

STUDIES IN INTELLIGENCE

Vol. 36, No. 5

The Gulf War From Tel Aviv

Sheryl Robinson

Guarding Against Politicization

Robert M. Gates

The Need for Ethical Norms

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A Crucial Estimate Relived

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Taking Arms Against a Sea of Enemies

David P. Fichtner

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STUDIES IN INTELLIGENCE

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Taking Arms Against a Sea of Enemies

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A Message from the Director of Central Intelligence

Studies in Intelligence began in 1955 with the publication of Sherman Kent's monograph, "The Need for Intelligence Literature." In that article, the Yale professor-turned-Intelligence Officer wrote:

"The most important service that (intelligence) literature can perform is the permanent recording of our new ideas and experiences. When we record, we not only make possible easier and wider communication of thought, we also take a rudimentary step towards making our findings cumulative"

Nearly four decades later, Studies in Intelligence has far exceeded Sherman Kent's early expectations. Taken together, the extraordinary range of articles published in Studies not only provides insights into world events, but also advances the culture and traditions of intelligence.

Up until now, this literature was outside of the public's view—available only to a select audience of intelligence professionals.

With this issue, we begin a new tradition. Now, once a year we will publish and distribute to the general public a volume that includes unclassified articles printed in Studies from the previous year. Contributions to this publication come from throughout the Intelligence Community. The articles are serious and scholarly, occasionally humorous, frequently provocative.

I am proud to submit this volume to the public, and I am sure that it, and future issues of its kind, will add to the public's understanding of intelligence and the world around us.

Aurly Woolsey

B. James Woolsey

This Scud's for you

The Gulf War From Tel Aviv

Sheryl Robinson

Okay, I should have known better. It had been almost 10 years since the last war, and Israel goes to war about every 10 years. Somehow I did not believe the rules applied to me. Even the first night, awakened by sirens, my principal emotion was surprise.

The Persian Gulf war began the night of 17 January 1991. Tel Aviv Bureau of the Foreign Broadcast Information Service had just switched to around-the-clock operations, and my shift ended at midnight. I was excited and I finally went to bed at 1:30 a.m. At 2:30 a.m. the phone rang, and a contact at the US Embassy told me the war had begun. I spent the rest of the night talking to a friend on the phone, listening to the BBC, and hoping the sounds in the night were not incoming missiles.

At dawn, I called my parents and told them not to worry. "If the Iraqis had any missiles," I said, "they would have used them last night." My father laughed, and he said he thought I was right. I was glad that one resident of the planet agreed with my reasoning.

After three hours of sleep, I went to work at noon for my 12-hour shift. It was an exciting shift, enlivened further by an item from London announcing that the Iraqi Ambassador to Belgium was threatening vague reprisals for the war and saying, incidentally, that Iraq would bomb Israel with chemical missiles whenever the urge struck. I calmed myself with the thought that Iraqi threats against Israel had become so common that Nicosia was now filing them at routine precedence.

The First Attack

I went home exhausted at midnight. I went to bed at 1:00 a.m., but I was awakened by sirens just before 2:00 a.m. I knew what the sirens meant. I had recently dislocated my shoulder and, when everyone had been told to prepare sealed rooms I was unable to comply. Furthermore, because I was working long, odd hours, I had been unable to find anyone to help me.

A sealed room is prepared by taping plastic—garbage bags, in my case—over the windows with masking tape and covering the vents the same way. We also were told to put drinking water and food in the sealed room and to prepare a pail of water mixed with bleach. When the siren went off, we were to don our gas masks, tape up the door, and put wet towels soaked in bleach underneath the door to keep out the gas. Then we were to listen to the radio and wait for instructions.

A neighbor had invited me to come over, if worse came to worse. When I heard the siren, I jumped out of bed and grabbed my gas mask, a flashlight, and my shoes. I ran out the door; my neighbor was already at her door, wearing her gas mask, and gesturing to me to come in. I ran inside, clutching my bundle, and we went into her sealed room. I immediately donned my gas mask, and we sealed the door with masking tape, put towels under the door, and sat down—trying not to look at each other's faces made unfamiliar by the black plastic masks. We were both breathing nervously and as deeply as the masks' filters allowed.

After a few minutes, we heard the missiles hit. I counted four or five explosions that night. As we sat and shivered, my neighbor told me she was not going to put up with this sort of thing any more. (Indeed, she left the next day, and she did not come back.)

We tuned in to the BBC, which was running a program on Broadway musicals. On the hour, the BBC finally announced that there had been a missile attack on Tel Aviv, and no one knew whether the warheads were chemical or conventional. We certainly did not know.

We stayed in that room for four hours. Later, I learned that one of those first missiles had fallen near a gas station, and the sensitive instruments of the Israeli Defense Forces (IDF) were picking up fumes from the gasoline. This caused confusion and delays in making a decision as to whether or not people should be allowed out of the sealed rooms.

War of Nerves

The first missile strikes were frightening and immobilizing. Bill Brown, the senior editor, was the "lucky" guy to oversee the first strike on Israel. The monitors were frightened, and the whole country stayed at home. Schools were closed, and few vehicles could be seen on the streets. We had to work hard to persuade our monitors to come to work and almost as hard to get them to leave at the end of their shifts. Even renting a room at a nearby hotel did not help. The monitors did not want to walk the two blocks from the hotel to the bureau. They were terrified of being by themselves during an attack, a fear I shared. In fact, several of them were caught outside when the sirens went off.

To put the danger in perspective, more people died in car accidents during the war than died in missile attacks. Few died as a direct result of missiles. More died from heart attacks and suffocation while wearing their gas masks. On the other hand, about 1,000 people were injured by flying glass or because they injected themselves with atropine. (A syringe of atropine was provided in the gas mask kits as an antidote to nerve gas.) The small number of deaths, however, is in no way a true measure of the fear and anxiety caused by the attacks.

The American staffers did not have their families to worry about, as the dependents were evacuated before the war. Many of the monitors and teletype operators were leaving small children and aged parents at home when they came to work. In addition, several of the monitors' husbands were called up by the IDF, leaving the women alone with their families. The monitors and the teletype operators were more frightened than the Americans; they had more to lose.

Becoming Routine

The bureau worked through it all, and it became quite a production. The sirens would sound, and the Embassy radio would confirm a launch. The Turkish monitors, with their earphones on, frequently did not hear the sirens and had to be informed that things were happening. The Hebrew monitors generally knew first, because the radio would broadcast a whirring noise and a coded message to the rescue teams a few seconds before the sirens blared. The teletype operator would send the canned flash message, vents were turned off via a master switch, and bureau personnel would converge on the sealed room carrying gas masks. We became accustomed to donning the masks and taping up the door of the systems administrator's office. It was deemed the safest place to be because it has no windows, little ventilation, and is an interior office. Sometimes, however, Saddam sent his greetings more than once a night; one night there were three alerts.

The best attack was one that did not happen. One night while I was on duty, Nicosia sent in an item in which Iraq claimed an attack on Haifa. Because an attack anywhere in Israel meant sirens were sounded throughout the country, it was obvious that the only thing striking Haifa that night were ill wishes.

There were periods of several days when there were no attacks. We would wonder if Saddam had run out of missiles or if the US had finally destroyed all the launchers. It seemed the US announced almost daily that more missile launchers in western Iraq had been taken out and only a few were left. It became frustrating to hear these announcements and then to have our hopes dashed. One Israeli journalist cynically asked an Israeli politician, "Has the US now destroyed 600 out of the 200 Iraqi missile launchers that are left?"

We eventually got used to Saddam's missiles. There was so much tape on the door of the sealed room that we stopped applying more and simply reused what was already stuck to the door. Everyone learned his particular responsibility during an attack, and fear began to subside. There still were problems. Both Turkish and Israeli TV were carrying many CNN reports, and CNN seemed to love to broadcast the sound of the sirens in Tel Aviv or Riyadh. The monitors, wearing earphones, could seldom distinguish the sounds on TV from the real thing, and several times one monitor or another would come out of the room yelling, "The sirens! I hear the sirens!" One teletype operator announced that he had heard a missile strike one night in the sealed room. What he really had heard was me accidentally hitting my head on the wall and making a great thumping sound.

Scary Situations

When we heard the missiles strike, I was afraid. The Patriots were worse than the Scuds, because they were louder and always sounded like they were flying directly over my apartment. Everyone hearing a Patriot apparently thought it was flying just over his

house, but the Patriots were so loud they just sounded that close. One bank began advertising, "We are all Patriots."

The apartment of one of our monitors was damaged by a blast while she was there, but she was unhurt. Debris from a Scud fell on the home of another monitor, but it did not cause any damage. It was close, but we were lucky.

At work, I could be calm. At home, I hid behind my couch. This was more than just cowardice. Most injuries were caused by flying glass, and the couch was a protection against that.

After six weeks and 39 Scuds, President Bush declared victory, and the missiles stopped coming. The bureau stepped down from 24-hour coverage, schools reopened, and cars ventured onto the streets. But it was a while before things returned to normal. People kept their gas masks with them even after the IDF said they no longer were needed. Any thud at any time sounded like a missile. After a few more weeks, however, most people calmed down. But I still jump at the sound of sirens or any booms anytime, anywhere.

A message to analysts

Guarding Against Politicization

Robert M. Gates

The following remarks by the Director of Central Intelligence were made on 16 March 1992 in the CIA auditorium.

Bourne Cockran wrote to Winston Churchill in 1895 that, "What the people really want to hear is the truth—it is the exciting thing—speak the simple truth." Twenty years later, Churchill himself wrote, "The truth is incontrovertible; panic may resent it; ignorance may deride it; malice may destroy it, but there it is." Truth, insofar as we can determine it, is what our work is all about. Indeed our own main entrance is dominated by the chiseled words, "And ye shall know the truth and the truth shall make you free." And because seeking truth is what we are all about as an institution, as professionals, and as individuals, the possibility—even the perception—that that quest may be tainted deeply troubles us, as it long has and as it should.

The problem of politicization is as old as the intelligence business. The missile gap in the late 1950s, the disputes over our work on Vietnam in the 1960s, the criticisms of pandering to Nixon and Kissinger on detente in the early 1970s, that we were foils for the Carter administration on energy in the late 1970s— all these controversies and more—predated the 1980s. For as long as intelligence data has been collected and analyzed by human beings, it has been susceptible to their biases.

Politicization can manifest itself in many ways, but in each case it boils down to the same essential elements: "Almost all agree that it involves deliberately distorting analysis or judgments to favor a preferred line of thinking irrespective of evidence. Most consider 'classic' politicization to be only that which occurs if products are forced to conform to policymakers' views. A number believe politicization also results from management pressures to define and

drive certain lines of analysis and substantive viewpoints. Still others believe that changes in tone or emphasis made during the normal review or coordination process, and limited means for expressing alternative viewpoints, also constitute forms of politicization."

This has been an issue with which all of us have long grappled, but never as publicly, or as pointedly, as in my confirmation hearings last fall. I know that for many of you, the segments devoted to politicization were wrenching, embarrassing, and even humiliating at times. They pitted friends and colleagues against one another. I know too that there were strong views on all sides of the debate back here in the ranks.

While I believed, and argued, that the specific allegations were unfair and untrue, I came away from that experience determined not only to find better ways to prevent the reality of policy-driven bias, but also to reexamine how we deal with perceptions of politicization.

I also came away with a renewed belief that, by dealing forthrightly with the politicization issue, we will also be strengthening our ability to fulfill our purpose—to provide the highest quality intelligence, accurate and relevant intelligence, to policymakers.

As a result of those hearings, one of my first moves upon becoming Director of Central Intelligence was to instruct the Deputy Director for Intelligence to form a task force to address politicization and to work with members of the Directorate of Intelligence to come up with recommendations for future action. In my view, the report provided valuable insights into the issue and prescribed a variety of measures

to address many of the concerns associated with politicization. I thank the task force members for their effort and encourage those of you who have not yet read the report or my resulting decision memorandum to do so.

In their report, the task force found a persistent and impressive commitment to objectivity, high ethical standards, and professionalism in the DI. They found that most analysts and managers remain determined to resist direct or indirect pressures from policy officials for products that conform to their views. Moreover, they concluded that politicization is not perceived to be a pervasive problem by most in the DI. Indeed, it is not a problem at all in some areas.

But the task force did find that concerns about politicization are serious enough to warrant action. Furthermore, most of these concerns relate to internally generated distortions. Over half the respondents to the task force's survey said that forcing a product to conform to a view thought to be held by a manager higher up the chain of command occurs often enough to be of concern. Most of the charges raised in discussions with the task force revolved around internal distortions generated during the review and coordination process.

I agree with the task force that this level of concern is disturbing, that it goes beyond the degree of frustration that is inherent to the review process, and that it demands the immediate attention of Agency management at all levels.

While my comments to you today fulfill a promise I made to Congress several months ago and respond in part to the task force's recommendations, I believe I would have scheduled this address regardless. In the short time that I have been back at the Agency, I have become more aware of the profound impact the issue of politicization has had on the morale of analysts and managers alike. It is not a concern to be dismissed with token gestures. Politicization is a serious matter, and it has no place at CIA or in the Intelligence Community.

As best we can, we must engage in a candid discussion of the issue, devise effective measures to prevent it from occurring, and resolve to deal decisively

with any circumstances that may foster distortions in our analysis. I hope that our encounter today will launch a process of greater openness and dialogue.

The DDI and I have accepted the task force recommendations in their totality, but before I discuss the specifics, I would like to talk with you further about politicization and the challenge it poses for us as intelligence analysts. The issue of politicization has dogged American intelligence for years and reflects the fact that although we belong to an institution with established norms and procedures, we are all human and prone to make mistakes and errors in judgment.

Although the task force study focused on the DI, I believe we must include the National Intelligence Officers and the National Intelligence Council in the discussion of politicization. They, too, are engaged in analysis and—given their frequent contact with high-level policymakers—their work is also vulnerable to distortion.

Let's start by defining the policymakers' proper role in the intelligence process. I believe that most of you would agree that policymakers should be able to request intelligence products that address the issues they are dealing with on a daily basis. Such tasking is an integral part of the intelligence process. If we ignore policymaker interests, then our products become irrelevant in the formulation of our government's foreign policies. I think we also all would concur that a policymaker should not dictate the line of march that he or she expects our analysis to take. Nor should we withhold our assessments because they convey bad news or may not be well received.

The challenge for us as analysts, then, is to produce intelligence that objectively assesses relevant policy issues—whether it supports or undermines current policy trends—and to ensure that our product is read and valued by the policymakers concerned. Ensuring objectivity means that we explore the issue fully, looking at and vetting all the available evidence and identifying where gaps, blindspots, or alternative scenarios exist. Our task is to facilitate an understanding of the realities of a particular situation and its implications for US policy.

Getting the policymaker to read our product should not jeopardize our objectivity; it does not mean sugarcoating our analysis. On the contrary, it means providing a frank, evenhanded discussion of the issues. If we know that a policymaker holds a certain viewpoint on an issue that is different from our analysis, we ought not lightly dismiss that view but rather address its strengths and weaknesses and then provide the evidence and reasoning behind our own judgment. I believe such an approach enhances our credibility and value. I realize, however, that in many cases the issues may not be clear-cut. In such situations, we owe it to ourselves to discuss fully how best to approach the subject before we even set pen to paper. In no instance should we alter our judgments to make a product more palatable to a policymaker.

In dealing with policymakers, we also need to keep in mind our role as intelligence analysts. Managers and analysts alike should meet with policymakers on a regular basis to exchange views and explore new ideas. In today's changing world, however, we must guard against taking on tasks that do not deal with intelligence topics and may be intended instead to drive a specific policy agenda. Managers and analysts need to discuss such situations candidly and design products that address only the intelligence issues at hand.

This brings me to the second aspect of politicization identified by the task force—the apparent lack of understanding and confidence between a number of DI analysts and managers. Somehow some seem to have lost the ability to discuss the substantive or structural aspects of an intelligence product frankly and in an atmosphere of trust. The task force report indicates that such circumstances exist in enough offices to be of concern. Apparently we have lost a sense of professional collegiality and find ourselves, in many instances, adopting a them-against-us mentality which fosters perceptions of distortions in the intelligence process. No one has a monopoly on the truth; we are all learning new things every day. Although some may be more experienced than others, no one person should impose his or her view on another. Dialogue must take place, each participant must be open to new ideas, and well-grounded alternative views must be represented. There are many managers and analysts who understand this; unfortunately, many do not.

If an analyst and manager or two analytical groups interpret information differently and can't come to a common understanding, the situation can degenerate into a perception of politicization. If one group or one person forces his or her line of analysis out over another, whether by force of his or her position in the management structure or through control of dissemination channels, it can leave the perception that that person or group has politicized the process.

I believe the first line of defense against politicization and analytic distortions is our own personal integrity; I want to spend some time talking about how each of us must work to ensure the highest integrity in our work.

Let me talk for a moment to our managers. I believe that managers are in a special position, particularly branch chiefs, because they are the ultimate arbiters in any analytical disagreements. They are also the ones who are charged with teaching and counseling our analysts.

As I see it, managers have three critical responsibilities to prevent distortions and corruptions of our products. First, managers have to challenge all of the analysis that comes through them to ensure its basic analytic soundness, logical validity, and clarity. As part of this, managers should always require analysts to defend their work.

Second, managers must strive to be open to new ideas and new lines of analysis from any source. We cannot simply stick with our previous conceptions and hope to keep pace with our rapidly changing environment. In the past year, many of the old assumptions that helped us in our analysis have been invalidated.

Third, I would also strongly concur with the task force in its conclusion that poor communication is the key source of the widespread concern within the DI about politicization.

Managers must strive in every interaction they have with analysts and managers to ensure all communications are clear. Managers must be able to state clearly why they disagree with a judgment, or how they want a logical argument reconstructed. We cannot simply say we don't like it and we'll know what we want when we see it. That is more than a copout, that is a prescription for trouble.

Let me emphasize this last responsibility. Managers, particularly those who are teaching our less experienced analysts how to do basic intelligence analysis, cannot afford poor communications. Managers should be showing analysts the hows and whys behind their decisions, not just telling them to change words. If you can't tell an analyst why you don't believe his or her arguments, or if you can't offer a logical counterargument, then you should take more time to construct your own analysis.

Most managers in the DI face difficult and highly stressful demands on their time. In a directorate in which, at each level, the manager is expected to be part expert, part editor, and part bureaucrat, they are sometimes tempted to give the people-management side of their jobs short shrift. Frequently, the result is that suspicions of base motives arise when there are simply differences of view:

- This happens when a division chief is too timid or thinks he or she is too busy—to sit down with the analyst and go over comments on a paper.
- It happens when a senior manager makes cryptic or offensive comments on drafts.
- It happens when the office director sits on a paper indefinitely because he or she lacks the courage to tell an analyst and his or her management that it is simply unworkable or irrelevant.
- It happens when an analyst responds to a reviewer with legitimate questions or counterarguments, only to discover he or she has been branded as uncooperative and unwilling to take criticism.
- It happens when subordinate managers are afraid to give bad news, or to admit to their own mistakes, and instead pin everything unpleasant on someone higher up the chain.
- It happens when there are so many layers of excessive review that some kind of misunderstanding somewhere along the way is inevitable.
- It happens when any manager becomes so intent on "making a call" or "sharpening the judgments" or "defining the office view" that he or she oversimplifies the argument or fails to provide alternative views.

I think you get the idea. Perceptions of politicization or other kinds of intentional distortion tend to arise in the absence of an open, creative environment that encourages give-and-take. The manager who allows the press of business and the frequent need to push and prod for the best possible product to cause him or her to behave rudely, abruptly, or imperiously, does so at considerable peril to his or her reputation for objectivity. I know also that what is necessary is not the practice of some awkward, feel-good management technique. It is simply a matter of treating people the right way—with professional respect, civility, and confidence in their integrity and capabilities.

Managers must create an environment in which analysts feel comfortable airing substantive differences. Managers must listen; they must talk; they must erode some of the hierarchy. And they must create a sense of joint ownership of ideas. Managers need to create an atmosphere in which people can approach them without fear of retribution. Managers must—I repeat must—create a barrier-free environment for ideas.

Now let me address our analysts. Analysts have their own responsibilities to prevent distortions and politicization from creeping into our analysis. First and foremost, analysts must be able to construct clearly a logical analysis of an issue. This includes not only the ability to write a clear argument, but also an ability to examine one's own biases, assumptions, and limitations.

Second, when an analyst sends forward a work to management, he or she should be prepared and expect to defend that analysis.

Third, every analyst must approach editing, coordination, and review as a process to improve a piece. An analyst must see the process as a team effort, with coordinating analysts and managers as team members who will offer input that must be considered and dealt with. No analyst should think that his or her view of the world is the only correct view, or that the opinions and arguments of others are not worthy of consideration. We must always keep our minds open. As Judge Learned Hand wrote, "Opinions are at best provisional hypotheses, incompletely tested. The more they are tested, after the tests are well

scrutinized, the more assurance we may assume, but they are never absolutes. So, we must be tolerant of opposite opinions or varying opinions by the very fact of our incredulity of our own."

Last, and this is an important point, analysts must always challenge the arguments and opinions of others, including their managers. An analyst should not expect his or her analysis to go unchallenged, and he or she should not be willing to accept the analysis of others without challenge. By questioning managers and other analysts on the reasons underlying their comments and judgments, especially those in conflict with our own, we learn to look at issues in new ways—sometimes ways that are better. You should rightly question anyone who cannot defend or explain the reasons behind disagreements with your analysis.

Also, unwarranted concerns about politicization can arise when analysts themselves fail to understand their role in the process. We do produce a corporate product. If the policymaker wants the opinion of a single individual, he or she can (and frequently does) consult any one of a dozen outside experts on any given issue. Your work, on the other hand, counts because it represents the well-considered view of an entire directorate and, in the case of National Estimates, the entire Intelligence Community. Analysts themselves must play a critical role in making the system work. They must do their part to help foster an open environment. Analysts must understand and practice the corporate concept. They must discard the academic mindset that says their work is their own, and they must take into account the views of others during the coordination process.

What, then, can we do together to counter both real and perceived distortion of the analytical product? For starters, we can all recommit ourselves to a solid professional ethic and a high degree of collegiality. Distortion of analysis is much less likely, and much easier to spot, if there is a concerted effort at all levels to observe basic standards:

- We must make explicit what is not known and clearly distinguish between fact, inference, and judgment.
- We must recommit ourselves to the good oldfashioned scientific method—the testing of alternative hypotheses against the evidence.

- We should provide an outlet for different interpretations, theories, or predictions in our mainline publications, not just in a staff note or a piece at the back of a monthly.
- While we strive for sharp and focused judgments for a clear assessment of likelihood, we must not dismiss alternatives or exaggerate our certainty under the guise of making the "tough calls." We are analysts, not umpires, and the game does not depend on our providing a single judgment. As Oliver Wendell Holmes wrote, "Certitude is not the test of certainty. We have been cocksure of many things that were not so."
- We must protect ourselves from groupthink, an institutional mind-set, or personal bias. We must also avoid the temptation to weight our arguments or our case as a corrective to the perceived failings of others.
- We must view coordination as an important step in ensuring that all views have been considered.
 Indeed, the task force found that refusal to alter a view or take into account the views of others during the coordination process frequently leads to charges of distortion or politicization.

But, above all, we must build an atmosphere of confidence and trust between analysts and managers. This requires a renewed commitment to accountability, expertise, and intellectual honesty. Accountability means standing behind the intelligence that one sends forward and being held responsible for any distortions that have been imposed upon it. It is not producing analysis designed to please one's superiors; nor does it mean that a branch, division, or office's analysis must always be right. Accountability requires that analysts and managers understand each other's viewpoints and work together in producing the best analysis they can.

In doing so, we rely on expertise. Managers should ensure that analysts are given opportunities to build and hone their substantive expertise and analytic skills. Managers are chosen to manage their analysts, not to become superanalysts themselves. In helping their analysts develop, managers can build a reserve of trust. Analysts, for their part, must dedicate themselves to becoming experts on their subject and sharpening

their critical thinking skills. This takes talent; this takes hard work; this takes dedication; and, not least, this takes time! It follows that managers will demonstrate increased confidence in analysts of such proven expertise.

Finally, we all need to recognize biases and blindspots—in ourselves and in others—viewing them not as weaknesses but as opportunities to grow. Such an approach would allow us to deal more openly with others and foster a more collegial give-and-take among analysts and managers. Greater intellectual honesty on everyone's part can make the process less bureaucratic, less hierarchical, and less of a win-lose situation.

By improving analyst-manager trust, I believe that concerns about the review process skewing intelligence can be lessened. Moreover, in the scope of a more collegial relationship, a manager challenging assumptions should not be seen as a threat by analysts. On balance, it is the managers who bear the greater burden of responsibility in the review process, and they need to have a sound basis for their actions. In editing and revising intelligence products, I expect managers to explain their changes in face-to-face exchanges with their analysts and to be willing to admit when a revision is unwarranted. In turn, I expect analysts to use evidence and logic when arguing against proposed revisions in substance, to be open to new approaches and ideas, and to guard against purely defensive reactions. Expertise is a requirement, but analysts must not become so wedded to their views that they exclude wellgrounded, alternative arguments.

The issue of analyst-manager communications is paralleled in the DI-NIC relationship, where NIOs review drafts submitted by DI analysts. A majority of the time, the process works smoothly. In some instances, however, tensions have flared over disagreements on substantive changes. Both sides must endeavor to communicate openly to resolve differences in views or outline alternative scenarios. Moreover, the NIOs' access to the DCI is not exclusive; analysts are welcome to bring their concerns about the estimative process directly to me.

I would like also to address the special obligations and responsibilities that fall on the Directorate of Intelligence and Directorate of Operations when CIA is involved in a covert action. For the DO, a covert action activity does not absolve it of its foreign intelligence reporting responsibilities. It must meet its professional obligation to report as accurately and as fully on an area or problem in which a covert action is under way, as on any other subject. The DO's task is made harder and scrutiny will be all the more intense because inevitably the DO will be working against the perception that its reporting is skewed by involvement in a covert action. And, in truth, it is only human nature to expect that those who are trying to implement a policy will develop strong opinions about, and even attachments to, that policy. We would be fooling ourselves if we tried to deny that reality. But all the more reason for the DO, as professional intelligence officers, to assert their own first obligation to seek and report the truth. And all the more reason that we must reaffirm that those who are responsible for covert action must not be in a position to produce, coordinate, or disseminate anything that is, or looks like, finished intelligence. At the same time, DI analysts must seek out the expertise in the DO, including in areas where covert action is involved, where operations and reports officers have great experience, expertise, and day-today working insights. And a special burden falls on the leaders of joint DO-DI Centers, who must ensure that neither the perception nor the reality of politicization gets a toehold.

There is one other potential problem that I need to talk about. As we all know, the DO frequently has information that for one reason or another is not formally disseminated. This may be especially true in cases involving covert action. The DO, in those cases, must make sure that the relevant analysts are made privy to the information they need to strengthen their analytical understanding and work.

In discussing this topic, I would be remiss in not stating that, with a few exceptions, we have a long history of effectively making this partnership between the DO and the DI work—where the DI has earned a well-deserved reputation for independence and insight and the DO for reporting unblinkingly and accurately even when involved in covert action.

In its examination of politicization, the task force concluded that "the solution to the problem of politicization, broadly defined, is not so much a matter of mechanisms as it is confidence in the integrity and capabilities of our people. For our recommendations to yield positive results, every Agency employee from the DCI on down must demonstrate adherence to the principles of integrity on which objective analysis rests, and civility, which fosters a trusting, creative environment."

While I agree that, first and foremost, attitudes must change to help us overcome the unease that politicization has produced among Agency employees, steps should be taken to set a process of reconciliation and dialogue in motion. As I noted earlier, I fully endorse the task force's recommended actions. At the risk of reciting a laundry list of new initiatives, I would like to outline for you the measures that I have undertaken in an effort to address the problem of politicization.

As a first step, I pledge to you today my firm commitment to ensure that analytic objectivity is at the core of every finished intelligence product and that the importance of people-oriented management is instilled at every supervisory level. I want to see this Agency excel in its mission; but to do so, its personnel must have a sense of value and feel that their contribution matters. I expect every manager in this organization to echo my commitment and foster an atmosphere of confidence and trust.

To strengthen management skills and enforce accountability for good management, I have directed the DDI to initiate a zero-based study of DI management practices, to mandate that performance appraisal reports explicitly cite deficiencies in management related to charges of politicization, and to support initiatives to secure better feedback from personnel—such as the evaluation forms being developed by the DI/MAG.

In an effort to assist managers in cultivating the analytic talent of the people under their supervision, I have asked the DDI to ensure that DI managers devote greater attention and resources to practical onthe-job training of analysts—showing them how to gather evidence, assess sources, make judgments, and write up or brief their analysis, our so-called tradecraft. The DDI also should develop a DI tradecraft manual and work with the Office of Training

and Education to enhance the tradecraft training that analysts receive in formal courses. In addition, managers should rely more frequently on the expertise and experience of senior analysts to assist in developing new analysts.

As a means of minimizing the chances for distortions and misperceptions caused by the review process, I have directed the DDI to institute practical measures to reduce layers of review, encourage greater flexibility and variety of formatting, and encourage fuller debate of substantive issues. To achieve these goals, a DI task force will be established to study the directorate's review and coordination process. At the risk of prejudging the task force's findings, I expect to see a noticeable reduction in the layers of review. In addition, I have asked the DDI to reserve his own substantive review to sensitive products intended for high-level consumers. I have not and will not become involved in the review process.

To ensure that our consumers get the benefit of differing analytic perspectives and to demonstrate the directorate's openness to new ideas and thoughtful alternative viewpoints, I have asked the DDI to restate his support for the inclusion of well-reasoned, relevant, and factually supported alternative views in mainline products, and to appoint a committee to develop practical means to accomplish this goal.

In an effort to remain vigilant to future instances of politicization, I have directed all major analytic components to establish and publicize procedures within the chain of command—to deal with allegations of politicization. I also asked the DDI to appoint a full-time ombudsman to serve as an independent, informal counselor for those with complaints about politicization, and he has asked Dave Peterson to take on that job. Dave will have access to me, the DDCI, the DDI, and all DI analytic products; he will counsel, arbitrate, or offer recommendations and have the authority to initiate inquiries into real or perceived problem areas. While Dave will be administratively located in the DI, he will be responsible for dealing with concerns about or allegations of politicization from throughout the Agency, as well as the NIC and estimative process. He will also publish an annual report that includes an assessment of the current level of concern and the effectiveness of measures being taken to alleviate it.

I have directed that several other measures be taken to guard against politicization becoming a problem in the future. IG studies of analytic components shall specifically consider the effectiveness of the review and coordination processes, and the DDI should make relevant portions of IG studies of DI components available to a wider audience within the DI. The DDI should also mandate wider dissemination of studies by the Product Evaluation Staff, as well as increase the studies' emphasis on distortions of the product and process and on the use of alternative analysis. As a follow-up to the task force's efforts, a survey of DI analysts and managers should be conducted a year from now on the issue of politicization.

Finally, the DDI and I are committed to encouraging open and continuing discussion throughout the DI and the NIC of politicization and will promptly take steps when allegations of problems arise, particularly in centers and task forces involved with DO operations. Specifically, I have asked the DDI to encourage all components to discuss politicization in general, and as it pertains to specific substantive issues, and to mandate that officers engaged in the conduct of covert action in areas where policy implementation and analytic functions are integrated shall not be involved in the formal coordination of finished analytic products. The DDI, the NIC Chairman, and the Deputy Director for Operations currently are developing guidelines to ensure that the entire intelligence production process, including the preparation of regular intelligence analysis, National Intelligence Estimates, briefings, etc., including in the DCI centers, are insulated from the influence of those with responsibility for implementing and supervising covert action.

I, better than anyone, know that this directorate lives and breathes skepticism. It is, after all, our stock in trade. And no area is so subject to skepticism—even cynicism—than senior-level rhetoric. "Show me" is the watchword. And so it should be. I intend to monitor closely the implementation of these instructions and ensure that they are carried out. This will be no paper exercise. Actions at every level and a sustained commitment will be required and, as we go along, the DDI and I will continue to welcome ideas in implementing the recommendations.

At the same time, you and I both know that this kind of problem cannot be directed away. You cannot order integrity, you cannot demand that a culture preserve its ethics. In the end, preventing distortion of our analysis depends on where all of us draw the line day in and day out. We must draw a line:

- Between producing a corporate product and suppressing different views.
- Between adjusting stylistic presentation to anticipate your consumer's predilections and changing the analysis to pander to them.
- Between making order out of chaos and suppressing legitimate debate.
- Between viewing reporting critically and using evidence selectively.
- Between avoiding wishy-washiness and pretending to be more certain than we are.
- Between being a team player and being a careerist.
- Between maintaining efficiency and suppressing legitimate debate.
- Between providing leadership and fostering a fearful, oppressive climate.

I wish I could look back on my career in the DI—from analyst to DDI—and say that in each and every case over 25 years I have always drawn all these lines in all the right places. I can tell you, however, that as DCI I intend to do everything in my power to guarantee that analytic objectivity remains the most important of the core values of the Central Intelligence Agency.

It is my sincere hope that the steps I have outlined will help alleviate the underlying causes of and concerns about politicization. Let me reiterate. In our efforts to be policy-relevant, we should not allow our analysis to become skewed in favor of one policy option or another. Nor should the views of one individual—manager or analyst—prevail when well-sourced, well-reasoned arguments support a different

set of judgments. We must improve the analyst-manager relationship, and the burden is largely on those who lead. Collegiality and honesty should be two key watchwords in our dealings. We must also avoid ascribing base motives to those with whom we disagree. Moreover, the analytic process should vigorously scrutinize all available evidence, including clandestine reporting, to ensure that underlying policy goals are not distorting our analysis.

In closing, I want to emphasize that the underlying key to dealing with this issue of politicization is respect for individuals, trust in their judgment, confidence in their capabilities, and concern for their well-being. Managers must tell employees what is expected of them, and they must hold them responsible for following through. At the same time, however, managers must give employees the trust and confidence, as well as the training and control, they need to carry out the task. And they must reward employees for their competence, creativity, and commitment to the analytic process.

I want respect for the employee to again become a central value of this organization, and I want that value to run deep. Many managers pay lipservice to this. I want all of us to deliver, and I think we should be held accountable for doing so. Because trust begets trust, I am certain perceptions of politicization would be reduced in the process.

I will make a commitment to you today. My door is always open to discuss this issue with you. If you believe your work is being distorted and you are not satisfied your managers are seriously addressing your concerns, I want to hear from you.

I am very proud of the Directorate of Intelligence. I served in it; I led it; and I used its analysis to frame policy. I want to see it—and the people in it—prosper. I have always been greatly impressed with the breadth and depth of expertise in the DI. And I do not want anybody—inside or outside the Agency—to believe this expertise is tarnished by political considerations.

I was uncertain how to present my message today—how exactly to say what I wanted to convey. So, I did what I have often done for years. I turned to the DI for help. I asked two members of the politicization task force each to give me a draft of what they thought I should say, and I asked them to choose two analysts—unknown to me—to do the same. My remarks today are an amalgam of those four drafts and my own views. Though many of the words today originally were not mine, I believe wholeheartedly in what they express. The sentiments, the views, are mine if not every word. Those who helped me know who they are, and I thank them.

