed sets of dependent variables (the end item one is trying to influence) and well-controlled independent and intervening variables. The objective is to be able to validly attribute the influences provided by variation in one of more of the independent and dependent variables to effects on the dependent variable(s), i.e. to find co-variation. Control involves being able to state with confidence that particular independent and intervening variables have been held constant across comparison groups, only varied randomly, or only varied through deliberate manipulation (the treatments). For deliberate manipulations, it must be clear that they took place before the presumed effect, i.e., they have temporal precedence.

This way of thinking can be applied in the form of a true or random experimental design. (We have excluded non-designed natural experiments for reasons stated previously.) It also can be applied in the less demanding form of a quasi-experimental design. In the former design, participants in groups exposed to one or more different treatments and those in a control group are made equivalent by random assignment. As every participant has an equal chance to be in any particular group, one forestalls the possibility that observed differences in results are a function not of deliberate, "experimenter imposed" variation, but rather of extraneous differences between the participants in the respective groups. One turns to the quasi-experimental variant when random assignment is not feasible. The risks to valid inference thus posed can be lessened by matching; that is, by using selection procedures that try to insure that participants are equivalent in characteristics thought to matter for dependent variable outcomes.

Strong experimental thinking emphasizes vigilance to guard against threats to validity of two kinds. Those to internal validity cast doubt on any causal effect attributed to the experimental treatments; those to external validity, on the extent to which the experimental results can be generalized to life outside of that somewhat artificial context. Common threats of each type are listed in Table 1.

In the internal column, history refers to events during the course of the experiment, but external to it, that might bias the outcome. Maturation involves change in the participants during the run of the experiment. Testing threats occur when some performance is repeatedly measured and the participants modify their behavior as a result of the earlier tests. Instrumentation involves changes in the measurements used. Regression to the mean can be at work when the participants were initially selected for extreme attributes of some characteristic. Mortality involves participants dropping out of the

[15] A classic primer is that of Thomas D. Cook and Donald Campbell, *Quasi Experimentation: Design and Analysis for Field Settings*, Boston: Houghton Mifflin, 1979.

TABLE 1. THREATS TO VALIDITY

INTERNAL:	EXTERNAL:
● HISTORY	● HISTORY x TREATMENT
● MATURATION	● PRETEST x TREATMENT
● TESTING EFFECTS	● SELECTION x TREATMENT
● REGRESSION TO THE MEAN	● REACTIVE ARRANGEMENT EFFECTS
● SELECTION MORTALITY	● MULTIPLE TREATMENT INTERFERENCE

source: authors

experiment. It is the investigators' responsibility to consider and plan carefully to damp each of these possibilities in order to preclude plausible alternative interpretations of dependent variable outcomes.

In the external column, we have a set of phenomena one or all of which incline those to whom results are extrapolated to behave differently than the experimental groups. Here, history refers to being affected by events that did not impinge on the experimental participants. Testing effects can operate when relevant parties have not been influenced by the same sensitization as were the participants in the experiment. Selection effects may operate if the parties differ from experimental participants in characteristics that matter for performance on the dependent variable(s). Reactive effects may occur when the performance situation of the experimental subjects was significantly different from those to whom the results are extrapolated. Finally, treatment effects can arise when the "real-life" parties are subjected to multiple treatments (changes in performance conditions) while the experimental subjects were not. When concerns about external validity are central to the purpose of the research program, it is important that experimental design be informed by a realistic understanding of the real-life situation to which results will be extrapolated and attentive to minimizing artificiality.

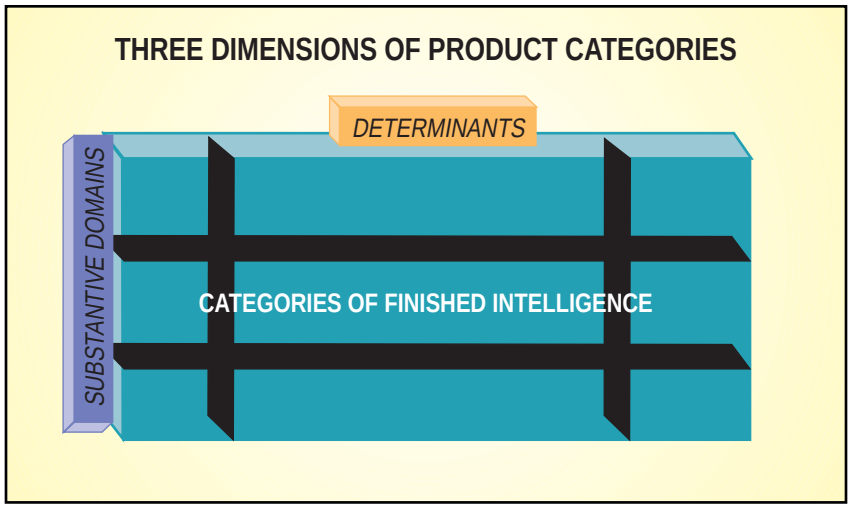
Faced with this demanding list of obstacles to reliable inferences about treatment effects, two implications stand out. The first is that meaningful experiments demand great care in design and must be informed by an understanding of the world to which they will be extrapolated. The second is that small differences in results between groups exposed to alternative treatments or between treatment and control groups should not be of great concern.

An Experimental Approach to Intelligence Analysis

Applying experimental logic to intelligence analysis requires that we develop four aspects of the design of an experimental program. These amount to intelligence-relevant stipulations of the dependent, independent, and intervening variables, and the system to "score" or "rate" results for value. Those stipulations require a set of guidelines conducive to strong inference about the merits of open- versus closed-source analyses. The confidence we can place in the results from our experimental program, like those from any experimental program, are a function of the extent to which the ensemble of stipulations guards against threats to internal and external validity. As those safeguards are never perfect, confidence also will be a function of the number of trials with different groups of participants.

Intelligence Products

Grasping the variety of the dependent variable (for us, quality intelligence products) provides the foundation for experiments to clarify the relative merit of open-source information treated by non-government analysts compared to closed-source information treated by government analysts. One helpful, if oversimplified and general, way of describing the variety of product categories involves three dimensions as illustrated.



source: authors

The dimensions are those of: 1) categories of finished intelligence (e.g., baselines, assessments, estimates, current, estimative, warning, and research) which are built on 2) judgments about intermediate and final determinants (e.g., indicators, changes, patterns, trends, vulnerabilities, strengths, associations, events) bearing on 3) substantive domains (e.g., economic, military, political, S&T, natural resources, peacekeeping operations,

narcotics, terrorism) and particular actors (e.g., nations, organizations, political leaders). Each dimension is of course subject to many layers of specification.

This representation has three implications for the design of an experimental program. First, for comparisons to be illuminating they should be between products that are similar on all three dimensions of our taxonomy. Second, for our broad question to be answered comprehensively, the experimental program should explore a variety of possible products across the three dimensions. Third, given the general context that introduced this paper, it makes sense to give priority to those types of products most likely to test what amounts to our null hypothesis. That is, the initial experiments should focus on types of products most likely to yield superior results from the open source, non-government analyst experimental groups. The reasoning here is that failure, even with this advantage, would efficiently reject the possibility of gains from outsiders and outside information for less promising categories of products.

GROUPS AND PARTICIPANTS

A second set of specifications in the design of an experimental program involves the independent variable, for us the analysts and information used by them. Here the quasi-experimental variant emphasizing matching is more feasible than that of random assignment. For experimental participants, it seems intuitively appropriate to control through matching for differences in professional background in general (experience) and subject matter knowledge (expertise). Yet one element of professional experience is that of preparing intelligence products.

Accordingly, it seems appropriate to have three types of experimental groups composed respectively of: a) uncleared academics (faculty, research staff, advanced graduate students) without Intelligence Community experience; b) currently uncleared academics with previous Intelligence Community experience; and c) cleared IC analysts. For any given product, we can have more confidence that differences in group results can be attributed to open versus closed source information as the participant groups are matched on characteristics they bring with them into the experimental situation, i.e., are in the same rows in Table 2.

The appropriateness of the first four rows in Table 2 seems obvious. The last row seeks to deal with the reality that the participants may well differ in their convictions about the best answer and most indicative sorts of information for the intelligence question posed prior to engaging in the experimental activity. Differences between groups in their conclusions and the quality of those conclusions could be affected by those prior convictions and not just by the experimental information processing. While matching on the first four rows may be done based on biographical information, the last row will probably require use of a pre-test. The pre-test should cover both the expected answer to the intelligence question as well as the subject's predilections. If the pre-test items are comparable with

TABLE 2. MATCHING GROUPS

	TYPE A	TYPE B	TYPE C
YEARS OF PROFESSIONAL EXPERIENCE			
FIELD OF ADVANCED EDUCATION			
YEARS OF SUBSTANTIVE DOMAIN EXPERIENCE			
SUBSTANTIVE DOMAIN ADVANCED EDUCATION			
INITIAL CONVICTION			

source: authors

those applied to the experimentally produced intelligence product, the results from the former can be used as possible explanations of the latter.

Matching reduces uncertainty about the extent to which differences in experimental group results are a function of information sources. Unfortunately, the more refined the matching requirement, the more difficult it will be to actually secure comparable participants. As with most aspects of experimental design, compromises will have to be made but those should be informed by foresight about their inferential consequences.

INFORMATION AND TREATMENT CONDITIONS

A third set of specifications involves intervening variables, in our case the information accessible to the groups, and aids and constraints on its processing. Given our fundamental question, we need groups of types A and B above to have available to them only open-source information and type C groups to have closed-source information only. We also need sufficient control of the experimental situation to ensure comparability of obviously relevant conditions for processing each sort of information. That is, we want to establish equivalence of experimental activities as much as possible on all pertinent factors about information access and processing except whether it is closed or open source.

Restriction to closed or open sources will be most assured to the extent that participants are gathered and kept in a monitored experimental environment, e.g., a residential conference center, for the period from the beginning to the conclusion of the experiment in which they are involved. Compromises to that ideal condition may be necessary and their control effectiveness will depend on the discipline of the participants.

Control could also be facilitated by providing each group with a predetermined set of sources. Yet doing so may not be advisable for several reasons. First, it may be unwarranted to assume that the range of pertinent sources is well established across both open and closed domains. Second, such a limitation frustrates the possible creativity of the analysts in locating what are for them key information elements. One possible solution to such dilemmas is to run experiments both ways.

TABLE 3. TREATMENT EQUIVALENCE

	TYPE A	TYPE B	TYPE C
AVAILABILITY OF SOURCES			
RETRIEVAL AND PROCESSING TECHNOLOGY			
TIME AVAILABLE			
GROUP SIZE			
IN-GROUP PROCESS			
PRODUCT TEMPLATE			

source: authors

The design also needs to provide for essential equivalence in other factors that may affect analysis. While not comprehensive, several such factors are clearly relevant and are shown in Table 3. Each consideration in this table merits brief explication. Given our general question, valid answers require that availability of sources to the participants provide the fullest possible coverage of, respectively, the open and closed source worlds. Each has compartmentation that must be overcome. In the closed-source world, clearances compartment analyst access. In the open-source world, Internet materials are divided into those generally available and those accessible "by subscription only."

Retrieval and processing support involves both computer-based tools and the availability of cognate experts for leads and judgments. The experimental participants across the three types of groups will need to be provided with similar computer-based tools and work under similar limitations on access to knowledgeable others. The time available to perform each experimental exercise should be similar across groups, as should be group size. Both affect what can be done analytically independent of the generic sorts of sources used. In-group process refers to the interactions between the participants on such matters as individual versus team activities, consensus versus recorded dissent, and iterative

examination of tentative conclusions. Since we know that group processes affect group conclusions, we need to ensure against variance on the dependent variables they may introduce.

Finally, the product template refers to the task goals toward which the groups labor, or the intelligence product specifications they are trying to meet. Meaningful comparisons of product quality from the different types of groups require that the groups try to produce the same result in terms such as length, topic coverage, temporal coverage, specificity, and caveats. This requirement is more likely to be met when each set of groups we wish to compare is given an identical product template at the beginning of their work.

Assessing Products

Finally, the design needs to address ways in which the results, intelligence products, will be assessed for relative quality. How to make such assessments is an ongoing issue among intelligence experts and the well-known difficulties of self-fulfilling and self-denying prophecies apply to our suggested program as well. So too do the possibilities that "ground truth" will never be known, or its knowledge made public — ever — or at least until some undetermined point in the future. These generic problems of intelligence evaluation are compounded by the reliability problems associated with experimental approaches. Those problems have to do with the consistency of performance by individuals or groups of participants and are usually managed by having participants perform multiple tasks with all that implies about the time they can commit to the experimental activity and still maintain some of the safeguards discussed previously.

Our approach to the assessment challenge is then less than scientifically satisfying. In the short run, it involves panels of raters of two sorts. The first is high-level former intelligence analysts; the second, high-level former government consumers. The panels would be given the results from the various experimental groups and for each comparable product asked to judge their relative merit. A common template would facilitate such judgments. The criteria would surely include relevance to policy concerns, reduction of uncertainty, source reliability assessments, and timeliness in the sense of providing judgments within the window available for acting on them. A longer-run assessment would include a cost analysis for those instances, if any, of producing the product outside the experimental situation by a reliance on open-source, uncleared analysts versus closed-source, IC employees. It also would include when possible a rating of the accuracy of the product with the benefit of hindsight.

Illustrative Experiments

In recent years, successive Directors of Central Intelligence have addressed the Congress on threats to U.S. security, with their related challenges to Community analysts. The February 1999 presentation by George Tenet to the Senate Armed Services Committee is but one recent example. Tenet's emphases included transnational crime and the proliferation of weapons of mass destruction. Some years earlier, Director Woolsey emphasized the concern

posed by Russian criminal organizations. The increased importance of economic matters bearing on U.S. competitiveness and foreign stability is still another topic brought up in this forum. Those public statements provide an ample range of possible areas for experimental assessment.[16]

We sketch illustrative experiments to indicate what a more concrete version of our proposed "shadow system" might look like. The illustrations are just that, not an outline of a particular, but limited, small-scale program. They could, however, serve as pre-tests for a more systematic program. Our topical "for instances" are picked to provide open-source using outsiders with what many observers would consider a relatively favorable playing field. That is, they all involve matters with large amounts of open-source coverage, and substantial non-governmental expertise. The illustrative topics are: a) an estimate of Brazilian economic performance in the period 2000-2005; b) a baseline of associations and resource transfers between Russian and other criminal organizations; c) an assessment of Indian responses to alternative U.S. policies intended to lead to stable deterrence in South Asia.

Each of our three examples follows a common sequence of steps but with different content for each. Four roles are involved in conducting each specific set of experiments: 1) substantive managers; 2) experimental quality controllers; 3) participants; and 4) assessors.

Step One: Analysis Task Statement

Substantive managers (SMs) drawn from the IC, the policy, and the academic communities, all knowledgeable about the substantive domain, design an assignment for the participants. The assignment stipulates the products to be produced on each of the dimensions in the figure on page 116. Each "tasker" stipulates a type of product (estimate, baseline, assessment) and a substantive domain specified in terms of activity (economic performance, crime, nuclear arms posture) and central actors (for the Brazilian economy, transnational organized crime, and Indian nuclear forces). The tasker also states the intermediate and final determinants on which judgments are sought. With regard to intermediate determinants, they will be framed in terms relevant to the substantive domain involved, and the envisioned product type. For example, with regard to indicators, the baseline illustration will be concerned with lagging indicators whose presence suggests what has already been achieved by Russian organized crime in terms of transnational linkages. The estimate will also be concerned with leading indicators that suggest where the Brazilian economy will be in terms of performance in the future. The assessment will be concerned with both types of indicators, as ascertaining the likely effects of U.S. actions on Indian nuclear force posture requires capturing where Indian policy and practice is at when the U.S. acts, and its path into the future without

[16] Central Intelligence Agency, Statement by Director of Central Intelligence George Tenet before the Senate Armed Services Committee, "Hearing on Current and Projected National Security Threats, 1 February 1999," http://www.odci.gov/cia/public_affairs/speeches/ps020299.html.

the stimulus of alternative U.S. actions. In other words, the tasker poses a set of questions to which answers are sought and provides a set of conclusion statements to be completed by the experimental groups. Those questions and statements provide a basis for identifying pertinent types of expertise based on the sorts of activity and the central actors involved. They also provide a common product template for each topic to facilitate comparison of the results and to discern differences attributable to open and closed sources and uncleared and cleared participants.

Step Two: Clarity and Comparability Review

Experiment Quality Controllers (EQCs) review the statements and if necessary iterate them back to SMs to bring them to the point of sufficient specification to enable comparability across the results from the different groups of participants in the experiments for each illustrative topic. Once that is achieved to the satisfaction of EQCs, they specify the profile of participants to be used in matching and design a prior conviction instrument for each topic. Those specifications are reviewed with the SMs until consensus is reached on them.

Step Three: Participant Selection

SMs then select an initial pool of potential participants for each of the three types of experimental groups, and collect information needed to establish individual profiles as suggested in Table 2. Pertinent substantive experience and advanced education will differ for each of the illustrative experiments, e.g., economists and Brazilian estimates for that example, nuclear deterrence stability and Indian experts for that example. EQCs use those profiles to create three comparable groups of participants for each illustrative topic.

Step Four: Treatment Conditions

EQCs establish an experimental protocol which SMs feel is representative of the real world of work of IC analysts in terms of retrieval and processing technology, time available for the assigned tasks, group size, interactions between participants, and a product template that includes the previously established conclusion statements and rationale for them (such as judgments about source credibility). Based on discussion with participants of each type, they arrange to provide access to the sources each type of participants feels relevant. The sources will be different for each of the three topics as will the product templates. It will, however, be desirable to keep the other treatment conditions common across the topical experimental groups to avoid noise from their variation affecting the results.

Step Five: Analytic Activities

The participants then go to work under the treatment conditions established and complete the product template. EQCs monitor that process to ensure that treatment conditions are met.

Step Six: Assessor Appraisals

For each illustrative topic, assessor panels of former IC analysts and of government consumers review the completed product templates for the pertinent experimental groups and assess their relative merit in terms of the criteria introduced earlier. Those appraisals are recorded on a common "rater" form for all experimental groups working on all of the topics.

Step Seven: Evaluation

EQCs and SMs review the rater forms to arrive at conclusions. The first sets are task specific and refer to the relative performance of each of the three types of groups for each of the illustrative intelligence problems. Conclusions can be drawn about the extent to which performance reflects the differences built into the three types of groups, the nature of the task or the substantive domain. The second set involves judgments about the internal and external validity of each set of experiments and the implications for refining the experimental design or replicating it for similar or additional tasks to achieve confidence in the implications of the results for intelligence management.

CONCLUSION

We live in a progressively more open and transparent world today, with the possible corollary that open sources have made a qualitative leap in their capacity to provide "warranted expectations." From a national point of view, it seems responsible to clarify to what extent the corollary is illusion or reality. The answer to that question, or more realistically the differentiated answers, will have major implications for intelligence management. So too will clarification of the extent to which the combination of open source information and uncleared analysts can rival the products from the classified world. These sorts of understandings are best provided through a systematic experimental program involving a "shadow system" of uncleared analysts using open sources. We have sketched the broad outlines of such a program and considerations important in its design in order for conclusions from it to merit confidence.

Our hypothesis and design methodology, our "shadow system," can be interpreted as a way to help focus the IC's closed-source information and cleared analysts on tasks where their contribution will provide a unique increment of value. From this perspective, almost any pattern of results from a systematic, careful experimental program will have important implications for intelligence management.

BIBLIOGRAPHY

Barber, Richard J. *The Politics of Research. Washington*, D.C.: Public Affairs Press,1966.

Ben-Zvi, Abraham. "Hindsight and Foresight: A Conceptual Framework for the Analysis of Surprise Attacks," *World Politics* 26 (April 1976): 381-395.

Brei, William S. (USAF), *Getting Intelligence Right: The Power of Logical Procedure*, Occasional Paper Number Two, Washington, DC: Joint Military Intelligence College, January1996.

Brookings Institution. *Research for Public Policy*. Washington, DC: The Brookings Institution, 1961.

Central Intelligence Agency. *A Consumer's Guide to Intelligence*. Washington, DC: Public Affairs Staff; July 1995.

Clark, Robert M. *Intelligence Analysis; Estimation and Prediction*. Baltimore, MD: American Library Press, Inc., 1996.

Cook, Thomas D. and Donald Campbell. Q*uasi Experimentation; Design and Analysis for Field Settings*. Boston, MA: Houghton Mifflin Company, 1979.

Cooper, Harris. *Synthesizing Research*. Third Edition. Thousand Oaks, CA: SAGE Publications, Inc., 1998.

Heuer, Richards J. Jr. *Quantitative Approaches to Political Intelligence: The CIA Experience*. Boulder, CO: Westview Press, 1978.

Heymann, Hans Jr. "The Intelligence-Policy Relationship," *Studies in Intelligence 28* (Winter 1984): 57-66.

Loeb, Vernon. "Spying Intelligence Data Can Be an Open-Book Test," *Washington Post*, 22 March 1999, A17.

_____. "Hobbyists Track Down Spies in the Sky," *Washington Post*, 20 February1999, A1, A16.

Perlmutter, Amos. "Israel's Fourth War, October 1973: Political and Military Misperceptions," *Orbis* 19 (Summer 1975): 434-460.

Peters, Katherine McIntire. "Downsizing: Intelligence Lost," *Government Executive 28* (November 1996): 20-24.

Simon, Herbert A. *Models of Bounded Rationality*, Vols. 1 and 2. Cambridge, MA: The MIT Press,1982.

Webb, Eugene J, Donald T. Campbell, Richard D. Schwartz, and Lee Sechrest. *Unobtrusive Measures*. Chicago, IL: Rand McNally & Company, 1966.

Wilensky, Harold L. *Organizational Intelligence; Knowledge and Policy in Government and Industry*. New York: Basic Books, 1967.

Winks, Robin W. *Cloak & Gown: Scholars in the Secret War, 1939-1961*. 1st ed. New York: Morrow, 1987.

_____. *The Historian as Detective: Essays on Evidence.* New York: Harper & Row, 1968.

Wohlstetter, Roberta. "Cuba and Pearl Harbor: Foresight and Hindsight," *Foreign Affairs* 43 (July1965): 691-707.

TEACHING INTELLIGENCE AT A JESUIT UNIVERSITY

Frank J. Smist, Jr.
Rockhurst University

INTRODUCTION

In early April 1990, I was asked by our Admissions Office at Rockhurst University to participate in a program on the CIA and the U.S. Intelligence Community to be hosted by the Kansas City, Kansas Community College. Aware that I had been an intelligence officer in the CIA's Directorate of Operations, the Rockhurst Admission's counselor had envisioned my participation in this intelligence program as a way to help recruit students from this particular community college to our school. The Political Science professor in charge of the program expressed delight at my willingness to participate and told me he was just seeking to give members of his community a "fair and objective" overview of the CIA and the rest of the Intelligence Community. He told me another former intelligence officer would participate and hoped we would have a good discussion of the role of intelligence in U.S. foreign policy. I agreed to participate.