Let me conclude then by simply reiterating that the absolute integrity of our analysis is the most important of the core values of the Central Intelligence Agency. Policymakers, the Congress, and the American people must know that our views—right or wrong—represent our best and most objective possible effort to describe the threats and opportunities facing the United States. They must know our assessments are the product of the highest quality and the most honest intelligence analysis available anywhere in the world. Thank you.

A personal perspective

The Need for Ethical Norms

Paul G. Ericson

The word "ethics" turns off many and confuses more. Yet the notions of shared values and an agreed-on process for dealing with adversity and change—what many people mean when they talk about corporate culture—seem to be at the heart of the ethical issue. People who are in touch with their own core beliefs and the beliefs of others and are sustained by them can be more comfortable living on the cutting edge. At times, taking a tough line or a decisive stand in a muddle of ambiguity is the only ethical thing to do. If a manager is indecisive and spends time trying to figure out the "good" thing to do, the enterprise may be lost.

We take great pride in our Agency's specialness, exhibiting an individual and corporate stance that speaks to the uniquely demanding nature of our business and our long tradition of "can do." This pride is well placed. America's expectations for the Agency and its people are extraordinarily high, and our record over the past four decades attests, in the main, to the fact that these expectations have been met, if not exceeded.

This pride has its dark side, which has its costs. One of the foremost has been our seemingly sustained reluctance to formalize the ethical minimums which should govern our business and to pass these findings on to those who join the Agency. Although many of us have discussed the ethics of our profession, little has been done organizationally to capture these thoughts. Rather than possibly hamstringing future options by formalizing Agency dos and don'ts, we seem to prefer risking a repetition of behaviors which have jeopardized our organizational standing and credibility in the past. We can ill afford to allow this trade-off to continue.

An Amoral Business

The need for a code of conduct is not trivial. The ethics attendant to the intelligence business are, at best, complicated. Each day many of us face formidable ethical choices. It is no accident that we are concerned about the ethical standards of potential employees.

Our ethical conundrum was captured in part by Judge Webster, when he answered a Third World leader seemingly perplexed over the then Director's personal ethical standards.

I don't understand it, Mr. Director. You are a judge, a man committed to upholding the law; and yet you have been placed at the head of an essentially lawless organization.

In responding, Judge Webster reportedly noted that:

In the United States, we obey the laws of the United States. Abroad we uphold the national security interests of the United States.²

This measured response understates the ethical pressures faced by many of this Agency's officers. The legal and moral strictures applied to civil servants are articulated and time tested. There are no analogous sets of ethical criteria associated with protecting the national security interests of the US. Most of our constituents would rather remain ignorant of what we have to do to accomplish some of our jobs. Case officers regularly move from upholding the laws of the US to upholding national security interests, and some have to face situations where these two requirements conflict. In most cases, the Agency seems able to deal effectively with these ethical problems. Our record, however, is not spotless.

Espionage is essentially amoral. We regularly break the laws of other governments, misrepresent ourselves to others, and use a variety of methods to manipulate others into doing our bidding. Those who are particularly skillful in doing so quickly move up the organizational ladder. It is not surprizing that officers who are rewarded for their operational successes abroad sometimes stumble when they return to the US. A proclivity for getting the job done, for example, can get one into trouble when "can do" unintentionally results in a contravention of Federal regulations or the expectations of a US civil servant.

More damaging would be a continuation of past tendencies among some to maintain an "operational" approach in dealings with other US agencies and the Congress. The operational realities faced by those stationed abroad can contribute to skepticism of the motivations of others and a fundamental distrust of all outsiders. Some have found it difficult to cast these biases aside during their tours at Headquarters. Using a "well-documented" pattern of Congressional leaks as a rationalization for our natural tendencies toward compartmentalization, we have had a history of limiting our disclosures to Congress. This issue was candidly addressed by the Executive Director of the Association of Former Intelligence Officers:

To my mind, to disclose as little as necessary to Congress, if they can get away with it, is not a bad thing because it helps Uncle Sam . . . We understand what they were doing. We hope that we would have tried to do the same thing ourselves. We're not paid to go out an blab our secrets around or we won't have any secrets anymore.³

The ethical challenges imbedded in our overseas operations have their analogies in the analytical world. Just as our operations officers are expected to penetrate regularly the hard targets or make good on high-risk covert actions, our customers turn to Agency analysts for seemingly impossible answers. Our clients expect analytical objectivity but demand omniscience. We are equally accountable for mind-reading as we are for the in-depth analysis of intelligence data. "Telling it like it is" does not go down well when it means saying we do not know. Under such conditions, analysts are tempted to paper over their ignorance by frequent invocation of the "we believe" formulation.

Working on the Edge

Our ethical challenges are further complicated by our corporate imperative towards risk taking. While no one subscribes to achieving success at any cost, if we ever become afraid to risk failure in order to maximize the potential for success, our value to the US Government would be significantly reduced. As an agency we are expected to take substantial analytical, technological, and operational risks. Indeed, we develop and cultivate the reputation of being the one government agency capable of getting the job done, and those among us who demonstrate the ability to do so advance rapidly. "Can do" is not an idle boast. Our fellow agencies and Congressional oversight committees who hold us accountable for "failures" expect us to be uniquely proactive in our approaches. The US requires just such a capability; if we could not provide these services, others would develop the ability to do so:

- Our analysts have to continue to make judgments on the basis of incomplete information with the full recognition that hindsight will often prove them to have been inaccurate. At the same time, they have to have the integrity and personal courage to revise the r estimates on the basis of new information or to admit their ignorance as to the likely unfolding of future events.
- Our operations officers have to continue to take chances with the full recognition that some of these will backfire. This may mean doing business with the dark side, with the understanding that such activities could redound against us in the years to come. It should never mean undertaking or condoning activities that could not stand up under close scrutiny.

A Secret Organization

The pressure to maintain high personal standards seems all the more appropriate when one considers that the secret nature of our business carries a responsibility for self policing. Our corporate successes and often the personal safety of our officers and their agents rest on a strict application of "need-to-know" principles. This holds true even within the

embassies in which we operate and within our own organization. The ease with which we can invoke "sources and methods" to preclude broad oversight of our activities is a temptation that has to be avoided when it comes to undertaking ethically questionable activities or when dealing with our mistakes.

Given these operational challenges, it would only seem appropriate to arm our officers with the clear understanding of the minimal ethical standards they will be expected to apply throughout their careers. Those who would refrain from this straightforward approach would soon recognize that "can do" is not incompatible with "do not do." A clear understanding and consistent application of ethical values will advance and not compromise Agency contributions to our natural security. As the parable of the Sadhu points out, a clear understanding of Agency ethical standards empowers the Agency officer to act correctly and decisively. In short, we cannot and should not shirk from the addressing the conclusion of a retired case officer:

Alan Fiers was one of the penultimate warriors of the modern era of the Agency, and, when he fell, all of the soldiers had to quiver. If Alan Fiers was not safe then no one is safe, simply because everything becomes a function of judgment.⁴

The Need for Change

The imperative for defining what we stand for seems clear:

- A lack of ethical integrity is unconscionable to an American public and Congress who bridle, in the first place, over the need to grant the CIA immunity from the public's right to know. We have to be seen as above reproach on this score, regardless of the unique ethical challenges we face. Integrity should not be seen as being derived from an analysis of the relative costs and benefits of being candid. It has to reside in each one of us in our day-to-day dealings.
- Our officers should be able to operate with a selfconfidence that allows each to make the appropriate ethical choices even when the issue is clouded

and the decision made on the run. Success in our business often rests on amoral behavior in the conduct of operations overseas and on moral behavior when dealing with US persons or organizations. Our officers have to have a clear understanding of professional ethical standards if they are to move effectively and decisively between the diverse standards of behavior called for by these two operating environments.

This Agency can no longer permit the "slips," "errors," and "misjudgments" which naturally evolve from an environment where our officers are often left to their own judgment when shifting through the maze of sometimes conflicting signals regarding proper behavior:

- Corporate ethics may remain fuzzy in the eyes of the individual case officer, analyst, or contracting officer, particularly where ethical considerations come into conflict with "can do."
- Each Agency Office or Division may have its own variation of acceptable ethical behavior, and this variation itself is often reinterpreted with each new component head.
- Ethical issues are not always fully and formally addressed within corporate training programs.

It is not a question of not having the information necessary to develop ethical standards. Forty years have left a record of both appropriate and inappropriate ethical choice. Our past is littered with the residue of those who were either unclear as to the ethical standards they were expected to uphold or who were unable to meet these standards. All of us bemoan the misfortune of having our mistakes or indiscretions result in strictures that make it more difficult to meet the demands of an increasingly complex mission. But we have yet to take the steps necessary to ensure that history does not continue to come full circle.

The development of a code of ethics is complicated. Ethics may constrain "can do" from time to time. We risk focusing on the words and not the spirit of any code that is developed. And an ethical code may require the alteration of time-honed behaviors among

mid level and senior officers. But when you stop to think about it, for an organization that rightly prides itself in the caliber of its people and its capabilities to get the job done, this issue should not prove all that challenging.

NOTES

- 1. "The Parable of the Sadhu"; Bowen H. McCoy; *Harvard Business Review*; September-October 1983.
- 2. "The In-Culture of the DO"; Charles Cogan, *Studies in Intelligence*; Summer 1991.
- 3. "Plea Ripples Through CIA"; Benjamin Weiser, *The Washington Post*; 31 August 1991.
- 4. Ibid.

Guideposts from Just War Theory

Managing Covert Political Action

James A. Barry

In 1954, at the height of US concern about the threat from international Communism, President Eisenhower appointed a panel to make recommendations regarding covert political action as an instrument of foreign policy. The panel, named after its chairman, Gen. Jimmy Doolittle, included the following statement in its report:

It is now clear that we are facing an implacable enemy whose avowed objective is world domination by whatever means and at whatever costs. There are no rules in such a game. Hitherto acceptable norms of human conduct do not apply. If the US is to survive, longstanding American concepts of "fair play" must be reconsidered. We must develop effective espionage and counterespionage services and must learn to subvert, sabotage and destroy our enemies by more clever, more sophisticated means than those used against us. It may become necessary that the American people be made acquainted with, understand and support this fundamentally repugnant philosophy.

In counseling such a radical departure from American norms, the authors of the Doolittle report adopted an argument that appears in hindsight to be extreme. But in the context of the times, it was consistent with several overlapping schools of thought in international affairs that formed the basis for many Cold War policies. The first was the "realist" tradition in international affairs, which traces its origins from the Greek historian Thucydides through the philosophies of Machiavelli, Hobbes, Spinoza, and Rousseau to modern theorists such as Hans Morgenthau and Reinhold Neibuhr. Although realists differ significantly in their views, they tend to emphasize the primacy of power in international affairs, and to exclude morality from considerations of making foreign policy.² Modern realism encompasses views ranging from George Kennan's proposals to combat Communism through a patient policy of

A revised version of this article will appear in the Summer 1993 edition of Orbis: A Journal of World Affairs.

containment and a low-profile approach to moral issues to Henry Kissinger's opportunistic use of moral language coupled with a belief that moral norms could not govern the conduct of states. Reinforcing the views of the early Cold War realists were the arguments of ideological crusaders who conceived of the struggle with Communism as kind of holy war, as well as those of American nationalists who, like General Sherman, believed that "war is hell" and that the merciful thing is in fact to wage it ruthlessly. Members of these several groups supported the need for covert action against Communism either because they believed that the exceptional circumstances of the times required it or because they judged that it was simply one of the methods that states used to struggle with each other.³

But it is clear that even the authors of the Doolittle Report were uncomfortable with the "repugnant philosophy" that they deemed necessary. Indeed, although covert political action became an important tool of US policy America never completely abandoned its moral traditions. The threat of international Communism, however, became a compelling rationale for covert action, to the extent that many operations needed no more specific justification. Thus the Cold War, and the perceived severity of the Soviet threat, made it possible for policymakers to ignore competing ethical considerations when they endorsed covert actions.

This Cold War rationale began to crumble in the late 1960s with popular opposition to the Vietnam War and the subsequent revelation in Congressional inquiries of abuses by the CIA. The result was that greater attention has been paid to the process of managing covert actions. Until recently, however, despite changes in decisionmaking and oversight mechanisms, the Soviet threat was a dominant consideration in most covert action decisions.

Covert Action and the New World Order

Since the dismantling of the Berlin Wall, the abortive coup in the Soviet Union, and the dissolution of the Soviet empire, the confluence of ideological, nationalist, and realist thought that formed a compelling rationale for covert action in the early Cold War period has lost more validity. In a dangerous world, however, presidents probably will not eschew this particular element of foreign policy, even in a "new world order." The Persian Gulf war shows that aggression by hostile states remains a threat to US interests, and other challenges such as terrorism, narcotics trafficking, and the potential for proliferation of weapons of mass destruction are likely to motivate the US to consider covert responses. What frame of reference, then, should replace the Cold War philosophy that has shaped covert action policy since the founding of the CIA?

Although the ideological crusade, American nationalism, and political realism dominated US thinking about international affairs in the immediate post—World War II era, there are other enduring philosophical traditions. Some emphasize the ends of policy (utilitarianism and Marxism); others are "rule-based" (international law and Kant's rationalism are in this category⁴).

One of the "rule-based" traditions has received greater attention in recent years. This is the natural law tradition, and in particular its rules regarding the use of force by states, which fall under the rubric of "Just War Theory." Just War Theory was used extensively by the Bush Administration in explaining its decision to go to war, under UN auspices, against Iraq. More recently, a symposium of jurists, philosophers, theologians, government officials and military officers affirmed that Just War Theory is useful in deliberations regarding low-intensity conflict.

Just War Theory

The origins of the Just War Theory can be traced to Saint Augustine in the 4th century A.D., and especially to Saint Thomas Aquinas, who extended and codified it in the 13th century. Just War Theory is in

essence a set of guidelines for going to war (the socalled *jus ad bellum*), and for the conduct of hostilities (*jus in bello*). Though largely associated with Catholic scholars, Just War Theory is not a religious teaching per se, but rather part of a tradition of theological and philosophical thought, dating from Aristotle, which emphasized the importance of ethical processes in decisionmaking.

Aquinas specified three conditions for the decision to go to war: the action must be ordered by proper authority, the cause must be just, and the authority must have a right intention of promoting good or avoiding evil. Other authorities subsequently added three further criteria: the action must be a last resort and all peaceful alternatives must have been exhausted, there must be a reasonable probability of success, and the evil and damage which the war entails must be proportionate to the injury it is designed to avert or the injustice which occasions it.

Once these conditions are met, the belligerent is subject to two further constraints in seeking his military objectives: his actions must be directed against the opponent, not against innocent people; and the means of combat must be proportionate to the just ends envisioned and must be under the control of a competent authority.¹⁰

The first of these constraints has been further refined, under the "principle of double effect," to encompass situations in which injury to innocent parties is unavoidable. Aquinas formulated the principle as follows:

There is nothing to hinder one act having two effects, of which one only is the intention of the agent, while the other is beside his intention. But moral acts receive their species from what is intended, not from what is beside the intention, as that is accidental."

Under this principle, then, a belligerent may, if there is good reason, be justified in permitting incidental evil effects. The conditions governing this, however, are held by most commentators to be exceedingly strict. For example, the action taken must not be evil in itself; the good effect, and not the evil effect, must be intended; and the good effect must not arise out of the evil effect, but both must arise simultaneously from the action taken.¹²

Modern political theorists have continued the Just War tradition and focused primarily on the criterion of just cause. Currently, the majority school of thought appears to favor the view that the only justifiable cause for armed conflict is to repel aggression. Traditionally, however, there were two other acceptable causes: to retake something wrongfully taken and to punish wrongdoing.¹³ Another area of debate has been whether forcible intervention in another state could be justified in order to reform that state's political system, for example in the case of flagrant human rights abuses.¹⁴

The Theory and Covert Action

But what can an arcane theological and philosophical doctrine that is more than 1,600 years old and which was codified to regulate war during the Middle Ages have to do with covert action following the collapse of Communism? At least one former practitioner, William Colby, has argued that "a standard for selection of covert actions that are just can be developed by analogy with the longstanding efforts to differentiate just from unjust wars." Perhaps more to the point, former Director of Central Intelligence (DCI) William Webster has noted that in its deliberations the CIA's Covert Action Review Group explores three key questions regarding a proposed covert action: "Is it entirely consistent with our laws? Is it consistent with American values as we understand them? And will it make sense to the American people?" 16 With respect to the last two considerations, a reformulation of the Just War criteria in common sense terms would probably appeal to the American people. It seems fair to conclude that the people would want the government to undertake covert actions only if:

- The action is approved by the President, after due deliberation within the Executive Branch and with the full knowledge and concurrence of appropriate members of the Congress.
- The intentions and objectives are clearly spelled out, reasonable, and just.
- There is a reasonable probability of success.
- The methods envisioned are commensurate with the objectives.

Moreover, in conducting covert action, it is reasonable to presume that the American people would approve of methods that minimize physical, economic, or psychological injury to innocent people and that are appropriate to the threat and under firm US control.¹⁷

Formulated this way, the Just War guidelines seem to be directly applicable to covert paramilitary operations or other actions involving the use of violence or coercion. Those who advocate or approve such covert actions, however, bear the additional burden of demonstrating why they must be conducted covertly. As ethicist Sissela Bok has pointed out, every state requires a measure of secrecy to defend itself, but when secrecy is invoked citizens lose the ordinary democratic checks on those matters that can affect them most strongly.¹⁸ In addition, a special problem of operational control can arise when intermediaries (agents) are employed—because their aims may differ from ours, and because the chain of command may be ambiguous or unreliable.¹⁹ Finally, most covert actions will necessarily lack the public legitimacy and legal status under international law of a declared, justifiable war. This makes it incumbent on those advocating such actions to take into account the consequences of possible public misunderstanding and international opprobrium.

The Chile Case

It would appear that a framework similar to the Just War Theory could be useful in evaluating covert actions that result in economic dislocation, distortion of political processes or manipulation of information, because these cause suffering or moral damage, as war causes physical destruction.²⁰ To explore this, consider how the guidelines would have applied to two instances of covert US intervention in Chile, in 1964 and 1970.²¹

The 1964 Election Operation

As part of its worldwide buildup of covert action capabilities in the early 1950s, the CIA established a capacity to conduct covert propaganda and political influence operations in Chile. In 1961, President Kennedy established a hemispheric policy to promote

the growth of democratic institutions, the Alliance for Progress. That same year, the President became convinced that the Chilean Christian Democratic Party shared his belief in democratic social reform and seemed to have the organizational competence to achieve their common goals. It lacked the resources, however, to compete with the extremist parties of the left and right.

During 1961, the CIA established relationships with key political parties in Chile, as well as propaganda and organizational mechanisms. In 1962, the Special Group (the interagency body charged with reviewing covert actions) approved two CIA proposals to provide support to the Christian Democrats. The program was modeled on that conducted in Italy in the late 1940s and 1950s, and it was intended to strengthen center-democratic forces against the leftist challenge from Salvador Allende, who was supported by the Soviet Union and Cuba. When President Johnson succeeded Kennedy, he continued the covert subsidies, with the objective of making Chile a model of democracy, as well as preventing the nationalization by a leftist government of the Chilean components of American multinational corporations.

The Chilean presidential election of 1964 came down to a battle between Allende and Eduardo Frei Montalva, a liberal Christian Democrat. The election was viewed with great alarm in Washington. The New York Times compared it to the Italian election of 1948, when the Communists had threatened to take over the country through the ballot box, and the US had intervened covertly to support democratic parties. Similarly, in 1964 the Johnson administration intervened in Chile, according to the Church Committee Report, to prevent or minimize the influence of Chilean Communists or Marxists in the government that would emerge from the election. Cord Meyer, a former CIA covert action manager, argues that the intervention was for the purpose of preserving the Chilean constitutional order.

In considering the 1964 election operations, the Johnson administration used the established mechanism, the interagency Special Group. By 1963, according to Professor Gregory Treverton, the Special Group had developed criteria for evaluating covert

action proposals. All expenditures of covert funds for the 1964 operation (some \$3 million in all) were approved by the Group. (There is no indication that the Congress approved these expenditures or was even informed in detail of the operation.) In addition, an interagency committee was set up in Washington to manage the operation, and it was paralleled by a group in the US Embassy in Santiago. Meyer contends that covert intervention on behalf of Christian Democratic candidates had wide support in the administration, and the Church Committee confirms that the covert action was decided upon at the highest levels of government.

During the early 1960s, the US pursued a dual-track policy in Chile, conducting covert action in support of broader, overt objectives. Overtly, the US undertook a variety of development programs, and Chile was chosen to become a showcase of such programs under the Alliance for Progress. Between 1964 and 1969, Chile received well over \$1 billion in direct, overt US aid-more per capita than any other country in the hemisphere. Moreover, funding to support the Frei candidacy was funnelled overtly through the Agency for International Development, as well as secretly through the CIA. Frei also received covert aid from a group of American corporations known as the Business Group for Latin America. Thus, the US used a variety of mechanisms to assist Frei. Covert support apparently was justified by the US Government on the grounds that Frei would be discredited if it were known that even more substantial support was flowing from the US.

That the 1964 covert action had a reasonable probability of success is evident from the outcome—Frei won a clear majority (56 percent) of the vote. According to Church Committee records, a CIA post mortem concluded that the covert campaign had a decisive impact. It is not clear from the available records whether a calculation of the likelihood of success was a specific part of the decisionmaking process. According to Treverton, the CIA was required under Special Group procedures to make such an estimate, and it is likely that its view would have been optimistic, because by the mid-1960s the Agency had managed to penetrate all significant elements of the Chilean Government and political parties.

In the 1964 operation, the CIA used virtually its entire arsenal of nonlethal methods:

- Funds were passed through intermediaries to the Christian Democrats for their own use.
- The CIA provided a consultant to assist the Christian Democrats in running an American-style campaign, which included polling, voter registration and get-out-the-vote drives.
- Political action operations, including polls and grassroots organizing, were conducted among slum dwellers, peasants, organized labor, and dissident Socialists.
- CIA-controlled assets placed propaganda in major Chilean newspapers and on radio, erected wall posters, passed out political leaflets, and organized demonstrations. According to the Church Committee, some of this propaganda used "scare tactics" to link Allende to Soviet and Cuban atrocities.
- Other assets manufactured "black propaganda," material falsely purporting to be from Allende and his supporters, and intended to discredit them.

Significant constraints were imposed, however. Paramilitary and other lethal methods were not used. The CIA explicitly rejected a proposal from the Chilean Defense Council to carry out a coup if Allende won. The Department of State turned down a similar proposal from a Chilean Air Force officer. Moreover, the Special Group turned down an offer from a group of American businessmen to provide funds for covert disbursement by the CIA. According to the Church Committee, the Group considered this "neither a secure nor an honorable way of doing business."

The 1970 Elections and "Track II"

Under Chilean law, Frei could not serve two consecutive terms as president. As the 1970 elections approached, the US faced a dilemma. The Christian Democrats had drifted to the left, and they were out of step with the Nixon administration's policy views.

(The principal architect of those views was Henry Kissinger, who as an academic had been a prominent member of the realist school.) The conservative candidate, Jorge Allesandri, was not particularly attractive to the US, but there was even greater concern about an Allende victory.

The CIA began to warn policymakers early in 1969 that an Allende victory was likely. In March 1970, the 303 Committee (successor to the Special Group) decided that the US would not support any particular candidate. Instead, it authorized the CIA to conduct a "spoiling operation," aimed at discrediting Allende through propaganda. The effort failed when Allende won a slim plurality in the 4 September election. Because no candidate won a clear majority, the election was referred to a joint session of Congress, which in the past had always endorsed the candidate who had received the highest popular vote. The joint session was set for 24 October 1970. Senior US officials maintained that their preoccupation with Allende was defensive and aimed at allaying fears of a Communist victory both abroad and at home. As Nixon noted in a New York Times interview:

There was a great deal of concern expressed in 1964 and again in 1970 by neighboring South American countries that if Mr. Allende were elected president, Chile would quickly become a haven for Communist operatives who could infiltrate and undermine independent governments throughout South America.²³

Kissinger noted that what worried the US was Allende's proclaimed hostility and his perceived intention to create "another Cuba." He maintained that nationalization of American-owned property was not the issue, though he did emphasize US interest in adequate compensation.

The Intelligence Community, however, held a more nuanced view. According to an assessment by the CIA's Directorate of Intelligence:

Regarding threats to US interests, we conclude that:

 The US has no vital national interests in Chile. There would, however, be tangible economic losses.

- 2. The world balance of power would not be significantly altered by an Allende government.
- 3. An Allende victory would, however, create considerable political and psychological costs:
 - Hemispheric cohesion would be threatened by the challenge that an Allende government would pose to the OAS, and by the reactions that it would create in other countries. We do not see, howeve, any likely threat to the peace of the region.
 - An Allende victory would represent a definite psychological setback to the US and a definite psychological advance for the Marxist idea.²⁴

Kissinger tacitly acknowledged the lack of vital US interests in Chile when he called it "a dagger pointed at the heart of Antarctica."

When Allende won a plurality of the popular vote, the thrust of US covert action shifted to preventing his accession to the presidency. The objective had now become to stop Allende by manipulation of the congressional vote. The committee asked Edward Korry, the US Ambassador in Santiago, for a "cold-blooded assessment" of the likelihood of mounting a coup and organizing an effective opposition to Allende. With negative evaluations from both Korry and the CIA, the committee met on 14 September and explored a "Rube Goldberg" gambit, in which Alessandri would be elected by the Congress and then resign, thus allowing Frei to run in a second election. The ploy was turned down.

By this time, Nixon had taken a personal role. He met on 15 September with Donald Kendall, chief executive officer of Pepsi Cola, and Augustine Edwards, an influential Chilean publisher who had supported Frei during the 1964 election. According to Kissinger, Nixon was incensed by what he heard, and decided that more direct action was necessary. As a result, he called in DCI Richard Helms and ordered a major effort to prevent Allende's accession. The CIA was instructed to play a direct role in organizing a military coup. Further, Helms was directed not to coordinate the CIA's activities with the

Departments of State and Defense and not to inform Ambassador Korry. The 40 Committee was not informed, nor was the Congress. This activity became known as "Track II," to distinguish it from the 40 Committee program, "Track I." ²⁵

Track II was a carefully guarded secret, but US displeasure with the prospect of an Allende victory was not. According to Kissinger, all agencies were working to prevent the election. The Chilean Government was threatened with economic reprisals, and steps were taken to inform the Chilean armed forces that military aid would be cut off. Separately from the CIA's effort, several large American companies had financed Alessandri's campaign. One company, ITT, offered the CIA \$1 million, but Helms turned it down.

When Helms left the Oval Office on 15 September, he had a page of handwritten notes. The first entry read, "less than one in ten chance of success." His pessimistic assessment was echoed by Ambassador Korry. According to his correspondence with the Church Committee, Korry consistently warned the Nixon administration that the Chilean military was no policy alternative. From Santiago, according to the Church Committee documents, the CIA reported: "Military action is impossible; the military is incapable and unwilling to seize power. We have no capability to motivate or instigate a coup."

This view was shared by the managers of Track II. According to David Phillips, chief of the CIA's Chile Task Force, both he and his immediate supervisor were convinced that Track II was unworkable. The CIA's Deputy Director for Plans, Thomas Karamessines, was adamant that the Agency should not refuse the assignment, but he personally briefed Nixon several times on the progress of the operation, always pessimistically.²⁶

Track I included funding to bribe Chilean congressmen, propaganda and economic activities, and contacts with Frei and elements of the military to foster opposition to Allende. Track II was more direct, stressing active CIA involvement in and support for a coup without Frei's knowledge. The CIA specifically offered encouragement to dissident Chilean military officers who opposed Allende, but who recognized that Gen. Rene Schneider, the Chilean

Chief of Staff, would not support a coup. These dissidents developed a plan to kidnap Schneider and take over the government, and this became known to CIA officials. Two unsuccessful kidnap attempts were made, and on the third attempt, on 22 October 1970, General Schneider was shot and subsequently died. Both the Church Committee and the Chilean inquiry concluded that the weapons used were not supplied by the US and that American officials did not desire or encourage Schneider's death. Neither, however, did they prevent it.

Unlike 1964, the 1970 covert operation did not involve extensive public-opinion polling, grassroots organizing or direct funding of any candidate. Moreover, Helms made it clear that assassination of Allende was not an option. And when a rightwing Chilean fanatic, Gen. Arturo Marshall, offered to help prevent Allende's confirmation, the CIA declined because of his earlier involvement in bombings in Santiago.

Evaluating the Two Operations

A Just War theorist reviewing the two covert operation would likely reach two conclusions: first, the 1964 operation was more justifiable than the 1970 activity, which would not have been approved if the officials concerned were natural law advocates rather than realists or ideological crusaders; and, second, both operations would have benefited from a more rigorous application of the *jus ad bellum* and *jus in bello* criteria.

US authorities probably would have considered that their covert intervention in the 1964 election was generally consistent with the *jus ad bellum*. It had clear objectives: preservation of an important democratic force in Chile and defense against the establishment of another Communist stronghold in the Western hemisphere. These were set by President Kennedy, based on his assessment of the commonality of US and Chilean interests. While not strictly speaking a last resort, it was conducted in the context of, and consistently with, an overall overt policy (the Alliance for Progress); was likely to be successful; and the overall effort was limited in scope and generally proportionate to the perceived threat. It

was approved in accordance with the established procedures, though in retrospect the process would have been strengthened if the Congress had been consulted.

Some doubts can be raised regarding consistency with the *jus in bello*. The need for "scare tactics" and "black propaganda" is not obvious. (If indeed Allende's affinities for the USSR and Cuba were on the public record, promulgation of this truthful information should have been adequate.) Such activities inherently carry the possibility of distortion and deception. As Sissela Bok notes, lying and deception carry a "negative weight." They require explanation and justification, while the truth, including presumably the "truth" promulgated through propaganda mechanisms, does not.²⁷ If not clearly justifiable in terms of necessity or to respond to Cuban or Soviet activities, such deceptive actions would not meet the test of proportionality of the *jus in bello*.

The 1970 Track II operation, in contrast, violated virtually all the Just War guidelines, though this might not have been of great consequence to those who directed it. Its objective was to prevent Allende's confirmation, but little thought apparently was given to the consequences for the Chilean people or the political system. The normal consultative process was bypassed, and Nixon made the fateful Track II decision in a state of high emotion.²⁸ No expert believed that success was likely. The methods chosen were initially inadequate and subsequently, when support for coup plotting took center stage, the intermediaries could not be controlled. What began as a nonlethal action quickly turned lethal. Despite the fact that injury to innocent parties was a foreseeable outcome of the envisioned coup, no advance provision was made to prevent or minimize it. In light of the intelligence assessment that the US lacked vital interests in Chile, it is hard to rationalize support for a potentially violent military coup as a proportionate response.

In sum, the Chile case shows that Just War Theory can provide a useful framework for evaluating covert political action by asking certain penetrating questions: Is the operation directed at a just cause, properly authorized, necessary and proportionate? Is it likely to succeed, and how will it be controlled?

Is it a last resort, a convenience or merely an action taken in frustration? In the case of the 1964 operation, the answers to most of these questions were satisfactory; in 1970, they were not.

Reforms Since the 1970s

In the more than two decades since Track II, significant improvements have been made in controlling covert action. The old doctrine of "plausible denial," which allowed senior officials to disclaim responsibility for their actions, has been replaced by one intended to secure direct presidential accountability. Beginning with the Hughes-Ryan Amendment of 1974, a series of laws has been enacted requiring the president personally to "find" that proposed covert actions are important to the national security, and to report such operations to Congress in a timely manner. (Debate has continued over what constitutes a timely notification.) In the wake of the Iran-Contra scandal, it became obvious that the system of presidential "Findings" needed to be strengthened, and even more stringent procedures were implemented, first by the Executive Branch and then by the Congress.

Under the current system, established by the Reagan administration in 1987 and refined by legislation in 1991, a written Finding must be signed before a covert action operation commences, except that in extreme circumstances an oral Finding may be made and then immediately documented in writing. A Memorandum of Notification (MON), also approved by the president, is required for a significant change in the means of implementation, level of resources, assets, operational conditions, cooperating foreign countries or risks associated with a covert action. Each Finding or MON includes a statement of policy objectives and goals; a description of the actions authorized, resources required, and participating organizations; a statement that indicates whether private individuals or organizations of foreign governments will be involved; and an assessment of risk. Each proposed Finding or MON is reviewed by a senior committee of the National Security Council (NSC), and coordinated with the NSC Legal Adviser and with the Counsel to the President. Copies of Findings and MONs are provided to the Congress at the time of notification, except in rare cases of extreme sensitivity.29

An Approach for the 1990s

These reforms are positive, especially with regard to the criterion of proper authority, because they provide for broader consultation, a legal review, presidential accountability, and Congressional involvement in covert action decisions. However, the content of Findings and MONs, as described above, leaves much to be desired from the perspective of Just War Theory. If, as the Chile case suggests, explicit use of Just War guidelines can strengthen the ethical content of covert action, more emphasis should be placed on the substance of discussions, not just the mechanics of the process. Further, the now widely accepted view that Just War Theory can be used to justify and explain resort to armed force strongly suggest that a similar approach would be useful in framing substantive debate on covert political action. In short, the current system addresses the legality, feasibility, and political sensitivity of proposed covert actions.³⁰ It does not, however, ensure that they are right, according to a widely accepted ethical standard.

To come closer to this ideal, it is important that, at each stage in the covert action approval process, difficult questions be asked about the objectives, intentions, methods, and management of a proposed operation. It is equally important that they be answered in detail, with rigor, and in writing—even (perhaps especially) when time is of the essence. Covert operators are understandably reluctant to commit sensitive details to paper, but this seems essential if the US is to meet high standards of morality and accountability in an era in which the easy rationalization of fighting Communism is no longer available.

A decisionmaking process structured explicitly around Just War guidelines is, in many ways, simply a restatement of Judge Webster's criteria of consistency with law, American values, and public mores. In that sense, Just War criteria merely reiterate the obvious and make explicit the goals that the US has striven toward in its reforms of the covert action process since the mid-1970s. But there is value to building a more systematic framework for substantive debate, constructed from specific questions derived from Just War Theory, even if many

of these questions are already considered in the CIA's Covert Action Review Group, the senior NSC groups or the oversight committees. The questions of concern include:

- Just cause. Exactly what are the objectives of the operation? Is it defensive—to repel an identifiable threat—or is it intended to redress a wrong, to punish wrongdoing or to reform a foreign country? Who or what are we conducting the operation against? Who are we for? What specific changes in the behavior or policy of the target country, group, or individual do we seek?
- Just intention. What will be the likely result in the target country and in other foreign countries? How will we or the international community be better off? How will we know if we have succeeded? What will we do if we win? If we lose?
- Proper authority. Who has reviewed the proposal? Are there dissents? What is the view of intelligence analysts on the problem being considered? Have senior government officials discussed the proposal in detail? Has the Congress been advised of all significant aspects of the covert activity? If notification has been restricted, what is the justification?
- Last resort. What other policies have been tried?
 Why have they not been effective? What overt
 policy options are being considered? What are
 their strengths and weaknesses? Why is covert
 action necessary? Why must the proposed activity
 be secret?
- Probability of success. What is the likelihood that
 the action will succeed? Are there differing views
 of the probability of success? Is the view of disinterested observers different from that of advocates
 or opponents? Why? What is the evidence?
- Proportionality. What specific methods are being considered? Does the proposal envision the use of lethal force, sabotage, economic disruption, or false information? Why are these methods necessary? Are they the same as those being used by the adversary, or are they potentially more damaging or disruptive? If so, what is the justification?

• Discrimination and control. What steps will be taken to safeguard the innocent against death, injury, economic hardship, or psychological damage? What will be done to protect political institutions and processes against disproportionate damage? If some damage is inevitable, what steps are being taken to minimize it? What controls does the US exercise over the agents to be employed? What steps will be taken if they disregard our directions? What steps will be taken to protect the agents, and what are our obligations to them? How will the operation be terminated if its objectives are achieved? How will it be terminated if it fails?

Each of these questions should be investigated at some step of the initial approval process, though some clearly exceed the competence of the CIA. Perhaps the NSC Staff and the Congressional oversight committees are the most appropriate bodies to probe these issues. Not all may be answerable at the outset, though this fact alone should signal caution. In addition, they should be posed again whenever there is a significant change in objectives, methods, or circumstances. The current management process calls for an annual review of all covert actions by the NSC, as well as periodic examinations by the oversight committees. These questions can guide such reviews as well.

The Casuistry of Covert Action

Rigorous examination of the questions enumerated above would emulate the technique of moral reasoning recommended by the natural law tradition. This method, known as casuistry, is acknowledged by scholars to be complex and difficult, especially in cases involving politics and international affairs. Moreover, in the hands of advocates, Just War criteria can deteriorate into mere rationalizations of intended actions. Just War Theory, then, can be exceedingly useful as an organizing principle, but in itself does not necessarily provide clear answers. How can the inherent uncertainty of this casuistry, and its potential misuse, be minimized?

William Colby has suggested that our process of moral reasoning concentrate primarily on the criteria of just cause and proportionality.33 These fundamental points do indeed appear to be the keys to an effective process of policy formulation. With respect to just cause, a recent report by a panel of distinguished scholars has recommended that covert action should be undertaken only in support of a publicly articulated policy.³⁴ Such an approach would ensure that the objectives of the policy could be debated publicly, even though some of the exact methods to be employed might be known to only a small group of elected and appointed officials. Open, public debate would go a long way toward determining whether a proposed course of action could be construed as a just cause. The need for such debate is so fundamental to the casuistry of covert action that, if it cannot be conducted, this in itself would seem to be grounds for rejection of any suggested operation.

Assessments of proportionality are not susceptible to the same kind of open scrutiny, because they involve specific descriptions of secret methods. Nevertheless, it is important to ensure that proposed activities meet strict tests of consistency with American values and mores. Just War Theory does not offer specific guidance for such choices, despite its stress on necessity and minimal damage to innocent parties. Loch Johnson, a longtime commentator on intelligence activities, has suggested that, in addition to having a sound ethical framework, decisions on covert action must take into account other factors, such as the type of target regime and the severity and immenence of the threat that is to be countered.³⁵ These would seem to be useful guides to evaluating proportionality, to which could be added the types of actions, overt or covert, being undertaken by the target regime against US interests.

Johnson has also tried to rank-order various types of covert operations into a 38-rung "ladder of escalation," and he introduces a useful concept of "thresholds" that involve different degrees of risk and interference in foreign countries. Following Johnson's concept, proposed covert activities could be arrayed for debate under thresholds of increasing ethical concern as follows:

- Limited concern. Benign provision of truthful information or support to existing political forces; intervention to keep election processes honest.
- Significant concern. Manipulative use of information; rigging of elections or other distortion of political processes; creating new opposition forces or increasing the strength of existing ones out of proportion to their indigenous support.
- Serious concern. Deceptive use of information, nonlethal sabotage, and economic disruption.
- *Grave Concern*. Use of lethal force; forcible changes in government.

Such actions are often taken in combination, rather than step by step in a scenario of escalation. Moreover, the amount or degree of covert support provided will vary in significance and moral weight depending on the nature of the foreign countries involved. And, as noted above, it is necessary to justify the actions proposed and the need to carry them out secretly. But clarity about what is being done, and whether or not it is proportional to the threat and proposed objectives, is a key element in sound policymaking.

Conclusion

Such an application of the Just War framework would not end controversy regarding covert action, nor would it guarantee that inappropriate or unethical actions will not be taken in the future. Debate over just cause and proportionality are likely to be particularly difficult-especially when, as was the case in US policy in Central America, there is no political consensus—but these are precisely the elements that most require informed scrutiny. Those who oppose covert action in all forms will not be reassured by a process based on the Just War framework; realists or crusaders will see it as unnecessary and unduly restrictive; Executive Branch officials and members of Congress may perceive that they already probe these questions in one way or another; and bureaucrats will regard it as just another "paper exercise." The claim for a conscious application of Just War guidelines is a modest one: it will help to make more rigorous Judge

Webster's common sense criteria, and to improve the quality of decisions regarding one of the most controversial aspects of US national security policy.

More generally, in light of recurring problems in the use of covert action as an instrument of policy, and the fact that it is likely to remain in the arsenal of states for the foreseeable future, greater rigor and structure in debates over specific proposals are essential. Reforming the process along the lines suggested would signal that the US is concerned—even in secret activities—with issues of right and wrong and not merely with power. It would promote openness and accountability and underscore that we firmly reject the "repugnant philosophy" of the Doolittle Report.

NOTES

- "Report of the Special Study Group (Doolittle Committee) on the Covert Activities of the Central Intelligence Agency, 30 September 1954 (excerpts)" in William M. Leary, ed., The Central Intelligence Agency, History and Documents; (The University of Alabama Press; 1984); p. 144.
- Jack Donnelly, "Twentieth-Century Realism," in Nardin and Mapel, eds., *Traditions of International Ethics*; (Cambridge University Press, 1992); p. 93.
- The author is indebted to Rev. John P. Langan for this typology of Cold War political thought. Letter to the author, 28 May 1992.
- 4. A penetrating assessment of covert action from the perspective of international law can be found in W. Michael Riesman and James E. Baker, *Regulating Covert Action* (New Haven, Yale University Press, 1992).
- 5. See James Turner Johnson and George Weigel, *Just War and the Gulf War* (Washington, Ethics and Public Policy Center, 1991).
- Symposium on Moral and Legal Constraints on Low-Intensity Conflict, sponsored by the Office of the Assistant Secretary of Defense for Special Operations and Low-Intensity Conflict; US Naval War College; Newport, Rhode Island; 9-10 April 1992.

- 7. National Conference of Catholic Bishops, *The Challenge of Peace* (Washington, US Catholic Conference, 1983), pp. 25-29.
- 8. Thomas Aquinas, *Summa Theologica*, Joseph Rickaby, S.J., trans. (London, Burns and Gates, 1892), Question XL, Article I.
- 9. National Conference of Catholic Bishops, *op. cit.*, pp. 29-32.
- 10. Aquinas, Q. XLI, Art. I.
- 11. Aquinas, Q. XLIV, Art. VII.
- 12. Paul Ramsey, War and the Christian Conscience (Duke University Press, 1969), pp. 47-8.
- 13. The classic modern work on Just War Theory is Michael Walzer, *Just and Unjust Wars* (New York, Basic Books, 1977).
- 14. Charles R. Beitz, "Recent International Thought," *Ethics and International Affairs*, 1989, Vol. 3, p. 190.
- 15. William E. Colby, "Public Policy, Secret Action," *Ethics and International Affairs*, 1989, Vol. 3, p. 63.
- 16. Address to the Eighth Circuit Judicial Conference, 12 July 1991.
- 17. There is some empirical research that suggests a correlation between these classic Just War criteria and American attitudes regarding war and peace. See Donald Secrest, Gregory G. Brunk and Howard Tamashiro, "Moral Justification for Resort to War With Nicaragua: The Attitudes of Three American Elite Groups," Western Political Quarterly, September 1991, pp. 541-559.
- Secrets: On the Ethics of Concealment and Revelation (New York, Pantheon Books, 1982), p. 191.
- 19. Charles R. Beitz, "Covert Intervention as a Moral Problem." *Ethics and International Affairs*, 1989, Vol. 3, pp. 49-50.

- 20. Langan notes that Just War Theory has both material and formal aspects, and that the formal aspects, such as just intention and proportionality, are applicable to a broad range of situations where one has to do harm to another, including punishment, surgery and —by extension—political or economic intervention. (Langan, *Op Cit.*)
- 21. The following discussion is drawn primarily from documents of the Church Committee, which investigated CIA covert actions in the mid-1970s, as well as memoirs of some of the participants and other government officials and commentators. (These include William Colby, Henry Kissinger, Cord Meyer, David Atlee Phillips and Arthur Schlesinger.) A summary of the Church Committee's findings, and recommendations for reform, can be found in Gregory Treverton, Covert Action: The Limits of Intervention in the Postwar World (New York, Basic Books, 1987). A case study based on Treverton's research has been published by the Carnegie Council on Ethics and International Affairs; an abridged version appeared in Studies In Intelligence, Winter 1992.
- 22. United States Senate, Staff Report of the Select Committee to Study Government Operations with Respect to Intelligence Activities: Covert Actions in Chile, 1963-73. (Washington, US Government Printing Office, 1975) pp. 15-17.
- 23. 12 March 1976.
- 24. Assessment dated 7 September 1970, declassified and quoted in the Church Committee report.
- 25. The US decision process is described in detail in the Church Committee Report, Alleged Assassination Attempts Involving Foreign Leaders, as well as in Kissinger's memoirs and John Ranelagh, The Agency: The Rise and Decline of the CIA (New York, Simon and Schuster, 1986), pp. 514-520.
- 26. David Atlee Philips, *The Night Watch* (New York, Ballentine Books, 1977), pp. 283-287.

- 27. Lying: Moral Choice in Public and Private Life (New York, Random House, 1978), p. 30.
- 28. Another tenet of the natural law tradition, the notion of prudentia or prudence in statecraft, cautions against such hasty and passionate decisions. See Alberto R. Coll, "Normative Prudence as a Tradition of Statecraft," Ethics and International Affairs, 1991, Vol. 5, pp. 36-7.
- 29. National Security Decision Directive (NSDD) 286, partially declassified on 15 December 1987; Intelligence Authorization Act, Fiscal Year 1991, Title VI.
- 30. "Political sensitivity" can sometimes become a euphemism for morally questionable activities. This semantic twist means that such activities are then discussed as though they were merely political rather than ethical issues.
- 31. Joseph Boyle, "Natural Law and International Ethics," in Nardin and Mapel, op. cit., p. 115.
- 32. The author is indebted to Joel Rosenthal of the Carnegie Council on Ethics and International Affairs for this point. (Letter to the author dated 12 May 1992)
- 33. Colby, *op. cit.* Colby concentrates on the self-defense aspect of just cause.
- 34. Report of the Twentieth Century Fund Task Force on Covert Action and American Democracy (New York, Twentieth Century Press, 1992) p. 8.
- 35. Loch K. Johnson, "On Drawing a Bright Line for Covert Operations," *American Journal of International Law*, Vol. 86, No. 2, April 1992. pp. 296-7.
- 36. Ibid. p. 286. Johnson's analysis is complicated by his mixing of traditional intelligence collection activities with covert actions, and his attempt to rank-order both categories hierarchically. At the lowest level of escalation ladder, Johnson enumerates routine, passive activities

to collect information. Above his first threshold of risk and interference he lists the placement of truthful, benign information in the foreign press and low-level funding of friendly political groups. His second threshold involves the placement of "contentious information" in the media, large-scale funding of foreign groups, economic disruption without loss of life, limited supplies of arms, small-scale hostage-rescue attempts, and disinformation. Above his highest

threshold are large-scale and potentially violent acts, including major secret wars, assassination plots, and hostage taking. Johnson argues that actions in this category should never be undertaken by the US. He also includes in this list of proscribed actions the supply of sophisticated weapons. This, however, would appear to be an option that might be considered in response to specific, serious threats.

Improving the quality of analysis

Combatting Mind-Set

Jack Davis

When intelligence analysts cannot rely solely on factual evidence to address questions of concern to US national security, they have to begin to employ judgment. In effect, when we do not know, we estimate. And when analysts estimate they depend on what I will call mind-set. For the purpose of this article,1 mind-set is the distillation of the intelligence analyst's cumulative factual and conceptual knowledge into a framework for making estimative judgments on a complex subject. Case studies on Agency analytic performance indicate that analysts and managers alike do not pay their dues to this powerful phe- nomenon. Analytic procedures and practices, herein called tradecraft, that do not ensure against or otherwise combat mind-set put the resultant assessments at high risk of either being wrong or being unread.

Inevitability of Mind-Set

Analysts rely on mind-set to bring to bear prior thinking as they process newly available but usually incomplete and ambiguous information. In circumstances where rigorous testing of assumptions and weighing of evidence is not practical, mind-set forms the basis for interpretation of how things usually work, say, in Israeli politics and for forecasting likely future developments (re the Middle East peace process). Other writers have called the same phenomenon "substantive biases" or "set of expectations."

The definition, again, assumes a level of complexity of subject matter and attendant ambiguity of information that require the analyst to make conditional judgments that interpret past and ongoing developments and seek to anticipate future developments. Klaus Knorr was one of the first scholars of intelligence analysis to spell out the analysts' reliance on their "set of expectations" in these circumstances.

It must be understood that the formulation of such a set by an intelligence service is both inevitable and indispensable. It is inevitable that, in doing their job, professionals will more or less deliberately build up the set. And it is indispensable because the set is a most valuable tool in performing timely, coherent, articulate and, on a probability basis, accurate intelligence. Without it, the current stream of information would be unmanageable and often paralyzingly ambiguous.²

Most subsequent students of the juncture between cognitive psychology and the analytic process, including Robert Jervis and Richard Betts, accept Knorr's judgment that reliance on mind-set is "both inevitable and indispensable." Yet the point deserves elaboration because some intelligence managers and outside critics argue that *elimination* of mind-set is needed to eliminate analytic error or failure.

The essential character of mind-set in the work of Agency analysts engaged in estimating is underwritten by four pervasive elements that characterize the intelligence environment: complexity of issues, attendant ambiguity, pressure of deadlines, pressure to predict:

• Complexity. As a rule of thumb, the more complex the issue the analysts address, the greater the uncertainty, the more urgent the need to estimate, and the greater the reliance on mind-set. Thus, the more that analytic judgments rely on understanding and anticipating the actions of a multiplicity of human players (including US policymakers), the less susceptible they are to management of the process according to the tenets of the scientific method. And to the extent that the analytic process has to serve policymaker needs and not pursuit of understanding for its own sake, analysts are regularly forced to move from what they know

to what they do not or cannot know: from Iraq's military capabilities, for example, to Saddam's military intentions, and then to his reaction to planned pressures against him. The analysts move, in effect, from reliance largely on evidence to reliance largely on surmise.

- Ambiguity. Incomplete and conflicting information usually attends complex issues. Increases in collection usually mean that the rate of growth of nonuseful information, "noise," will greatly exceed that of useful information, "signals." And advance of complex—especially, unprecedented—developments, analysts cannot be certain what will turn out to be a distraction from and what an indicator of pending events. The analyst's substantive biases provide a powerful but potentially dangerous tool for choosing.
- Deadlines. Whether deadlines reflect policy utility
 or merely bureaucratic convenience, they force
 relatively more reliance than would otherwise obtain on judgment and less on weighing evidence.
 Inelegant tasking, review, and coordination processes also serve as deadlines for the time allotted
 to analytic processes, and thus also increase reliance on mind-set.
- Prediction. Pressures to predict specific outcomes, at times regardless of the degree of uncertainty of the issue, further reinforce reliance on existing assumptions. These pressures were built into the analytic value system in the early days of the Agency, when optimism obtained about the power of first-rate scholarship to predict correctly future events, such as whether or not the USSR would place strategic missiles in Cuba in 1962. These pressures persist, especially at command levels, despite accumulating evidence of the disutility of single-outcome predictions on complex issues involving high levels of uncertainty. First, analysts generally find it extremely difficult to catch discontinuities and unusual developments. such as the fall of the Shah of Iran and of the Sandinista government in Nicaragua. Second, policy officials tend to be turned off by nondocumentable predictions they see as politically unhelpful. Third, even openminded policymakers hesitate to invest major resources in response to analysts' predictions of dramatic changes or unusual threats, on which the evidence is by nature fragmentary and ambiguous.

Trade-Offs

When these factors are in play, analysts working tough issues must skimp on evaluating evidence, challenging assumptions, and seeking alternative explanations in favor of high and, at times, risky reliance on mind-set. Indeed, production units tend to favor those analysts who can table a battery of ready explanations regarding their substantive turf over those gifted merely with good technical analytic skills. Analysts, then, are paid to have their *mind-set* to judge whether or not "X" is more likely than "Y" in country "Z" before they read the daily traffic.

The good news? As Knorr indicates, well-developed insights do lead "on a probability basis, [to] accurate intelligence." To the extent that mind-sets are based on much sweat equity, they can be relied upon professionally in most cases. The odds favor judgments that most stable countries will continue to be stable, most ruinous economic policies will continue to produce ruin, most long-surviving national leaders will avoid disastrous initiatives. Moreover, unidirectional argumentation does help get the production out on time, and it also facilitates terse and, at times, elegant drafting.

The bad news? Mind-set tends to distort how analysts perceive new information. Analysts by and large see more vividly and pay more attention to information that is consonant with what they expect to see. As experts, they are trained to dismiss what seems to be noise, if not also nonsense, on their accounts. This makes the estimative process vulnerable in anticipating unusual developments: revolutions and other political watersheds; military surprise; economic turning points; S&T breakthroughs. For example, Agency analysts missed first the sharp rise in OPEC influence in the 1970s and then the sharp drop in OPEC influence in the 1980s. In some instances where the onset of dramatic developments was missed, the more expert the analyst—the more images of the usual in his or her mind—the longer it took to see the onset of the unusual development.

Sadly, the basic trade-off for mind-set is much like that for nuclear power plants: it works wonders to get the production out—in between disasters.

Strategies for Combatting Mind-Set

If intelligence analysts cannot dispense with reliance on mind-set when making estimative judgments, they must then find strategies that simultaneously harness its impressive energy and limit the potential damage. I recommend a strategy of two complementary, indeed overlapping, elements: mind-set enhancement and mind-set insurance.

Mind-Set Enhancement

The recommendations for using mind-set more efficiently rest on studies that attach insights from the professional literature on cognition, perception, and decisionmaking to the process of intelligence analysis. The work here of former Agency analyst Richards Heuer is especially noteworthy.⁴

The essential argument for asking experienced analysts to pay greater attention to their analytic tradecraft starts with recognition that the free-ranging human mind is the most creative analytic tool in existence. But it quickly reaches limits in three important capacities:

- The volume of stored information that can be recalled from memory for use in problem solving, especially the inaccessibility for "working memory" of bites of information and insight that are used infrequently.
- The number of variables that can be brought to bear coherently, as the processes first of thinking and then of writing force the analyst toward what, for lack of a better term, can be called premature simplification.⁵
- The tracking of the consequences for the whole set of variables or volatile factors of changes in one of the factors under consideration.

Thus, analysts need simple tools and procedures to supplement the power of working memory and to bring to bear on complex and ambiguous issues more of their vast informational holdings and reasoning potential. These tools are all but indispensable for challenging the key assumptions on which the analysts' bottom line estimative judgments are based.

Now, by whatever name they prefer, experienced analysts already rely on a variety of tools to jog and polish their analytic thinking. What is promoted here is more self-conscious, frequent, and disciplined use of devices that hold promise of wringing additional information, insights, and implications from their memory banks. The list that follows is selective and could easily be expanded from the inventories of veteran analysts, as well as from Heuer's many articles.

- Talking aloud to stimulate alternative patterns of language and argumentation, in order to get through difficult analytic patches in a written draft.
- Thinking backwards—from a seemingly unlikely future event, to necessary intermediate developments, to present circumstances—to overcome the natural propensity to call forth assumptions and data that support the most likely outcome.
- Brainstorming, to enlarge the pool of potentially useful insights by lowering the threshold for consideration from "likely" to "possible."
- Devil's advocacy, which can take many forms, including presentation of the expert's line of argumentation to colleagues who are short on direct substantive knowledge but long on the rules of logic, evidence, and inference.
- Structuring, or externalizing, the analytic process by writing down what is known and assumed about discrete parts of an estimative problem, in order to call forth more information and insight than the free-ranging mind can generate.

Structuring probably represents the most powerful and versatile, yet user-friendly set of tools for mind-set enhancement. Analysts who lean toward the reading-thinking-drafting mode of work can use structuring both "to keep themselves honest," when drawn to a convenient generalization, and to overcome inertia, when no useful generalization can be summoned from past experience. By placing elements of a complex issue on a yellow pad or blackboard, analysts can evoke previously untouched information as well as connect previously unrelated ideas. Chronologies, for example, help make sure the

sequence of events is remembered correctly. Lists of key players and their priorities help test assumptions about alliances and enmities as well as about motivation and intentions.

Mind-set Insurance

The recommendation that analysts ensure against the limits of mind-set rises from examination of the analytic performance of the Agency and other intelligence services, including case studies generated for the "Seminar on Intelligence Successes and Failures." The argument here is that enhanced mind-set can still leave the analyst at high risk, especially regarding matters of high uncertainty: longterm developments in most countries, and short-term developments in such countries under stress as the former Soviet Republics, Cuba, and Iraq. Moreover, even when the analysts' proffered prediction is technically correct, the decisionmaker may find little utility from their labors to determine whether an event is 40 or 50 or 60 percent likely. Thus, analysts should be prepared to provide decisionmakers with values other than or in addition to single-outcome predictions.

Multiple Explanations and Projections. Roughly equal coverage of more than one political, economic, or military dynamic provides decisionmakers, among other values, with serious attention to their operational fears and hopes. Analysts can rank order the outcomes addressed, but implications and indicators for each scenario should show considered effort and not mere afterthought. Analysts now routinely use multiple explanations when compelled to by overwhelming uncertainty, such as recent National Intelligence Estimates on the former Soviet Union. Multiple explanations should also be considered whenever the most likely projection weighs in at under 70 percent, and the assumed less likely outcome(s) are fraught with important threats or opportunities for US security interests. A one-third contingency, for example, that country "X" will seriously threaten US interests deserves at least as much attention as the two-thirds contingency that hostile action will not occur.

Tackling More Specific Questions. Often papers and briefings that set out and answer specific questions will serve the decisionmaker's operational agenda better than a far more risky comprehensive assessment of the outlook for country "X." Data from interviews show that policymakers prefer "the rifle approach over the shotgun approach."6 I would guess, admittedly without benefit of a survey, that most intelligence papers executed in response to a request from policy officials have a narrower and simpler focus than those generated at the initiative of Agency managers. Besides, decisionmakers-experienced and otherwise-tend to think of themselves as accomplished analysts; and if they realize they cannot confidently predict "whither country 'X' over the next three years," they may not attach much stock to intelligence assessments that try to do so.

Going for the Gray. Analyst concentration on hardearned insight into capabilities, relationships, and other information based on unique collection and research capacity frequently provides the decisionmaker with a precious commodity: greater working knowledge on what he or she has to deal with. Again, I would bet that much of the praise for National Intelligence Estimates and other assessments prepared during the recent Persian Gulf crisis had to do with gray material in boxes and matrices and tables rather than with black-or-white predictions.

Opportunity Analysis. Intelligence memorandums and briefings that provide explicitly actionable support for the implementation of policy by definition will be seen to be more useful by decisionmakers than essays that predict whether or not the already-adopted policy will be successful. Even comprehensive papers are likely to be taken more seriously if their key judgments point to opportunities for the United States to use leverage and limit damage in pursuit of policy objectives.

As with mind-set enhancement, managers and veteran analysts can table additional practical initiatives for mind-set insurance. These will include variations of the multiple projections approach, including "low-probability, high-impact" assessments, which provide disciplined speculative analysis on an important unlikely development. Further, by calling upon growing experience working in and with decisionmaking organizations, intelligence pros can add to the list of

the alternatives to predictive analysis that will serve the interests and needs of policy pros—and at the same time ease the burden on mind-set.

Tradecraft Recommendations

While the following recommendations for combatting mind-set address the circumstances of a hypothetical production division in a regional analytic office, similar measures should work as well in functional analytic offices:

- Make an inventory of the specific policymaking interests of the 10 or so top consumers, mostly deputy assistant secretaries in policymaking departments and NSC Staff directors. Give the resultant list a reality check by interviewing these decisionmakers or their aides and gatekeepers. Most of the 30 or 40 specific interests are likely to relate to the near-term requirements for implementing agreed policy. Others are likely to revolve around the need to generate and consider alternative strategies to advance broadly defined Administration goals. Still others, around avoiding unpleasant surprises.
- Make a complementary inventory of the division's current and prospective assets for serving these specific needs. While the division research program should also address over-the-horizon policy concerns, a healthy proportion should relate directly to building the capital to service identified existing needs.
- Concept papers and other planning documents should emphasize specific utilities for specific policymakers. And the review process should give as much time to "utility control" as to quality control.
- For new and journeyman analysts, make a clear distinction between the "writer's paper" (the research effort that ensures the analysts they know what they are talking about) and the "reader's paper" (what specific consumers need from a memorandum or briefing). As a project proceeds, its emphasis should shift from the events and prospects in Madrid, Managua, and Manila to the policy questions in Washington.

- Examine consciously the analytic challenges of a project. For example, after allowing some time for research but before serious drafting has started, task the analyst to produce a one- or two-page statement on (a) the level of difficulty of the project's key estimative issues, including degree of analytic uncertainty and quality of reporting, (b) the extant estimative assumptions, and (c) planned tactics for dealing with mind-set challenges (such as using devil's advocacy or multiple projections).
- In particular, encourage analysts to identify, structure, and examine critically the one or two
 assumptions that, if found faulty, could undermine
 the prevailing mind-set.
- Select experienced analysts to serve on a rotating basis as "mind-set coaches"—reviewing assessments for issues of mind-set, uncertainty, and policy utility. Consider pairing with another production division to swap personnel for this activity. As a rule, the less the critical reader knows about the substance of the paper, the more he or she will concentrate on the quality of argumentation. Reward the best "mind-set coaches" by making them branch chiefs.
- In general, provide an environment where matters of analytic tradecraft share pride of place with substantive expertise. Training for analysts, on the job and in the Office of Training and Education, should drive home two points: reliance on mind-set is both inevitable and dangerous; professional analysts take responsibility for combatting mind-set.

NOTES

- This article is based on a memorandum prepared under contract for the National Intelligence Council in August 1991.
- Klaus Knorr, "Failures in National Intelligence Estimates: The Case of the Cuban Missiles," World Politics, XVI:3 (April 1964), pp.461-462.
- 3. Robert Jervis, Richard Ned Lebow, Janice Gross Stein, eds., *Psychology & Deterrence* (1985), especially pp.1-33; Richard K. Betts, "Analysis, War, and Decision: Why Intelligence Failures Are Inevitable," *World Politics*, XXXI: I (October 1978).

- Heuer makes his strongest case in a memorandum, "Breaking Mind-Sets," written in May 1991 under contract with the National Intelligence Council.
- 5. See Robert S. Sinclair, *Thinking and Writing:*Cognitive Science and the Directorate of
 Intelligence; 1984. Published by the Center
 for the Study of Intelligence.
- 6. The phrase was called to my attention by Frans Bax of the Office of Resources, Trade, and Technology; it is based on his studies of interview data.
- 7. I owe the phrase to Katherine Hall, Deputy Director of the Office of African and Latin American Analysis.

Tribute to the long watch

Dedicating the Berlin Wall Monument

Vernon A. Walters and Robert M. Gates

The following remarks were made on 18 December 1992 by former Deputy Director of Central Intelligence Walters and then Director of Central Intelligence Gates at the ceremony dedicating the CIA's Berlin Wall Monument.

Remarks by Ambassador Walters

Director Gates, former directors of the Agency, distinguished guests, directors of other agencies—it is a very moving moment for me to be here to see this piece of the Berlin Wall being set up. I also see here General Haddock, who was the Staff Commandant who accompanied me on the first day after the wall came down, both first in the helicopter around the wall and then to the Glienicke Bridge, which had a certain emotional appeal to it because we got back some people there whom we never expected to see alive again. It is always a moving thing for me to come out here.

I spent four years of my life here, and when I left part of my heart stayed here. I have always watched with fascinated interest everything that pertains to this Agency. I always remember what President Kennedy said in 1961, "Your work is not easy. Your failures are trumpeted to the world and your successes are passed over in silence." And that is a very true thing. It requires a special kind of dedication to work here, and it is particularly appropriate that this piece of the wall be erected on the grounds of this Agency, which for 45 years successfully manned the watch on the battlements of freedom.

It was a very emotional experience when I went with Ray Haddock to the wall in the morning of the 10th of November. I had fought against the German Army; I had been blown up by the German Army. I got a lump in my throat the size of a golf ball when I realized that the long war which had gone on all of my adult life was over, and that freedom had won. Now I am not so sure it is over.

What is done here is indispensable to the survival not just of the United States but of human freedom. And really the great service which this Agency rendered to the world-and the US Government-is the idea of what it was we had to arm against. We were not like the Soviet Union, led into expenditures beyond what we could bear. During the 1980s, we spent \$300 billion a year, a sum almost the size of the budget of the German Federal Republic, the third-largest economy in the world, and we have a debt of \$3 trillion. That is a lot. In fact, it is half of one year's Gross National Product. In France, the national debt is equivalent to two years' Gross National Product. And, while we know the facts, we were not always right. I cannot help using the word "we" because I had the honor for four years of being part of that. We may have been wrong on this, that, or the other-which is trumpeted to the world. But the world is unaware of the many times that we were right.

I am happy to be here, to see this piece of the wall which stood for 28 years. I think it is just as well they did not bring you the part on which they painted a copy of the photograph of Gorbachev kissing Honecker on the lips. I understand that only happened to secretaries general of fraternal Communist parties. But this is enough to remind people of the success of the long watch.

We were surprised tactically, never strategically. I must say that when I came here and I realized what was being done, I was astounded. In the armed forces you get something in return for what you do. Here, you do not. You have to be content with the satisfaction of knowing that you have served the United States, and you have served the cause of human freedom. I often say to the people who are hostile to us, "What chance do you think human freedom would have had to survive if there had been no United States in 1945? Or, if there had been a United States without the Central Intelligence Agency in 1947?" The answer is, of course, almost none.



So, I would just like to take this opportunity of coming back here to thank Director Gates, previous directors, other superiors of mine like the Secretary of the Army, and FBI Director Sessions for manning the battlements of the besieged citadel that never fell. It never fell because of you. Thank you.

Remarks by DCI Gates

I want to welcome all of you this afternoon to this ceremony dedicating our Berlin Wall Monument. Over 30 years ago—in August 1961—the first strands of barbed wire and the first barricades were positioned along the Soviet Sector in the city of Berlin. Buildings next to the east side of the border

were evacuated—their windows and doorways bricked up. Guard dogs and watchtowers appeared. A strip of territory was cleared and became a "noman's land"—with land mines and more barbed wire. And a wall of concrete—6 feet high—was quickly erected along the 27-mile border.

All of these measures were taken by the Communists, not to prepare for an enemy attack from the West, but to prevent the mass migration of East German citizens to freedom, to the West.

No other symbol so clearly represented the battleline drawn between East and West, between democracy and Communism, between freedom and totalitarianism, than the Berlin Wall.



Former DDCI Walters and DCI Gates

The wall was an ugly scar across the face of Berlin. And for nearly three decades, it stood as a silent, but constant, reminder of the failure of Communism—its total rejection of freedom, its blatant disregard for the individual. The wall was erected as a desperate act—those who could not be swayed by theory would be held by force.

But the true dimensions of the wall cannot be measured by its height or by its length, but by its toll on the citizens of Berlin. For over 28 long years they faced the wall—day in and day out—separated from family and friends—husbands from wives, brothers from sisters, citizens from their fellow countrymen. All Berliners knew the pain of separation, and all wanted desperately to be reunited in peace and freedom.

Over the years, their hope, their will, and their determination never wavered—nor did America's resolve in facing the challenge posed by the Berlin Wall.

Of all the leaders who traveled to Berlin, perhaps President Kennedy best expressed the hopes of the West, when he said:

"You live in a defended island of freedom . . . Lift up your eyes beyond the dangers of today, to the hopes of tomorrow, beyond the freedom merely of this city of Berlin, or your country of Germany, to the advance of freedom everywhere, beyond the wall to the day of peace with justice, beyond yourselves and ourselves to all mankind."

Twenty-five years later the political climate had been transformed, and another American President traveled to the city of Berlin. President Reagan realized that dramatic change was possible, and, in an impassioned speech at the foot of the Brandenberg Gate, he demanded of Soviet President Gorbachev, "Tear down this wall!"

But, ultimately, it was not the Soviet Government which leveled the wall, it was the citizens of Berlin themselves—ordinary people, taking into their own hands hammers and chisels—battering the wall—each reclaiming the unity and freedom for their country that had been denied for so long.

Today, we are fortunate—with the assistance of General Haddock, Ambassador Walters, our Fine Arts Commission, and the Directorates of Operations and Administration—to have a portion of the Berlin Wall here at our headquarters building. This monument that we dedicate today stands for many things, but most of all it is a permanent reminder of the power of a single and truly revolutionary idea—freedom.

Our Fine Arts Commission took great pains to find the right location for this monument. Its north-south orientation mirrors the wall's placement along Potsdammer Platz in Berlin. The west side of the wall is covered with original graffiti that reflects the color, hope, and optimism of the West itself. It stands in stark contrast to the east side of this wall, which is whitewashed and devoid of color and life. This monument is also placed in the middle of a main thoroughfare leading to our building—and so it must be confronted by our people daily, just as it was for nearly three decades by the citizens of Berlin.

But for all of us here today, these three slabs of concrete and steel hold a special meaning. Just as the Berlin Wall was being erected, we were moving into the headquarters building that stands behind us. And over the next 28 years, much of the work that took place here was devoted to breaking down the barriers to freedom created by the Cold War. In Berlin itself, we worked to bring down those barriers, and the names of those who worked there, took risks there, fought for freedom there include some of the most familiar names of CIA's history, people such as Dick Helms, Bill Harvey, Bill Graver, and Dave Murphy.

America's intelligence services were well suited to meet the demands of a Cold War, where military force was too harsh, and polite diplomacy was too mild. We helped our leaders to navigate through these uncharted waters; we told them of the prospects for war and the potential for peace.

During those Cold War years, our view had to be global in scope. And through our actions, we countered the Communist threat worldwide—not only in Germany, but also in Korea, Taiwan, Vietnam, Angola, Afghanistan—anywhere across the globe where free people were faced with the tyranny of Communism.