When I arrived at the Community College campus for the program, I was greeted by a marquee sign that read: "CIA Murderers Exposed: Forum at 2 p.m. Today." In addition, after I entered the auditorium where the program was to be held, I discovered that the "other" former intelligence officer was none other than Philip Agee making a pitch for his book *Inside the Company.* Agee repeatedly denounced the CIA and all intelligence officers as "cutthroat terrorists" and advocated a radically different American approach to "peace-loving" countries like Cuba, North Korea, and the Soviet Union. After hearing U.S. intelligence and U.S. intelligence officers repeatedly denounced, when it came my turn to speak I began by observing: "I am proud to be able to stand before you and say I was an intelligence officer in the Central Intelligence Agency." I was immediately booed and shouted down and not allowed to speak. In fact, one young lady came up to me, told me I was a murdering fascist, and proceeded to spit at me. Suffice it to say, that was as "fair and objective" as that particular program ever became. I did not recruit any new students for Rockhurst from that Community College and I have never returned to the campus. But the views expressed that day toward the CIA and U.S. intelligence are views quite popular in academia. The Cold War may have ended but many narrow-minded academics continue to fight on as if it had never stopped.

Even in 1999, many in academia prefer to fight over and over again Cold War battles like Nicaragua, Cuba, and the reality of the Soviet threat. Yet, the world has changed dramatically and unless members of the academic community are willing to adopt new paradigms and methods of teaching, the students graduating from institutions unwilling

or unable to change will be ill-prepared for the new challenges and issues of the 21st century.

At Rockhurst University, we created a Global Studies Center in 1988, along with an interdisciplinary B.A. Degree in Global Studies. In 1989, I became the first Director of Global Studies at Rockhurst. In 1998, I was elected Chair of the Political Science Department and in 1999 I was appointed Pre-Law Advisor. This paper examines how one Jesuit university teaches intelligence studies and prepares undergraduates for intelligence careers and the 21st century.

HISTORY AND CHALLENGES OF THE GLOBAL STUDIES CENTER

The Global Studies Center was developed by Thomas Trebon, a political scientist who was Dean of the College of Arts and Sciences. Dean Trebon envisioned the Global Studies Center as the vehicle through which Rockhurst would make "globalization" and "internationalization" a key part of the learning experience for undergraduates and he also saw the Center as a vehicle for developing and supporting interdisciplinary research and teaching.

Rockhurst University is one of twenty-eight Jesuit colleges and universities in the United States. Located in Kansas City, Missouri, Rockhurst has more than one hundred full-time faculty members and an undergraduate student body of almost 2,000. Through its four schools or colleges — the College of Arts and Sciences, the School of Management, the Research College of Nursing, and the School of Professional Studies — Rockhurst offers degrees at both the bachelor's and master's degree levels.

The Global Studies Center, established in the College of Arts and Sciences, was intended as a vehicle through which traditional rivalries and animosities between Arts and Sciences and Business/Management faculty might be bridged and creative new work in interdisciplinary endeavors might be undertaken. Speakers, programs, and curriculum internationalization efforts aimed to make that vision a reality: a greater understanding of the world would be the result for both the Rockhurst and greater Kansas City communities.

Since I became Director of the Global Studies Center, speakers on a variety of topics have been brought to campus and programs have been run focusing on new challenges confronting the United States. For example, the Global Studies Center sponsored two Soviet Film Festivals and major programs examining the legacies of both John F. Kennedy and Richard M. Nixon. During the Gulf War, the Center sponsored a program called "Operation Gulf Support" through which Rockhurst University students offered aid and support to the families of servicemen and servicewomen in the Persian Gulf. Sadly, the first casualty in the Gulf War was a pilot who had been born and raised in Kansas City. The Center has also been a key player in bringing the program "Public Achievement" to Kansas City, working in partnership with the University of Minnesota. In this program, college students serve as "coaches" or "mentors" to 6th, 7th and 8th graders and work

with the students on public service projects. Rockhurst students have "coached" at Christ the King Grammar School and have helped students there learn what "democracy" and "representation" mean in a very different way from that taught in traditional textbooks.

Despite the full support and backing of Dean Trebon, the Global Studies Center has faced significant problems in the past ten years. After the 1989-1990 academic year, Dean Trebon left Rockhurst for an academic position at another university. No succeeding Dean has had the same commitment to internationalization. In succeeding years, budgets for the Global Studies Center have repeatedly been cut. In addition, many on the faculty were not convinced that Rockhurst needed to internationalize and viewed interdisciplinary efforts with disdain, distrust, and an unfounded fear of competition for student attention. For all the use of buzzwords like "interdisciplinary," American higher education remains a very interdisciplinary-wary endeavor with academics, encouraged by tenure and reward structures, remaining focused very narrowly on their particular discipline.

In the fall of 1998, a new President came to Rockhurst with a goal for the university to prepare leaders for the 21st century. In the fall of 1999, a new Dean will be installed in the College of Arts and Sciences. With more visible support from top administrators and a larger budget, the Global Studies Center is now poised to assume a larger role in helping to internationalize the Rockhurst campus.

THE B.A. DEGREE IN GLOBAL STUDIES

Rockhurst has offered a B.A. Degree in Global Studies since 1988. Those enrolled in this degree program are required to take GS 100 "Introduction to Global Issues" and a senior capstone seminar GS 490 "The United States and the Post-Cold War World." Majors are required to take a minimum of two years of foreign language at the University. On campus, students can study German, French, Japanese, and Spanish. Through an exchange agreement with the University of Missouri-Kansas City, located literally across the street from Rockhurst, students can enroll in Arabic and Chinese courses for no additional tuition. Students in this degree program are also required to take courses from an array of disciplines: Survey of Western Civilization, Integrated Humanities, Macroeconomics, Microeconomics, International Economics, Comparative Economic Systems, International Relations, one course on the Third World, and one special topics course. Majors are expected to complete a minimum of 12 hours in one of several tracks. Options here include: language and culture, area studies (Europe, Latin America, Central America, and Pacific Rim) and business (commerce, management, marketing or finance).

SHORT-TERM STUDY ABROAD TRIPS

As the 1990s have unfolded, a new trend has quietly emerged in American higher education. While college costs have escalated, support for students attending institutions of higher education has changed dramatically. Federal and state programs of aid to college students have changed from grants to loans. It is common for students with B.A. and B.S. Degrees to have amassed $50,000-$100,000 in student loans.

One unintended consequence of this educational phenomenon is the impact all this has had on study abroad experiences. College graduates and intelligence professionals need a global perspective. Unfortunately, today study abroad programs are becoming the preserve of students from a wealthy family background. Moreover, destinations of Americans studying abroad (see Table One) tend to be those countries parents themselves would like most to visit. While 99.9 percent of Japanese high school students study English, less than 0.1 percent of American high school students study Japanese. As the most recent figures available show, the United Kingdom, Spain, Italy, France, and Germany are five of the top seven countries where today's American college students study abroad. Such destinations would be ideal for graduates preparing for the world of the 19th century; however, for those preparing for the 21st century, such destinations are far from ideal.

TABLE 1. STUDY ABROAD FROM U.S. TO THE FOLLOWING DESTINATIONS

TOP DESTINATIONS

RANK	COUNTRY OR TERRITORY	STUDENTS	1-YEAR CHANGE
1.	United Kingdom	20,062	+3.4%
2.	Spain	8,135	+8.9%
3.	Italy	7,890	+11.7%
4.	France	7,749	-1.6%
5.	Mexico	6,220	+31.9%
6.	Multiple countries	3,605	+13.4%
7.	Germany	3,552	+1.4%
8.	Australia	3,313	-1.0%
9.	Costa Rica	2,298	-0.2%
10.	Japan	2,010	-9.1%
11.	Israel	1,667	-36.4%
12.	Ireland	1,594	+33.8%
13.	Austria	1,486	-0.2%
14.	Russia	1,482	+14.9%
15.	China	1,396	+11.1
16.	Ecuador	925	+10.5%
17.	Greece	898	-4.0%
18.	Switzerland	754	-12.1%
19.	Netherlands	707	-0.6%
20.	Kenya	683	-14.1%
21.	Canada	653	+14.0%
22.	Chile	605	-19.9%
23.	Czech Republic	600	+33.3%
24.	Denmark	510	+6.9%
25.	Belgium	484	+27.4%
26.	India	470	+14.9
27.	Hong Kong	424	+177.1
28.	Republic of Korea	411	+9.9%
29.	New Zealand	501	+71.4%
30.	Brazil	386	+11.9%
31.	Hungary	381	+3.5%
32.	Belize	370	+59.5%
33.	Sweden	349	-13.6%
34.	Jamaica	339	+22.8%
35.	Argentina	311	+13.1%
36.	South Africa	297	+245.3%
37.	Luxembourg	292	-8.2%

TABLE 1. STUDY ABROAD FROM U.S. TO THE FOLLOWING DESTINATIONS			
TOP DESTINATIONS			
RANK	COUNTRY OR TERRITORY	STUDENTS	1-YEAR CHANGE
38.	Guatemala	289	+32.0%
39.	Bahamas	287	+17.6%
40.	Ghana	285	+5.6%
41.	Honduras	272	+88.9%
42.	Dominican Republic	266	-8.9%
43.	Egypt	226	+9.7%
44.	Venezuela	207	+1.0%
45.	Thailand	207	+9.5%
46.	Taiwan	172	-14.4%
47.	Poland	171	-16.6%
48.	Indonesia	170	-20.9%
49.	Nepal	163	-13.8%
50.	Finland	145	-2.0%
51.	Colombia	114	+3.6%
52.	Peru	111	+56.3%
53.	Turkey	102	-19.7%
54.	Norway	100	-18.7%
55.	Nicaragua	93	+82.4%
56.	Morocco	85	+6.3%
57.	Singapore	83	+45.6%
58.	Cameroon	79	+51.9%
59.	Martinique	78	+27.9%
60.	Caribbean, unspecified	76	-44.1%
61.	Ukraine	74	-38.8%
62.	Vietnam	73	-12.0%
63.	Tanzania	70	-20.5%
64.	Western Europe, unspecified	67	–
65.	Bolivia	65	+1.6%
66.	Tonga	62	–
67.	Philippines	60	+36.4%
68.	Senegal	59	+13.5%
69.	Former Yugoslavia	57	-56.8%
70.	Jordan	54	+86.2%
71.	Trinidad & Tobago	53	+51.4%
71.	Cuba	53	+5,200.0%
73.	Madagascar	52	+62.5%
74.	Barbados	49	-5.8%
75.	Cayman Islands	46	+53.3%
76.	Bulgaria	44	+63.0%
77.	Western Samoa	42	+250.0%
78.	Malta	38	+3,700.0%
79.	Uruguay	35	+337.5%
79.	Namibia	35	+52.2%
81.	Romania	32	+88.2%
81.	Guyana	32	+300.0%
81.	Estonia	32	-43.9%
81.	Botswana	32	+6.7%
86.	Ivory Coast	31	-26.2%
87.	Central America, unspecified	30	+87.5%

Source: modified from Chronicle of Higher Education, 12 Dec 1998, A43, A45: data from U.S. Information Agency.