I do not intend to let this opportunity pass without insisting with pride that American intelligence played a critical role in preventing World War III and in the triumph of the West over Communism.

In the 40 years of the Cold War, as the two superpowers sat with their fingers on the nuclear trigger, there was no nuclear or global conflagration in large part because US intelligence accurately told American leaders—and indeed the world at large—what was happening militarily on the other side. We watched their planes, their ships, their missiles, their armies; we knew where they were, their state of alert, and what they were doing. This played a critical role in preventing a mistake or miscalculation that could have incinerated the world. By the same token, US intelligence provided nearly all of the information that made arms control agreements and associated lessening of tensions possible, from the Limited Test Ban Treaty of 1993 to START II this year.

During the long decades of the Cold War, one of the reasons that "containment" worked was that, while military forces trained and exercised and glowered at one another, US intelligence was in the trenches and at war—from Italy and France out of World War II to Afghanistan in the 1980s. Containment worked not just because the Soviet system was fundamentally flawed, but also because Soviet aggression and subversion were resisted—and that resistance was usually organized or supported by American intelligence.

Though the Cold War is over, and the threat from Communism has all but evaporated, American intelligence still has—and must maintain—a global view.

In earlier years, we were concerned that underdevelopment and unstable countries would be susceptible to Communist influence. Today, many of these same countries are still unstable, threatened by fanatics, or facing humanitarian crises that not only endanger their sovereignty, but also challenge regional stability.

So, in many ways, this monument represents a tremendous success—and a tremendous challenge.

We must remember that those who conceived America's policies to contain Soviet Communism, and those from CIA who helped implement them, had the conviction, the faith that Communism was doomed. In his farewell address on January 15, 1953, President Truman said:

"As the free world grows stronger, more united, more attractive to men on both sides of the Iron Curtain—and as the Soviet hopes for easy expansion are blocked—then there will have to come a time of change in the Soviet world. Nobody can say for sure when that is going to be, or exactly how it will come about,

whether by revolution, or trouble in the satellites, or by a change inside the Kremlin. Whether the Communist rulers shift their policies of their own free will—or whether change comes about in some other way—I have not a doubt in the world that a change will occur. I have a deep and abiding faith in the destiny of free men. With patience and courage, we shall someday move into a new era."

Thirty-six years later, the wall came down, and we are moving into the new era President Truman believed would come.

Our work is not over. There are other walls to tear down—the wall built by tyrants who would deny others their freedom, the wall that imprisons those addicted to illegal drugs, the wall of fear created by the terrorist, and the wall of defiance, built by those who seek weapons of mass destruction.

These are the walls that the democracies now seek to tear down. And with strong intelligence, and effective cooperation at home and abroad, these walls too will come down.

Stresses, successes, and the future

The DI 10 Years After Reorganization

David W. Overton

Ten years have passed since the Directorate of Intelligence (DI) was reorganized primarily along regional rather than functional lines. Technically, the reorganization was of the National Foreign Assessment Center (NFAC) into the DI. Because the DI was a name of much longer standing (January 1952–October 1977), I have chosen to simplify this discussion by talking about the old DI and new DI, with October 1981 as the breaking point between the two.

At the time, the objectives of the reorganization were to increase the share of multidisciplinary output and to provide better tuned support to policymakers. No one would argue that the transformations in process or product have been costless, but most would agree that the outcome has in the main been consistent with what was first intended. The DI product gets generally good grades from our customers, and those who produce it are typically more comfortable today that it is complete than they might have been a decade ago.

Whether the design and process of reorganization of the DI begun in 1981 was carried out in the most effective way turns out today to be largely a moot point, except in management courses, simply because new configurations proved necessary to deal with changing times and demands. In hindsight, it is hard to imagine that the challenging situations we were forced to deal with in the 1980s—the conflict over the Falklands; the war between Iran and Iraq; the US interventions in Grenada and Panama; deepening problems in managing the political economics of Third World debt; and the resource crisis of meeting both defense and consumer demands in the USSR—or those we face in the 1990s—the transformation of socialist systems; the revivification of international institutions; growing gaps between rich and poor and free and oppressed; proliferation of

sophisticated weaponry to irresponsible regimes—could be adequately addressed without a reorganization like the one we underwent.

My assessment of the reorganization reflects the peculiar perspectives of my experiences as: a DI research director shortly after the famous speech by then Deputy Director for Intelligence (DDI) Gates on the inadequacy of our analysis and product; a senior economist in the DI as economic issues became increasingly important as a share of our work; a member of the Product Evaluation Staff (PES) from 1983 to 1985 and from 1989 to the present; and the Deputy Director for Curriculum of the Office of Training and Education (OTE), a position that allowed me to see some of the persistent management and analytic training problems that attended the new configuration of the DI. All these things have helped make me aware of some important aspects of the emergence of a new DI culture over the 1980s and 1990s, but they may also have made me too attached to what the DI has achieved to be wholly objective about the flaws.

1981: Inventing a New DI

The issue of DI reorganization had been visited with and without consultants several times before enough momentum built for action. Most of the dinosaurs of DI management were resistant to the idea of reconfiguration along geographic lines.

A study on the reorganization produced by OTE traces the idea of geographic organization of the DI back to at least 1973 and refers to serious examinations in 1976 of the possibility by DDI Sayre Stevens and by contractor Arthur D. Little Associates. The words of the study have a certain haunting quality to those who were part of the old DI:

Several of the studies submitted to the DDI [by his subordinates] identified the same problem as the central flaw with the functional model: the Directorate did not appear capable of interdisciplinary research and analysis, at least not consistently, at a time when the foreign policy questions were becoming more complex, and consumers' questions more sophisticated. Further, some observers noted, many DI analysts were concerned that the demands of current intelligence production—with its fast pace and short time horizon—were being met at the expense of long-term research.

Besides the bureaucratic inertia and sense of fiefdoms common to all organizations, I believe there was another basic impediment to reorganization along geographic lines. The products of the DI were not as diverse as they are today, but the differences in product emphasis in particular offices were profound. For example, in the Office of Economic Research (OER), where I was a division chief at the time of reorganization, current intelligence largely meant production for the International Economic and Energy Weekly. We produced only sporadically for the daily publications, which, in turn, were the bread and butter of many of the political analysts. Unlike the Office of Political Analysis, we did not have monthly publications. On the other hand, OER put out a considerable amount of both hardcopy and typescripts tailored to the particular needs of economic policymakers. Though changes were beginning to take place in political and sociological analysis propelling them more toward longer term research, the emphasis on research was much stronger in the economic, engineering, military, and scientific areas.

The product differences were complemented by differences in the ways in which offices related to their customers. Then as now, an unfortunately large number of customers saw themselves as their own best political analysts, while those who were interested in economic topics were fairly receptive to new ideas or the results of rigorous research.

The military analysts—again, then as now—had a good deal of competition from other parts of the Intelligence Community. One net effect of all this was that the economists tended to interact more closely and frequently with the policymaker, and they were rarely concerned that their results were being "politicized," but the political analysts had to be more skeptical of the ends to which their work would be put.

Despite the obstacles to breaking down functional organization, there was some slight progress in that direction with the establishment of several centers before the reorganization. These included a Cuba Analytic Center, an International Narcotics and Terrorism Center, a Southwest Asia Analytic Center, and a Center for the Analysis of Personality and Political Behavior. Moreover, about a year before the reorganization, multidisciplinary task forces were put together to track the Polish debt crisis and developments in the USSR.

The key turning point, however, was DCI Casey's increasing concern for better service to the new Reagan administration policymakers, especially on the USSR, which led to the appointment of John McMahon as the Director of the National Foreign Assessment Center (NFAC), in April 1981, with the mission of improving the DI's analytic product. Through he considered other options, McMahon gravitated back to the geographic model. In July 1981 he told a meeting of his office directors that he was going to reorganize NFAC—to once again be known as the DI-along geographic lines no later than 1 October 1981.1 To some, it seemed that this would require a massive overhaul, might not eventuate in anything particularly better, and would take more personnel resources than the DI could possibly muster.

1982-84: Getting Beyond Words

If McMahon's determination to get on with reorganization was necessary to budge the old cultures over the hump of inertia and complacency, the insights of DDI Gates on the needs of the customers were critical to shaping a new product. In fact, since he took over as DDI only a few months after the reorganization and quickly addressed nearly the whole officer

corps of the DI on his new agenda, Gates can lay particular claim to being the father of the new product.

There were, and are, two schools of thought about whether shaping of the product went too far. Those few on one extreme of the spectrum who believe politicization—or more politicization—was part of the outcome tend to forget how often prereorganization product was conceived at Headquarters without benefit of knowing the policymakers' activities or needs, packaged according to the convenience of the producer, and left on doorsteps downtown in the orphan basket it deserved. All too often, I saw a sort of arrogance in what the DI produced and how it was delivered that was first cousin to the *hauteur* of Detroit's automakers when they argued that they knew best what kinds of cars American consumers needed.

And yet, in fairness, even those most sympathetic to the new approaches in DI production and marketing suffered some pain in trying to make them work. There were few good models from outside the Agency to tap into in order to get a sense of how effective multidisciplinary analysis took place. The academic world had for years been talking about—and raising funds on the strength of-multidisciplinary projects, but most of the ones that were successful were in narrow areas of the physical sciences. As a result, progress in this area for the DI was to occur largely through trial and error based on what we and the customer felt about the end-product. And this meant the need for closer relations with the customers, a move that the most conservative DI analysts saw as "caving in" to the policymakers' prejudices.

Even for those who were attuned to the fine line between providing good policy support and kowtowing, simply learning the new writing styles and terminologies was a tedious chore. To distinguish more clearly between what we knew and what we thought, Gates pushed the analysts to use much more sourcing and statements of methodology. As an office research director, I was constantly reminding analysts that appendixes and a few well-crafted footnotes on sources or methods might relieve them of the "obligation" of justifying every single sentence or paragraph with a source comment. Developing the combination of an engaging writing style and a fairly rigorous method of identifying sources and methods did not come quickly or easily for anyone.

Another area that needed serious development was our knowledge and skills in identifying outside experts who could help us think through issues and undertake research for us. In the 19 years I had been in the DI before the reorganization, I had interacted with only 35 to 40 people outside the US Government who worked on topics of interest to me. For most DI analysts, the network of outside experts was even thinner. In early 1982, when the DDI asked that the offices write essays on key outsiders working on relevant fields and list names of those with whom we dealt, many in the DI began to fear that we might actually have to deal with the world beyond us.²

DI economists had been among the more outwardly oriented analysts before the reorganization. It was not uncommon for the old Office of Economic Research to bring in academics a few times a year to comment on our product or help us work on complex issues. And the DI economists also made regular use of the former Domestic Contacts Division and other channels to reach out to specialists in the academic, business, and banking worlds. Still, the rate of outside contacts was nowhere near as frequent then for economists as it is today. In the last two years, for example, I have been invited to DI-sponsored conferences with outsiders on economic topics at the rate of about one a month, and the number of outsiders present at any one event has run between five and 25.

Another wrenching experience for those who had lived under the old DI was the rigor of the construction of the program of analysis in the new culture. I recall sitting through a program review in the earlier days in which a senior analyst was confident that, upon some minutes of reflection, he had a good concept for a paper about Soviet educational aid in the Third World because he had thought as far as the title: The Little Red Schoolhouse. That approach had no place after the reorganization, when building an annual program became an event of several months and engaged all layers of supervision in the DI.

Before the DI reorganization, a reasonable annual rate of production for an experienced analyst had been seen as a combination of one or two longer hardcopy publications, perhaps a half-dozen typescript memorandums, and a solid file of current intelligence dotted across the year. In fact, the rate

of output of products slowed in early 1982 as managers and analysts tried to come to grips with the new ground rules for formats and the new approach to programming. By the time the reorganization took hold, expected and actual output rates were considerably higher than before.

Perhaps the worst new development of the new programming/production environment from the perspective of those who had been fully comfortable with the old culture was the notion of accountability. On 12 February 1982 the DDI sent a memo to all office directors and staff chiefs that was the charter of PES. The first sentences of that memo included these words: "I attach the highest importance to the quality of our research and production effort, and have established the Product Evaluation Staff to advise and work with you and make recommendations to me concerning the overall DI research program and how to improve it. . . . It [PES] will have two major responsibilities—research planning and evaluation of our product." Thus, imbedded in the new research planning process was the responsibility to count beans and track results.

The Path to Today

The range of subjects the DI subsequently had to cover was more extensive than any of us imagined in the early 1980s, and the ability to do this work was shaped by the new configurations and commitments of the first days of the reorganization. Some additional changes in organization and format were in store, but they usually blended well with what the chefs had put in the pot in 1982.

Areas of conspicuous new strength abounded:

 The regional offices working on the Third World and the Office of Global Issues (later to become the Office of Resources, Trade, and Technology) were able to move beyond the baseline of our earlier analysis of LDC debt to say more trenchant things about how well LDC governments would manage their problems and how world financial markets would react to them.

- The regional offices working on the G-7 countries were able to extend political/economic analysis forward in ways that made our output on the EC and trade/financial relations with East Asia more sophisticated.
- Growing steadily from simple biographic sketches in the early 1980s, our work in the area of leadership analysis progressed to more comprehensive assessments of individuals' and organizations' strengths and weaknesses.
- From a limited base for military analysis on the Third World, the DI developed enough capability to produce significant intelligence on the Falklands crisis, the war in Chad, civil strife in Angola, the Iran-Iraq war, the continuing bloodbath in Ethiopia, the invasions of Grenada and Panama, and the Persian Gulf crisis.
- Essentially from scratch, the DI built an ability to do military-industrial analysis on major countries other than the Communist ones.
- The DI developed from the bottom up a new expertise on advanced technologies that had both national security and major commercial applications, and it advised policymakers on critical new developments in this field.

Beginning essentially in the mid-1980s, we enhanced our ability to analyze in the areas of counternarcotics, counterterrorism, and counterintelligence through development of centers that drew from both the DI and the Directorate of Operations (DO) for their personnel. This approach has meant better exchanges of information between collectors and analysts, although sometimes at the cost of capturing analytic time for operational support. Generally, the center experiments have worked out well in helping to build or increase specialized knowledge. There is, therefore, some basis for optimism that the new DCI Nonproliferation Center will also expand the range and depth of what we do in that field.

The Age of ADP

While this and much more was afoot, the DI passed through one of the most encompassing changes in its history. More than any other time, the 1980s were the watershed of broad acceptance and use of automated data processing. While we think of SAFE and other sophisticated changes in the use of the mainframe computers as signs of this change, two of the most important new departures were of the garden variety. One was electronic mail. It broke with the traditional ways of doing work because the number of potential discussants moved from the small numbers of one's acquaintances and immediate colleagues to all those you might simply hear of or choose to reach through an electronic conference or alias. While undertaking a study on ADP in the DI in the mid-1980s, I was surprised to find, for example, that the unclassified version of a DI paper on the Soviet computer industry had been shared via INTERNET with a former DI co-op knowledgeable about the topic who had returned to his campus. The author maintained that he had gotten some useful remarks from the co-op as well as from those here at Headquarters with whom he shared it electronically.

The second change with enormous implications was the Agency's acquisition of commercial databases that gave us electronic access to all sorts of unclassified material. Thus, when PES did a study of DI current intelligence production in the mid-1980s, it was able to call up quickly what the press had been reporting on the same issues through LEXIX/NEXIS. Similarly, the typical DI economist vaulted from having to read through hundreds of pages a quarter of *The Journal of Economic Literature* to find what he or she needed to getting a librarian to do a run in DIALOG.

One of the key concerns at the time of reorganization had been that the geographic model would lead to degradation of specialized products. On balance, that does not appear to have been the case. In various reviews, PES has found instances in which the DI product would have been stronger if the junior analysts had someone from their own discipline overseeing their work. Weighing heavily against this kind of defect, however, is the fact that the range of specialized products for the DI has increased steadily over the past 10 years. One has only to think of what

we produce today on economic/technology issues, narcotics production and finance, terrorist networks, weapons proliferation, and counterintelligence concerns compared to what we produced in 1980 to realize that it is possible to have *both* more multidisciplinary work and more specialized analysis. One small clue to that increasing diversity is the fact that the number of functional labels by which PES categorizes DI product in its database is about twice what it was in the early 1980s.

This is not to say that we have avoided all the problems that concerned us when the DI took on a new look in 1981. I recently asked a former Director of OER to look over a substantial number of articles from the *International Economic and Energy Review* in order to compare it to earlier editions. He gave it high marks for thoroughness of research, writing style, and quality of the graphics and packaging. On the other hand, he said it struck him as less premonitory and less willing to take risks than what he remembered of the 1970s. I believe he is right, and I also believe that some of the conservatism of the new era is driven by management that is generally less comfortable with the concepts that are familiar to economists.

Costs and Benefits

Human Costs. The DI has paid high human costs in moving from where it was in 1981 to where it is today. Some analysts, particularly in the regional offices, who could not adjust to multidisciplinary work either left the DI or found that the numbers of jobs for which they were suited and their career advancement opportunities dwindled rapidly.³ And those who had counted on their supervisors and their professional mentors being one and the same now found career development more complicated as economists, say, reported to military analysts who in turn reported to political analysts.

Even the definition of appropriate work activities became more muddled. Military analysts, who often had proportionally greater need for extended formal training after they entered on duty, were now subject to criticism from political scientist managers, much of whose training came on the job. Economists, who typically make extensive use of private-sector experts and source materials, had to defend the outside meetings and conferences they attended and their recourse to unclassified data when we already had "the embassy stuff." Both economic and military analysts, who rely heavily on automated, numerical databases that they must develop and adapt, were now open to the charge that they spent too much time "playing with the numbers."

Certainly in the case of the economists, the costs of career development for the DI became increasingly explicit over the 1980s. What formerly took place as an exchange between a branch chief and an analyst now became sets of courses and workshops and career counseling across organization boundaries. It became increasingly difficult in a DI office for a new economist to know what training was important to developing the skills most needed on the job. And the rewards that had accrued to same-discipline managers who tutored and developed people proved harder to specify and implement as bureaucratic boundaries intervened.

A partial correction to these problems was the outcome of two PES studies undertaken in 1989 and 1990. One study looked at the product of and conditions for economic analysis in the DI, and the other was a similar study on military analysis. One outcome of the studies was the appointment of senior military and economic referents to help on issues of professional communication and career development for these two groups of analysts throughout the DI. So far, this approach seems to have achieved a better transmission of relevant information than had been true before.

Resource Costs. In some areas, it is hard to sort out how much of the increased resource commitments for analysis related to new demands rather than the increased expense of doing business in the new configuration. In others it is not. Either way, there were some resource tendencies that we need to be aware of as we look forward.

In thinking about resource costs, it is important to remember that DCI Casey increased the size of the Agency and the territory in which it operated. Thus, it is equally hard to distinguish accurately or in any net sense between new things we did because we thought they would be helpful and new things we did because the customer demanded them. (Showing that we can do one new thing on our own often stimulates outside interest in having us do several others that are related.)

In addition to greater training and new ADP features, four areas come to mind as increased costs of doing business in the new DI: more people; more recruiting; more space; and more time invested in meetings. On people, once you undertake to do multidisciplinary work on any country, the requirement for specialists from various disciplines rises. In the economic area, for example, there are today twice as many economists working on Sub-Saharan Africa as there were before 1981, and they are still stretched thin. The difference is that, before the reorganization, OER moved people around much more from country assignment to country assignment as particular narrowly focused economic issues arose.

Similarly, military analysts did not have to have a deep knowledge of the countries they worked on. In a brief stint as a division chief in late 1981, I inherited from the old Office of Strategic Research the lion's share of military analysts doing research on the Third World. They constituted a small branch. Considering their numbers, they would have drowned in a task like tracking the Persian Gulf crisis.

Recruiting is, of course, the other face of having more people. Recruiting activity blossomed in the 1980s for two reasons. The accounts we covered grew in number and complexity, and this required more people in the pipeline. As the population of people outside the Agency who fit well the changing nature of the DI jobs tended to decrease, recruiting became somewhat more difficult and increasingly demanded a fairly heavy effort of DI people in concert with Office of Personnel recruiters. As we face reductions over the next several years, the need for large numbers of applicants will decline. But the sustained high effort to find the *right* people will not.

There is also a strong correlation between people and space. If we had needed a clear sign that space would be a problem, it came swiftly. The departure of the former Office of Soviet Analysis from the Headquarters compound was the first salvo, but others were to come as we searched for places to house the new centers in the mid-1980s. The pressure of space issues was heavily driven by increased automation of information processing, an enhanced capability which was critical to dealing with more and more complex policymakers' questions.

I would argue that there is also a strong connection between people and space issues and the increased numbers of large meetings we conduct. I recall the time before the DI reorganization when, if I wanted to get away from phones and noise to review a paper, I had a better-than-even chance of finding OER's sumptuous conference room unoccupied. Today a conference room readily accessible on short notice is like a fresh supply of toilet paper at state stores in Moscow: the word travels fast.

What has happened? Communication among greater numbers of people on increasingly complex topics and within more offices/centers than in the prereorganization DI is a part of the answer. The other part is that the daily cycle of production meetings that was central to the current intelligence-dominated political analysts is now *de rigeur* for the whole DI.

People and Product Benefits. For anyone who has participated in studies of the DI production effort, a message that rings loud and clear is that most DI analysts find working in this organization intellectually stimulating. This is not necessarily individual rationalization of why they have stayed on, for younger analysts and student interns also give the work high marks for chances to learn and grow. Moreover, I have listened to visiting academics say over and over again how impressed they are to discover how challenging and exciting the DI's work is.

Because I have heard the same academics say that we are light years ahead of them in multidisciplinary work in the social sciences, I tend to believe that it is just this object of the DI reorganization that has done a lot to make the work more fun and rewarding. Indeed, the distinction between what we do here and what we might be doing if we applied our talents in academe was well captured in a comparison made by an Ivy League college professor who visited the Office of Leadership Analysis for discussions. After complimenting our analysts on their

collegiality within and across offices, he described the atmosphere of the typical university campus.

We're high-tech cave dwellers. I don't know what's going on in the cave next to mine, and the guy in it doesn't know what I'm doing.

The cross-fertilization among disciplines has served us especially well in the newer, expanding areas of our work, such as counterterrorism or environmental aspects of foreign policy. But it has clearly also helped in increasing the sophistication of our traditional country and regional analysis. It is not hard today to find multiple instances in any year of DI papers that either would not have been possible or would have been very difficult to produce before the reorganization.

Looking Ahead

Both in PES and with fellow economists over the past two years, I have had the challenge of worrying about the issues we will face in the first half of the 1990s. What is striking to anyone who undertakes to look back and forward at this watershed is how dramatic the potential for change is in the next five or so years Marxism-Leninism bids fair to disappear from most parts of the world, except, of course, from college campuses. Tyrants who appeared capable of dominating many of the world's poorer countries are cringing in front of a wave of support for democracy. The death of Communism and the rise of democracy will, as comparable experience in various parts of the Third World has shown, be attended by serious pains and instability.

If the economic and political revolutions in countries around the world are obvious new developments, subtler but equally important ones loom.

- The institutional base that permitted the unprecedented postwar expansion of global trade and finance is undergoing rapid changes, the end of which we can only dimly predict.
- Dangerous, unsophisticated people are finding it easier to gain access to dangerous, sophisticated weapons.

 The ferment in both regional groupings and technological development may profoundly change both the way economic relations are conducted and the power positions of the actors.

Comparative Advantage in the 1990s

In this changing environment, we would be well advised to focus our thoughts on what constitutes our comparative advantage as a source of information and insights to the policymaker. I am struck by four advantages we enjoy that we have to press to their fullest. I list them in what I judge to be their decreasing order of importance:

- The ability to acquire, process, and manipulate large quantities of data/information.
- The time to undertake serious, deep, premonitory intelligence.
- Access to sensitive information not generally available.
- A reputation for producing readable, attractive products.

Information Handling. The clear message of the 1980s and the picture we face today is that the availability of unclassified data and analysis pertinent to policymakers will continue to increase. Those who are simply trying to keep up with what is becoming available from the former Communist countries have evidence enough that this is going to be a challenge. Because this information is as likely to be available to CNN, think tanks, and universities as to us, we are all in a position to exploit it. Virtually no one else, however, has the computer capacity, experience, or broad access to the full range of commercial databases that we do, and we can make this work to our advantage in assuring that policymakers come to us to collate and analyze the raw material.

We have this same capability with respect to classified data and mixed databases. The groans about the ups and downs of SAFE in the early 1980s have given way to a much clearer recognition that we served ourselves well in this investment.

The clear strength we have in developing analytical software is sometimes overlooked. My experience, for example, is that we have yet to demonstrate TRADAR, the automated system for collating and analyzing trade data to outsiders, that they fail to be impressed with it.

Time. In the early 1980s, Bob Gates spoke to large groups of university placement directors on several occasions. When he did, he would astonish them by saying that we were among the few US agencies still undertaking long-term forecasting in the realms of foreign policy and national security. He was right then, and the story is simply more accurate today.

In addition to the recognition that we have a forecasting capability, we are credited with having time to think seriously about difficult topics generally. A senior US Trade Representative official told me some months ago that the institutional products we were doing in the realm of leadership analysis could be done only in real time at CIA.

We have to remember, however, that when we get locked into sitreps for sitreps sake or produce a flyweight typescript memorandum to pad an analyst's production file, we are frittering away this advantage.

Access to Sensitive Information. This was our primary comparative advantage when I joined the Agency some 30 years ago. It is still important, and it is often dramatically so in key moments of international tension or negotiation.

But times have changed. Much more is openly available than 30—or even five—years ago. Some of the issues that demanded clandestine collection have been seriously reduced in scale or disappeared entirely.

This imposes a greater burden on both analysts and collectors to pinpoint what they really need from clandestine collection and to know when new or expanded open sources become available. I believe we are pointing in the right direction in this effort, but we still have a long way to go. A recent high-quality HUMINT collection plan for economics tells me we can get to where we need to be. The repeated silliness in the press about our engaging in industrial espionage says, however, that some do not believe we are there yet.

Readable, Attractive Products. Whenever I think about the generally high quality of the layouts and graphics in our formal publication, I recall a State Department classmate of mine in State's Senior Seminar showing me some maps that he particularly liked. "Our mapmakers really do attractive work, don't they?," he asked. I did not have the heart to point out the CIA product number in the lower right corner.

But this is no time to get cocky. Recently, the type-script memorandum has tended to displace our more formal publications. Only if you have the perspective of seeing all of what the DI puts out, as we in PES do, do you realize how easy it is for quality standards to appear to slip if someone is not watching out for formats as well as substance. In my estimation, the DDI has been right on the money in trying to ensure that there are some standards for appearance in our informal publications as we drift down the river of desktop publishing.

The Task Force on Intelligence Production has made some wise and provocative recommendations in its report. I do not agree with all of them, including in particular the theme of pushing more of the responsibility for product review down to the offices. That said, I was pleased to see that they recognized the need to standardize formats for informal product.

Our maps, charts, and products that more than met the consumers' needs for clarity and convenience have been praised for years in the US Government. On the other hand, despite what consumers say about being willing to take our product in any format or condition, I can testify to the fact that a few slips in this area bring out the boo-bears and cries of sloppy work.

Applying Lessons From the Past

As tighter budgets press on us in the coming years, we have to remember the most important lesson we have learned from the DI reorganization. Nothing—larger sums of money, additional space, greater favorable recognition, less criticism from the Congress or the press—is, by itself, as important to us as the mental health and welfare of the people who do our work. They have to be able to develop knowledge and skills we can only dimly perceive today. And they have to be able to attack, regroup, and reattack issues that will be constantly changing form and reappearing in new settings.

This central fact of the importance of the DI's people calls for more training, diverse job opportunities, and sensible rewards for good service. The people of the DI need to know that they can grow, develop, and apply newfound skills. I am confident that enhanced language training, the Analyst Overseas Program, opportunities for external training, rotations to policy organizations, and more chances to deal with the private sector are taking us in the right direction.

I am less confident that we understand the importance of remaining flexible about how we do our work. The events in the former Communist countries have precipitated various reorganizations into new groups, divisions, branches, and working groups. Some of the change has been strategic and some knee jerk. It is too soon to say whether it has enhanced or diminished our flexibility in putting out the product.

But the message of the DI reorganization of 1981 has less to do with wiring diagrams and new names than it does with the flexibility of people themselves. And foremost among those who have to be flexible are our managers. Throughout the 1980s, the participation of senior management in the production and review processes provided an important opportunity for analysts to speak up the line of command. One hopes that the push for decentralization of review does not take a toll on this kind of communication.

To move forward smoothly into the next century, DI managers have to be willing to solicit new ideas from those they supervise, who, after all, know best where the shoe pinches. The DCI has taken an important first step in this direction in convening task forces that were charged to challenge our working assumptions. The DI should promptly exploit every good idea the task forces advance.

NOTES

 In the end, the substantive area of the DI least affected by the reorganization was scientific and engineering research and analysis. Various earlier changes had resulted tin the collocation of the DI's scientists and engineers, and their leadership was persuasive in arguing that the maintenance of professional skills required that they continue to sit together. Over the period 1981-92, the most striking changes in this area had to do with additions to OSWR's responsibilities in technology transfer and proliferation issues.

- 2. A notable exception to this inwardness was Soviet military and economic analysis, where we had long had relations with the academic world. In the context of the recent charges that we failed to take advantage of superior wisdom outside the Agency on the Soviet economy, this fact of a long relationship makes the criticism especially ironic.
- 3. Until comparatively recent times, this sort of retooling was less of a problem in Soviet analysis, where the need for specialized knowledge on comparatively narrow aspects of the military,

- internal politics, and the economy preserved the demand for analysts from the "old school." For functional accounts that survived the 1981 reorganization, there was generally less of a problem of adaptation, but, even here, analysis of issues like trade or financial policies, for example, led rapidly to the need for a better understanding of country politics.
- 4. All good generals know that an army where no one grumbles is in serious trouble. The complaint from the minority in the DI is that the individual accounts are becoming "too narrow." What this seems most often to mean is that those concerned are not getting the space or frequency of publication they feel they deserve, especially in current intelligence. This, the other face of sustaining multidisciplinary capabilities on a wide range of countries, is a real balancing and adapting challenge for DI managers.

Cuban missile crisis

The San Cristobal Trapezoid

John T. Hughes with A. Denis Clift

Aerial photos give crisp, hard information, like the dawn after long darkness.

Arthur Lundahl

A courier stepped forward to meet me as I reached the Pentagon's river entrance. I remember the moment: 7:30 a.m., 8 February 1963, a wintery morning brightness just emerging. "Mr. John Hughes?" "Yes," I said. "I've been asked to deliver this to you." He handed me a manila envelope, return address, "The White House," in block letters, and departed.

My office was nearby inside the Pentagon in the Joint Staff spaces next to the National Military Command Center, almost directly beneath the office of the Secretary of Defense. I opened the letter. It was from the President.

Dear Mr. Hughes:

I thought you did an excellent job on television in explaining our surveillance in Cuba. I understand it was done on short notice. I want you to know how much I appreciate your efforts. With best wishes.

> Sincerely, John Kennedy

Cuba. For the past seven months, the US Intelligence Community had riveted its attention on that island nation. Its topography, road network, cities, military garrisons, storage depots, deployed ground-force units, airports and airbases, seaports, merchant shipping and naval units had been photographed, categorized, and studied. US reconnaissance also zeroed in on Soviet merchant ships, fighter aircraft, surface-to-air-missile (SAM) units, missile patrol boats, and rocket forces.

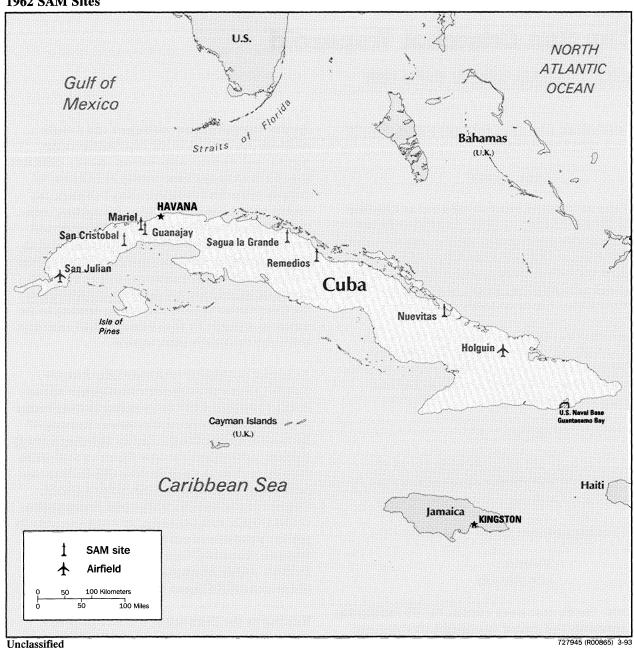
As photointerpreters, my colleagues and I could recall the key features of the intermediate-range (IRBM) and medium-range ballistic missile (MRBM) sites the Soviets had been rushing to complete in October 1962: the missile-servicing buildings, the nuclear warhead storage bunkers, the oxidizer vehicles, propellant vehicles, missile shelter tents, and the missiles. San Julian, Holguin, Nuevitas, Mariel, Sagua La Grande, Remedios and San Cristobal were names that took on a special meaning after the discovery of the missiles and bombers, the peaking of the crisis, Soviet withdrawal, and my briefing to the nation on network TV on 6 February 1963, two days before the President's letter arrived.

As Special Assistant to Lieutenant Gen. Joseph F. Carroll, Director of the Defense Intelligence Agency (DIA), I was responsible for providing reconnaissance intelligence support during the crisis to Secretary of Defense Robert McNamara, Deputy Secretary Roswell Gilpatric, Chairman of the Joint Chiefs of Staff (JCS) Gen. Maxwell Taylor, and the Joint Chiefs. There had been intensive coordination with Arthur Lundahl, Director of the National Photographic Interpretation Center (NPIC). In this capacity, he was responsible for providing critical national intelligence support to the President, Director of Central Intelligence (DCI) John McCone, and the Executive Committee of the National Security Council.

Building on the CIA's initial U-2 reconnaissance flights in the summer and early autumn of 1962, the the Department of Defense would eventually fly more than 400 military reconnaissance missions over Cuba during the crisis. Targeting information for each photo mission had to be developed for the JCS Joint Reconnaissance Center (JRC) to coordinate the operations and allow for policy review by the Secretary, the Deputy Secretary, and the White House, and then be delivered to the "recce" units that would fly the missions. The highest priority was

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1962 SAM Sites



to move that film from the returning aircraft through the photo labs, through analysis, to the policy level of government—a 24-hour-a-day operation, with intense time pressures, and a crucial need for accuracy.

In his introduction to Robert F. Kennedy's memoir of the Cuban missile crisis, *Thirteen Days*, McNamara wrote:

The performance of the US Government during that critical period was more effective than at any other time during my seven years' service as Secretary of Defense. The agencies of government—the State Department, the civilian and military leaders of the Defense Department, the CIA, the White House Staff, and the UN Mission-worked together smoothly and harmoniously.

The entire intelligence-operations team for US reconnaissance against Cuba demonstrated a sense of urgency and national mission that epitomized this effort.