TABLE 2. ORIGIN OF FOREIGN STUDENTS STUDYING IN THE UNITED STATES			
TOP COUNTRIES OF ORIGIN			
RANK	COUNTRY OR TERRITORY	STUDENTS	1-YEAR CHANGE
1.	Japan	46,292	+1.7%
2.	China	42,503	+7.3%
3.	Republic of Korea	37,130	+2.5%
4.	India	30,641	-3.5%
5.	Taiwan	30,487	-6.8%
6.	Canada	22.984	-0.1%
7.	Malaysia	14,527	+3.7%
8.	Indonesia	12,461	-2.8%
9.	Thailand	13,481	+10.8%
10.	Hong Kong	10,942	-9.0%
11.	Germany	8,990	-0.3%
12.	Mexico	8,975	+3.3%
13.	Turkey	8,194	+6.7%
14.	United Kingdom	7,357	-5.7%
15.	Russia	6,199	+10.9%
16.	Brazil	6,168	+12.2%
17.	Pakistan	6,095	-5.2%
18.	France	5,692	-_.3%
19.	Spain	4,673	-2.8%
20.	Venezuela	4,590	+3.0%
21.	Saudi Arabia	4,264	+1.7%
22.	Sweden	4,096	+5.3%
23.	Singapore	3,727	-9.1%
24.	Kenya	3,723	+26.9%
25.	Colombia	3,636	+5.0%
26.	Bangladesh	3,462	+3.0%
27.	Jamaica	3,357	+14.1%
28.	Greece	3,010	-10.5%
29.	Kuwait	2,924	-3.7%
30.	Italy	2,839	+2.1%
31.	Philippines	2,796	-10.6^
32.	Israel	2,507	-4.9%
33.	Argentina	2,275	+4.9%
34.	Norway	2,268	+1.0%
35.	Trinidad & Tobago	2,223	+6.5%
36.	Australia	2,206	-1.7%
37.	Peru	2,205	-1.8%
38.	Nigeria	2,184	+4.3%
39.	United Arab Emirates	2,133	-4.5%
40.	Iran	2,129	-19.0%
41.	Jordan	2,094	-5.8%
42.	Bahamas	2,060	+23.6
43.	Netherlands`	1,883	-2.2%
44.	South Africa	1,851	-2.0%
45.	Switzerland	1,850	+10.$%
46.	Sri Lanka	1,816	-6.9%
47.	Cyprus	1,806	-0.7%
48.	Bulgaria	1,805	+13.7%
49.	Poland	1,707	-2.1%
50.	Romania	1,669	+14.6%

TABLE 2. ORIGIN OF FOREIGN STUDENTS STUDYING IN THE UNITED STATES			
TOP COUNTRIES OF ORIGIN			
RANK	COUNTRY OR TERRITORY	STUDENTS	1-YEAR CHANGE
51.	Egypt	1,540	+3.4%
52.	Ecuador	1,516	+0.9%
53.	Former Yugoslavia	1,419	-11.0%
54.	Nepal	1,400	+14.8%
55.	Lebanon	1,370	-11.8%
56.	Ghana	1,327	+11.7%
57.	Ukraine	1,305	+7.4%
58.	Panama	1,286	-5.9%
59.	Ethiopia	1,160	-12.7%
60.	Morocco	1,053	+6.8%
61.	Denmark	1,006	+4.4%
Source: modified from Chronicle of Higher Education, 12 Dec 1998, A43, A45: data from U.S. Information Agency.			

To remedy the twin problems of financial constraints and destination, the Global Studies Center at Rockhurst University began in 1991 a program of short-term study-abroad trips. Each trip begins early on a Saturday morning and ends late on the following Sunday night. Of the twelve trips done since 1991, six have been to Russia and other republics of the former Soviet Union, two have been to China, two have been to Israel, and there have been single trips to Greece and Italy. More than 400 people have gone on these trips. Participants have included students, faculty, alumni of Rockhurst, and friends of the university. For business people, one week is about all the time they can afford to take off from work. We have run these trips during spring break in March of each year and again at the Easter break. To support students with financial need, more than $100,000 has been raised for student scholarships. For those students with work or family obligations, a short-term study abroad trip is viable whereas a semester or year abroad would be out of the question.

In 1999, the Global Studies Center sponsored a trip to Russia April 4-12th. The group left Kansas City and flew to Moscow by way of Stockholm. Three full days were spent in Moscow and, after a cross-country train trip, three additional days were spent in St. Petersburg. Prior to going on the 1999 trip, the seven students going read David Remnick's *Lenin's Tomb* and *Resurrection*, Harrison Salisbury's *The 900 Days*, and Robert Massie's *Peter the Great*. The students receive academic credit for this trip. Besides reading the books noted, the students must keep a journal of their experiences and write a reflective essay after the trip on what they learned about themselves, Russia, and the U.S. relationship with Russia.

The 1999 Short-Term Study Abroad Trip to Russia is similar to the previous twelve trips sponsored by the Global Studies Center. Those on the trip received a crash course in Russian history, politics, economics, culture, and living styles. Besides doing standard city touring in Moscow and St. Petersburg, the 1999 group brought over 250 pounds of children's books to Christian missionaries in Moscow, visited a Moscow McDonald's, attended a Russian Orthodox church service, attended a ballet at the Bolshoi, went to a St. Petersburg circus, viewed Peter the Great's Museum of Peculiarities, and visited Piskarevsky Cemetery where the more than one million siege victims of Leningrad in

World War II are buried. After such a trip, one is not an "expert" on Russia. However, one does have a much better sense of Russia, its relationship to the West, and how people in another country live. Such trips can be an effective means of making Americans more global and open-minded toward other cultures and peoples.

Making Sense of the Post-Cold War World

From 1947 until the end of 1991, the Cold War rivalry and the U.S.-U.S.S.R. relationship dominated American foreign policy and affected the relationship of the United States with every other country. However, after the collapse of the Soviet Union in December 1991, neither President Bush nor President Clinton has been able to develop a paradigm to clarify the U.S. relationship to the rest of the world. The United States is the world's sole superpower but instead of the clarity of the Cold War, all we have now is a world of uncertainty and new dangers that demands the mastery of new skills and knowledge.

While politicians and political scientists have struggled with how to make sense of the new world order, *New York Times* columnist Thomas Friedman helped to identify some of the new characteristics of the post-Cold War world in a 12 August 1997 speech to the Aspen Institute that was televised by C-SPAN. According to Friedman, "globalization" is the key characteristic of the post-Cold War world. For Friedman, globalization is the integration of financial markets, trade, and information technology in such a way that the result is a world tied together by a single market and a single culture. In such a world, Washington and Moscow lose importance and power shifts instead to those who run and control the bond and stock markets in Singapore, Shanghai, Hong Kong, Tokyo, London, Paris, Frankfurt, and New York. Key indicators of power are no longer the distribution of nuclear or conventional arms but rather how a country manages its currency, how open its markets are, what its rate of inflation is, what its deficit/GDP ratio is, how open the country is to trade, and what trade barriers the nation still possesses. In the post-Cold War world of globalization, free markets are everywhere and countries watch as their economies grow and as politics shrinks in importance.

For Friedman, all countries possess the same hardware, a free market. What distinguishes countries is the software they possess; the rule of law, the regulation of abuses, the judicial system, the commercial courts, and how countries differ on issues such as the regulation of child labor. In such a world, economic "hot spots" to watch include: northern Italy, southern India, the Malaysia-Indonesia-Singapore triangle, Hong Kong, South Korea, and Israel. Moreover, in such a world the United States is ideally situated: We are both an Atlantic and Pacific power, we have a federal political structure that is adaptable and flexible, Americans speak English, the language of the Internet, we have flexible labor markets whereby a worker in Maine can find a new job in California the next day, we are open to immigration, and we have developed the service industries (computers, media, entertainment, insurance, and investment banking) that are crucial for success in the new post-Cold War world. Key issue differences now become not East-West rivalry

but the rivalry between those who favor integration (free trade, open markets, and agreements like NAFTA) and separatists who want to stop this type of globalization cold. The work of those like Friedman is providing a new vision of how power can be measured and what new paradigms may be emerging in the post-Cold War world.[1] The importance of this new dimension holds even though major parts of the world have experienced economic tumult and uncertainty in the past two years.

PREPARING UNDERGRADUATES FOR INTELLIGENCE CAREERS AND LIFE

For those in academia who might still deplore academic study of intelligence, ironically the skills undergraduates need to succeed in life after college are the same skills individuals need to succeed in the Intelligence Community. The ability to engage in critical thinking is absolutely crucial. In both life and intelligence, excellent oral and written communication skills are also essential.

TABLE 3
(NOTE: This material has been declassified by the Central Intelligence Agency for the use of Dr. Smist.)

Indicators War Would Break Out in October 1973
Sadat's threats and warnings in public speeches (for three years)
U.S. has Egyptian plan of attack (April 1973)
INR predicts war based on Soviet arms deliveries (May 1973)
Extensive maneuvers begin in Egypt and Syria (September 21)
Forward deployment of air defenses during maneuver
Leave cancelled in Egyptian army (September 28)
Israeli Lt. Siman-Tov decides Egyptian maneuvers are cover for attack (October 1 & 3)
Russians begin launching extra reconnaissance satellites (October 3)
NSA warns hostilities are imminent (October 4)
Evacuation of Soviet dependents begins (October 4)
Egyptian civilian aircraft grounded and Cairo airport close
Egyptian forces deploy for offensive action (October 5)
Israeli human source reports attack is imminent (0400 October 6)
Attack begins (1400 October 6)

Moreover, individuals must have an understanding of the complexity that is life. Tables 3 and 4 are part of an exercise in my GS 100 and intelligence classes. In 1975-1976, the Pike Committee in the U.S. House of Representatives examined the performance of the U.S. Intelligence Community and in its final report identified a list of intelligence "failures." One of the "failures" cited by the Pike Committee was the failure of the CIA to predict the outbreak of war in the Middle East in October 1973, the Yom Kippur War. The Pike Committee released the data found in Table 3. Any reasonable person or intelligence analyst presented with such information would be foolish not to predict that something up to and probably including actual warfare was about to break out in the Middle East. Yet, that is only half the story. The real world is much more complex than the world suggested by Table 3. Now, add in the data found in Table 4. This is the reality of life for both the individual and the intelligence analyst: The world is full of complexity. Most compelling among all the information to be found in Table 4 is the fact that the Egyptian mobilization

[1] Thomas Friedman, "Globalization and U.S. Foreign Policy," Address to Aspen Institute, 12 August 1997.

in October 1973 was the 20th mobilization that year. What makes it any more likely this time that war will actually break out? Unfortunately, in its final report, by neglecting the data in Table 4, the Pike Committee presented too neat and clear-cut a picture of a world that is too often complicated, unclear, and messy.[2]

TABLE 4

(NOTE: This material has been declassified by the Central Intelligence Agency for the use of Dr. Smist.)

Indicators War Would NOT Break Out in October 1973

- Outcome of Six Day War in 1967 (Israeli skill & power vs. Arab weakness)
- Maneuvers in Egypt, but no war (April 1973)
- Expensive false alarm in Israel in response to Egyptian maneuvers (May 1973)
- Egypt lacks air superiority (Fall 1973)
- Egypt still pursuing negotiations (Fall 1973)
- Belief that Soviets won't risk détente by allowing war
- U.S. policymakers preoccupied with arms balance between Jordan and Israel
- No civilian preparation for war in Egypt; Ramadan (September 1973)
- Syria taking defensive measures after air battle with Israel (September 1973)
- Terrorist incident in Austria distracts Israeli government (September 2)
- Israeli military intelligence assesses risk of war as low (September, October)
- Egyptian mobilization for maneuvers is 20th one that year; announcement that maneuvers will be over October 8
- Air defenses in Egypt and Syria deployed in defensive fashion (September)

Besides the complexity that is life, educated citizens in the 21st century must learn that it is absolutely critical to expect the unexpected. In August 1990, the United States and the West were stunned when Saddam Hussein had his forces invade Kuwait. After a punishing and inconclusive war with Iran, most observers and conventional wisdom suggested that Saddam would do anything but mount an aggressive invasion of Kuwait. Similarly, it is important to distinguish between capabilities and intentions. All too often policymakers and leaders want certainty and abhor the unknown and uncertain. But while it is possible with incredible precision to identify capabilities, it is also incredibly difficult to identify or gauge intentions. Trying to read what is in another's heart is extremely difficult. For Americans this is excruciatingly difficult. We are a people who live to act and have a deep belief that all problems require action, the sooner the better. Yet, in reality, sometimes inaction is the best option available but one that is all too infrequently utilized by Americans.