Tactical Data

Intelligence did not perform flawlessly during the crisis. The Intelligence Community had not provided clear warning of the Soviet Union's intention to place offensive nuclear weapons in Cuba. Indeed, the debate over Khrushchev's motives and the USSR's strategic intentions continues. The community did, however, provide tactical intelligence on the USSR's rapid deployment of missile and bomber forces in Cuba. As the crisis mounted, tactical warning and targeting data were developed and steadily updated in support of strike options being developed by the JCS and the NSC Executive Committee. Targets included the MRBM and IRBM missile installations, the IL-28/BEAGLE bombers, the 24 SA-2 SAM sites, the MiG-21 fighters, and other ground, air, and naval targets.

The intelligence flowing from the reconnaissance missions provided the irrefutable evidence the US required to document to the world the basis for its response, as well as the targeting data that would have been needed if the crisis touched off an armed conflict. It tracked the surge of Soviet military personnel to some 22,000 by the end of October 1962, and then the ebb in those numbers to some 17,000 as the troops manning the offensive weapons departed.

Strategic Warning

Strategic warning is the most important component of effective intelligence. Perhaps the greatest barrier to developing effective strategic indications and warning for decisionmaking is the tendency of the human mind to assume that the status quo will continue. The Cuban missile crisis and many other conflicts of the postwar era, including the Arab-Israeli Yom Kippur war and the Falklands conflict, confirm that nations generally do not credit their potential opponents with the will to take unexpected acts. We did not believe the Soviets would do so in 1962.

I was part of a team assisting General Carroll in his responsibilities as a member of the US Intelligence Board (USIB), the top policy forum of the Intelligence Community, whose membership included the DCI and the Deputy Director of Central Intelligence, the Director of the DIA, the Department of State's Director of Intelligence and Research, the Director of Naval Intelligence, the Army and Air Force Assistant Chiefs of Staff for Intelligence, the Director of the National Security Agency, the Assistant General Manager for Administration of the Atomic Energy Commission, and the Assistant to the Director of the FBI. Each person brought the intelligence strengths of their respective organizations to the table. It was the Board's primary duty to produce the formal National Intelligence Estimates (NIEs) and Special National Intelligence Estimates (SNIEs) on key international issues and events for consideration by the NSC. With the memory of the Bay of Pigs disaster still fresh and with the politically charged US concern over Fidel Castro's consolidation of communist power in Cuba and the growing Soviet military presence there, the USIB focused on Cuba in its estimates. At the same time, the Intelligence Community tracked and recorded the entry of Soviet weapons by type and capability.

Two NIEs

NIE 85-2-62, *The Situation and Prospects in Cuba*, was issued by the Board on 1 August 1962. It underlined Castro's political primacy, the loyalty of the Cuban armed forces to Castro and his brother Raul, the provision of Soviet Bloc military equipment and

training to Cuban Forces, and the deepening commitment of the Soviet Union to preserve and strengthen the Castro regime.²

As of 1 July 1962, the monitoring of Soviet military deliveries indicated that there were 160 tanks, 770 field artillery and antitank guns, 560 antiaircraft guns, 35 jet fighters, 24 helicopters and 3,800 military vehicles of various types in Cuba.³ On 27 July, Castro announced that Cuba would soon have new defenses against the US. On 29 August, as the weaponry continued to roll off Soviet ships in Cuban ports, a CIA U-2 photographed the first SA-2 SAMs. Human intelligence sources in Cuba were reporting the sightings of rockets on the island. We concluded that these rockets were not MRBMs/IRBMs.

On 19 September 1962, in NIE 85-3-62, *The Military Buildup in Cuba*, the Intelligence Community reiterated its belief that the USSR would not introduce offensive strategic weapons into Cuba. Its key conclusion stated:

The USSR could derive considerable military advantage from the establishment of Soviet MRBMs and IRBMs in Cuba, or from the establishment of a submarine base there. As between these two, the establishment of a submarine base would be the more likely. Either development, however, would be incompatible with Soviet practice to date and with Soviet policy as we presently estimate it. It would indicate a far greater willingness to increase the level of risk in US-Soviet relations than the USSR has displayed thus far, and consequently to other areas and other problems in East-West relations.⁴

DCI McCone personally was not persuaded that the Soviet buildup was essentially defensive. Fate, however, would have him in Europe on an extended honeymoon when the crisis began. His messages to the President from Europe in mid-September advising that the evidence pointed to Soviet preparations for introducing offensive weapons into Cuba could not compete with the contrary judgment of the formal NIEs that the missiles would be for defensive purposes.

Following the discovery of the defensive SAMs in late August, the President warned Khrushchev that the US would not permit the introduction of offensive weapons. The Soviet leader's responses through several channels from Moscow to Washington repeated the official Soviet position that only defensive weapons were being introduced into Cuba. In his news conference on 13 September 1962, the Pres- ident delivered a clear statement of the US position on Cuba and on the possibility of Soviet offensive weapons being deployed there.

Soviet Buildup

The Intelligence Community continued to monitor the rapid buildup and assess its implications. From July to 1 November 1962, the number of tanks would grow from 160 to 345; the field artillery and antitank guns from 770 to 1,320; the antiaircraft guns from 560 to 710; the jet fighters from 35 to 101; the helicopters from 24 to 70 or more; the military vehicles from 3,800 to between 7,500 and 10,000. And through late August, September and early October we continued to identify new cate- gories of weaponry: the construction of 24 SAM sites with 500 missiles by 1 November; the introduction of some 24 to 32 Free Rocket Over Ground (FROG) rockets; the installation of four cruise missile sites and 160 air defense radars; and the arrival of 12 Soviet KOMAR-class cruisemissile patrol boats at Cuban ports.⁵

U-2 Missions

From 1956 on, I had participated in the Intelligence Community's tasking of the U-2 by contributing the Army's and DIA's intelligence collection requirements to the flight planners of the operational missions. I had helped analyze the photographic intelligence from the U-2 flights over the Soviet Union from 1956 to 1960.

The extraordinary capabilities of the U-2 as an aircraft were complemented by its advanced photographic gear. The U-2 carried the HR-73B camera system, a big, high-technology camera with a 36-inch focal-length lens able to capture considerable detail

from altitudes of 14 miles. The camera load was two 6,500-foot rolls of 9 1/2-inch film. Each mission could produce more than 4,000 frames of film, with vertical, single-frame ground coverage of 5.7 x 5.7 nautical miles.

Following the flight of 29 August 1962, CIA launched additional U-2 missions on 5, 17, 26, and 29 September and 5 and 7 October. Working through an interagency committee, collection requirements were formulated that would shape the flight profile of each mission. The work of reading the film from each mission took place in NPIC in an atmosphere of intense analytical debate throughout September and early October. These U-2 missions established an excellent baseline for judging the nature and pace of the Soviet military buildup.

The success of our efforts owed much to the brilliant leadership of Art Lundahl, who was internationally recognized for his contributions to photographic interpretation and photogrammetric engineering. His dedication to improving the nation's reconnaissance capabilities and his professional standards shaped the work of all who were a part of his crisis team.

SA-2 Controversy

One issue for the photointerpreters was the intended role of the Soviet SA-2 GUIDELINE SAM, which had been operational with Soviet air defense forces since the late 1950s. The 30-foot-long SA-2 had a solid-propellant booster and a kerosene-based second-stage sustainer, and it could sprint to Mach 3 carrying a 280-pound high-explosive warhead with a proximity fuse to a range of 30 miles. Radio guid- ance from ground-based target acquisition radar fed steering commands to the missile's control fins. We assessed it as reliable and accurate.

The U-2 missions through 5 September revealed a disproportionate buildup of SA-2 launch sites in western Cuba. One school of thought contended that this deployment pattern was not particularly worrisome, given that Havana and the larger part of the Cuban population were in that region. Further, most of the sites were along Cuba's periphery, where one might expect such missiles arrayed in a national air-defense network.

Another line of analysis held that the disproportionate concentration of SA-2s in the west meant that the Soviets and the Cubans had important military equipment there requiring greater protection. The photointerpreters pushed on with their analysis, somewhat hampered by a policy-level decision following the 5 October mission to avoid the western sector on future U-2 missions because of administration concerns that an SA-2 might shoot down a U-2, thereby escalating the crisis.

Analysis was not based exclusively on photointerpretation. One of my DIA colleagues, Col. John Wright, directed the work of a center in DIA that collated intelligence from all sources. The center evaluated the photography together with other sources, including reports from refugees and agents in Cuba. These reports continued to warn of large rockets, possibly missiles, arriving in Cuba and of suspicious military activity in western Cuba.

Focus on San Cristobal

Colonel Wright and his staff became increasingly interested in the SA-2 sites near San Cristobal, in the western part of the island. Most important, the U-2 photography indicated that these sites formed the outline of a trapezoid. This suggested that the sites were forming a "point defense" to protect some extremely important weapons emplacements or installations.

This deployment pattern was similar to those identified near ballistic-missile launch sites in the Soviet homeland. The stationing of these SA-2s, together with human-source reporting of missiles in western Cuba, strongly suggested that there were offensive Soviet ballistic missiles to be found within the San Cristobal trapezoid.

Shift in Responsibility

The President's advisers largely agreed that the new evidence warranted resuming U-2 missions over western Cuba. New requirements were issued for photographic reconnaissance of the San Cristobal area. Because of continuing concern over the international repercussions should one of the U-2s be shot

down, it was decided that future U-2 missions should be flown by the Air Force. If any questions about the flights should arise, they would be acknowledged as military reconnaissance missions.

The 4080th Strategic Wing of the Strategic Air Command, based at Laughlin Air Force Base in Del Rio, Texas, was given the assignment. The next flight was set for 14 October, with Major Rudolph Anderson, USAF, as the pilot. The mission went flawlessly, and copies of the photography were sent by courier to NPIC, Navy analysts, the Strategic Air Command (SAC), and other key commands.

Evidence of MRBMs

Photointerpreters at NPIC called me at the Pentagon on 15 October. MRBMs had been found and confirmed. I called General Carroll to tell him what I had just heard and that I was on my way to NPIC. He asked me to give him another call as soon as I had personally reviewed the evidence.

After a quick look at three or four of the frames, I called General Carroll back and told him that the film showed ballistic-missile carriers, associated equipment, and support trucks. The U-2 camera had caught an MRBM convoy just as it was preparing to pull into the cover of a wooded area.

That evening General Carroll, my colleague John McLauchlin, and I reported directly to Deputy Secretary Gilpatric. He asked me the same question that the President would ask Art Lundahl the following morning. It was the same question that would be asked by each of the select senior US officials being informed of the discovery as they looked at the tiny objects and patterns on our photographs of the Cuban countryside: "Are you sure that these are Soviet MRBMs?" I answered, "I am convinced they are." The next morning, Lundahl told the President he was "as sure of this as a photointerpreter can be sure of anything"

Strategic Surveillance

The urgent work of the Executive Committee would begin on the morning of 16 October. While the world remained ignorant of the mounting

crisis, those supporting the President and the Executive Committee were aware of the responsibility and trust that had been given us. The President needed absolute confirmation of the presence and numbers of MRBMs and any other offensive weapons that the Soviets had in place in Cuba. He needed time to marshal US ground, sea, and air forces and to consider the options for their use should military action be required. He also needed time to decide how best to confront Khrushchev with the evidence, and he had to plan how to implement the US response. Secrecy was essential. More documentary evidence was required.

U-2s from SAC were moved to Florida. Between 15 and 22 October, they flew 20 missions over Cuba to search the entire island. These reconnaissance flights helped us to understand what the Soviets were up to and what stage of weapons deployment they had reached. This information enabled the Intelligence Community to give the President and his advisers its best judgment as to whether the missiles were operational and, if not, when they would most likely become operational.

As a result of highly classified and urgent work, the community would determine that the first of the MRBMs would become operational on 28 October. While US intelligence had not provided strategic warning that the Soviets would introduce such weapons, intelligence had discovered the weapons before they became operational, giving the President an advantage in planning his response.

Analysis of U-2 photography went on around the clock, with few, even in the Intelligence Community, given access to the intelligence. As new photography became available, General Carroll and I would brief the Secretary and then take the same findings to the Chairman and the Joint Chiefs to prepare the Defense representatives for the continuing deliberations of the Executive Committee. Our photointerpreters poured over earlier U-2 photography of the geographic locations where we were now discovering the offensive weapons. These comparisons enabled us to determine when the Soviets had begun construction, a process which confirmed the clandestine and time-urgent design of the Soviet operation.

Seaborne Shipments

With the deployment of the missiles in Cuba now established, we began to reexamine earlier photointelligence to determine how they had arrived. From September to mid-October, the Navy had photographed several Soviet merchant ships en route to Cuba, including the *Poltava* and the *Omsk*, riding high in the water and with unusually long cargo hatches. It was apparent that these merchant vessels must have been transporting a high-volume cargo that was not particularly heavy. We then realized that they had, in fact, been delivering missiles that were to be offloaded at night.

SS-4s and SS-5s

The photography of the 17 October U-2 mission revealed a major new development: the construction of a fixed IRBM site at Guanajay, just west of Havana. While the mobile MRBM posed a serious threat, its range was limited to targets in the southern US.

We had studied the SS-4 MRBM since before its first appearance on parade in Moscow the year before. It had an overall length of just over 73 feet with warhead attached. It had a support crew of 24 men, and it was serviced by a dozen vehicles. The SS-4 had sufficient fuel and thrust to deliver a 1-megaton nuclear warhead on short notice up to 1,000 miles, a range that threatened the southeastern US in an arc extending from Savannah, Georgia, to New Orleans, Louisiana.

The SS-5 IRBM, by contrast, had a range of over 2,200 miles, and it could hit any target in the continental US except Seattle, Spokane, and other cities in Washington state. It was clear that we were not facing a temporary expeditionary force in Cuba. The SS-5 required complex permanent launch sites, with troop quarters, missile shelters, warhead bunkers, and a large logistic train.

We had monitored the development and testing of the SS-5 SKEAN since the late 1950s. Operational in 1961, the SS-5 was the newest of the Soviet Union's IRBMs and the product of their intensive strategic rocket program. Its warhead yield also was estimated at 1 megaton, but it had better inertial guidance than the SS-4.

Four Key Sites

Continuing intelligence analysis provided irrefutable evidence that the Soviets were pushing ahead simultaneously with the installation of ballistic missiles at four separate locations: MRBMs at San Cristobal and Sagua La Grande, and IRBMs at Guanajay and Remedios. Soviet construction was progressing at a breakneck pace; photointelligence from successive U-2 missions indicated that sites were rapidly approaching operational status. Their construction workers were experiencing some difficulties as was evident from earth scarring and deep tire ruts produced by heavy transporters in the soft soil of the semitropical countryside.

The Soviets and Cubans were working almost continuously to set up 24 MRBM launchers plus 18 reserves for a total of 42 SS-4 MRBM nuclear missiles, as well as three fixed IRBM launch sites, each with four launchers. If these sites were completed, their missiles would significantly affect the strategic balance.

Cratology

The U-2 mission of 15 October discovered a third dimension to the impending nuclear threat. In late September, US maritime surveillance had spotted a merchant ship bound for Cuba carrying a number of large crates on its deck. To deduce their content, US photointerpreters had to resort to the fledgling "science" of cratology.

Unique dimensions, shapes, volumes, and other features of the apparently innocuous-looking crates allowed the analysts to determine with some precision by mid-October that the crates contained disassembled IL-28/BEAGLE bomber aircraft.

The U-2 photographed 21 of these crates, one with the top open and the BEAGLE fuselage exposed, at San Julian Airfield on the 15th. This was our first sighting of part of the total force of 42 bombers the Soviet Union was delivering to the San Julian and Holguin Airfields.

Meeting With Gromyko

At the White House, the Executive Committee weighed the new evidence in its deliberations on the best course of action to recommend to the President. On 18 October, the President proceeded with an office call by Soviet Foreign Minister Gromyko, an appointment that had been made many weeks before. Without tipping his hand about the US discovery of the Soviet MRBMs, IRBMs and bombers in Cuba, President Kennedy underscored to Gromyko the unacceptability of Soviet offensive nuclear weapons on the island. Gromyko responded with assurances that the weapons being introduced were strictly defensive.

SNIE's Judgments

The Executive Committee soon narrowed the options to airstrikes against the missile sites and bomber bases versus a naval blockade of the island. On 20 October, the Intelligence Community published its views on the implications of the committee's options in SNIE 11-19-62, "Major Consequences of Certain US Courses of Action on Cuba."

SNIE 11-19-62 was cautious about the likely results of either a selective or a total blockade of Cuba. It argued that nuclear warheads could be delivered covertly aboard aircraft or submarines evading the blockade, that the Soviet missiles already in Cuba would still be poised to strike, that it would not weaken Castro's regime, and that either a selective or total blockade would give the Soviet Union time to mobilize world pressure against the US. The SNIE judged that neither type of blockade would necessarily escalate to war, either in Cuba or elsewhere, and that the Soviets would not be driven to immediate military retaliation.

The estimate also judged that, whatever the nature of any US military action against Cuba, it would not be likely to provoke Khrushchev and his colleagues into launching all-out nuclear war. The authors wrote:

We believe that there would probably be a difference between Soviet reaction to all-out invasion and Soviet reaction to more limited US use of force against selective objectives in Cuba. We believe that the Soviets would be somewhat less likely to retaliate with military force in areas outside of Cuba in response to speedy, effective invasion than in response to more limited forms of military action against Cuba. We recognize that such an estimate cannot be made with very great assurance and do not rule out the possibility of Soviet retaliation outside of Cuba in case of invasion. But we believe that a rapid occupation of Cuba would be more likely to make the Soviets pause in opening new theaters of conflict than limited action or action which drags out.

The President's Decision

Proponents of the alternate options of US response continued to argue within the Executive Committee until the President authorized a selective blockade of deliveries of offensive weapons to Cuba. The President had chosen a course which he had judged would not push Khrushchev beyond the brink. It would demonstrate US resolve, and it would provide the President and his advisers the time and the leverage they required in their communications with Khrushchev to demand that the USSR withdraw its missiles and bombers from Cuba.

President Kennedy's report to the American people on the Soviet missile and bomber buildup in Cuba was delivered from the White House Oval Office at 7:00 p.m., 22 October, one week after the discovery of the MRBMs at San Cristobal. I was with Navy photointerpreters in Suitland, Maryland. We listened to the President's somber, electrifying words. As stated in the second of his announced actions, the President had ordered low-level surveillance photo missions by Navy and Air Force tactical reconnaissance squadrons to begin the following morning.

Given the array of MiG-21 fighters, antiaircraft guns and SAM defenses that would confront our reconnaissance planes, tactical intelligence support was vital to their success. In turn, their success would be essential to the President's strategy. As we worked to prepare for the following day's briefing, there was a profound sense of urgency.

Low-Level Missions

Shortly after dawn on 23 October, Navy pilots of Light Photographic Squadron 62 and Air Force pilots of the 363rd Tactical Reconnaissance Wing took off on the first low-level photo missions over Cuba. Later that day, the President issued Proclamation 3504: Interdiction of the Delivery of Offensive Weapons to Cuba. It stated that as of 2:00 p.m., 24 October, forces under his command had instructions to intercept any vessel or craft proceeding toward Cuba and to interdict the delivery of surface-to-surface missiles; bombers; bombs; air-to-surface rockets and guided missiles; warheads; mechanical and electrical equipment for such weapons; and any other materials subsequently designated by the Secretary of Defense.

Our aerial reconnaissance of Cuba took a quantum leap both in volume and in precision of detail with the low-level missions. The Navy and Marine Corps pilots assigned to Light Photographic Squadron 62 were flying the single-engine reconnaissance RF-8A version of the F-8 Crusader fighter. It carried five cameras. The Air Force pilots of the 363rd Tactical Reconnaissance Wing were flying the RF-101 reconnaissance version of the F-101 Voodoo fighter.

The RF-101's reconnaissance eyes were the KA-53 aerial reconnaissance cameras with black-and-white and color emulsion 5-inch aerial roll film loaded in 250-foot film cassettes, cameras with shutter speeds up to 1/3,000th of a second. The combination of planes and cameras in these Navy and Air Force tactical units was as remarkable in its sophistication as was the technology aboard the U-2s.

The RF-8As and RF-101s covered their targets 500 feet off the ground at speeds of 600 mph. With this speed and altitude, the Soviets and Cubans had no warning, only the sonic roar as the reconnaissance planes flew by on flight profiles that brought them in low over the Gulf of Mexico with a pop-up over the target. At the successful conclusion of each mission, the VP-62 pilots would paint another dead chicken on the fuselages of their Crusaders to symbolize Castro's chickens coming home to roost.⁷

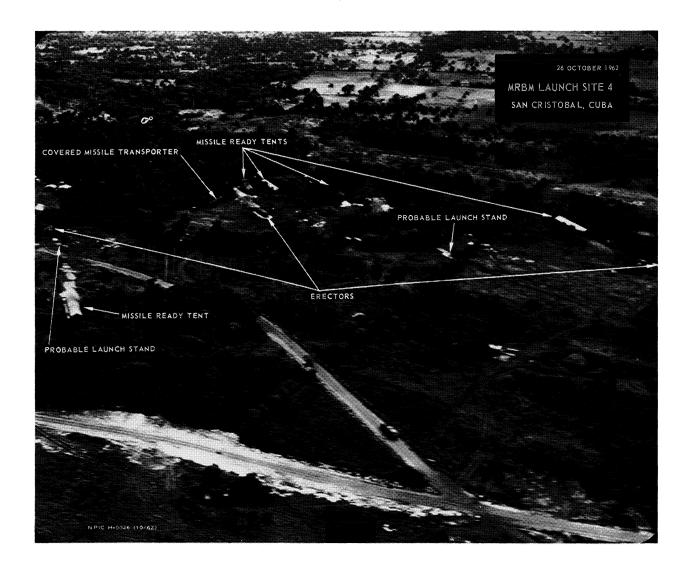
The reconnaissance photography these pilots were delivering was spectacular. It was clear, large-scale documentation. It permitted us to gain full understanding of the MRBMs that would be operational by the 28th and to track the continuing intensive construction of the IRBM sites. The photography provided our combat-mission planners with the precise detail they required in the event the President were to order a strike against the island.

As soon as each low-level mission delivered its film to the squadron and wing photo labs, it was developed and flown to Washington and to other photographic analysis centers.

The JRC

The nerve center for the US reconnaissance effort was the Joint Reconnaissance Center (JRC) in the Pentagon, under the direction of then Col. Ralph D. Steakley, USAF. The JRC had been created to provide the JCS, the Office of the Secretary of Defense, the Department of State, and the White House with a focal point for policy decisions on the US reconnaissance missions being undertaken worldwide long before the Cuban missile crisis. The Intelligence Community, the Unified and Specified Commands, and others would identify reconnaissance requirements. The JRC would clear mission plans through the appropriate policy level of the government, and, with approval received, authorize the reconnaissance missions.

We fed our reconnaissance targeting requirements to Steakley. He had assigned liaison officers from the Center to the Tactical Air Command and SAC. The JRC and the operational planners of the Air Force and Navy drew up detailed flight plans to fulfill the latest intelligence requirements. The work proceeded around the clock. Steakley had a cot in his office, where he lived throughout the crisis. He was under relentless operational pressure. He had received a telephone call from President Kennedy's secretary with the message, "The President has directed that you not be away from your phone for more than three rings" Secretary McNamara had made it clear that he personally wanted to be certain that each mission flown was in accordance with a determined



plan and a predetermined approval cycle. Steakley was regularly summoned to the White House to brief the President on the planned flights.

The President and the Executive Committee were seeing explicit details of the Soviet nuclear offensive buildup. They were following the advances of the MRBMs and IRBMs toward operational status with each day's low-level recce take. The missions, as the President knew, were dangerous and might escalate the crisis beyond the control of either side.

A Bad Day

On 27 October, an Air Force RB-47 flying maritime surveillance missions against Soviet shipping crashed on takeoff from Bermuda with the loss of all four crew members. That same day, of a Soviet SA-2 GUIDELINE missile brought down a U-2 over Cuba flown by Maj. Rudolf Anderson, the pilot of the U-2 flight on 14 October that had filmed the discovery of the Soviet MRBMs. Anderson was killed, and the pressure to retaliate intensified.

An Effective Cycle

We felt this pressure in our support to Secretary McNamara and the JCS. The work cycle began with the delivery of hundreds of feet of new photography in Washington, usually each evening, which had to be analyzed around the clock. I would arrive at either the Pentagon or NPIC early each morning to review the findings and to prepare to brief McNamara and the JCS, usually before the start of the morning Executive Committee sessions at the White House. Current intelligence for targeting of SAM sites was fed to the military planners for inclusion in the target folders. There was a growing consensus that the US would have to act.

The gravity of the situation was confirmed by the results of the low-level reconnaissance missions. The JRC worked with Air Force and Navy planners in drawing up the final flight plans. The pilots agreed that flight tracks for each missions were flyable, and that they were the best tracks to achieve coverage of the requested targets. This success was matched by the cycle we had developed of film processing, readout and feedback to both the national level and the operators. The results of each day's reconnaissance were available to feed into the following day's planning and execution.

White House Statement

On 26 October, the President approved the release of a statement updating the American people on the status of the Soviet missile sites. It reported that development of the IRBM sites was continuing, with bulldozers and cranes observed clearing new areas within the sites. It noted that MRBMs had been observed, with cabling running from missile-ready tents to nearby power generators. And it concluded that the Soviets were trying to camouflage their efforts at the sites.

The USSR's measured response to the quarantine was of critical importance to the President's restrained approach to the crisis. No ships with prohibited or even questionable cargoes had tried to run the blockade. The shootdown of Major Anderson had brought the US to the brink of a retaliatory strike against military targets in Cuba, but the President

remained determined to force Soviet compliance with US demands on terms short of war. Intelligence had given him the information he needed to catch Khrushchev red-handed. There could be no question of the validity of the US charges. But the President knew he was running out of time: the MRBMs would become operational on 28 October.

Messages From Khrushchev

On 26 October, Khrushchev sent President Kennedy first one message, then another. The first couched the Soviet Union's conditions for the withdrawal of its missiles and bombers from Cuba in terms of a requirement for an end to the US blockage and for a promise from the US that it would not invade Cuba. The second Khrushchev letter added another, far more difficult demand:

You are worried over Cuba. You say that it worries you because it lies at a distance of 90 miles across the sea from the shores of the United States. However, Turkey lies next to us. Our sentinels are pacing up and down watching each other. Do you believe that you have the right to demand security for your country and the removal of such weapons that you qualify as offensive, while not recognizing this right for us?

This is why I make this proposal: We agree to remove those weapons from Cuba which you regard as offensive weapons. We agree to do this and to state this commitment in the United Nations. Your representatives will make a statement to the effect that the United States, on its part, bearing in mind the anxiety and concern of the Soviet state, will evacuate its analogous weapons from Turkey. Let us reach an understanding on what time you and we need to put this into effect 8

The US Replies

While the US missiles would eventually be withdrawn from Turkey, at the peak of the Cuban missile crisis the President rejected including them or any mention of them in the terms that would be set for the withdrawal of the Soviet missiles from Cuba. In the midst of the Executive Committee meeting on 27 October on the next step to be taken by the US, Attorney General Robert Kennedy proposed that the US reply to Khrushchev's first letter and not to the second. He actually drafted the reply, stating the terms we were willing to accept, plucking them from several often disparate Soviet messages. They were the terms on which the settlement ultimately was based.

The President's reply of 27 October opened on a positive note, welcoming Khrushchev's "desire to seek a prompt solution to the problem." The President then stressed that if there were to be a solution, work had to cease on the missile bases, and the offensive weapons in Cuba had to be rendered inoperable and removed, with supervision of the removal under appropriate UN arrangements. The US in turn would lift the quarantine and would assure the Soviet Union that it would not invade Cuba.

The President then hinted at future US willingness to consider the missiles in Turkey, without explicitly so stating. "The effect of such a settlement," he wrote, "on easing world tensions would enable us to work toward a more general arrangement regarding 'other armaments,' as proposed in your second letter which you made public." The President closed his reply by again stressing the imperative of an immediate Soviet halt to work on the MRBMs and IRBMs and rendering the weapons inoperable. ¹⁰

Attorney General Kennedy handed over a copy of the President's reply to Soviet Ambassador Dobrynin, stressing the President's belief that the substance of the Soviet response to this message would dictate swiftly whether the two superpowers would resolve the crisis or escalate to war.

On 28 October 1962, Khrushchev agreed to President Kennedy's terms: work would stop on the missile sites, and the weapons would be dismantled and withdrawn. The word arrived quickly as we continued to support preparations for US military action. There was tremendous exhilaration. The Intelligence Community and the military shifted gears, moving to the responsibility of monitoring Soviet dismantlement and withdrawal.

Monitoring Withdrawal

New orders from Moscow to the Soviet missile and bomber forces in Cuba were dispatched immediately. As early as 29 October, low-level reconnaissance flights brought back evidence that the MRBM missile erectors were no longer in their missile-ready firing positions. We would monitor every step of the Soviet withdrawal through photography, reports from human sources, ship-to-ship inspections, air-to-ship surveillance, and other sources and methods. Weather permitting, the Navy RF-8As and Air Force RF-101s flew across Cuba on daily missions collecting thousands of frames of up-to-the-minute evidence for examination by the photointerpreters, analysts, and the senior levels of government.

Early on, the Soviets started to break up the IRBM sites—sites which would never meet their planned 15 December operational date, which was chosen to coincide with Khrushchev's planned address to the UN. Bulldozers tore up the missiles' concrete launch pads and smashed through missile-support facilities. Each of the sites was systematically monitored. The status of the support equipment, propellant trailers, nuclear weapons-handling vans and communications vans was also an intelligence indicator. We tracked their withdrawal from the missile sites to the ports and onto a succession of Soviet merchant ships. The reconnaissance cameras documented Soviet personnel boarding ships for the voyage back across the Atlantic.

The Navy quarantine remained in effect, examining any inbound ships and, in a new phase, inspecting outbound ships to determine their cargoes. The Soviets complied with orders to strip away canvas covering each of the missiles in their canisters, with each clearly in the open, riding as deck cargo. They also complied with orders to break open the wooden crates containing the IL-28 bomber wings and fuselages, permitting us to count each and to confirm their departure.

Quarantine commander Admiral Ward reported that, while the business was deadly serious and while the US forces insisted on full, precise compliance with all demands, there was no sign of Soviet hostility.

Status Reports

On 2 November, President Kennedy provided his first formal status report on the dismantling of the Soviet missile bases in Cuba in an address to the nation. He reported that careful examination of aerial photography and other information was confirming the destruction of the missile bases and preparation of the missiles for return to the USSR. He said that US surveillance would continue to track the withdrawal closely and that this unilateral inspection and monitoring would continue until the US arranged for international inspection of the cargoes and overall withdrawal.

By the time of his news conference on 20 November, the President had received sufficient intelligence to be able to report that the missile sites had all been dismantled, that the missiles and associated equipment had departed Cuba aboard Soviet ships, that US inspection at sea had confirmed that the numbers departing included all known missiles, and that Khrushchev had informed him earlier that day that the IL-28 bombers would all be withdrawn from Cuba within 30 days. Following this Soviet compliance with US demands, the President announced that he had ordered the lifting of the quarantine. He went on to stress that close surveillance of Cuba would continue, bearing in mind that Castro had still not agreed to allow UN inspectors to verify the removal of all offensive weapons or to set safeguards in place to prevent their reintroduction.

In his news conference of 12 December, the President had to repeat his position of 20 November, stating that, while the US continued to press for on-site inspection, he would take every step necessary through continuing close daily surveillance to ensure that no missiles or offensive weapons were reintroduced.

Paying Tribute

With the quarantine lifted, the President flew to Florida on 26 November to pay tribute to the reconnaissance wings and squadrons. At Homestead Air Force Base, the President presented Outstanding Unit Awards to the 4080th Strategic Reconnaissance Wing

and the 363rd Tactical Reconnaissance Wing. He saluted the work of the pilots and their ground crews:

I may say, gentleman, that you take excellent pictures, and I've seen a good many of them. And beginning with the photographs which were taken on the weekend in the middle of October, which first gave us conclusive proof of the buildup of offensive weapons in Cuba, through the days that have followed to the present time, the work of these two units has contributed as much to the security of the US as any units in our history, and any group of men in our history."

He then flew to Key West, to Boca Chica Naval Air Station, to present Unit Citations to Navy Light Photographic Squadron 62 and Marine Light Photographic Squadron VMC-J2.

On 28 November, SAC Commander-in-Chief General Thomas Power awarded the Distinguished Flying Cross to 10 U-2 pilots of the 4080th. Adm. Robert Dennison, USN, presented the same decoration to 25 pilots of the Navy, Marine Corps, and Air Force tactical recce units. The next day the planes' cameras were again in action over Cuba.

Monitoring Continues

The reconnaissance missions of November enabled us to monitor the disassembly and crating of the II-28 bombers at San Julian and Holguin Airfields and the departure of the crates from Cuba, just as we had earlier monitored the destruction of the IRBM sites at Guanajay and Remedios and the departure of the MRBM missiles from San Cristobal and Sagua La Grande. The first missions of 1963 also enabled us to continue to monitor the status of the Soviets' considerable remaining defensive installations, weaponry and personnel, ostensibly in place to protect against the threat of invasion.

The number of Soviet troops had swollen to between 22,000 and 23,000 on Cuba at the peak of the crisis. With the departure of the missile and bomber forces, we could now identify some 17,000 troops still on

the island. Our order of battle in early 1963 showed that Soviet military equipment in Cuba included 24 SAM sites with 500 missiles; 104 MiG fighters, including 24 of the new MiG-21 jets capable of Mach 2 performance; 200 air defense radars; 12 KOMAR-class missile patrol boats; upwards of 100 helicopters; four cruise-missile sites with 150 cruise missiles; more the 700 antiaircraft guns; 24 to 32 FROG rockets; 7,500 to 10,000 military support vehicles; more than 1,300 pieces of field artillery and antitank guns; and some 400 tanks.¹²

Taken together, this weaponry would have given the Soviets a layered set of ground, sea, and air defenses for their missile sites and bomber bases. And there could be little doubt that the remaining weapons were defensive in character. While the Intelligence Community assessed the MiG-21 as being capable of carrying a nuclear weapon, we knew that was not the fighter's intended mission. With a nuclear weapon aboard, the MiG-21 would have a combat radius of little more than 200 miles restricted to clear weather. daytime missions. Of prime importance, our analysis of each new batch of recce photography showed absolutely no evidence of the types of secure facilities that one could expect with confidence that the Soviets would have in place if there were still any nuclear weapons stored on the island.

We were confident of the complete withdrawal based on the comprehensive character of our reconnaissance and monitoring in late 1962 and early 1963.

Refuting Rumors

When the US Congress reconvened in late January 1963, our hard evidence on the defensive nature of the Soviet forces in Cuba remained largely classified. The public debate was feeding rumors that Soviet nuclear offensive capabilities remained in Cuba, that missiles were hidden in caves, and that the MiG-21s and KOMAR patrol boats could deliver nuclear weapons. Such rumors were pouring in from anti-Castro Cuban refugees, and they were fueled by those still angry that the President had not invaded the island and done away with the Communist regime.

Following his Congressional testimony on 5 February, DCI McCone issued a formal unclassified statement in the name of the USIB reviewing the entire Soviet buildup and the departure of the missiles: "We are convinced beyond reasonable doubt, as has been stated by the Department of Defense, that all offensive missiles and bombers known to be in Cuba were withdrawn soon thereafter Reconnaissance has not detected the presence of offensive missiles or bombers in Cuba since that time." Referring to the alleged storage of missiles in caves, McCone said, "All statements alleging the presence of offensive weapons are meticulously checked. So far the findings have been negative. Absolute assurance on these matters, however, could only come from continuing, penetrating on-site inspection." The statement still did not defuse the issue.

In my appearance with Secretary McNamara before the House Subcommittee on Defense Appropriations on 6 February, the Secretary reviewed each phase of the Soviet buildup since the spring of 1962. To set the stage for my classified presentation to the subcommittee of the most important photography, the Secretary described the role of reconnaissance in some detail. Immediately after my presentation, the President decided that the photographic evidence had to be declassified and shared with the American people.

Briefing the Nation

Shortly before noon, Secretary McNamara informed me that I was to present the briefing to the nation that evening on national TV from 5:00 to 7:00 p.m. I was to make the presentation in the State Department Auditorium to an audience of journalists and photographers assigned to the White House, State Department, and Defense Department. The briefing requested by the President included photos, charts, and tables that would document clearly the discovery of the Soviet ballistic missiles, their assembly and operational readiness, and their dismantlement and removal from the island. The photos were selected from among the best available and reflected the superb quality of the photography regularly provided by our reconnaissance jets.

Secretary McNamara told me that he would introduce the presentation and take the follow-on questions. He asked to see the text of my briefing and was surprised when I told him that there was no written text because I had committed the briefing to memory and that the sequence of the photographs and charts would shape and pace the presentation.

The Secretary directed his military assistant, Col. George Brown, USAF, who would go on to become Chairman of the Joint Chiefs of Staff, to take me under his charge for the remainder of the day and ensure that I was at the State Department by 4:00 p.m.

By 3:30 p.m., we were ready. The graphics had been checked and rechecked, classifications removed or covered, and some descriptive annotations added. Colonel Brown and I arrived at the State Department at 4:00 p.m. The auditorium was larger than I had expected, and the viewing screen-at least 12 feet by 8 feet—towered above the stage. This screen would enhance and display the photographs to maximum advantage. To tell the story effectively, however, I had to be able to point to photographic details that would be well beyond reach. I contacted my special assistant, Capt. Billy R. Cooper, USAF, at the Pentagon about the problem, and he was more than equal to the challenge. He grabbed a roll of tape, securely joined two long fishing poles, and rushed to his car. I had this tailor-made pointer in hand and was set and ready to go at 5:00 p.m.

The air was charged in the auditorium. The press was out in full force, and McNamara was to the point:

Good afternoon, ladies and gentlemen. In recent days questions have been raised in the press and elsewhere regarding the presence of offensive weapons systems in Cuba. I believe beyond any reasonable doubt that all such weapons systems have been removed from the island and none have been reintroduced. It is our purpose to show you this afternoon the evidence on which we base that conclusion.

Since 1 July, over 400 reconnaissance flights have been flown over the island of Cuba by US military aircraft. These reconnaissance flights provided the essential basis for the national decisions taken with respect to Cuba in October. They provided the basis for the military preparations necessary to support those decisions. They provided the evidence we were able to present to the world to document the basis and the rationale of our action.

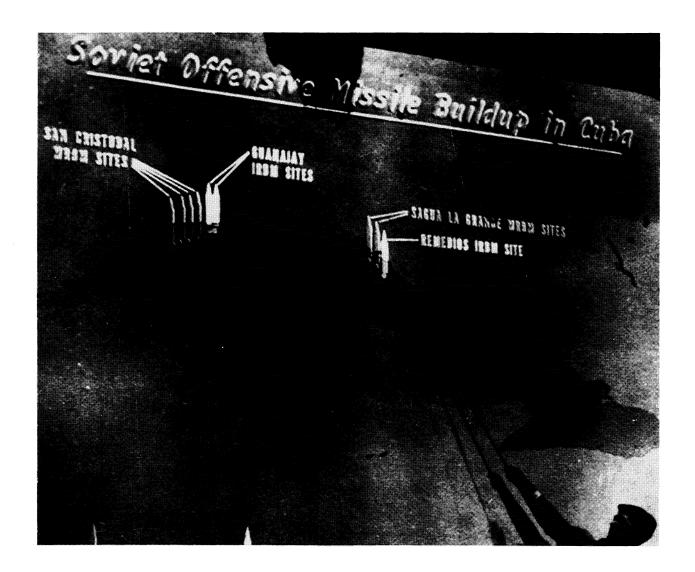
The reconnaissance flights recorded the removal of the offensive weapon systems from Cuba, and they continued to provide the foundation for our conclusion that such weapons systems have not been reintroduced into the island.

Mr. John Hughes, the Special Assistant to General Carroll, the Director of DIA, will present to you a detailed photographic review of the introduction of Soviet military personnel and equipment into Cuba, with particular emphasis on the introduction and removal of the offensive weapons systems.

After Mr. Hughes completes his review, I will summarize very briefly our current estimates of the Soviet military strength in Cuba.

Mr. Hughes.

I began my briefing.



NOTES

- Kennedy, Robert F., *Thirteen Days*, W. W. Norton & Company, Inc., New York, 1969, p. 14.
- 2. NIE 85-2-62, The Situation and Prospects in Cuba, 1 August 1962.
- 3. CIA Fact Sheet, Soviet Forces in Cuba, 5 February 1963.
- 4. SNIE 85-3-62, *The Military Buildup in Cuba*, 19 September 1962.
- CIA Fact Sheet, Soviet Forces in Cuba,
 February 1963.
- 6. SNIE 11-19-62, Major Consequences of Certain US Courses of Action on Cuba, 20 October 1962.
- 7. Newsletter, Light Photographic Squadron Sixty-Two (VPF-62), February 1963.

- 8. Kennedy, Robert F., op. cit., p. 198-199.
- 9. *Ibid.*, pp. 15-16.
- 10. Ibid., p. 203.
- Public Papers of the Presidents of the United States, John F. Kennedy, 1962; US Government Printing Office, Washington, D.C.; 1963; pp. 832-833.
- 12. CIA Fact Sheet, Soviet Forces in Cuba, 5 February 1963.
- 13. Statement on Cuba by the DCI, 6 February 1963.

The Enemy Objective Unit

Waging Economic Warfare From London

W. W. Rostow

This article is based on an essay presented on 11 July 1991 at an OSS symposium held at the National Archives. The essay draws upon the author's unpublished history of the Enemy Objectives Unit (EOU), "Economic Outpost with Economic Warfare Division," Vol. 5, War Diary of the OSS London: The Enemy Objectives Unit To April 30, 1945, located in the National Archives in Washington, as well as on his Pre-Invasion Bombing Strategy: General Eisenhower's Decision of March 25, 1944, published in 1981 by the University of Texas Press.

These recollections are confined narrowly to the EOU, which was formally part of the Economic Warfare Division of the American Embassy and housed in 40 Berkeley Square. But its door was barred to all but the American Ambassador and a few designated Air Force officers. Of the 15 professionals who served in EOU at one time or another over its 32 months of active life, all were from OSS, except two who came from the Board of Economic Warfare.

EOU was the child of Air Corps Col. Richard D'Oyly Hughes. He originally was a British Army officer who followed the love of his life from India's North-West Frontier to St. Louis, where he became an American citizen in the early 1930s. Dick Hughes was one of those selfless men of high intelligence, integrity, and dedication who play important roles in great enterprises but, operating at a middle level of authority, leave little trace in the formal records. Chief planner for the American Air Forces in Europe, his unpressed uniform bedecked with distinguished British decorations, he became a major figure in the Allied effort.

In 1942, Hughes found himself in London, wholly dependent on British sources of intelligence, without an independent staff capable of evaluating the flow

of material on which planning had to be based. He thought this was wrong. He induced Ambassador Winant and General Eisenhower to request that appropriately trained civilians be sent to London to work for him, but formally within the Embassy. The first contingent—Chandler Morse, the unit's chief; Roselene Honerkamp, its secretary; and myself—arrived in London on 13 September 1942. We had made a languid Sikorsky flying-boat journey from New York to Bottwood Bay to Shannon, and then on to London in a plywood de Havilland.

The previous experience of those who served EOU and its outposts converged in a quite particular way with Hughes's intellectual biases. As a professional product of Wellington and Sandhurst, he had long been trained in the principles of concentration of effort at the enemy's most vulnerable point and of prompt and maximum followthrough when a breakthrough was achieved. The members of EOU were, mainly, trained as economists, reflecting the assumption that the broad objective of the strategic bombing offensive was to weaken the German war economy. Our task was to develop and apply criteria for the selection of one target system versus another, one target within a system versus another, and, if the target were large enough and bombing precise enough, one aiming point versus another. When EOU arrived in London, the intellectual level of development of these criteria was quite primitive. To put no fine point upon it, the US had committed itself to a massive daylight precision-bombing program without developing the doctrine and techniques of target selection or the intelligence required to underpin the exercise or without perceiving initially what it would require to conduct precision-bombing operations against the opposition of the German single-engined fighter force.

A Doctrine Emerges

Hughes took a little time to size up the small but overactive young crew he had evoked from Washington at long distance—a bit like a colonel in the field trying to figure out a batch of lieutenants sent from headquarters. He initially put EOU to work on a narrowly focussed and painstaking task: aiming-point reports. These were analyses of particular German industrial plants or installations designed to establish the most vulnerable point of attack. The aiming-point reports were an invaluable education requiring, among other things, visits to the nearest equivalent plants in Britain. They also required exploitation of virtually all the intelligence London could provide about the plant itself, the economic sector of which it was a part, and the role of that sector in the German war effort.

Near the end of 1942, after producing some 285 aiming-point reports, Hughes unleashed EOU on the principles and practice of target selection. In the doctrine we evolved, we sought target systems where the destruction of the minimum number of targets would have the greatest, most prompt, and most long-lasting direct military effect on the battlefield. Each of the modifiers carried weight. One had to ask, in assessing the results of an attack, how large its effect would be within its own sector of the economy or military system; how quickly would the effect be felt in frontline strength; how long the effect would last; and what its direct military, as opposed to economic, consequences would be. The application of these criteria was serious, rigorous intellectual business. In part, it required taking fully into account the extent to which the military effect of an attack could be cushioned by the Germans by diverting civilian output or services to military purposes or buying time for repair by drawing down stocks of finished products in the pipeline. In all this, our knowledge as economists of the structure of production, buttressed by what we had learned from the aiming-point reports, converged with the classic military principles Hughes and his best senior colleagues brought to the task.

The EOU view was, then, a doctrine of warfare, not of economics or politics.

Once EOU developed its doctrine and as D-Day approached, a good proportion of its personnel was shifted to what was known as Operation Octopus to assist (or, as some thought, subvert) the 21st and 12th Army Groups, the Allied Expeditionary Air Force, G-2 SHAEF, and the British Air Ministry. Aside from its umbilical ties to the 8th and 15th Air Forces, EOU probably had its greatest operational impact through Operation Octopus. Its mode of operation violated every textbook rule of administration. Located for almost two years in British air intelligence, for example, I was simultaneously in the chains of command of General Donovan, General Spaatz, Air–Vice Marshal Inglis, and Ambassador Winant. It made good sense at the time, however, and it worked quite well.

Three Bureaucratic Battles

The doctrine which emerged from the interplay of EOU, Hughes, and the top US Air Corps command was not unchallenged; war is not exactly a theoretical debate in a learned journal. There were three critical intervals of head-on, high-level policy conflict involving, as always in public life, clashes of personality, vested interest, and unforeseen events, as well as doctrine. EOU played a role in all three bureaucratic battles, which, quite literally, determined the shape of the air war in Europe.

The first came in the second half of 1943. With great courage, Gen. Frederick L. Anderson, chief of Bomber Command of the 8th Air Force, took the bold initiative of attacking aircraft production, then concentrated in central Germany, before long-range fighters were available to protect the bombers. The unexpected attacks began in July. Under forced draft, German single-engined fighter production at wellknown plants-expanding before our eyes in reconnaissance photos-had risen from 381 in January to 1,050 in July; and first-line fighter strength rose in proportion.' Allied air supremacy on D-Day was clearly endangered if the German expansion plan was permitted to come to fruition. The American attacks forced the Germans to disperse their production, and by December production was only 560. But US bomber losses in the summer and autumn were heavy and generated much criticism in Washington and London. British supporters of area bombings of cities thought the time was thus ripe for a full-court press. They argued that a decisive Wagnerian crisis in German morale could be brought about if the US bombers would abandon daylight bombing and join the RAF in night attacks. Those holding this view often argued that it was the break in German morale that caused capitulation in November 1918.

With a large flow of long-range fighters in sight, the American military establishment was not about to abandon its deeply rooted commitment to daylight precision operations. EOU played its part in the defense of American doctrine by asserting that the German acceptance of defeat in 1918 was based on the situation in the field. In a widely circulated memorandum I sent from the British Air Ministry on 14 November 1943 to an influential advocate of area bombing, I argued that

collapse will come this time also from the top, and as a result of the military and military supply situation literally defined. I see no evidence or reason to believe that area bombing, whatever its great virtues as a generalized drain on the structure of Germany and its military potential, is capable of precipitating a decisive crisis.

The issue was settled, as often in public policy, by an event, not an argument. In the week of 20 February 1944, the entire US bomber force, conforming to a long-laid plan, was dispatched to attack German aircraft production from one end of Europe to the other. It was estimated that about 100 US bombers and crews would be lost (the number lost was only 22). The weather miraculously held clear until the 25th. General Anderson, pursuing basic military doctrine, and despite the exhaustion of the crews and protests from the bomb division commanders, exploited the breakthrough relentlessly until the winter weather closed in. The German singleengined fighter force never recovered from its unlikely defeat by the American long-range bombers. This was the week that, in effect, a mature US Air Force emerged.

From the perspective of those immediately engaged, the big week in February 1944 was Murphy's Law in reverse or intervention by higher authority. But not atypically, success led directly to more trouble: the second and third great conflicts over bombing policy.

Both related to the appropriate use of airpower before D-Day and in the wake of the Allied landings. Both involved intense debate in which, at the bureaucratic level, General Spaatz was squared off against Eisenhower's deputy, Air Chief Marshal Tedder and part of the RAF. At the intellectual level, EOU was squared off against Tedder's one-man brain trust, Solly Zuckerman, a scholar of the sexual and social life of apes; under the curious but not untypical imperatives of war, he became an expert on the physical effects of bombing which he applied in the Mediterranean, and then he became a bombing stategist. There are Americans (and some British) who to the end of their days regarded (or will regard) the last year of the struggle in Europe as a war against Solly Zuckerman rather than Adolf Hitler.

Stated with reasonable objectivity, the first controversy was about bombing policy before D-Day. Even before the big week in February had ended, Hughes and EOU were at work on a plan to exploit air supremacy over Germany. A plan to bomb German oil production was drawn up, approved by Spaatz as early as 5 March, and went forward to Eisenhower and Tedder. The judgment underlying the plan was that the use of strategic bombing to reduce oil supplies radically was the optimum way to lower the fighting capability of the German ground and air forces. Meanwhile, Zuckerman, basing his judgment on his highly debatable view of lessons of the air war in the Mediterranean, persuaded Tedder to support concentrated attacks on marshalling yards, postponing the whole question of oil until after D-Day.

Spaatz took the view that attacks on marshalling yards would have diffuse, generalized effects but would not interdict military supplies because the minimum essential lines could be repaired overnight and because the Germans would not engage their beleaguered fighter force to defend marshalling yards. Thus, his primary and overriding responsibility of Allied air supremacy on D-Day would be at risk.

The battle was promptly joined between Spaatz and Tedder and between their passionate intellectual spear carriers. The crisis and what proved to be interim resolution came at a historic meeting on 25 March 1944, chaired by Air Chief Marshal Portal, representing the combined Chiefs of Staff. But the

decisive voice was Eisenhower's. He decided in favor of Tedder and marshalling yards on the grounds that the latter would provide some immediate help in the landings and their aftermath, whereas the military effects of the oil attacks might be delayed.

But that was not the end of the matter. On 5 April, the 15th Air Force successfully attacked Ploesti, exploiting a comic mistake by SHAEF Headquarters. To block oil attacks in the Mediterranean theater as well as Western Europe, SHAEF confined the Mediterranean air forces to marshalling-yard targets, although the connection with the Normandy landings of the marshalling yards of Southern Europe was a bit obscure. But SHAEF failed to omit Ploesti, which was on the standard marshalling-yard list because there were small marshalling yards outside each refinery. The error was noted and exploited. The attack—in effect, on the refineries—was successful, and significant immediate effects on the German oil supply could be detected.

On 12 May, the American bombers in Britain attacked a substantial group of oil targets in central Germany, including the most important at Leuna. Eisenhower had given Spaatz two pre-D-Day goodweather days on oil when the latter threatened to resign. The Germans were not defending the marshalling yards, and their fighter force was expanding again. Spaatz felt he might not be able to fulfill his overriding D-Day responsibility of assuring air supremacy. Ultraintelligence promptly and unambiguously provided evidence of the Germans' panic as they elevated the defense of their oil production to top priority, even ranking above factories producing single-engined fighters. The evidence was sufficient to convince Tedder that the oil attacks should be immediately pursued. (What Tedder actually said in response to the Ultra reports was: "I guess we'll have to give the customer what he wants.")

Almost two valuable months were lost in reversing Eisenhower's March decision. When German aircraft production began to rise in dispersed factories later in 1944, however, there was insufficient aircraft fuel to train the pilots and to fly the planes. From a peak of 180,000-metric-tons production in March 1944, before the insubordinate attack on Ploesti, aircraftfuel production was down to an incredible 10,000 tons by September. Overall, oil supplies were reduced from 981,000 to 281,000 tons.²

The third battle was over the optimum tactical targets in support of D-Day. Tedder and Zuckerman argued that, again, marshalling yards would suffice. EOU argued for isolating the Normandy battlefield by taking out three rings of bridges, above all the Seine-Loire complex. The weight of the American Air Force and, ultimately, Bradley's and Montgomery's ground force headquarters was thrown behind the bridge concept. The technical argument hinged on how many tons of bombs were required to render a bridge unusable for, say, three weeks. Zuckerman said 1,200 tons per bridge (600 to 1,200 sorties). On the basis of Mediterranean experience, EOU thought less than one-third that tonnage would suffice. Again, the issue was settled by a somewhat adventitious event.

On a predicted bad-weather day in Germany with good weather predicted in France, the Americans proposed a test with some 3,000 aircraft broken into flights of 60. With that force, we could have attacked virtually every bridge on our three-tier list. On getting word of the proposed enterprise, the marshalling-yard advocates went ballistic, as current jargon has it, and the massive test was called off. By way of compromise, and after some extraordinary shenanigans involving 10 Downing Street, (where Churchill and Lord Cherwell maintained a strong dislike of the marshalling-yard strategy), experimental attacks were permitted on 7 May 1944 on six Seine bridges by a total of fewer than 50 P-47 fighter-bombers each carrying two 1,000-pound bombs. There was nothing in prior experience to indicate they would do the bridges any harm. As it was, three bridges were badly damaged and a fourth (at Vernon) was dropped into the Seine by six P-47s with accuracy not to be seen again until the Persian Gulf war. The extraordinary success of the experiment was a matter of luck, except that the fighter-bomber group chosen for the experiment had been practicing low-level attacks on bridges in Texas, a fact not widely circulated before the event.

The postattack photograph of the submerged Vernon bridge was on every general officer's desk the next morning. Tedder capitulated in the face of hard but not quite statistically reputable evidence, and the Seine-Loire bridge attacks were approved. By D-Day, the interdiction of the Seine was complete,

and the Germans' reinforcement of their armies in Normandy from the Calais area and elsewhere was significantly impeded. After being ferried across the Seine, German forces were fed into the battle piecemeal and brutally harassed by virtually unimpeded Allied fighters and fighter-bombers.

Thus, between 7 and 12 May, the American air forces won back a good deal of what they had lost from Vernon to Leuna by Eisenhower's decision of 25 February.

EOU in Perspective

Even on this authentically nostalgic occasion, I would underline with all the emphasis I can muster that the role of EOU should not be overemphasized. We contributed a useful piece to an enormous mosaic of Allied effort.

Looking back, I can see again the faces of Hughes, Anderson, and Spaatz, as well as the key figures in British intelligence, on whom the American effort was based-as able, imaginative, and dedicated a group of men and women as was ever assembled. They backed the precision-bombing effort not only as good allies but also because the intelligence requirements were more exacting and challenging that those for the area bombing of cities or marshalling vards, where all that was really required was an automobile road map. Moreover, there was Portal's bombing-policy staff led by Air Commodore Sidney Bufton, all young men with one or more tours of operations, who supported the American precisionbombing effort unswervingly against strong, nationalistic appeals.

In addition, there was Thomas Hitchcock, a poloplaying American air attache in London, who made a critical contribution to the improbable conversion of the Mustang into a long-range fighter, which won virtually total air supremacy over Germany, thereby validating the American commitment to precision bombing. That validation and the air supremacy it provided was essential to the Normandy landings, to the consolidation of the bridgehead, and to the attacks on oil which virtually grounded the German Air Force and radically reduced the mobility of German ground forces on the Western and Eastern Fronts in the last year of the war.

Gen. Adolf Galland, Chief of the German fighter force, summed up an extended analysis:

The raids of the Allied air fleets on the German petrol supply installations were the most important of the combined factors which brought about the collapse of Germany.

Air Chief Marshal Sir Arthur Harris, Commander of the RAF bomber force, opposed the oil offensive and referred to its advocates, including EOU, as "the oily boys." Against his will, the RAF was forced into the oil offensive and played an effective role. Harris's final word is a bit grudging, but on the whole it was a gracious capitulation:

... I still do not think it was reasonable at that time, to expect that the (oil) campaign would succeed: what the Allied strategists did was to bet on an outsider, and it happened to win the race.

But, above all, there were the aircrews who flew up from the peaceful British countryside, assembled, and, in a matter of minutes, found themselves for much of the air war plunged into an inferno of antiaircraft fire and lethal air combat—some dying or going into captivity; others limping home with dead or wounded aboard; all undergoing traumatic strain carried gracefully or otherwise for the rest of their lives.

The following is from the commanding colonel's austere after-battle report on the attack on the bridge at Vernon, the photograph of which settled an important bureaucratic battle:

While the force orbited at 10,000 feet above the break in the overcast, the first man initiated the attack on the target. He dove for the deck south of Vernon, leveled out over the town, and drove straight for north abutment at deck level and full throttle. His flight path was about 25 degrees off axis of bridge and point of aim was intersecting of bridge and foundation supporting north end of the steel span. The bombs were released at pointblank range, and he pulled up over the bridge, breaking left with evasive maneuvers on the deck. During the attack, the bombers were the target of the most intense light flak they have yet encountered.

I do not believe that the members of EOU, caught up in exciting headquarter's business, ever forgot for long those for whom we were ultimately working. After all, they were of our generation.

Some Final Observations

EOU will always be associated with the name of Charles Kindleberger as well as Richard Hughes. Kindleberger took over from Morse as chief of the unit in February 1943. He left in May 1944, ultimately to join General Bradley's staff. Like the rest of us engaged in Operation Octopus, he kept in close touch with 40 Berkeley Square. His character and style suffused the outfit to the end. His rule in exercising authority was: "tough upwards, soft downwards." Despite our modest military ranks, we spoke our minds to higher authority. We all learned that one could debate quite amicably with general officers if advocacy was interspersed with a sufficient number of "Sirs." But beneath the band-of-brothers spirit which marked EOU, and the texture of humor which suffused virtually all talk in the family, Charlie quietly exercised discretion and compassion on behalf of his subordinates, when required. Above all, he is, as I once wrote, a man of "fierce integrity," and he insisted on a self-critical integrity among us. This is perhaps best illustrated by his insistence in the autumn of 1944, after a sustained period of advocacy, that we pause, draw back, and reexamine skeptically our logic and the factual evidence for the policy positions we held.

What, finally, can one say of the longer run impact of EOU and of OSS? I would make here only three casual concluding observations.

First, it was an irreversible experience of public service that helped shape the subsequent lives of its members. As nearly as I can calculate, virtually all of us subsequently spent some time in government; in this, we are typical of our generation.

Second, a lesson was driven home which affected those of us who were economists, as most of us were. We learned that theories, no matter how elegant or attractive, had to be disciplined forcefully against the facts before a policy decision is reached.

I suspect this bias helped insulate us from the pathological obsession of post-1945 mainstream economics, where mathematical models, inadequately tested, are tossed about as if their internal consistency, under arbitrary assumptions, rendered them useful approximations of reality.

Finally, EOU contributed in a small way to rectifying in the long run the situation Franklin Roosevelt confronted as war approached in mid-1941, a situation which led him to evoke Bill Donovan as *deus ex machina*. The situation was that American military intelligence, especially G-2, was grossly inadequate; that the military services put overriding priority on operational virtuosity and consigned their least competent permanent officers to intelligence; and that there was no way the situation could be rapidly changed from the top. As on other occasions, Roosevelt brought into play the principle of competition—not Adam Smith's Hidden Hand but the not-so-Hidden Foot of Donovan and his merry men and women.³

After deciding OSS was irrepressible, the Army turned to the best east coast law offices to remake G-2. The Navy, already quite competent at assembling order-of-battle data, gradually drew on similar intellectual resources to build up its deficient analytic capabilities.

Even more important, the kind of able military men who rose to command under the pressure of a great and initially desperate war learned that they needed intellectuals and that physical and social scientists and all manner of bright, enterprising civilians could work well in a military setting where innovation in thought and hardware was essential for survival. Thus, the link was forged which yielded the CIA, RAND, the AEC, and all the other present-day institutionalized ties between intellectual life and national security.

It is for new generations of scholars, free of the memories we cherish, to study cooly the records, debate, and decide. It may be, however, that Bill Donovan's OSS will be viewed as part of the wideranging process that brought to the tasks of national security the linkages forged between American intellectual life and the economy by the land-grant colleges which grew out of the Morrill Act of 1862.

NOTES

- The source for these official German figures is
 US Strategic Bombing Survey, Overall Economic
 Effects Division. "The Effects of Strategic
 Bombing on the German War Economy,"
 31 October 1945, p. 156. The German single-engined fighter production plan, which British intelligence acquired early in 1943, called for a levelling off at about 2,000 per month at the end of 1943.
- 2. US Strategic Bomb Survey, *ibid.*, table 41, p. 179, from official German sources.
- 3. I owe the concept of the Hidden Foot to fellow economist Burton Klein, *Prices, Wages, and Business Cycles: A Dynamic Theory.* (Elmsford, New York: Pergammon Press, 1984)



August 1990: Survivors of the raid on Vemork. Author Claus Helberg is seated at the far left.

A classic act of sabotage

The Vemork Action

Claus Helberg

The following is an edited version of an article which was originally published in 1947 Yearbook of the Norwegian Tourist Association. The author, who was a member of a Norwegian sabotage team, has authorized its inclusion in Studies in Intelligence. The sabotage operation against the German heavywater production plant was celebrated in a movie, "The Heroes of Telemark." Mr. Helberg, who participated in the operation, is still hearty. In 1990, he took a member of the Editorial Board of Studies in Intelligence on a trip to Vemork, retracing part of the journey described in the article.

All mountain hikers still recollect that the Hardanger Plateau in Norway was blocked off by the Germans during World War II. From the spring of 1943 to the German capitulation, the plateau was a forbidden area, and the Wehrmacht confiscated the cabins in the mountains. Not even the cabins of the Norwegian Tourist Association were exempt. The Germans burned, plundered, and destroyed, and there were rumors circulating about clashes between British troops and Germans.

The reason for the German actions gradually became public knowledge. It was because of the sabotage action in February 1943 against the heavy-water production plant at Vemork. As long as the war lasted, however, people were not given a factual explanation about these events, but they understood that something important was happening.

The importance of the sabotage action was not disclosed until after the war against Japan was over. At that time, the War Department in London published the story on the Vemork action, and Churchill stated that the attacks against Vemork constituted a major event in the struggle for atomic power. The Germans had actually depended on heavy water from Vemork for their experiments with the atom bomb. As a member of one of the sabotage groups and as an employee of the Norwegian Tourist Association, I con-

sider it appropriate to tell part of the story of what happened at Vemork and on the Hardanger Plateau during the war years.

How It Began

In the summer of 1942, I was a member of the Linge Company's training camp in the mountains of Scotland. We were being trained for industrial and maritime sabotage and for training the Norwegian resistance forces. Professor (and Major) Leif Tronstad planned and organized the industrial sabotage. An excellent scientist, Tronstad was a member of the Allied technical council. He made solid contributions to the Allies during the war, including the intelligence work behind the successful bomb attack against the German missile-testing site at Peenemunde.

Tronstad was keenly interested in the heavy-water production at Vemork. In 1934, as a chemical consultant, he had participated in planning the plant. One day in August 1942, the training camp in Scotland was informed that four men, including myself, were to report to Professor Tronstad in London.

In London, our team leader received instructions for the assignment. To keep the information on the planned attack from leaking, only he was briefed on the real assignment. The rest of us believed that the action concerned training the resistance.

By the end of August, we had rounded up the skis, boots, and other winter equipment we needed. Then we had to wait for a moonlit night and fair weather. For the next six months, the weather was our worst enemy, not the Germans.

On our first infiltration flight, one of the plane's engines burned up, and we limped back to England. The next time we had to turn back because of heavy fog.

Jumping In

Finally, on 18 October, we had some luck. In the most beautiful moonlight, we circled over the Hardanger Plateau to find the target for our jump, the extensive Lokkje Marshes at Ugleflott. We believed that the navigator would have no trouble finding them.

It is hard to describe my state of mind just before jumping. A few hours earlier, I had been soaking up sun on a lawn in England. The joy of returning home blended with the excitement of the jump itself. As the plane descended from 4,000 meters to 300 meters, the terrain no longer looked so fine and flat. "Action station!" The sharp command gave us something else to think about, and a few seconds later I was floating down to the plateau.

We quickly learned that the pilots had not found Ugleflott after all. We ended up in rough terrain, in boulders and rocky mountain slopes. But all four of us plus our 12 containers with food, equipment, weapons and ammunition landed nicely. Even our radio transmitter seemed to have survived the rocky landing. After a year in England, we were not quite used to the sharp, dry cold.

Mission Revealed

We soon got something else to think about, once our team leader told us about our actual mission. To assist in destroying the plant at Vemork, we were to find a good landing site for two British gliders with 40 Royal Engineers and to guide the men from the landing site down to Vemork. We also were to reconnoiter the plant in advance and obtain all information about its German guards. The landing site could not be too far from Vemork. The British would not have skis, which meant that the site would have to be close to a road. The Skodal Marshes, 5 kilometers west of the Mos Lake Dam, were a logical choice. They are on both sides of the road between the dam and Rauland.

Some Tough Going

The operation was to be carried out during the next moon period, which was in one month. Unfortunately, we had landed 15 kilometers farther west than planned, at Fjarefit in the mountain range east of the Songa River. It is roughly 100 kilometers from Fjarefit to the Skoland Marshes. We had to pull 300 kilos of the equipment we needed, including food, skis, our radio, and weapons and ammunitions. This would have worked out well on good snow. But in October we could not even expect snow for skiing. The snow that was on the ground melted the next day in the sun. However, we did not dare to go without taking our skis. If it should snow, we would be completely stuck without them. It took two days to collect our things, to pack what we would take, and to hide the rest in a depot. We had no time to spare. During the third night, heavy, wet snow began to fall.

On 21 October we began marching to Mos Lake. For more than 14 days we struggled in rough terrain and in indescribably bad snow. On good snow, an experienced skier would have covered that distance in a day or so. We just about exhausted ourselves to make it in 14 days. The Songa and Bitdal Rivers were not yet covered with ice, which meant that we had to struggle along steep birch-covered slopes. Each of us carried more than 30 kilos, and that was only half the equipment, so we had to backtrack and walk each distance twice. Under such conditions, we were tempted to leave behind as much as possible, either in the depot or along the route.

We soon realized that we would have to resort to the strictest rationing to make the food last for four weeks. This was our daily menu: 1/4 plate of permican, one handful of oats, some crackers, and some chocolate. Because of the toil, our need for calories was much higher than normal. Each day, we became weaker and weaker. Toward the last day we were not able to cover more than 2 kilometers. Fortunately, there were many cabins along the Songa and Bit Valleys, so we did not have to camp out. If we had had to sleep outdoors, I doubt we would have made it.

On 10 November, we reached the Sandvass cabin, about 10 kilometers south of the Skodal Marshes, where we were to live until the glider party's arrival. On the trek from Fjarefit, our radio operator tried to contact England, but succeeded only once due to a defective battery. To get a new battery and to supplement our scanty food supply, I went down to the well-known skier, Torstein Skinnarland, who was the guard of the dam. Through him, we got all we needed, and

from then on the radio link worked smoothly. Skinnarland fed us information on Vemork, and after two of us had been down there to do a little spying, we were well prepared for the assignment.

III-Fated Attempt

On 19 November we were told over the radio that the gliders would be coming the same night. Later in the evening, we went down to the landing site and put out our reception lights. But the wind increased, and it seemed that London had second thoughts. We were informed over the radio that the operation was postponed for an hour. At 2300 hours, we heard the sound of planes. It certainly was a marvelous feat that the pilots had found the place in this weather. The lights were lit, and we expected every moment to see the gliders land. A little later, we heard plane engines, but now black cloud banks were drifting along the mountains, so I assumed that the chances were small for our lights to be seen.

The next day, we received a sad report from England. Only one of the planes had returned. One glider had been dropped over southern Norway, and the other plane with a glider was missing.

We had nothing else to do than to wait for further orders. We did not feel very safe in our cabin. The German camp at the Mos Lake Dam was only 5 kilometers away. Consequently, we went northwest again, toward Saura, between Mogen and Kalhovd. There was a little hunting cabin there that was not marked on the map, and it became our home for three months.

More Hard Times

This period offered us a fair share of difficulties. At the outset the Germans were especially worrisome. One day when I was down at the Mos Lake to get the latest news from our contact, Torstein, I was told that he had just been arrested. There had been large raids in Rauland, Mosstranda, and Rjukan, and many people were arrested. A German radio-direction-finding car had been observed at Rjukan, and German patrols had headed for the mountains. Every

house in Rjukan and the Vestfjord Valley was searched, and the Germans asked everywhere if people had seen Englishmen in the area.