At Harvard University and in their book *Thinking in Time: The Uses of History for Decision Makers*, historian Ernest R. May and political scientist Richard E. Neustadt have developed a decisionmaking model that is extremely useful in trying to make sense out of the seeming inscrutability of the post-Cold War world.[3] The ultimate challenge of the model is for analysts to understand "placement": how individuals and organizations involved in an issue have evolved and what the view is from each perspective. Placing

---

[2] Frank J. Smist, Jr., *Congress Oversees the United States Intelligence Community: 1947-1994*, 2nd Edition (Knoxville: University of Tennessee Press, 1994) 193, 210.

[3] Richard E. Neustadt and Ernest R. May, *Thinking in Time: The Uses of History for Decision Makers* (New York: The Free Press, 1986), 232-246.

oneself in an adversary's position and trying to see things from that viewpoint is an absolutely critical if neglected part of decisionmaking. To apply the May-Neustadt model of decisionmaking, critical thinking and the ability to gather, organize and interpret diverse information is an absolute necessity. Such skills and tools as those described above are critical in both the intelligence arena and the arena of life itself.

TEACHING AN INTELLIGENCE CLASS THAT ADDRESSES THE CHALLENGES OF THE 21ST CENTURY

While working with Dr. Ray Cline of Georgetown University in 1980, I obtained through the Freedom of Information Act a CIA estimate, *Current Capabilities of the Northern Korean Regime*, which was published June 19, 1950 and delivered directly into the hands of President Harry S. Truman. Although this CIA estimate failed to predict or suggest that North Korea would very shortly invade South Korea, it is a good example of country assessment. In my own intelligence class (see course syllabus below), I have my students do a country assessment. I focus student attention on either China or Russia. Two basic texts to use in such work are *The World Factbook 1998* published by the Central Intelligence Agency and the *Wall Street Journal's 1999 Index of Economic Freedom*. These works provide the hard data students can use in describing the political system, the military, and the economy. To give my students a better understanding of China, I have them read *China Wakes* by Nicholas D. Kristof and Sheryl WuDunn. To give my students a better understanding of Russia, I have them read David Remnick's *Lenin's Tomb* and its sequel *Resurrection*. For both China and Russia, these additional books help my students develop a sense of the history, culture, and people of these countries.

Besides the country study papers, I also have my students do a research project as a small group activity. Each team is tasked with the responsibility to identify the top five terrorist targets in the greater Kansas City area. Each team also has to examine how effective security is around the target sites, what groups or individuals pose terrorist threats, and how likely an actual terrorist attack is in the greater Kansas City area. Besides resources about Kansas City, I also provide each group with a copy of *The Turner Diaries*, the book used by Timothy McVeigh before he bombed the Murrah Building in Oklahoma City. In today's workplace, small working groups are a reality and this assignment helps students prepare for the type of small group task force they will be involved with in the years ahead.

The ability to communicate effectively in writing is a crucial skill I try to give my students the opportunity to develop in class. In addition, I have tried to have my students focus more of their attention on the Pacific Rim. For both faculty and students, there is very little understanding about the Pacific Rim and the important role it will play in shaping America and the world in the 21st century. I have devoted increasing attention to China, the country that, besides the United States, will play the most significant role in the

21st century. Exercises include: 1) analyzing U.S.-Chinese relations and their evolution from a Japanese perspective and 2) providing an intelligence assessment for the business community on what Americans should know before doing business with China.

Today's generation of students is a generation that grew up on television and video. I make extensive use of video in all my classes. In the intelligence course, I show movies like "Three Days of the Condor" and "The Long Kiss Goodnight" to demonstrate how the CIA and the rest of the Intelligence Community is depicted in fiction and film. In my own research on congressional oversight of intelligence, I found that the movie "Three Days of the Condor" had a significant impact on staffers from the Pike Committee. Many of these staffers were neophytes in the intelligence arena and had been hired because of their outsider's perspective. Unfortunately, several of the staffers I interviewed from the Pike Committee believed that the movie "Three Days of the Condor" was an accurate reflection of the CIA and the U.S. Intelligence Community. Nothing, unfortunately, could be further from the truth.

Video can also be used in other ways to teach basic principles about intelligence. For example, I usually show the beginning of the movie "Red Dawn" to my intelligence classes. This 1984 movie has the United States being invaded by Cubans and Nicaraguans. I use this movie to get my students thinking about the unthinkable. Do countries like Mexico and Nicaragua and Cuba carry grudges against the United States such that they could possibly pose national security threats to the United States at some point in the future? Most of my current students have never seen this movie. It is a good way to teach students how to expect the unexpected and think the unthinkable. In addition to using movies to get my students thinking about the future, I have also utilized such futuristic books like *2015: Power and Progress*, prepared by the National Defense University.

Besides films, I have also used works of fiction to illustrate principles of intelligence. A good way to do this is with the novel *The Cobra Event* by Richard Preston. President Clinton actually read this fictional account of a germ warfare attack on New York City, which led him to order up a simulation to see how effective U.S. defenses are against such an attack. The simulation revealed serious weaknesses in U.S. defenses.[4] In class, I have my students read the novel and then I show them how even a work of fiction can have a significant effect on shaping intelligence and intelligence policy.

Finally, another exercise I have effectively employed in my intelligence class involves my own research and writing on congressional oversight of the intelligence community. I have students read my own book on U.S. intelligence and then I make them staff directors of either the House or Senate intelligence committee (see Table 5 on intelligence oversight).

---

[4] Judith Miller and William J. Broad, "Exercise Finds U.S. Unable to Handle Germ Warfare Threat," *New York Times*, 26 April 1998, 1, 10.

TABLE 5. TWO MODELS OF CONGRESSIONAL OVERSIGHT: INSTITUTIONAL VERSUS INVESTIGATIVE

	Institutional Attitudes	Investigative Attitudes
Toward Staff	Seeks Washington insiders: academics and national security careerists to understand institutions and processes	Seeks outsiders: aggressive investigators and lawyers to unearth wrongdoing and deficiencies.
Toward parent chamber	Seeks to retain maximum approval and support. Responsible and responsive.	Seeks to educate members as well as press and public of need for corrective action. Aggressive, in danger of becoming renegade.
Toward executive	Deferential: tends to accept without question any information from executive. Seeks a partnership and common ground with minimum of conflict and controversy. Tends to become advocate for those it oversees; becomes co-opted	Suspicious: does not trust executive to provide unbiased information. Uses critics, GAO, outside consultants in adversarial relationship. Searches constantly for failures and abuses; enjoys seeing executive branch officials squirm. Greatest fear is becoming co-opted.
Toward press	Suspicious: sees press as sensationalistic; wants to maintain low visibility. Prefers closed-door private hearings; sees no role for press.	Views press as ally, communication vehicle to educate other members and public. Stages dramatic, sensational hearings to call attention to abuses.

source: Smist, 1994, 20.

Then, I ask them to identify the type of oversight they will practice on their committee, how they will organize the committee and its staff, and what issues they will focus attention upon in the next two years. A significant but largely unnoticed change in recent years is how the Congress has become a player equal in importance to the executive branch in the intelligence policy area. This exercise enables my students to see the new and significant role Congress is playing.

Intelligence is a fascinating area in today's world. Those planning to teach an intelligence course must be prepared to add new elements and areas of interest as circumstances dictate. No intelligence course can be set in concrete and become immune to change. Similarly, the Intelligence Community needs well-rounded individuals who can accommodate change and who can easily engage in critical thinking and communicate effectively.

THE FUTURE: POSSIBILITIES AND PROSPECTS

Every so often, some politician or influential person suggests that we no longer have a need for a CIA or other elements of the present Intelligence Community. Yet, while one might quibble over whether a particular intelligence entity is needed or essential, it is quite clear that policymakers will continue to need intelligence officers and agencies. Policymakers will always need individuals and agencies to collect information, analyze it, tell them what it means, and help them collect the information necessary to assess how their decisions are implemented once they have been made. Jesuit universities, like

Rockhurst, already have as their mission the production of graduates who will be thinkers and doers in the 21st century. Such graduates can be very effective in helping intelligence agencies meet the challenges of the 21st century.

GS350/PS350 — U.S. INTELLIGENCE OPERATIONS SYLLABUS

(Summer 1998)
Dr. Frank J. Smist, Jr.

This course studies the evolution of U.S. intelligence operations and national security policy from Pearl Harbor to the present post-Cold War world. Special attention is devoted to the roles of the CIA, FBI, and how the public's right to know in a democracy and the government's right to protect the national security can be reconciled.

The following books will be used: *Congress Oversees the United States Intelligence Community: 1947-1994* (Frank J. Smist, Jr.), *China Wakes: The Struggle for the Soul of a Rising Power* (Nicholas D. Kristof and Sheryl WuDunn), *Beijing Jeep: A Case Study of Western Business in China* (Jim Mann), and *The Cobra Event* (Richard Preston).

This course will be taught as a seminar. Grades will be based on a total point goal of 500 points. (450 = A, 400 = B, 350 = C) Required assignments and due dates are on sheets at the end of this syllabus.

Besides developing in you a more global perspective, this course is also designed to develop students' oral and written communication skills, and to develop students' ability to analyze raw data and to engage in critical thinking.

You are expected to attend every class. The class lectures, small group activities, and discussion are an integral part of this course. You are also expected to complete and turn in assignments and examinations at the regularly scheduled times. I am available to assist you. Regular office hours will be announced in class and appointments outside regular office hours can be scheduled at a mutually convenient time.

Course Outline:

I. INTRODUCTION AND ORGANIZATION
II. THE CIA IN FACT AND FICTION; A FIRST CUT
— view "Three Days of the Condor" and "Hopscotch"
III. CASE STUDY: TERRORISM AND KANSAS CITY
IV. TERRORISM AND THE POST-COLD WAR WORLD
V. THE CIA IN FACT AND FICTION; A SECOND CUT
— view "The Manchurian Candidate" and "The Long Kiss Goodnight"
VI. THE EVOLUTION OF U.S. INTELLIGENCE
VII. INTELLIGENCE AND WORLD WAR II

VIII. U.S. INTELLIGENCE: AN OVERVIEW

IX. POLITICAL LEADERS

X. COUNTRY ASSESSMENTS

XI. LEADERSHIP AND INTELLIGENCE

Assignments:

Assignment #1 — Due: July 7, 1998 — Point Value: 50 Points

In class on July 6th, we will view the IMAX film "Mission to MIR". You are a CIA analyst. You have been assigned to examine the Russian space program. Using "Mission to MIR" as your raw intelligence data, prepare a memo for President Clinton setting forth what "Mission to MIR" tells us about the Russian space program.

Assignment #2 — Due: July 20, 1998 — Point Value: 50 Points

According to U.S. Attorney Stephen L. Hill, Jr., several thousand extremists live in Missouri and could mount terrorist attacks at any time (see article from August 17, 1995 *Kansas City Star* to be distributed in class).

Mayor Cleaver heard about Mr. Hill's remarks and is very concerned about their implications. You have been assigned to a team to prepare a report for Mayor Cleaver on this matter. The report is to include the following: 1) what are the five most likely terrorist targets in the greater Kansas City area?; 2) how effective is security around these potential targets?; 3) what groups or individuals pose terrorist threats in this area?; and 4) how likely is a terrorist attack to occur in this area?

On July 9th, teams will be set up. Each team will present a written report in class on July 20th that addresses the four questions raised above. It is up to each team to allot assignments and responsibilities in completing this assignment. One group grade will be given for the completed reports and all members in the group will receive this grade. It is up to each group to see that all in the group do their fair share of the work. You are encouraged to use your imagination and creativity in carrying out this assignment.

Assignment #3 — Due: July 20, 1998 — Point Value: 100 Points

In your spare time, you work as an analyst for the Japanese consulate in Kansas City. You have been assigned to prepare a report for the Consul-General that addresses the following questions: 1) What has been the reaction of the American people to President Clinton's just-completed trip to China?; 2) What has been the reaction of those in the greater Kansas City community to Clinton's China trip?; 3) What was accomplished by President Clinton on the trip?; and 4) What are the implications of Clinton's China trip on future U.S.-Japanese relations?

Assignment #4 — Due: August 3, 1998 — Point Value: 100 Points

You are an intelligence analyst with the Kansas City Chamber of Commerce. Using *China Wakes, The Coming Conflict with China, and Beijing Jeep,* prepare a document that the Chamber of Commerce can use with local businesses interested in establishing trade relationships with China. What should American business people know about Chinese history, politics, culture, the Chinese economy, and Chinese personalities before launching such an endeavor?

Assignment #5 — Due: August 6, 1998 — Point Value: 100 Points

You are an intelligence analyst with the CIA. You are the principal CIA analyst for China. The DCI (Director of Central Intelligence) has asked you to prepare an estimate for President Clinton on China. Your estimate should include the following: 1) brief historical overview; 2) military status (capabilities with respect to conventional weapons, nuclear weapons, biological and chemical weapons); 3) state of China's economy; 4) present and potential future leaders; 5) current relations with the United States and key issues, and 6) the outlook for the future.

In class, you will receive a copy of an actual CIA estimate, *Current Capabilities of the Northern Korean Regime*, which was published June 19, 1950 and delivered directly into the hands of President Harry S. Truman. In class, we will also discuss country assessments.

The actual text should not be longer than twenty pages. You are encouraged to be imaginative and creative. Your estimate may consider items beyond the six cited above.

Assignment #6 — Due: August 6, 1998 — Point Value: 100 Points

You are to read the novel *The Cobra Event* by Richard Preston. Although a work of fiction, this book has had a significant impact on President Clinton and the U.S. Intelligence Community (see "U.S. Fails Exercise Simulating Strike by a Germ Weapon" by Judith Miller and William J. Broad in the 26 April 1998 issue of the *New York Times*).

BIBLIOGRAPHY

Bernstein, Richard and Munro, Ross H. *The Coming Conflict with China*. New York: Alfred A. Knopf, 1997.

Cline, Ray W. *The CIA: Reality vs. Myth*, Washington, DC: Acropolis Books, 1982.

CO: Westview Press, 1977.

Cronin, Patrick M., ed. 2015: *Power and Progress*. Washington, DC: National Defense University Press, 1996.

Friedman, Thomas. *From Beirut to Jerusalem*. New York: Anchor, 1995.

Johnson, Bryan T., Holmes, Kim R., and Kirkpatrick, Melanie. *1999 Index of Economic Freedom.* New York: The Wall Street Journal, 1999.

Johnson, Stuart E. *The Niche Threat: Deterring the Use of Chemical and Biological Weapons*. Washington, DC: National Defense University Press, 1997.

Kristof, Nicholas D. and WuDunn, Sheryl. *China Wakes: The Struggle for the Soul of a Rising Power*. New York: Random House, 1994.

Macdonald, Andrew. *The Turner Diaries*. New York: Barricade Books, 1978.

Mann, Jim. *Beijing Jeep: A Case Study of Western Business in China*. Boulder, CO: Westview Press, 1997.

Massie, Robert K. *Peter the Great: His Life and World*. New York: Ballantine Books, 1980.

Neustadt, Richard E. and May, Ernest R. *Thinking in Time: The Uses of History for Decision Makers*. New York: The Free Press, 1986.

Preston, Richard. *The Cobra Event*. New York: Random House, 1997.

Remnick, David. *Lenin's Tomb: The Last Days of the Soviet Empire*. New York: Random House, 1993.

Remnick, David. *Resurrection: The Struggle for the New Russia*. New York: Random House, 1997.

Salisbury, Harrison. *The 900 Days: The Siege of Leningrad*. New York: Harper and Row, 1969.

Smist, Frank J., Jr. *Congress Oversees the United States Intelligence Community: 1947-1989*. Knoxville, TN: University of Tennessee Press, c1990.

Smist, Frank J., Jr. *Congress Oversees the United States Intelligence Community: 1947-1994*. 2nd ed. Knoxville, TN: University of Tennessee Press, 1994.

Snow, Edgar. *Red Star Over China*, New York: Random House, 1938.

Strategic Assessment 1998: Engaging Power for Peace. Washington, DC: National Defense University Press, 1998.

The World Factbook 1998. Washington, DC: Central Intelligence Agency, 1998.

INTELLIGENCE STUDIES: THE CASE OF AUSTRIA

Siegfried Beer
University of Graz, Austria

Austria, decimated as an empire but re-created as a republic in the aftermath of World War I, has ever since been a small country of approximately seven million inhabitants. Its political destiny over the last eight decades has been described and characterized in colorful, seemingly contradictory terms: "the State that nobody wanted" with its Austro-Marxist, clerico-corporate, and Austro-fascist variants (1918-1938); the Ostmark, the first "victim" of Hitlerite aggression to some, and the eagerly collaborative province of NS-Greater Germany to others (1938-1945); the quadri-partitely occupied "victim" of the First Cold War (1945-1955); and the "Island of the Blessed" (Pope Paul VI) stretching from the signing of the Austrian State Treaty through the 1960s to the mid-1980s (up to the Waldheim affair).

Austria's relatively short republican history has clearly been marked by drama and turmoil on the one hand, but on the other hand, also by the strength of traditionalism, political continuity and stubborn anti-modernism. Since 1995 a member of the European Union, Austria today ranks among the richest and socially and technologically most advanced countries in the world. Viewed and examined from the perspective of the entire life span of post-World War I Austria (1918-1999), the long-term development of this small Danubian land from the break-up of the Habsburg Empire to the present has rightfully been labelled "almost a miracle."

Yet in some ways Austria today remains as subtly backward as it appeared, for example, to the members of the American Coolidge Mission of 1918/19, a full-fledged intelligence enterprise, which had been dispatched by the American Commission to Negotiate Peace in Paris in order to provide for the American negotiators with authentic accounts and analyses of the social, economic, and political troubles in the former Habsburg lands along the Danube.[1] Austria today, despite its advanced socio-economic, technological and cultural/academic status in the world, exhibits an almost total disregard for what I term a mature intelligence culture as seen in comparable democracies. It is no exaggeration to claim that the academic intelligence revolution of the last quarter-century has almost totally bypassed Austria, and this despite the fact that the small state of Austria, strategically situated in the center of Europe, has — as indicated above — been politically and militarily exposed to the extreme for most of its 20th-century history, at first to the great

[1] See Siegfried Beer, "Von Alfred Redl zum 'Dritten Mann.' Österreich und ÖsterreicherInnen im internationalen Geheimdienstgeschehen 1918-1947. *Geschichte und Gegenwart"* (März 1997): 14.

source: CIA

fascist powers, and then to the ideologies of the Cold War era. This diagnosis must be judged the more remarkable for the fact that Austrians and Austrian governments have over the decades of this century been heavily involved, both actively and passively, in the intelligence struggles of the inter-war, World War II, and post-war periods. Perhaps the years from 1944 to 1955 constitute the period of the most intense interest of American intelligence forces in the territory of Austria, first by the Office of Strategic Services (OSS) and its immediate, though scaled-down successor, the Strategic Services Unit (SSU), which in the fall of 1946 was merged with the Central Intelligence Group (CIG),

and after 1947 by the Central Intelligence Agency. Numerically speaking, however, it is perhaps the presence of American military intelligence units in Austria, that is, G-2, the 7769 Military Intelligence Service (MIS), serving under the American Element of the Allied Commission for Austria (USACA), and the 430th CounterIntelligence Corps (CIC), active during the entire period of the Allied occupation of Austria, which represents the pinnacle of American intelligence involvement in this part of Danubian Europe.[2]

Already a cursory look at the history of Austria in international affairs since 1918 can provide ample evidence of the disproportionately intensive entanglements of Austrian political movements or functionaries in intelligence-related issues or of a particular bent of the Austrian political character toward the secretive and irregular side of politics. Needless to say, Austria, certainly from the Metternichean era onward, has had a rich tradition of state surveillance and state-organized intelligence gathering as it has also had its share of spectacular espionage cases, from Alfred Redl to Felix Bloch. In almost regular intervals, intelligence-related events have stirred public interest and controversy in Austria over unresolved issues of espionage, treachery, or newly discovered Cold War operations. In other words, the general intelligence revolution of the 20th century has very much impacted on Austria.

Yet serious intelligence studies and consequently also intelligence teaching as scientific and academic pursuits have not yet arrived in Austria at all. As far as I am aware, I am still the only civilian academic ever to have lectured or offered academic courses at university level on international and national intelligence topics of history in Austria. There are about a handful of trained Austrian historians who have explicitly concerned themselves with topics of history in the context of Austrian involvement in international intelligence affairs.[3] Practically all monographs (with one exception to prove the rule)[4] on Austrian espionage have been written by journalists or writers of fiction. Thus the category of the secretive and sublime in Austrian history and experience has so far been left to hobby- and/or pseudo-historians, enterprising journalists and to producers of entertainment-oriented film and/or fiction.[5]

This state of affairs pertains as well to the related Austrian social sciences which in other countries have contributed to an understanding of the intelligence phenomenon and functions in any civil society. If anything, there are even fewer political scientists, sociologists

---

[2] Not surprisingly therefore, this is also the period on which most intelligence research has so far been concentrated.

[3] They are, in alphabetical order: Siegfried Beer, Arnold Kopeczek, Albert Pethö, Oliver Rathkolb, Felix Schneider and Gerald Steinacher. Fortunately, there are also several non-Austrian specialists who have contributed in the field of Austrian intelligence affairs, among them: Ralph W. Brown III, James T. Carafano and Timothy Naftali. Representative examples of their work are listed in the select bibliography at the end of this paper.

[4] Albert Pethö, *Agenten für den Doppeladler. Österreich-Ungarns Geheimer Dienst im Weltkrieg* (Graz-Stuttgart: Stocker Verlag, 1998).

[5] They are foremost: Manfred Fuchs, Harald Irnberger, Kid Möchel and Hans Wolker. See select bibliography below.

or legal experts who have exhibited any interest in the question of the role or democratic legitimacy of Austrian intelligence organizations operating in present-day Austria.[6] This is the more perplexing as the issue of parliamentary control of the major civilian intelligence branch of the government of the day, the Staatspolizeilicher Dienst, shortly known as Stapo, and of the two military intelligence organizations, the Heeresnachrichtenamt (HnaA — foreign military intelligence) and the Abwehramt (AbwA — military security service) has surfaced again and again over the last few years, as particularly the newly established smaller parliamentary parties in Austria (the Greens and the Liberals) have aggressively taken up the question of the legal ramifications of the government-proposed new legislation for the structure and functions of all three intelligence services.