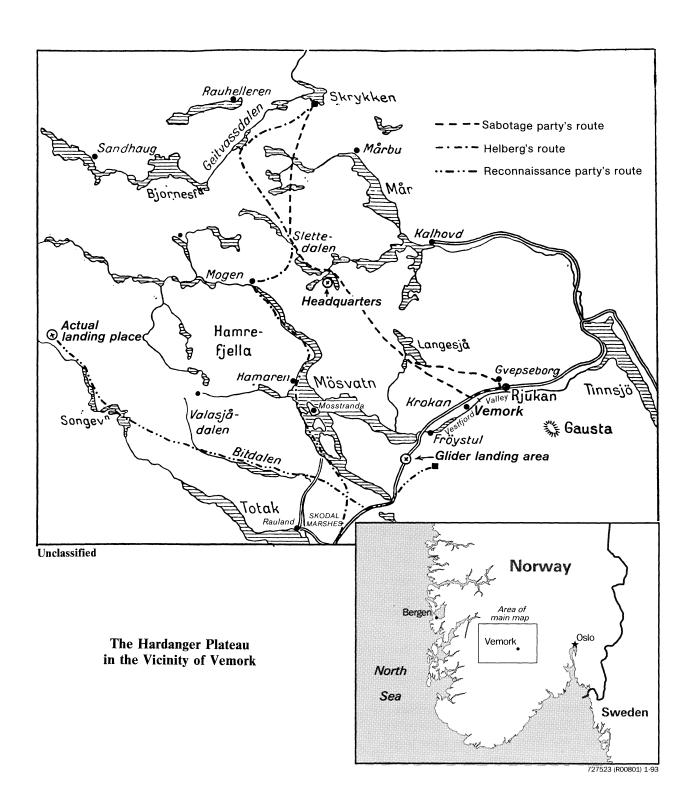
The reason for the raids was obvious. It was a known fact that the British from one of the gliders had been captured and killed by the Germans. In the glider, the Germans had found maps and information showing that Vemork was their target.

The Germans also almost certainly deduced that a radio transmitter in the area had been in contact with the British. Their suspicion fell on Einar Skinnarland, Torstein's brother. But because he was not at home when the Germans came to arrest him, they took Torstein instead. The Germans were closer to their target than they realized. Einar belonged to our own group. He had, however, left England as early as April 1942 to furnish the Allies with information on German activities in the Rjukan region. We had not been in contact with Einar yet, but he joined us later in the winter.

After we lost our contact with Torstein, our food situation became difficult again. For two weeks, we lived on oats, some margarine, sugar, and Iceland moss. We dug the moss up from under the snow and boiled it. It hardly gave us any nourishment, but we imagined it did, and that helped a little.

On this diet, our strength waned quickly, and we were susceptible to diseases. At one time, we were all in bed, except the chief. I believe he managed to keep healthy because he spent much time thinking about reindeer steaks. He had shot many reindeer in these mountains before the war. The others in our group who had hardly seen a wild reindeer before were more skeptical about his chances of killing one.

Meanwhile, the radio connection with England was maintained. We were told a new party would be sent, but only one plane would be used, and that it would deliver no more than six men, all from the Linge Company. The fellows would parachute to our quarters at Saura. So we would be 10 in all. The German guard force at Rjukan and Vemork numbered between 200 and 300 men. But we thought it would work out.





Tough sledding.

Shortly before Christmas, there was a lot of rain and fog. Such troublesome weather suited us admirably. The Germans got tired of their patrolling and the wild reindeer came down from the western areas of the plateau. From then on, our chief was out daily to bag an animal, but conditions were not good for hunting. The fog was thick in the mountains, and he was so weak that he could only get to the nearest peak.

But on Christmas Eve we received a welcome gift, clear and fine weather. Our patient leader went out again; this time he returned with reindeer meat. For two months, we ate only reindeer meat, as many as 11 animals. To prevent scurvy, we ate the stomach and its contents from every animal. It tasted quite good, when mixed with blood and fat.

There was miserable weather in the mountains that winter, and we could not go hunting often. For weeks, the big storms would rage, and it was almost impossible for us to go outside. From time to time, we had a short break when the storms changed from east to west or the other way around, and then we had to make the utmost use of our time to go hunting or pick firewood. Fortunately, Saura was blessed with a birch forest.

Polar disease is the name of a disease attacking people who live in isolation under difficult conditions. In a short time, the best friends may become the most bitter enemies. Even the most cheerful people may collapse. The fact that we did not fall victim to diseases was largely due to our leader's creative ability.

We had no light, which meant long evenings. Idleness is the cause of polar disease to a great extent. To prevent this, our chief started a study circle. Each evening, one of us gave a lecture. The theme did not matter; the main thing was our thoughts were removed as much as possible from our daily existence.

From time to time, I went for a walk down to Rjukan or to the Mos Lake. We has a couple of contacts who furnished us with information on the movements of the Germans in the Vestfjord Valley. Meanwhile, the situation at Vemork had become less favorable. It looked like the Germans were prepared for an attack, as the number of guards at the plant increased steadily. The Austrian guards were replaced by Germans; there were double guards where there had been single ones, and mines were deployed. Mounted floodlight facilities were installed so that the whole factory area could be lighted up as bright as day in case of alarm.

We sent reports on these developments to England. The transmitter demanded much electricity, so we made strenuous trips with the battery to and from the charger. And I had to make many return trips. Often I was unable to force my way through the storms.



Contacting England.

A New Group Arrives

Fair weather finally returned one day at the end of February. It was real "drop weather," with moonlight and quiet, but 34 degrees below centigrade. Over the radio, we were told that the men would come that night, which meant that we would stand outside with the lights. We stood there in the cold until 0500, but nobody came.

The next day we were told that the plane had not been able to find us and that it had dropped the men on the High Plateau, most likely 50 kilometers north of our position. At the same time, we were hit by a terrible storm, the worst we had experienced. We had to stay in the cabin for a week.

"Gunnerside" was the code name of the new group. They were given a rough reception: the big storm struck even before they had collected all their equipment. They were lucky, however, as there was a large cabin right by the landing site.

On the first day of good weather they headed south, and in the evening we saw them coming from the west. It was fun to talk with friends who had news to tell. We had lived for five months alone in the mountains, and the change was welcome.

Attack Planning

We immediately began to plan for the attack. We had to figure out how to get into the factory area and from there into the factory itself, and then how to get back alive. We had two alternatives to get to our target. One was the bridge across the gorge by Vemork, but it was guarded. Liquidating the guard would make noise and perhaps reduce our small force. Another way was to try to cross the gorge under the bridge, and from there move unseen into the factory. We knew that the Germans believed that no one would try it that way. Our contact from Vemork had told us that no one could cross the gorge. But we doubted that. Local people often do not know their own area all that well, when you boil it right down.

On the last day before the attack, I left the others to investigate on my own the possibility of getting across the river gorge. In the bright daylight I strolled down the country road past Vaer. A little farther down, I left the road and headed for the gorge. I was able to make it down to the river ice, and I was also lucky enough to find a somewhat passable way up the factory side. It would not be as easy to go this way in the dark, but it was better than trying to get past the German guards on the bridge.

On the basis of my information on the way across the gorge, our plan for our advance and attack was simple. As it got dark, we would start down the Fjosbu Valley, and then hike down into the Vestfjord Valley until we reached the country road. We would then follow the road about 1 kilometer to the spot where I had found the ford, move across the river and up on to the railroad line between Rjukan and Vemork on the south side of the valley. We would follow the railroad up to the fence surrounding the factory area. After cutting our way through, we would split into a cover party and a blasting party. The cover party would take up positions so it could make a surprise attack in case the Germans sounded the alarm. If all stayed quiet, everyone was to remain at their posts until the explosion was heard. If the alarm was sounded during the advance, the cover party would attack the guards immediately. When the explosion was heard, they should assume that the blasting party was outside the factory area. An order to withdraw would then be given. The passwords would be: "Picadilly? Leicester Square!"

The blasting party would destroy the heavy-water plant in the basement of the Hydrogen Factory. They would try to find an open door into the factory. If they did not succeed, they would try to crawl through a tunnel for pipes and cables leading into the building. If something unforeseen happened, everyone was to act on his own initiative to complete the mission.

Closing In

It was overcast, and there were heavy winds when we went down into the valley with skis and packs. We all wore British uniforms. On the road, the ice was as slick and shiny as an ice rink. Off and on, the wind came in such strong gusts that we fell on the road. The weather could not have been better. We were the only ones out in such conditions. The climb down into the gorge went better than expected, but the river had risen because of the mild weather, and the water ran high above the river ice. But we got across and up to the railroad on the other side.

When we were only 500 meters from our target, we stopped to go through the plan for the last time. It was vital that each man knew his assignment. We

had a fine view of the bridge where the guards were posted. There would be a changing of guards at midnight, and because the guards' house was up by the factory building, we let the off-duty guards have 30 minutes to fall asleep. Then we went up to the fence and cut our way through.

I was with the cover party, and we took up our positions. We covered the German guardhouse and the entrances of the factory. Fortunately, we did not see a single guard. The noise from the factory was quite loud, and there was no other sound. It was pitch dark, and, even if a German had come, I do not believe he would have seen us leaning against the factory wall.

The blasting party had some difficulties getting into the factory. The doors were locked, and it was not easy to find the cable tunnel in the dark. During the search, the men lost track of each other, and only two finally found the opening. They had the explosives, and the tunnel was just wide enough for them to crawl through. They entered the room next to the heavy water plant. The entrance door was open, and they walked right in. There was a worker there, and he probably was scared stiff at the sight of the uniformed men. But he sensed the situation, and he kept quiet.

Success

The men started to place their explosives. They had practiced on wooden models in England, and loads and fuses had been cut to size beforehand. While they were busy working, the silence was broken by the sound of glass being shattered nearby. One of the others in the blasting party who had not found the cable opening had decided to act on his own, and, when he found a window, he smashed it and crawled through. He assisted in completing the work.

To make sure that the explosives would not be removed, the fuses were cut as short as possible. The leader lighted the fuse, the worker dashed up the stairs to the upper floors, and the saboteurs ran out through one of the basement doors. The loads exploded 30 seconds later, and the heavy-water instruments were destroyed.

Except for smashed windows, only the instruments were demolished. The factory itself was undamaged. It may have been this fact that made the Germans react so slowly. One of the off-duty guards poked his head out the guardhouse door, turned a flashlight on the factory building, and then went back to bed!

Thus, we got an unexpectedly large headstart, and it was not until we were up on the country road that the first cars with Germans came up from Rjukan. We found our skis and headed for the town.

Getting Away

There was some discussion as to whether we should go straight up the mountain slope, but those of us who knew the area were able to veto that. The slope would have been too steep and heavy. Of course, it was risky to go down this road, because we could run into Germans at any moment, but we had no other way. The German cars went towards Vemork on the road right below us. Nobody must have thought that we would go *toward* Rjukan. At 0500, we were at Gvepseborg. And we felt great satisfaction when we sat and looked at Vemork and thought of all the commotion we had caused down there.

Then we headed for Hardanger Plateau again and for new assignments. Five men made straight for Sweden on skis, in English uniforms, with guns and ammunition.

Our leader made his way alone to Oslo and then on to Sweden and England. Two went westward and established headquarters for the resistance forces in the Vinje region; one was back in England by Christmas, while the other stayed in Norway until the end of the war. The two telegraph operators established a radio station in the Hamre Mountains by the Mos Lake, and one operated this station until the war was over.

A Hot Pursuit

Many exciting stories can be told about each one of the men from that time on, but I will limit myself to my own adventures after our action. First, I had to make a trip to Fjosbu Valley, and then I was to catch up with the others near Rjukan. But because of bad weather, I was delayed and did not find them. I therefore went alone to Geilo and took the train to Oslo. I left my uniform in the mountains.

So far, the Germans had not started to search the Hardanger Plateau, and three weeks after the action I headed for the mountains again. I went from Imingen north to Skrykken. The purpose of my trip was to hide some weapons and explosives that had been left behind by Gunnerside at Skrykken.

I found the cabin where the men had stayed and went in to get a little food after a long hike. The cabin looked like a pigsty, and it was obvious that the Germans had been there. Perhaps they were close by! I ran out. Sure enough. Four or five men came running up towards the cabin. I put my skis on in a hurry and took off. My only weapon was a pistol.

I had to rely on my abilities as a skier. After some shooting, one of the Germans was catching up with me. We were heading westward at great speed. I just wanted to have the evening sun in my face, to blind the Germans when they were shooting. But one German kept my speed. Fortunately, he also just had a pistol. Thus the chances were equal, and the best shooter would win.

The German evidently determined that the fight would be to my advantage. He became so scared when I began to shoot at him that he emptied his whole magazine at me. All misses. Suddenly, our roles were changed. He threw himself around and headed back towards the other Germans. I hesitated for a moment, and then I pursued him as fast as I could. Every second was precious. His friends could show up over the crest at any moment. At a distance of about 30 meters I fired a few shots at him. The sun had gone down, and darkness was approaching. I was safe, at least for the time being.

But the ski tracks were a problem. The Germans could follow them, even in the dark. I knew there was no snow on the ice of Vra Lake, so I made for the lake. It was a starry night, but it was dark, and I had the bad luck of skiing off a precipice in the Slette Valley, just north of Vra Lake. I hurt my left arm badly, but I had to move on.

Down by Mogen, I barely avoided the Germans. They were swarming all over the place. It was obvious that they had started a major raid. But with a broken arm, I could not head for the mountains again. I had to see a doctor.

Later in the day, I reached Hamaren, tired and hungry. I knew the people there, but I could not stay because the Germans searched every house at the Mos Beach. After I had had something to eat and rested a little, I moved across Mos Lake and down to Rauland. I had been on my feet for 36 hours and covered 160 kilometers.

Rauland was standing on end. I could not have chosen a worse haven. There were about 300 German troops there. The weather turned mild, and it was impossible for me to consider moving on. I knew a merchant at Austbo, and I moved in with him and was allowed to sleep on his kitchen floor. The Germans had requisitioned the other rooms.

Fast Thinking

During the night, I concocted a story to tell the Germans, and they bought it! I said that I had reported as a local scout for the Germans in their search for the Vemork saboteurs and had broken my arm in their service. The Germans must have thought that I was quite a likable fellow. The German field doctor at Rauland examined my arm and sent me by ambulance down to Dalen, where I could travel on to Oslo by myself. In Dalen, I said *auf wiedersehen* to my helpers, and we parted as good friends.

A boat was to leave the next day, and I wanted to rest a little. The tourist hotel looked inviting, and I found lodgings there. But bad luck struck again. Two German officers and their staffs came to the hotel in the evening and requisitioned most of the rooms. All the doors were blocked, and it was out of the question to try to escape. All 30 guests were interrogated. We each had to give our name, address, age, and purpose of staying in Dalen. My identification card, which had been made in London, withstood a close examination.

Under Arrest

The next morning, 18 guests, including myself, were told to pack. We were arrested because of "insolent behavior." I was in great doubt as to what to do, but I finally decided to go with the prisoner transport and then make a run for it. At any rate, I could not go all the way to Grini prison camp. I had put my pistol under the lining of my ski jacket.

Before long, a big bus pulled up in front of the hotel, and we were accompanied to it, one by one. I made sure I was the last one to get out of the hotel, so that I would get a seat right by the exit door in the bus. A German thought that I moved too slowly, and he gave me a kick in the rear so that I stumbled on the stairs. My pistol fell out of my ski jacket and landed between the feet of a German. Now I was in a jam! The Germans obviously did not know what to do with me, but the order was to send us to Grini, and an order is an order.

One German guard was sitting in the front of the bus, and four others on two motorcycles convoyed us, one motorcycle 10 meters in front of and the other 10 meters behind the bus. My seat was on the floor in the rear of the bus. A young lady from Oslo sat next to me. We got to talking and actually had a cozy time. The German guard in the bus was envious, and eventually we changed seats. I got to sit up front by the exit door, and he sat in the back.

Of course, that made things easy. We had driven for nine hours, and it had become dark. In the Lier Hills between Drammen and Oslo, I opened the door and jumped out, amid the oaths of the Germans. I fell on the road, but got back on my feet just as the Germans in the rear motorcycle were about to jump on me. Pursued by exploding hand grenades, I got into the forest, and, thanks to the darkness, my pursuers lost me. They gave up and had to go on without me.

After benevolent treatment at Lier Asylum and a three-week stay at Drammen Hospital, I went on to England through Sweden.

Another Mission

In the night of 4 October 1944, nine soldiers parachuted at Ugleflott. One of them was Maj. Leif

Tronstad. My original team leader, another team leader, another team member, and myself were also among these men. Einar Skinnarland stood on the ground with the landing lights.

Our assignment at this time was to assist the resistance force in Upper Telemark with weapons and training. It was of decisive importance for the economy of Norway after the war that the valuable industry in Telemark should remain intact. The Germans could be desperate enough to destroy the factories when they withdrew. The resistance would help to prevent this.

Our headquarters was established in Skinn Valley by Mos Lake, with Tronstad as the chief. During the winter, we requested and received more than 100 "drops." Almost every moonlit night, large Stirling planes came with guns, ammunition, food, uniforms, and radio equipment. We had radio stations in every district, and we communicated among ourselves and with England.

We established so-called cells, and the men in them were fully trained militarily. They were the elite troops. Training with weapons was given at night in the farm areas and in the towns. We had field maneuvers in the mountains on Sundays. The Germans were more alert than ever, and their raids were part of our daily routine.

We regarded the Hardanger Plateau almost as a recovered area. The blockade was still on, but the Germans had no chance of maintaining effective control there.

Then came 8 May. All the groups mobilized. On the mountain farms at the Mos Beach and Rauland, in every town and farm area, men and young boys dressed in uniforms. They had been prepared to defend their country. Fortunately, actions were not necessary. A long, liberating breath was let out by all Norwegian lungs.

Professor Tronstad did not live to see that day. On 11 March, he and another team member were shot by a traitor close to our headquarters. It was a great loss for Norway. Tronstad was an important scientist, and in no way could we afford to lose him.

The people in the mountain farms around the Mos Beach mourned Tronstad deeply. Never had one person been so loved by the people on those isolated farms. All through the winter, he had lived with them. They appreciated his inexhaustible spirit and optimism, and they especially were fond of him for his considerate and friendly nature and for the warmth of his heart.

For years to come, the memory of Professor Leif Tronstad will live on among the Mos Beach people.

Analysis and policy

The Kent-Kendall Debate of 1949

Jack Davis

Sherman Kent's Strategic Intelligence for American World Policy, published in 1949, is probably the most influential book ever written on US intelligence analysis. Indeed, Kent's carefully drafted blueprint for meeting the challenges facing intelligence in the postwar world has regularly been cited by defenders and critics alike of the performance of the Central Intelligence Agency. Almost all experienced Agency analysts are generally familiar with Kent's themes, though probably more from informal discussions than from a careful reading.

One of Kent's most finely honed doctrines addresses the relationship between producers and consumers of intelligence analysis. Effective ties, while manifestly essential for the well-being of both groups, were difficult to achieve. Kent's recommended fix: to warrant scholarly objectivity, provide analysts with institutional independence; to warrant relevance, urge them to strive to obtain "guidance" from policymakers.

Willmoore Kendall's "The Function of Intelligence," a 1949 review of *Strategic Intelligence*, agreed with Kent on the importance of getting right the relationship between experts and decisionmakers but on little else. Kendall's bold and prescient arguments deserve more attention from both students and practitioners of intelligence analysis.

Kendall rejected what he depicted as Kent's ideal of bureaucratic scholars processing information to understand the outside world for the benefit of bureaucratic policy planners. The function of the intelligence as Kendall saw it was directly to help "politically responsible" leaders achieve their foreign policy goals in large measure by identifying the elements of an issue that were susceptible to US influence. In addition, Kendall observed that if the intelligence mission were to illuminate decisionmaking with the best expert knowledge can provide, Kent's aversions to taking account of domestic US politics and social science theory were self-defeating.²

This article first sets out the major lines of doctrinal disagreement between Kent and Kendall in the context of the late 1940's. It then sketches the impact of the opposing views on CIA doctrine and practice during the ensuing 40 years. Finally, it addresses requirements for effective producer-consumer relations in the 1990s, a period in which challenges to both policymakers and analysts are likely to increase even as resources committed to national security become scarcer. If for no other reason, doctrinal choices require thoughtful examination at this juncture.

Kent's Perspective

Kent, born in 1903 into a politically prominent California family, spent some 20 years before World War II at Yale University, as undergraduate and graduate student and as a faculty member. His major interests were the teaching of European history and the study of 19th-century French politics. His world and political views then and subsequently would characterize him as an eastern establishment liberal. A colorful one though, as indicated by the many references to his earthy vocabulary and humor.³

Kent was a 37-year-old assistant professor at Yale in 1941 when he answered the call to scholars for enlistment in the national defense. He joined the Research and Analysis Branch (R&A) in what started as the Office of the Coordinator of Information and was transformed in 1942 into the Office of Strategic Services. R&A was quickly dubbed the "Four-Eyes Brigade," whose most powerful weapon was the index card. At war's end though, Kent described it as an institution "of almost bewildering power, resourcefulness, and flexibility."

Kent was proud as well of his own wartime achievements, especially the Herculean research effort in support of planning for the 1942 Allied invasion of North Africa. He won recognition for his bureaucratic as well as his research skills, especially his

ability to manage often reluctant fellow scholars to work as teams and to meet deadlines as well as standards. For the North African exercise, his unit worked around the clock for several days and impressed the military consumers with the wealth of useful information uncovered from R&A's perch in the Library of Congress.

For his efforts, Kent was recognized as the senior R&A division chief when, upon the abolition of OSS in 1945, the 1,500-strong research unit was moved to the State Department. He rose quickly to deputy and then acting director of the newly created Office of Research and Intelligence. No pride here; rather, dismay. His two bosses quit in response to State's gutting of R&A. Kent himself resigned in mid-1946. He was unable to accept the scattering of the research cadre to the various geographic policy bureaus, who went to work directly under the command of the assistant secretaries.⁶

Kent arranged for an extension of his leave of absence from Yale, in order not to cut loose either from the Washington scene or from his concerns about the future of "strategic intelligence." First, he spent a semester teaching at the newly formed National War College. Then, with the funds from a Guggenheim Fellowship and in an office at the War College, he proceeded to draft the book that, as he put it, "wild horses" could not keep him from turning out. If he had a priority goal, it was to preserve what he saw as the rapidly fraying bonds between first-rate scholarships and national defense.⁷

Kent relied mostly on his experience as historian and analyst, though he also read through the "infantile" student essays on intelligence at the War College library and conducted bull sessions and exchanges of letters with an impressive array of R&A, Yale University, and the War College colleagues. His third and final draft was completed late in 1947, at which time he did return to teaching history at Yale.

In 1950, in the wake of Korean War emergency, Director of Central Intelligence Agency Gen. Walter Bedell Smith in effect drafted Kent back into intelligence service. Kent was named deputy and heir apparent to his old R&A boss William Langer for the new Office of National Estimates (ONE). Kent

was recognized as one of the leading US authorities on intelligence research. Indeed, General Smith's deputy, William Jackson, had lobbied to have him named to the top ONE post. Kent served as head of ONE from 1952 until his retirement from the agency in 1967. As with his R&A experience, he impressed his colleagues with a talent for leadership as well as scholarship.

Kent's Doctrine: 1949

One reason for the continued attention by academic specialists on intelligence to a book now over 40 years old is that little else of Kent's thoughts on the subject is readily available. Kent made a point of not talking or writing publicly about the "business," even after retirement. Those, including myself, who served under Kent and have access to others who worked with him during his 17 years with CIA have a handicap of their own. They have to take care to distinguish between the Kent of the book and the practicing Kent.

In the final chapter of *Strategic Intelligence*, Kent characterized the relationship between "producers and consumers of intelligence" as "one of utmost delicacy." The relationship did not establish itself but required "a great deal of conscious effort, and is likely to disappear when that effort is relaxed." What could be counted on to work at the desk level became more problematic at higher levels. Indeed, the more "august" the issue, the less one could rely on effective ties."

Kent provided several reasons, the most prominent being the fact that policymakers do not naturally trust the quality and utility of the product of intelligence makers, nor the latters' readiness to take responsibility for their assessments. Kent quipped, "I will warrant that the Light Brigade's G-2 was high on the list of survivors in the charge at Balaclava."

What to do about it? Kent's recommendations are colored by his view of the mission of strategic intelligence as well as by his concern that the relationship required special handling. Kent believed that the function of the intelligence unit was to provide expert knowledge of the external world, on the basis of

which sound policy would then be made by those with expert knowledge of US politics. While the intelligence unit "wished above all else to have its findings prove useful in the makings of decisions," its role had clear limits.

Intelligence is not the formulator of objectives . . . drafter of policy . . . maker of plans . . . carrier out of operations.

Intelligence is ancillary to these; . . . it performs a service function. Its job is to see that the doers are generally well informed . . . to stand behind them with the book open at the right page, to call their attention to the stubborn fact they may be neglecting, and—at their request—to analyze alternative courses without indicating choice.

According to Kent, policymakers are very much in need of the intelligence unit's service, which at one point he defines as knowledge about foreign countries that is "complete . . . accurate . . . delivered on time and . . . capable of serving as a basis for action." To be worthwhile, though, intelligence has to provide objective scholarship. Getting too close to policy would undercut the whole purpose of such an effort. In this context, policy did "not necessarily mean officially accepted high United States policy."

. . . but something far less exalted. What I am talking of is often expressed by the words "slant," "line," "position," and "view."

Kent made much of the point that analysts had enough difficulty avoiding unsound judgements on tough issues without worrying about what conclusions a policymaking boss wanted to see in their intelligence assessments.

Other difficulties that would emerge if intelligence analysts worked directly for policy officials could be fixed at least in part by good administration: the tendency of operational bosses to put analysts to work as operators, to preoccupy them with trivial questions that precluded serious research, to permit research standards and coordination across regional desks to suffer. But in Kent's considered judgement the problem of the skewing of analysis to fit the wishes and fears of the bosses had no solution.

Kent was well aware of the need for analysts to put something on the table for policymakers in addition to scholarship. Analysts, he averred, were not paid to pursue knowledge for its own sake but rather for "the practical matter of taking action." He went one step further: intelligence that is ignored, for whatever reason, is "useless." To avoid this, analysts have to bend every effort to obtain guidance from their customers. Today this is called tasking and feedback.

Intelligence cannot serve if it does not know the doer's mind; it cannot serve if it has not his confidence; it cannot serve unless it can have the kind of guidance any professional man must have from his client.

Kent put the challenge of getting the relationship right into a well-known phrase: "Intelligence must be close enough to policy, plans, and operations to have the greatest amount of guidance, and must not be so close that it loses its objectivity and integrity of judgement." He conceded that the danger to the relationship of intelligence being too far from policy was greater than that of being too close. But he could not leave matters there, warning instead that "the absorption of intelligence producers by intelligence consumers may prove too heroic a cure for both disease and patient." Thus, Kent recommended what he called the customary compromise, in effect the "bargain" of his book:

Guarantee intelligence its administrative and substantive integrity by keeping it separate from its consumers; keep trying every known device to make the users familiar with the producers' organization, and the producers with the users' organization.

He ended chapter and book with still another expression of concern about the "delicacy" of the relationship between men of study and men of action. He warned policymakers that, if they ignored the intelligence arm when its considered judgements disagreed with their "intuition," they would be turning their back "on the two instruments by which Western man has since Aristotle steadily enlarged his horizon of knowledge—the instruments of reason and the scientific method."

Kendall's Perspective

Kendall's perspective on intelligence and policy is much more difficult to capture within the confines of a short paper than is Kent's. Kendall seems by far the more complex man. Unlike Kent, he left little or no commentary on his doctrine of intelligence; and some of his recommendations require understanding of his philosophical positions on broader matters of politics, government, and the Constitution.

Born in Oklahoma in 1909, Kendall was a child prodigy, who at the age of four began reading adult material to his father, a blind, circuit-riding Methodist minister. Kendall's education and world view had more varied stations than did Kent's. Kendall attended the Universities of Tulsa, Oklahoma, Northwestern, Illinois, and Oxford (as a Rhodes Scholar). After completing all course work for a doctorate in Romance languages, he switched interests and obtained his degree in political philosophy. In the mid-1930's, his ideology was leftist, perhaps even Trotskyite. In the 1940's, he became a staunchly anti-Communist conservative. At the time of his death in 1967, he was considered to have been a major (to some, the major) contributor to the postwar development of American conservative political philosophy.¹³

In 1942, Kendall was an assistant professor of political science at the University of Richmond when he made the move to Washington to join the war effort. Most of his wartime posts appear to have been as an operational official rather than as an intelligence analyst. He served, for example, in Washington and in Bogota, Columbia, with the Office of the Coordinator of Inter-American affairs, which was engaged in propaganda and psychological warfare. This wartime creation was independent of OSS, but was moved to State's Office of Research and Intelligence in 1945 along with R&A.

Kendall's hands-on experience with intelligence analysis apparently was limited to a year or so. For some months in 1946, he was chief of Latin American research in State's troubled intelligence office. In August 1946, Kendall moved to the newly created Office of Research and Evaluation (soon renamed Reports and Estimates) of the Central Intelligence Group (shortly thereafter, CIA). He served there as chief of the Latin

American Branch, one of several large units of that office. By the fall of 1947, he had joined the Political Science Department of Yale University as associate professor, the same time that Kent had rejoined the History Department as full professor.¹⁴

Little information is available on Kendall's brief experience in intelligence analysis. Two who served with him during his CIA tour remember him as contemptuous of his fellow branch chiefs and of his staff; ready to lecture those few he deemed capable of learning about political philosophy, effective argumentation, and the intelligence mission; and equally combative about bureaucratic perquisites and substantive judgments. He was not a particularly good "listener." And he was seen regularly as an obstacle to "getting the job done." If one reads backward from his subsequent endeavors—at Yale from 1947 to 1961 and as a senior editor of the National Review from 1955 to 1963-one also concludes that the promotion of teamwork and other bureaucratic values was not his strong suit. Yale administrators saw him as a disruptive force and were happy to purchase his tenure rights to have him off their campus. The story at National Review: Kendall was never on speaking terms with more than one fellow staffer at a time. One observer of his operating style in conservative intellectual circles claimed Kendall was without peer in his speed for turning a discussion into a shouting match.¹⁵

"Controversial," "isolated," a natural "aginner" are all characterizations Kendall would probably have proudly accepted. A memorial collection of his essays in fact was entitled *Willmoore Kendall Contra Mundum.* ¹⁶ His brillance, according to one observer was "his capability to think his way through convention and assumption finally to arrive at the irreducible and crystalline truth." ¹⁷

Back to the 1940s. The future of American intelligence was a frequently discussed topic in the nations's capital. And whatever the extent of Kendall's direct experience, his "intellectual charisma," according to one observer, warranted an audience for his views in various circles. Kendall continued working in Washington for the government part-time after he took his appointment at Yale, once again on psychological warfare. But after his 1949 essay, he left little evidence of a continued interest in intelligence analysis.¹⁸

Kendall's Doctrine

Kendall's review of *Strategic Intelligence* praised Kent for his talent in describing the terminology and organizational map of intelligence. But he criticized Kent's recommendations for improving the performance of intelligence as well as of his underlying "general theory" of intelligence.

Apparently, Kendall was at least as alarmed as Kent over the postwar shortfalls of American intelligence, and he was much less willing to accept existing ("official Washington") compromises based on experience and expediency. He wished Kent would have carried his guarded criticisms about the declining quality of personnel, the misdirection of clandestine collection, the excessive concern with security to their logical ends, so that the reader might see the "intelligence arrangements . . . [Kent] would set up if all the resistances were removed."

As the book was written, Kendall concluded that:

. . . if all of Mr. Kent's reproofs were acted upon, and all his proposals adopted, the result would be an improvement in United States intelligence operations. But the improvement would, like the infant mentioned in Marx's famous footnote, be very small.¹⁹

Kendall charged Kent with a misguided view of the function of intelligence, in the first instance because of a preoccupation with an "essentially wartime conception" of the analysts' role. Excessive concentration on building knowledge about current and potential enemy countries diverts attention from support for "the big job—the carving out of United States destiny in the world as a whole."

Kendall also criticized Kent (and through him prevailing practice) for a "crassly empirical conception of the research process," one favored by historians. Kendall calls instead for:

. . . an intelligence operation built upon a conception of the research process in the social sciences that assigns due weight to "theory" as it is understood in economics and sociology and, increasingly one hopes, in politics . . .

Throwing in as well the charge of an excessively bureaucratic concept of how the US Government should work, Kendall would free intelligence officers from "the tidal wave of documents" Kent would have them process. Kendall would recruit a "considerable percentage" of the intelligence unit "precisely for its theoretical training and accomplishments . . . and enable them to work under conditions calculated to encourage *thought*" (emphasis in the original). He would supply the analysts, via telephone to the field, with "the data that really matter," information on currently developing situations, rather than with "out-of-date" traffic and documents.

Kendall's major salvos against Kent concern "the relation of intelligence to policy in a democratic society," a matter of vital importance "since it is American policy on which the future of the free world seems to depend." He agreed with Kent on the need for "guidance" from policymakers to get the intelligence job done, and on the absence of such guidance "as regards the great decisions about foreign policy." He chides Kent for not facing up to the danger to the nation from such an alarming state of affairs.

More specifically, Kendall charges Kent (and the reigning leaders of intelligence) with a "compulsive preoccupation with *prediction* (emphasis in the original), with elimination of 'surprise' from foreign affairs."

The shadow of Pearl Harbor is projected into the mists of Bogota, and intelligence looks shamefaced over its failure to tell Secretary [of State] Marshall the day and hour at which a revolution will break out in Colombia. The course of events is conceived not as something you try to influence but as a tape all printed up inside a machine; and the job of intelligence is to tell the planners how it reads.

Kendall sees the intelligence function as helping the policymakers "influence" the course of events by helping them understand the operative factors on which the US can have an impact. His most specific language appears in a footnote which starts with examples of "absolute" (and thus inappropriate) predictions: "General DeGaulle will come to power

this day six months'; or 'Japan will attack Pearl Harbor on the x-day at y-hour.' "His example of a "contingent" or appropriate prediction:

"The following factors, which can be influenced in such and such a fashion by action from outside, will determine whether, and if so, when, General DeGaulle will come to power."

Kendall had two additional criticisms of what he considered Kent's flawed theory of producer-consumer relations. He sees Kent's endorsement of the traditional separations of intelligence from domestic affairs as self-defeating, if the goal of the intelligence unit is to bring to bear the knowledge on which foreign policy decisions are to be made. According to Kendall, Kent's definition of mission:

. . . puts [foreign affairs] in the hands of a distinct group of officials whose "research" must stop short at the 3-mile limit even when the thread they are following runs right across it, and yet which tells itself it is using the scientific method. (This ends up with intelligence reports that *never*, *never* take cognizance of United States policies alternative to the ones actual in effect, such problems being "domestic matters.")²⁰

Finally, he charged that Kent, yet again endorsing current practices, would have the intelligence unit laboring for a mid-rather than top-level audience. Kendall rejected the intelligence function as research assistant to bureaucratic "policy planners," such as George Kennan at the State Department.

The issue here is fundamental: if you conceive the intelligence function [as Kent does], you are excluding from its purview what this writer would call its most crucial aspect—i.e., that which concerns the communications to the politically responsible laymen of the knowledge which, to use Mr. [Walter] Lippmann's happy phrase, determines the "pictures" they have in their heads of the world to which their decisions relate.²¹

Was There a Debate?