Wesley Wark, one of the leading international intelligence historians, has divided the research agenda of the on-going international scholarly intelligence revolution into eight extensive projects.[7] I would like to follow his lead but limit myself to six major "issues" for an intelligence-oriented exploration of Austrian history in the 20th century:

1. The "Research Issue," defined as the effort to unearth and make available, through new research strategies, bold interpretation, and occasionally through documentation, vital raw materials for intelligence-related topics and questions of Austrian history. This would clearly necessitate a concerted effort by historians and other social scientists, supported perhaps by organized public pressure, to achieve better access to documentary collections in state or regional Austrian archives as well as in normal administrative record depositories such as ministries or the several types of security offices in this country. It is high time for Austria to lift its archival standards to liberal international norms. This can only be achieved through a collective effort by all those who value transparency and accountability of all government agencies within a reasonable scope of current national interest and a reasonable span of distance in time. To be sure, there will always be major gaps in the documentation of military, security or even regular government activities due, for example, to censorship or intentional destruction of evidence. One can draw solace from the fact that in the field of intelligence nobody ever gets the whole story. Nor does one have to suffer from archival overload. However, a small state like Austria, surrounded as it is by small, medium-sized and great powers, will always attract foreign (intelligence) attention through diplomatic, military, political or economic channels. The evidence of such activities may, and eventually most likely will, become available in foreign archives, sometimes much earlier than in the national depositories of Austria.

2. The "Historical Issue" is focused on intelligence in war and peace in an international but also, of course, in a national context over a longer period of time. Its case-study quality lends itself well to comparative assessment, that is to the question of how

---

[6] These are primarily Benjamin and Ulrike Davy, Markus Purkhart, and Helmut Widder.

[7] *The Study of Espionage: Past, Present, Future*? Ed. by Wesley K. Wark (Portland, OR: Frank Cass, 1994), 2-8.

states and governments differ in their reactions and policies to the same or at least similar challenges. This pertains to both the civilian and military intelligence organizations and to the often naturally secretive agenda of regular national bureaucracies or organizations. This type of assessment always deals with the perception and psychology of governmental decisionmakers. Intelligence historians forcefully need to defy the notion, widely held even by their colleagues in related fields, that it is always necessary to establish a clear link between intelligence provision and policy outcome, that is, between the intelligence producer/ analyst and the intelligence user. It can be just as important to illuminate the archeology of thinking or even only the mental atmosphere and specific climate under which decisionmakers operate and reach policy conclusions. Through the method of historical comparison one can examine the relative importance of size, power, and impact of organized intelligence in small, medium-sized, and major states, not least to determine the degree of the general applicability or lack thereof of the historical intelligence revolution in the various countries examined or compared.

3. The "Public Policy Issue." This project has had special importance for the larger debate on the intelligence establishment in the United States, particularly in regard to the role and functions of the CIA in American foreign policy since the 1970s. This debate has pitted the critics of American intelligence abuses against the defenders of the status quo of intelligence or of its mild structural reform. Importantly, however, it prompted a significant number of intelligence practitioners of the past and the present to engage in fairly open debate of the past and future value of U.S. intelligence and this, naturally, led to a much broader awareness of the complicated issues involved by at least a good portion of the American electorate. The main problems addressed in this context have been the high cost of intelligence,[8] the necessity for greater accountability to Congress and for better efficiency, the question of ethics in the use of covert operations (e.g. assassination) and the issue of executive leadership in the whole area of intelligence. One of the direct stimuli of this public discourse on intelligence in the United States has been the writing of memoirs or even defensive treatises by veterans of intelligence services which in turn have become significant sources of information also for historical analysis.

All of this, quite clearly, has but little reference to the state of intelligence debate in Austria which historically has not gone much beyond political infighting between the governments of the day and the respective political opposition. At present a national community of intelligence scientists simply does not exist in Austria where intelligence issues, if they are addressed at all, are researched and analyzed only by individual representatives of academic fields such as International Law, Penal Law, Political Science

[8] For the first time ever the current Director of Central Intelligence has officially released the fiscal year budget for intelligence activities of the entire Intelligence Community for 1997-9 as amounting to approximately 26 to 29 billion dollars per annum. See *The International Herald Tribune*, 5-6 December 1998 and *Global Intelligence Monthly*, February 1999, 2-4.

and History, general and military. Even if a community of intelligence scholars from these various fields did exist, they would not know where to locate an organized community of practitioners with whom to enter into a dialogue.[9] Presumably only the Austrian military (Bundesheer) possesses such a group of specialists but this author has not encountered any evidence that this group of active or even retired military experts has ever sought to engage in a broader national debate on general intelligence issues in Austria.[10] Nor do the parliamentary security spokesmen of the political parties seem to seek the company or advice of scholarly experts on intelligence. This field has simply not yet been integrated into the Austrian political landscape.

Because of this I would like to argue that it is time to start talking to each other, if only to broaden the parameters of concern for all specialists involved. At this time, it appears that the Departments of Contemporary History and of Political Science at the University of Vienna are seriously contemplating the organization of a scientifically-motivated conference on security and intelligence in present-day Austria for the fall of 1999. It remains to be seen if the organizers of that conference have any use for historians or former intelligence practitioners in Austria.

4. The "Civil Liberties Issue" in Austria is closely tied to the topic just discussed. It is the predominant theme in the limited public security debate in Austria. It naturally focuses on the abuse of the law primarily in the domestic behavior of both the special police forces, particularly of the Staatspolizei and of the military counterintelligence service Heeresabwehramt (HAA). Protection of privacy has been the overriding issue of the national intelligence debate in Austria. This debate, though obviously of great importance in any developed democracy, has obscured the relevance of the legitimate functions of defensive intelligence agencies necessary for the protection against interior subversion and terrorism or aggressive espionage applied from the outside, political or military. It has also clouded the issue of the division of labor between the separate organizations for domestic and foreign intelligence. Needless to say, this has also affected the study of domestic and foreign intelligence services in this country. It will be up to the Austrian scholars in the various fields concerned to break down these artificial barriers and to study and debate the system of Austrian intelligence-gathering and operating as a whole, both historically and as it pertains to the current needs and situation of present-day Austria.

---

[9] I actually know of only one serious attempt by an official of the Austrian Staatspolizei to seek a broader audience for Austrian (security) intelligence issues: Erwin Kemper, *Verrat an Österreich* (Wien: Zeitschriftenbuch, 1996.)

[10] It seems to be the monopoly of pacifist and anti-militarist organizations and publications in this country to try to stimulate public debate on such issues. One example would be the little-known Viennese journal *ZOOM* which regularly addresses itself to intelligence questions relevant for Austrian history or current Austrian politics. See *ZOOM* issues 4-5/ 1996 on Gladio, 4/ 1998 on the parliamentary control of intelligence organizations in Austria or 4/ 1998 and 1/1999 on the OSS/SSU operations in Austria.

5. The “Investigative Journalism Issue.” Journalists of every persuasion in Austria have taken up intelligence topics much earlier, and so far even more comprehensively, than most intelligence scholars.[11] They appear to have been motivated in their pursuit of intelligence stories more often by the wide interest of general readers, secretive politics, subversion and terrorism than in a thorough research into complicated patterns of clandestine behavior in Austria, past and present. Most of the published monographic work by journalists or amateur historians on Austrian intelligence involvement, historical or current, has actually proved very successful from a commercial point of view. Such books have generally sold well and allegedly always reach best-seller status, even if only for short periods of time. All of these journalistic investigations or presentations share an open or occasionally hidden tendency to expose a conspiracy; they often either stress that what intelligence services or practitioners do or did was wrong or they tend to exaggerate the danger of intelligence services or agents active in a particular historical or current situation. Intelligence agencies are thus usually portrayed as ineffectual and ridiculous or they are seen as too powerful and even conspiratorial. In spite of this, some of these journalistic products can actually prove to be a good read; however, on closer inspection, they often come out closer to fictional writing. Nevertheless, as serious analysts of intelligence have recognized, some of their quickly-arrived-at conspiracy theories have occasionally later been proved largely accurate.

6. Finally, the “Popular Culture Issue.” The inclusion of popular culture in the treatment of intelligence generally, and of intelligence involvement of a specific country or people specifically, may prove to be a suitable vehicle for reaching a larger audience when national or international issues of intelligence need to be addressed for reasons of popular political support. Spy novels and spy films have been perennial and almost assured successes in most societies; here again one has reason to assume that Austria is no exception. Popular notions of espionage and clandestine action, if studied and understood by scholars and trade practitioners, may well serve as a widely available background against which a deeper understanding of the need for a responsible national intelligence effort can be explained; that is, verified or falsified in view of existing popular beliefs. It will take knowledgeable, responsible and skillful specialists to convey this type of message if ever the issue of the need for a comprehensive national intelligence structure or for the renunciation of significant intelligence failures of the Austrian government arises as a general political question or principle.

All these issues confirm that the agenda for intelligence scholars from all disciplines in Austria is stocked with challenges of varied yet fundamental kinds. I am convinced that historians of Austrian intelligence or of the forces of intelligence active in Austrian history have a mammoth and specialized task to tackle. Judging by international exam-

[11] Among the exceptions are Ulrike Davy, *Die geheime Staatspolizei in Österreich* (Wien: Manz, 1990) and a collective study: *Alpenstasi. Die II. Republik im Zerrspiegel der Staatspolizei* (Linz: Edition Sandkorn, 1990).

ples, it will most likely be up to the historians to unite the scholars from the various academic fields to join in a national community of intelligence studies which alone will be able to offer itself as a partner for a national dialogue on intelligence with politicians and practitioners alike in this country, whenever or if ever that stage is reached on this particular aspect of security politics in Austria.

I have recently taken the initiative to write to the heads of the three major Austrian intelligence services proposing to enter into a dialogue about the needs and functions of national intelligence in Austria — past, present and future — with all the various academic disciplines involved in these intelligence issues. The response so far has not been promising. Judging by the traditional lack of exposure to public debate or scrutiny, this initiative for an integrated approach to national intelligence topics in Austria will probably not be taken seriously, much less be welcomed by the practitioners of the trade. Even though there are several significant differences in attitude and approach between the civilian security service and the two military organizations, they have all three chosen, at least since 1955/56, to remain largely inconspicuous or even hidden from the view of the average citizen. There has never been a public attempt at self-portrayal. This self-imposition of silence has resulted in a chronically skeptical and often very critical press coverage whenever intelligence-related stories or issues surface. Over the last few years there have been several parliamentary initiatives, both by oppositional groups and by the coalition government parties to create a legal foundation and framework for an improved parliamentary control of the various intelligence and security functions of the state. None of these attempts has yet resulted in the passing of new legislation for the execution of intelligence functions in the future.

One of the apparent features of the comparatively limited intelligence debate in the Austrian press and parliament is that the services themselves are not at all actively participating in it, supposedly for fear of exposing themselves and thereby endangering their effectiveness. Obviously, these traditional patterns of behavior do not lend themselves to establishing or furthering dialogue and cooperation with representatives of the scientific intelligence fields. All my attempts to point to substantially different approaches or patterns in other industrially and democratically advanced countries have so far not found any significant acknowledgement.

It has occurred to me that very likely similar problems and situations exist in other countries and that therefore the organizers of this Washington, DC conference on Teaching Intelligence Studies at Colleges and Universities might create an opportunity to address the issue of potential support for intelligence colleagues such as myself in countries without an academically organized tradition in intelligence cooperation, research, and teaching. As far as I am aware most “intelligently advanced” countries have eventually moved to found national associations or working groups for intelligence studies which by definition are oriented toward the history of or the present needs of the relevant state intelligence institutions. I have myself joined the German International Intelligence History Study Group a few years ago but this has not yet been a medium to advance the creation of systematic Austrian intelligence studies.

What may be needed to create a positive effect in states with underdeveloped intelligence awareness like Austria is a truly international association of intelligence scientists and former intelligence practitioners in which lonely intelligencers like myself might gain encouragement and support as well as expert advice on proven strategies or concrete projects designed to promote the different national goals in view of international standards and expectations. Such an international association might provide the collective wisdom upon which national intelligence deficits might be addressed and ultimately remedied.

Clearly, Austria as a small state could never strive for a comparable status in regard to intelligence studies with countries such as Great Britain, France, Germany or Canada, but it should be in a class, for example, with Sweden, Norway, Switzerland or the Netherlands. At the least, the leading countries in intelligence studies could serve as models on how to proceed and to prioritize. There must be numerous ways of learning from "intelligently advanced" countries. Perhaps this conference can assist in developing a strategy for the creation of intelligence studies in countries such as Austria.

BIBLIOGRAPHY

Alpenstasi. *Die II. Republik im Zerrspiegel der Staatspolizei*. Ed. by Hans G. Zeger and others. Linz: Edition Sandkorn, 1990.

Beer, Siegfried. "Von der russischen zur britischen Besetzung der Steiermark. Berichte des amerikanischen Geheimdienstes OSS aus dem Jahre 1945." *Blätter für Heimatkunde 59*, no. 4 (1985): 103-120.

_____. "Monitoring Helmer. Zur Tätigkeit des amerikanischen Armeegeheimdienstes CIC in Österreich 1945-1950. Eine exemplarische Dokumentation." *Geschichte zwischen Freiheit und Ordnung. Gerald Stourzh zum 60. Geburtstag*. Ed. by E. Brix and others. Graz: Styria, 1989, 229-259.

_____. "ARCEL, CASSIA, REDBIRD. Die Widerstandsgruppe Maier-Messner und der amerikanische Kriegsgeheimdienst OSS in Bern, Istanbul und Algier 1943/44." *Jahrbuch 1993*. Wien: Dokumentationsarchiv des österreichischen Widerstandes, 1993, 75-100.

_____. "Von Alfred Redl zum 'Dritten Mann.' Österreich und ÖsterreicherInnen im internationalen Geheimdienstwesen, 1918-1949." *Geschichte und Gegenwart* (März 1997): 3-25.

_____. "Early CIA Reports on Austria, 1947-1949." *Contemporary Austrian Studies*. 5 (1997): 247-288.

_____. *Target Central Europe: American Intelligence Efforts Regarding Nazi and Early Postwar Austria 1941-1947*. Working Papers in Austrian Studies. 97-1, Minneapolis, MN: Center for Austrian Studies, 1997.

Bischof, Guenter. *The Leverage of the Weak: Austria in the First Cold War, 1945-1955*. London: MacMillan, 1999.

Brook-Shepherd, Gordon. *The Storm Birds. Soviet Postwar Defectors*. New York: Weidenfeld&Nicolson, 1989, 85-109 (on Peter Deriabin)

Brown III, Ralph W. *"Stalin Tells us that War is Inevitable": What American Military Intelligence in Austria Learned from Soviet Defectors, 1946-1948*. Unpublished Paper, 1995.

Carafano, James T. " 'Waltzing into the Cold War'. US Army Intelligence for Postwar Austria, 1944-1948." *Contemporary Austrian Studies 7* (1999): 165-189.

Davy, Ulrike. *Die geheime Staatspolizei in Österreich. Organisation und Aufgaben der Geheimen Staatspolizei im "Dritten Reich" und die Weiterführung ihrer Geschäfte durch österreichische Sicherheitsbehörden*. Wien: Manz, 1990.

Fuchs, Manfred. *Der österreichische Geheimdienst. Das zweitälteste Gewerbe der Welt*. Wien: Ueberreuter, 1993

From Hitler's Doorstep: The Wartime Intelligence Reports of Allen Dulles, 1942-1945. Ed. by Neal H. Petersen. University Park, PA: Penn State Press, 1996 (passim on Austria)

Höttl, Wilhelm. *Einsatz für das Reich. Im Auslandsgeheimdienst des Dritten Reiches.* Koblenz: S. Bubblies, 1997.

Hood, William. *Mole*. New York: Random House, 1993.

Irnberger, Harald. *Nelkenstrauß ruft Praterstern. Am Beispiel Österreich: Funktion und Arbeitsweise geheimer Nachrichtendienste in einem neutralen Staat*. Wien: Promedia, 1983.

Kemper, Erwin. *Verrat an Österreich*. Wien: Zeitschriftenbuch, 1996.

Kopeczek, Arnold. *Fallbeispiele des Kalten Krieges in Österreich, 1945-1965*. PhD Dissertation, Universität Wien, 1992.

Milano, James V. and Patrick Brogan. *Soldiers, Spies, and the Ratline. America's Undeclared War Against the Soviets*. Washington, DC: Brassey's, 1995.

Möchel, Kid. *Der geheime Krieg der Agenten. Spionagedrehscheibe Wien*. Hamburg: Rasch und Röhring, 1997.

Naftali, Timothy. "Creating the Myth of the Alpenfestung: Allied Intelligence and the Collapse of the Nazi-State." *Contemporary Austrian Studies*. 5 (1997): 203-246.

Persico, Joseph E. *Piercing the Third Reich. The Penetration of Nazi Germany by American Secret Agents During World War II*. New York: Viking, 1979.

Gezähmte Polizeigewalt? Aufgaben und Neuordnung der Sicherheitspolizei in Österreich. Ed. By Benjamin and Ulrike Davy. Wien: Manz, 1991.

Pethö, Albert. *Agenten für den Doppeladler. Österreich-Ungarns Geheimer Dienst im Weltkrieg*.Graz-Stuttgart: Stocker, 1998.

Purkhart, Markus. *Staatspolizei, Heeresnachrichtenamt und Abwehramt. Die österreichischen Geheimdienste aus der Perspektive parlamentarischer Transparenz und Kontrolle. Eine politikwissenschaftliche Analyse zur österreichischen Demokratie*. Diplomarbeit (M.A. Thesis), Universität Wien, 1998.

Rathkolb, Oliver. "Ex-Nazis als US-Agenten" *Das jüdische Echo*. 39 (1990): 85-89.

_____. "Professorenpläne für Österreich. Nachkriegsfragen im Diskurs der Forschungsabteilung Research and Analysis." *Geheimdienstkrieg gegen Deutschland*. Ed. by Jürgen Heideking and Christof Mauch. Göttingen: Vandenhoeck&Ruprecht, 1993, 166-184.

Schneider, Felix. "Zur Tätigkeit des militärischen Geheimdienstes FSS und des Public Safety Branch in Graz 1945-1947." *Graz* 1945 (Historisches Jahrbuch der Stadt Graz 25), 1994, 215-233.

Steinacher, Gerald. "Die Zukunft Südtirols im Lichte der Akten des amerikanischen Kriegsgeheimdienstes (OSS) 1943-1945." *Das Fenster*. No. 62 (1996): 5976-5988.

Widder, Helmut. "Die parlamentarische Kontrolle von Staatspolizei und militärischen Nachrichtendiensten in Österreich." F*ür Staat und Recht. Festschrift für Herbert Schambeck*. Ed. by Johannes Hengstschläger. Berlin: Duncker&Humblot, 1994, 647-661.

Wolker, Hans. *Schatten über Österreich. Das Bundesheer und seine geheimen Dienste*. Wien: Promedia, 1993.

About The Authors

Dr. Siegfried Beer teaches at the University of Graz, Austria, and is affiliated with the Institute of History at that university. He has also taught in England and at the University of Minnesota, and has held research fellowships with the U.S. National Archives and Harvard University. He has published numerous works on intelligence issues.
siegfried.beer@kfunigraz.ac.at

Dr. Davis B. Bobrow is Professor of Public and International Affairs and Political Science at the University of Pittsburgh. He has also taught at the University of Maryland, the University of Minnesota and at Princeton, and abroad in Japan, China and Israel. He has also served as President of the International Studies Association.
bobrow@imdi.gspia.pitt.edu

Dr. Robert (RE) Burnett teaches and serves as Assistant Director of the Patterson School of Diplomacy and International Commerce at the University of Kentucky. He has published on the topic of weapons of mass destruction.
burnett@pop.uky.edu

Dr. Mark M. Lowenthal is President and Chief Operating Officer of Open Source Solutions (USA), which provides open-source support to the U.S. Intelligence Community. He has over 22 years of experience in both the Legislative and Executive branches of government, including several years as Staff Director of the Permanent Select Committee on Intelligence of the House of Representatives.
lion@oss.net

Dr. John Macartney is Scholar in Residence at American University's School of International Service, where he teaches a graduate course on "The CIA and Foreign Policy." He is co-editor of *The Intelligencer*, a newsletter published by the Association of Former Intelligence Officers. He is a retired USAF colonel and was Commandant of the Defense Intelligence College, now the Joint Military Intelligence College.
jdmac@erols.com

Mark G. Marshall holds a Master's degree from the Joint Military Intelligence College. He carries 18 years of experience in military and imagery intelligence with expertise in commercial imaging, cartography, national and military imagery analysis. He has lectured widely throughout the Intelligence Community on imagery issues.
AFmarmg@dia.osis.gov

Dr. Perry L. Pickert holds a degree in Law from George Mason University and a PhD from the Fletcher School of Law and Diplomacy of Tufts University. He has taught in Japan and at the Joint Military Intelligence College. He has served as intelligence analyst at the Central Intelligence Agency and Defense Intelligence Agency, and is the principal author of the 1997 JMIC book *Intelligence for Multilateral Decision and Action.*
plpickert@aol.com

Dr. Robert Pringle teaches as an adjunct professor at the Patterson School of the University of Kentucky. A 30-year veteran of military intelligence, the U.S. Department of State, and the Central Intelligence Agency, he earned a PhD in History from the University of Virginia.
rwprin0@pop.uky.edu

Michael J. Rattie is completing his Master's degree in Public Policy and Management at the University of Pittsburgh's Graduate School of Public and International Affairs. His area of specialization is in International Security Studies, with emphasis on the proliferation of weapons of mass destruction. He served in the U.S. Navy until 1992, and more recently as contract administrator with the Defense Contract Management Command.
mjr@ndic.osis.gov

Dr. Katherine M. Shelfer teaches Competitive Intelligence courses at Drexel University, where she has established and advises a local chapter of the Society of Competitive Intelligence Professionals. She has also served as University Librarian at The Florida State University, where she taught in the School of Information Studies.
Kathy.shelfer@cis.drexel.edu

Dr. Frank J. Smist, Jr. chairs the Political Science Department at Rockhurst University, and directs the Global Studies Center there. He also serves as pre-law advisor. He is author of *Congress Oversees the U.S. Intelligence Community: 1947-1994*. 2nd Ed. Knoxville, TN: University of Tennessee Press, 1994.
smist@vax1.rockhurst.edu

Joint Military Intelligence College
Occasional Papers

1. Classified paper.
2. *Getting Intelligence Right: The Power of Logical Procedure*, Capt (USAF) William S. Brei, 1996.
3. *An Office Manager's Guide to Intelligence Readiness*, Russell G. Swenson, 1996.
4. Classified paper.
5. *A Flourishing Craft: Teaching Intelligence Studies*, Papers Prepared for the 18 June 1999 JMIC Conference on Teaching Intelligence Studies at Colleges and Universities, 1999.
6. *Intelligence Essentials for Everyone*, Lisa Krizan, 1999.


DEFENSE INTELLIGENCE AGENCY
UNITED STATES OF AMERICA