I have found insufficient evidence to conclude that a Kent-Kendall debate took place in the late 1940s—some kind of doctrinal shootout between champions

of the detached and close-support approaches to the producer-consumer relationship. The two did exchange views at least from time to time in Washington and in New Haven. In the preface to the 1949 edition of *Strategic Intelligence*, Kent thanks Kendall and three others "for readings of the manuscript and many kinds of advice." The same preface, though, also expresses obligations to some 30 additional "friends, associates, and disputants." Apparently, Kent did not think Kendall's doctrinal rebuke worth taking into account either in his final draft for the book or in his subsequent writings on intelligence. ²³

Whether or not the two debated much with each other, the future of American intelligence was a matter for frequent discussion in informed and influential circles during the early postwar years. First, a Central Intelligence Agency was proposed, opposed, blessed, and staffed. In addition to White House plans and disposition, Congressional hearings, and continuous conflict among bureaucrats representing various intelligence organizations, discussion was fueled by several major investigations of intelligence organization and performance (the so-called Eberstadt, Lovett, and Dulles-Jackson-Correa reports).

Most of the controversy, though, concerned what kind of central intelligence entity to construct and its relations with departmental intelligence organizations. The investigations, the recently declassified official CIA histories of the period, and—excepting Kendall—the reviews of *Strategic Intelligence* spend little or no time on policy relations per se.²⁴

The latter issue was not entirely ignored.²⁵ Kent's deliberate argument in *Strategic Intelligence* took aim at those in the State Department and presumably elsewhere in Washington who saw no great value in an independent intelligence unit. His doctrinal standards (administrative independence and scholarly objectivity balanced by vigorous pursuit of guidance), if not the "official Washington" view as Kendall charged, probably seemed in the ball park to most discussants. Indeed, supporters of a strong central intelligence entity had a motive to play down, at least in public discussion, the influence of intelligence on policy: to ward off critics' charges that such an organization would become too powerful and thereby threaten American democracy.

What of Kendall's doctrines? Some discussants, as indicated, probably thought the views espoused by Kent went too far in attempting to insulate intelligence practitioners from their policy counterparts. But did many stand with Kendall? In other words, did he too represent a major party to the debate, a large or at least respected faction? Or, as so often in his later career, was Kendall all but outside the contemporary lines of argument, a compulsive critic of conventional wisdom striving to have others see the issue as he saw it in his mind's eye? I believe the latter was the case.

After all, Kendall was calling for intelligence professionals to step over their own shadow—in terms of writing directly to the perspective of elected officials, taking account of domestic politics as well as policy prerogatives, and shedding such traditional preoccupations as staying on top of the traffic and investing in empirical research on potential enemy countries. At least some contemporary observers, probably including Kent, thought Kendall's juggling of the intelligence and policy roles to be "irresponsible." ²⁶

Kendall's apparent recommendation that the intelligence unit serve the policymaking needs of congressional leaders is one indication of how far his views were from the mainstream in 1949. Kendall was an antagonist of the "imperial presidency" and an advocate instead of rule by "politically responsible laymen" in Congress.

Judging by the hard edge of mutual criticism, Kent and Kendall probably saw little that was complementary in their concepts about the function of intelligence; that is a belief that the national interest would benefit from both a detached and a close-support service, performed at different levels of the intelligence unit or under differing circumstances. This might make sense today, but in the context of 1949 the two seemed to be describing two separate functions. Kent's intelligence unit was to focus on "rolling back the inventory of ignorance" about an uncertain postwar world,²⁷ so that policy units would be effectively served when the need arose. His goal was to have the nation's best scholars make a career of · being intelligence professionals, much the way in preceding generations they made their careers as part of the professoriate.

Kendall, in contrast, was indelibly antibureaucratic concerning both government and university. He did not believe "guidance" would come from policymakers, unless analysts put more on the table than Kent would have them commit. Thus, Kendall's intelligence unit was focused as much on operational "solutions" as on problems overseas. His discription of the intelligence function—wise men who are part of the political and policymaking processes—sounds much like the role played in the 1940s by the "policy planners" he scorned. Perhaps even closer models to much of what Kendall had in mind are the regional and functional directors of the National Security Council staff as that institution developed in subsquent decades.

Four Decades of Doctrine and Practice

In my view, which is marked by years of labor within an "intelligence unit," the untidiness of practice is seen regularly to obscure the clarity of doctrines on producer-consumer relations. Leadership's attempts to set a standard by pronouncement, incentive, and example routinely evoke working-level pleadings on why said standard could not work on this subject, at this time, with this analyst, for this consumer. The history of producer-consumer relations demands and is worthy of book-length treatment, to determine what actually has worked, what has not, and why. Here only one point is developed: If on nothing else, Kent cannot be faulted for saying "a great deal of conscious effort" is required to extract the full potential of the producer-consumer relationship.

Over the years, diversity in practice on the part of CIA analytic units has been propelled by a parade of diverse personalities, opportunities, and obstacles. Thus, any attempt to characterize a decade is immediately put at risk to a large number of exceptions. That said, one can make the case that Kent's ddoctrine as projected in *Strategic Intelligence* had considerable currency in practice during the 1950s.

First, President Eisenhower's administrative style for national security issues—regularly planned NSC meetings to discuss if not to decide policy—provided an orderly place for the scholarship of intelligence.

Because National Intelligence Esitmates were regularly included or taken account of in briefing books for meetings over which the President was to preside, policymaking officials had a stake in being informed on, and in trying to inform intelligence judgments. Second, both the intelligence and policy communities were staffed at high levels by people who regularly sought and gave "guidance." The close ties between DCI and Secretary of State—first Generals Smith and Marshall and the brothers Dulles—are well known. But there were other valuable connections. For example, during part of the decade, CIA's Deputy Director for Intelligence and State's director of the Policy Planning Staff, who were former collegues as Harvard law students, drove to and from work together.²⁸

During the 1960s, readymade opportunities for guidance were reduced, as President Kennedy's more ad hoc operating style frequently left the intelligence analysts a day late and a dollar short. Ray Cline, who served with ONE during the 1950s and as CIA's Deputy Director for Intelligence during the 1960s, used a sports metaphor to contrast the periods. Under Eisenhower, the making of policy was like a football game, with a play for intelligence analysts called in each huddle. Under Kennedy, it was like a basketball game with the players in constant motion.²⁹ The tendency to bypass intelligence judgments accelerated sharply in the 1970s, as a result of the antagonisms toward CIA analysis on the part of President Nixon and National Security Adviser Kissinger. Even when Kissinger became Secretary of State, his low regard for analysts continued to extend to State Department intelligence as well as CIA.30

Removal of CIA quarters, in the early 1960s, from a central location in the District of Columbia to a much less aaccessible location in suburban Virginia added psychological as well as social distance between intelligence and policy professionals. As the analytic cadre at CIA became more substantively specialized, careerist, and bureaucratic during the 1960s and 1970s, it also became more introverted and self-satisfied. Thus, as a rule the absence of guidance awas not viewed as an insuperable obstacle by analysts, who thought that the quality and integrity of their assessments would be sufficient to command the attention of the policy community.

Kent himself during the latter years of his service (until 1967) and in his lectures on intelligence in the ensuing decade seemed to place heavier emphasis on independence of judgment and less on seeking guidance.³¹ Some of his statements indicate a fear that extensive contact with policy officials, even with institutional independence, could corrupt the analytic process. He warned one colleague that "analysts and estimators who go downtown will become policy advocates and begin to serve power rather than truth."³²

Kent was resisted by other Agency leaders and by members of his ONE staff in his retreat from his own prior insistence on the importance of guidance. This was undertaken apparently without direct knowledge of Kendall's views. The Ray Cline story was part of his effort to increase emphasis on intelligence memorandums at the exposure of Kent's National Intelligence Estimates, on the grounds that the former would more effectively meet the consumers' needs. Chester Cooper, Cline's appointment to the new position of Associate Deputy Director for Intelligence for Policy Support, also tried to wrest the doctrinal banner from Kent by emphasizing the importance of staying in close touch with the policy world.33 And a number of analytic units and individual analysts, largely innocent of the doctrinal dispute, went about their business trying to maximize their service to consumers of intelligence by seeking tasking and feedback.

I believe, though, that most CIA analysts and managers during the 1960s amd 1970s identified with Kent's fear of corruption of objectivity and his aversion to close ties to policy officials. Kent's final published words on the delicate relationship speak loudly of independence and say nothing of seeking guidance.

I suppose that if we in intelligence were one day given three wishes, they would be to know everything, to be believed when we spoke, and in such a way to exercise an influence to the good in the matter of policy. But absent the Good Fairy, we sometimes get the order of our unarticulated wishes mixed. Often we feel the desire to influence policy and perhaps just stop wishing here. This is too bad, because to wish simply for influence can, and upon occasion does, get intelligence to the place where it can have no influence

whatever. By striving too hard in this direction intelligence may come to seem just another policy voice, and an unwanted one at that.

On the other hand, if intelligence strives for omniscience and strives to be believed, giving a third place to influence, serendipity may take over. Unselfconscious intelligence work, even in the speculative and highly competitive area of estimates, may prove (in fact, has provided many times) a key determinant in policy decision.³⁴

With one final notice that characterizations by decades are an author's convenience, the 1980s saw a resurgence of emphasis, in both Agency doctrine and practice, on the obligation of analysts to see that their work in fact was useful to policymakers. For one thing, more and more managers and analysts came to take seriously the criticism of CIA analysis from vocal policymakers and to grasp the limitations of the "to whom it may concern" approach to the relationship that was routinely employed in the previous period.³⁵

More important, Robert M. Gates, as Deputy Director for Intelligence from 1982 to 1986, pushed a new doctrinal line that in effect reflected Kent's 1949 emphasis on seeking guidance as well as major elements of the activism recommended by Kendall. Gate's views on what kinds of analysis would be appreciated rather than scorned by policymakers were developed during his service on the National Security Council staff during the 1970's. He observed that CIA analysts knew how every government in the world worked—except their own. At a minimum, he wanted every intelligence assessment to make explicit the implications for US policy of its key judgments. Better yet, he wanted each assessment to highlight some opportunity or threat that the targeted policy audience faced. At one point, he echoed Kent's 1949 dictum that analysts could not earn their pay if they were not throughly familiar with the world of policymakers. In Gates's words:

Unless intelligence officers are down in the trenches with the policymakers, understand the issues, and know what US objectives are, how the process works, and who the people are, they cannot possibly provide either relevant or timely intelligence that will contribute to better informed decisions.³⁶

Gates, even though supported by DCI William Casey, met resistance at both the practical and doctrinal levels. Changes in practice were slow in coming, largely because many analysts preferred to continue doing what they were trained for and accustomed to doing. But doctrinal considerations were also brought to bear. I teach a course commissioned by Casey and Gates on intelligence successes and failures.³⁷ During the mid-1980's, the students, experienced CIA analysts and first-line supervisors, regularly raised the name of Sherman Kent to ward off Gates's efforts to close their distance from the policy world.

Resistance notwithstanding, bureaucratically impressive changes have taken place in CIA analytic practice in the past 10 years—toward both Kent's vigorous pursuit of guidance and Kendall's more activist policy-supported standard. The number of informal "typescript" memorandums written at the request of policy officials or to satisfy their specifically targeted intelligence needs has grown sharply. Oral briefings and especially informal exchanges with individual policy officials have also grown apace. The establishment of CIA centers for counterterrorism and counternarcotics that combine analysts with collectors and operational officers also serves to increase the ties between producer and consumer. At least one senior policy official gives CIA analysts high marks for their enterprise and substantive competence in supporting policymaking during 1989-90. (Though he also notes that he made a considerable effort to establish effective, professional relations.)³⁸ Finally, President Bush's readiness to ask questions of his former Agency provides, at least temporarily, guidance of the highest order.

Purists who will settle for nothing less than seeing Kendall's view's on close policy support become the dominant CIA doctrine will still find much to criticize on that score. The change has been from a weak to a substantial, but by no means an all-out, effort to make intelligence assessments more "user friendly." More specially, Kendall's recommended approach of pointing out the aspects of external situations that the US can influence is not broadly applied. The final issue for this article is the matter of what additional changes in the CIA's practices regarding relations with policymakers are needed to meet the challenges of the 1990s.

Producer-Consumer Relations in the 1990s

Currently, all aspects of US national security organization, priorities, and funding have come under uncommon scrutiny. The new decade already bears witness to the fact that external challenges to US well-being, while not as awesome as during the height of the Cold War, will be more numerous, more diverse, more nettlesome. And budgetary problems that will have an impact on national security resources sooner rather than later beg for more efficient use of intelligence expertise on foreign countries and global problems.

The Senate Select Committee on Intelligence, in February 1991, launched a major review of the missions and functions of US intelligence agencies. The newly appointed chairman of the intelligence committee in the House of Representatives has also shown interest in reassessing practices and priorities.³⁹ I trust these and any other examinations will give due importance to producer-consumer relations. For those who would address the issue, I would like to table five recommendations for consideration.

First, pay attention to the latter-day evocation of Kendall's doctrine, as espoused by Roy Godson, the Coordinator of the Consortium for the Study of Intelligence. Every intelligence manager and analyst should understand why "opportunities-oriented analysis" appeals to those with experience on the staffs of top-level decisionmakers. Most simply put, assessments that address the factors that the US can influence to reduce threats to and enhance opportunities for our national interests provide besieged policy officers with the actionable insights they need to complete their arduous daily rounds. And I can understand the latters' irritation when the intelligence product is restricted solely to descriptions of the events and trends with which they must contend. 40 Intelligence analysts should be trained to deploy their expertise in an variety of more "user friendly" yet professional ways. I have argued elsewhere that the costs of such training will be considerable; some form of jump-start effort is called for that includes experienced as well as new analysts.41

Second, do not forget the Kent of the 1949 book. If intelligence analysts were made mere extensions of the various policymaking staffs, the nation would lose some important advantages it has heavily invested in over the past half-century:

- Cadres with the time and incentive to develop in-depth understanding of issues which suddenly become important, such as ethnic groups in the USSR and in the Persian Gulf, and who are committed to calling attention to "the stubborn fact" that could complicate policy initiatives.
- Members of the national security team whose primary interest is how foreign governments work, even as they mightily seek guidance on helping the US Government to work better.
- An intelligence unit that can provide a level playing field for the many policymaking contenders for influence on the President's decisions.

And one more thing that Kent did not pay much attention to: an intelligence unit with sufficient independence of the administration's policymaking teams to command the respect and trust of Congress.

Third, recognize that the doctrines of Kent and Kendall are not mutually exclusive. A growing number of intelligence veterans believe that analysts and their managers can maintain their basic identities as men and women of study while playing cameo roles in direct support of the policymaking process. For example, a time-honored tradition allows intelligence analysts to be seconded to a policymaking unit for a tour of a year or two, during which time they carry out the normal duties of that unit and, incidentally, learn much about its requirements for intelligence support. When the national interest requires and the benefits exceed the risks, why cannot an intelligence professional take a one-week or one-day tour to bring expertise more immediately to the task of drafting or implementing policy? Such initiatives require the understanding and support of both intelligence and policy leaders so that the analyst's policymaking activities are not paraded as intelligence assessments.

Fourth, promote enhanced analyst utility to the policymaking process and eliminate wasted efforts in all corners, but do not underestimate the tenacity and cleverness of bureaucracies under siege. Any program of changed priorities that does not take account of the need to encourage serving professionals to accept new ways will be a long time in paying off. As indicated above, enhanced and improved training is an essential ingredient for effective change of organizational norms. Top-down management, rather than analyst coverage of the risks of innovation in producer-consumer relations and explicit top-level recognition of achievement, say in employing new art forms, will also speed the spread of change through the ranks.

Lastly, because policymakers ultimately determine the relevance of analysts, get the consumers of intelligence to identify their priority needs as clearly as possible. I expect in a period of diminishing resources at least some policymaking units will press upon intelligence units for all kinds of time-consuming support previously provided by in-house staffs. Other units will likely prefer to criticize intelligence's shortcoming rather than to take steps needed to encourage cooperation.

While the intelligence unit has to take the major share of responsibility for improving relationships, large steps forward also require that policymaking units take seriously any efforts to redraw the lines of engagement. This really has to start with clear and persistent signals at the level of the Office of the President. Indeed, formal training in making the relationship work would suit policymakers as well as intelligence makers.

NOTES

 Strategic Intelligence was published in 1949 and reprinted in 1951 and 1965. Except for minor adjustments for two footnotes added in 1951, the page content of the text is identical in all editions. A second substantive preface was added in 1965. The book also was published in several paperback and foreign language editions.

- Kendall's review appeared in the then new journal World Politics (Vol. 1, No. 4, July 1949). The journal was published by the Institute of International Studies, then located at Yale University, where both Kent and Kendall served on the faculty.
- 3. The most complete source on Kent's life and career is contained in the transcripts of a dictated draft memoir, executed in the 1970s and available in the Sherman Kent Papers at the Yale University Library. The two most informative published accounts are Harold P. Ford, "A Tribute to Sherman Kent." Studies in Intelligence (Winter 1958), pp. 1-8; and Robin Winks, Cloak & Gown: Scholars in the Secret War, 1939-61 (1987), especially pp. 82-96, 449-450.
- 4. In today's terms, OSS would be an "agency," and the R&A Branch would be equivalent to an "office," The constituent units of R&A were "divisions," probably what they would be called today. Kent's version of his R&A service is found in Kent Papers, Series II, Tapes 4-7. See also Winks, pp. 62-115.
- 5. Kent to Harold Nicholson, 31 December 1946, Kent Papers, Box 5, 112.
- 6. Kent's strong feelings about the experience at State are recorded in Kent Papers, Series II, Tapes 7-8; and in "How Effective Is Our Intelligence?" an article published in *The Reporter*, Vol. 3, No. 6, 12 September 1950), pp. 17-19, in which Kent avers that R&A was "not demobilized but demolished" by the old hands at State.
- 7. Kent's brief depiction of his work on the book is found in Kent Papers, Series II, Tape 8, pp. 18-19 and Tape 9, pp. 8-9.
- 8. Jackson had served along with Allen Dulles on a group commissioned by the National Security Council to review CIA practices in 1948, at which time he had access to part of Kent's draft manuscript. (William Darling, The DCI Historical Series: The Central Intelligence

Agency: An Instrument of Government, to 1950, written in 1953, declassified 1989, p. 54). Jackson met Kent in 1949, in conjunction with writing a favorable review of his "very remarkable book." (The New York Times Book Review, 1 May 1949, pp. 4, 20). Some accounts have Kent seeking to return to intelligence work, but Kent's own account indicates his return 1950 was at General Smith's insistence (Kent Papers, Series II, Tapes 10 and 13).

- 9. Ford, pp. 1-8.
- Thomas Powers reports that Kent was one of only three CIA veterans who refused to be interviewed in connection with his *The Man Who Kept the Secrets: Richard Helms and the CIA* (1979), p. xi, 312.
- 11. Unless otherwise indicated, all citations for this section are from *Strategic Intelligence*, pp. 180-206.
- 12. Ibid., p. 5.
- George H. Nash, The Conservative Intellectual Movement in America Since 1945 (1976), pp. 227-248, 402, 410, provides informative coverage of Kendall's early life and his subsequent political writings, but almost no coverage of his intelligence period in the 1940s.
- 14. I am indebted to Ambassador Charles
 Lichtenstein, who met Kendall as a student at
 Yale and remained a colleague until Kendall's
 death in 1967, for information on the 1941-46
 period (interviews, 9 and 19 November 1990).
 See also the entry under Kendall in the 1961
 American Political Science Association
 Biographical Dictionary, p. 131.
- 15. Interviews with Gen. (R.) William Tidwell and Russell Jack Smith, May 1991. Tidwell was Kendall's deputy in the Latin America branch. Smith was deputy chief of the current intelligence staff. Without naming Kendall, Smith describes his perceived limitations in *The Unknown CIA: My Three Decades With the Agency* (1989), pp. 31-33.
- 16. Nash, pp. 230, 247, 403-404.

- 17. Edited by Nellie D. Kendall (1971). The introductory chapter by Jeffrey Hart, "Willmoore Kendall: American," is an informative short essay on Kendall's persona and philosophy. The quotation is from *Ibid.*, p. 9.
- 18. Lichtenstein interview, 19 November 1900; interview with Howard Penniman, 5 February 1991. Penniman was a colleague of Kendall's starting in the late 1930's. Neither man could recall Kendall mentioning his views on intelligence.
- 19. All citations are from *World Politics*, Vol. I, No. 4 (July 1949), pp. 542-552.
- 20. Emphasis in the original.
- 21. Emphasis in the original.
- 22. Strategic Intelligence, 1949 edition, p. x.
- 23. The Kent Papers show no major changes in the three drafts of the chapter on producer-consumer relations. Kent kept a torn-out copy of the World Politics review, on which he mocked Kendall's reference (p. 547) to his experience as an intelligence "official."
- 24. The Darling volume (note 8) contains much useful and interesting information. The first volume of Ludwell Lee Montague's five-volume history of the Bedell Smith period (The DCI Historical Series: Gen Walter Bedell Smith As Director of Central Intelligence, October 1950-February 1953: Volume I, The Essential Background, written in 1971, approved for release, 1990) is easier to read for broad trends and probably more reliable.
- 25. William Langer's review of Kent's book, Knowledge for Security, Yale Review, Winter 1950, p. 366, refers to "the relationship of intelligence work to policy-making" and other aspects of the intelligence task as "still a burning issue in Washington that deserves deep and prolonged thought." The Eberstadt and Dulles reports recommended that analyst-generated reports be replaced with reports dedicated to the requirements of policy officials (Darling, pp. 101-102).

- 26. Ambassador Lichtenstein (interview, 19 November 1990) recalls characterizing Kendall's views as "irresponsible," in a discussion with Kent during the early 1950s.
- 27. The phrase comes from Edward Proctor, as a characterization of what attracted him and other scholars to CIA in the early 1950s. Proctor later became Deputy Director for Intelligence. Interview, October 1988.
- 28. Robert R. Bowie, "Analysis of our Policy Machine," *The New York Times Magazine*, 9 March 1958, pp. 16, 68-71. Interview with Bowie, January 1991. Chester L. Cooper, "The CIA and Decision-Making," *Foreign Affairs*, January 1972 (50:2), pp. 223-236. interview with Cooper, 5 March 1991.
- Cline's remarks were delivered at a staff meeting in 1963 attended by the author. Cline remembers trying to make the point, but not the metaphor. Interview, December 1989.
- 30. Ray S. Cline, "Policy Without Intelligence," Foreign Policy, Winter 1974-75, pp. 121-135, takes Kissinger to task for ignoring intelligence assessments. Cline had recently resigned from his position as director of State's intelligence bureau.
- 31. Recalling practices in ONE in his draft memoirs (Series II, Tape 12, p. 1.), Kent seemed proud of the fact that he never bothered to know the positions of key policymakers on the issues under assessment in National Intelligence Estimates.
- 32. Ford, p. 8, and interview, January 1991.
- 33. Cooper, 234-236. Interview, 5 March 1991. Cooper had been Kent's Deputy Director in ONE in 1962, and shifted to working as Cline's deputy in good measure because of disagreement with Kent on the issue of producerconsumer relations.

- 34. Foreign Service Journal, April 1969. The article was adapted by Kent from his presentation before an Intelligence Methods Conference in London in September 1966. Kent's subheading for the two paragraphs was "Truth Before Power."
- 35. Robert M. Gates, "An Opportunity Unfulfilled: The Use and Perception of Intelligence at the White House," Washington Quarterly, Winter 1989, starts with the citiations of high-level displeasure with intelligence analysis. The article was first published in 1980, in a classified version, in Studies in Intelligence, a quarterly CIA journal founded by Sherman Kent. On increased self-criticism, see also L. Keith Gardiner, "Dealing with Intelligence-Policy Disconnects," Studies in Intelligence, Summer 1989.
- Roy Godson, Editor, Intelligence Requirements for the 1990s: Collection, Analysis,
 Counterintelligence, Covert Action (1989),
 p. 111. See also, Robert Gates, "CIA and the Making of American Foreign Policy," Foreign Affairs, Winter, 1987/88.
- 37. Letter from Director, Public Affairs, CIA, *Foreign Policy*, Spring 1985, p. 171.
- Ambassador Robert Blackwill, then a Senior Director of the National Security Council staff, in remarks at Harvard University, March 1990.
- 39. The Washington Post, 6 February 1991, p. A-17; The New York Times, 8 February 1991, p. A-18.
- 40. Godson, pp. 4-7.
- 41. Jack Davis, review of Godson, *Intelligence Requirements for the 1990s*, in *Studies in Intelligence*, Winter 1989, pp. 69-71.

Seward's other folly

America's First Encrypted Cable

Ralph E. Weber

On the early morning of 26 November 1866, before American Minister to France John Bigelow was out of bed, a secret encrypted cable from Secretary of State William Seward began arriving in the Paris telegraph office. The dispatch's last installment was completed late the following afternoon. News and rumors about the lengthy encoded telegram spread rapidly through the French governmental departments and the diplomatic corps, but Bigelow maintained a determined silence. The first streamer from New York to arrive in France after the dispatch was written brought a reprint of the confidential cable in the pages of the New York Herald newspaper!

This strange episode in American foreign relations commenced a fascinating chapter in American cryptology history. Moreover, the event shaped American State Department code books for the next two generations and provoked a costly lawsuit against the US Government.

Security Concerns

In August 1866, Bigelow had written to Seward praising the inauguration of the Atlantic cable, which he termed the "umbilical cord with which the old world is reunited to its transatlantic offspring." Bigelow recognized the new challenges for communications security that accompanied the new Atlantic cable, completed on 28 July 1866. He advised Seward to develop a new cipher for the exclusive use of the State Department so that Seward could communicate secretly with his diplomatic officers. Even better, he suggested a different cipher for each of the legations overseas.

Bigelow was concerned that the State Department code—the Monroe Code—was no longer secret, for he believed copies of it were taken from the State Department archives by the "traitors to the government" working in an earlier administration. Bigelow

concluded by warning Seward that the Department should take steps to "clothe its communications with that privacy without which, oftentimes, they would become valueless."

Seward, replying to Bigelow's dispatch, dismissed the conjecture that traitors took copies of the code. And he added an astonishing statement: the Department code, in service for at least half a century, is believed to be the "most inscrutable ever invented." Because he held this opinion, Seward wrote that he rejected the offer of five or six new ciphers each year.

Costly Communications

Seward had first discussed the new transatlantic cable with the parent company, the New York, Newfoundland, and London Telegraph Company, at a celebration in New York on 29 August 1866 honoring President Andrew Johnson. At the conclusion of the evening's festivities, one of the directors of the company, Mr. Wilson G. Hunt, asked Seward why the Federal Government did not use the new Atlantic cable. It was a question that would eventually lead to a \$32,000 claim against the State Department. Seward told Hunt that the tariff was too costly and that "the Government of the United States was not rich enough to use the telegraph."²

In fact, the provisional tariff rates were very expensive: cable charges between America and Great Britain were \$100 or 20 pounds sterling for messages of 20 words or less, including address, date, and signature. Every additional word, not exceeding five letters, cost 20 shillings. Code or cipher messages charged double.³ And all messages had to be paid in gold *before* transmission.⁴

Given the "oppressive and extortionate" cost of the tariff and faced with an immense Civil War debt, Seward told Hunt that the State Department would

lose public confidence if it incurred the great expense of telegraphic communication under the existing tariff. Moreover, Seward recognized that a code or cipher would have to be employed for telegraphic communication in order to maintain confidentiality. Using the cipher code for a cable, Seward said, "increased the number of words about five times, and the expense of transmissions 10 times."

After some discussion, in which each party apparently misunderstood the other's position, Hunt came away believing that he would soon receive a written message from Seward requesting lower rates. Seward, in turn, believed he could send a trial message as an experiment for lowering rates, with Seward determining what the proper pay would be for the trial message. The seeds of confusion grew when Seward failed to send the written communication to the company's proprietors.

Several months later the company, bowing to public pressure, lowered its rates. Wilson Hunt then sent Seward a listing of the new prices. Ten days after the new tariff went into effect on 1 November 1866, Seward sent in plain text the first State Department cable via the Western Union Telegraph Company. It was a brief dispatch to John Bigelow in France telling him that his successor was embarking later that month. Shortly after sending the plain-text message, Seward decided he needed to send a coded dispatch to Bigelow containing a warning, to be delivered to Emperor Napoleon III, about France's interventionist activities in Mexico.

A Historic Document

Seward believed it was necessary to send an encoded message to Bigelow because his highly confidential message would pass through the hands of American and foreign telegraphers. But encoded American diplomatic dispatches had become a distinct rarity in the years after 1848. The decline of encrypted diplomatic communications mirrored a new liberal tradition sweeping Great Britain. In support of oppressed Polish leaders and others persecuted by Russia or Austria, the British abolished the secret foreign-letter monitoring branch of the Post Office along with the deciphering office.

Seward's decision to send the encrypted message was prompted by an alarming dispatch from Bigelow earlier in November about continuing French designs on Mexico. Seward believed the message would be in accord with the trial cost agreement he thought he had reached with Wilson Hunt in August. Expecting that Bigelow would read the message in its entirety to the Emperor, Seward left no word out for reasons of economy.

Seward's original plain-text message of 780 words, when encoded, grew to 1,237 number groups, with an additional 88 code symbols spelled out. Moreover, there were more than 35 transmission errors, and some phrases were mistakenly repeated. The dispatch, now 3,722 words long, took six hours to transmit. This historic document became the first encoded American diplomatic dispatch to use the new Atlantic cable.

The State Department clerk who prepared the cable, John H. Haswell, later recalled that the cablegram "... was an important one addressed to our minister at Paris. It caused the French to leave Mexico. I was directed by the Secretary to send it in cipher, using the Department's code which had been in vogue since colonial times but seldom used." Despite the age of the code, Haswell wrote that "it was a good one, but entirely unsuited for telegraphic communication. Its cumbersome character, and what was of even more importance, the very great expense entailed by its use impressed me, and turned my attention to an arrangement for cipher communication by telegraph." 10

A Big Bill

And indeed the cable was expensive, especially in comparison with previous costs. Earlier State
Department monthly bills for using domestic telegraph lines were quite modest. In September, for example, the bill—with an 8-percent discount—came to \$73.79. For October, the bill was \$76.34¹¹ and November (minus the encrypted message) \$46.94. But the charge for the 23 November encrypted message was \$19,540.50! This cost, together with other cables sent in November, added up to \$24,996.12, an amount equal to the yearly salary of the President of the US and three times more than that paid to Seward. The Secretary of State was unwilling, and unable, to pay the cable charges.

Further, the use of expensive encryption was questionable, given that Seward, only days later, testified in some detail before the Senate Committee on Foreign Relations on the subject of the dispatch. And the Secretary of State provided the full plain text of the 23 November dispatch to the *New York Herald!* For more than six decades, the Monroe Code had provided a limited degree of protection for diplomatic communication. Seward's release of the information to the Senate Committee and to the *Herald* greatly lessened communications security and the value of the code.

At Seward's request, Wilson Hunt and Cyrus Field, the manager of the New York, Newfoundland and London Telegraph Company, met with the Secretary to discuss the bill. 13 Seward asked Field to accept a partial payment of between \$5,000 and \$6,000, based on the number of words in the original message before encryption. Field, recognizing that Seward had no idea encipherment would be so expensive, questioned the Secretary's decision to use a code that had been in use since the formation of the nation. Seward replied that a new, economical cipher would replace the old one. And he promised that the company would eventually be paid in full and that the State Department would continue to use Field's company. Seward's compromise offer was not accepted, and he ended the conversation by stating he would not pay the bill. He did, however, invite the gentlemen to dine with him.14

Someone leaked the news about the Seward-Field-Hunt exchange to the *New York Herald*. The newspaper reported inaccurately that the company had charged \$25,000 for the November dispatch and that Seward had paid only \$5,000. The editor commented that the *Herald* had paid for all of its cable dispatches in gold before transmittal and had never made any request for "abatement or delay" in payment. The editor concluded that "It is a shame for the United States Government not to be able to pay its telegraph bills as promptly as a New York newspaper."

More Trouble

Another cable dispute involving Seward began in March 1867, when the Russian Minister to the US sent an encrypted 1,833-word cable to St. Petersburg.

The cable was transmitted through the newly organized State Department telegraph office at a cost of close to \$10,000.¹⁵ The cable, which contained the basic treaty conditions for the purchase of Russian America for \$7 million, was sent, according to the Russian Minister, at the "... request of Seward who pays for it" The charges for the cable thus were transferred to the American account, which by now had grown to over \$42,000!

Wilson Hunt, acting on behalf of the telegraph company, made further efforts to recover the money from Seward. Always a tough negotiator, Seward succinctly replied: "I have received and attentively read your letter of the 1st instant. I am, dear sir, Your obedient servant." One week later, the cashier for the telegraph company asked the State Department accounting clerk if he could collect on the account and received a prompt "No." 18

A New Code

Seward's unhappiness with the cable costs for transmitting dispatches in the Monroe Code brought into existence the first new State Department code in 50 years. This awkward code, devised for economy, was based on the letters of the alphabet. The 23 words used most frequently in dispatches were assigned one letter of the alphabet. For example, "a" was the; "b" was it; "c" was have; and so forth. "W" was not used for the code (though it was in cipher) because European telegraph operators were not familiar with this letter. The next 624 most frequently used words were encoded by two letters of the alphabet. For example, "ak" was those; "al" was who; and "az" was such. Three letters were used for the remainder of the diplomatic vocabulary and a fourth letter could be added for plurals, participles, and genitives.

On 19 August 1867, a copy of the new code was sent to US envoys serving overseas. ¹⁹ For security purposes, Seward asked that the code be used with discretion and that the ministers have a small box made that could be fastened with a lock, the key to which should be kept by the head of the legation.

This novel code, which delighted the thrifty Seward, would be used from August 1867 until 1876. It proved to be a disaster because European and American telegraphers often merged code groups, and dispatches were frequently unread until mailed copies reached the State Department weeks later. Indeed, the first encoded message received at the Department from the American minister in Turkey formed a long string of connected letters and remained a conundrum until finally decrypted by an assistant clerk after days of puzzlement. A similar message from Vienna was never decoded.²⁰ Seward's battle over money with the cable company had as its result, then, a supposedly thrifty but flawed encryption system.²¹

Lower Tariffs

Meanwhile, the battle over money continued. The telegraph company did not contact Seward again until it had a new tariff schedule that lowered rates by 50 percent. Further, under the new schedule, messages in code carried no extra charges. In notifying Seward of these modifications, Wilson Hunt politely renewed his request for payment of outstanding charges, including the cable sent by the Russian minister and other Department cables. Appealing to Seward's patriotism, Hunt noted that 90 percent of the New York stock was owned by citizens of the US.²²

Seward's reply, written exactly one year after the famous dispatch to Minister Bigelow in Paris, praised the tariff reduction. But Seward regretted that no reductions had been made in previous charges, and he added that the Department was not responsible for the cable sent by the Russian minister because the dispatch was neither signed nor ordered by him.²³

Stalemate

In the ensuing months, a tedious exchange of polite letters between the company and Seward led nowhere. Frustrated by the failure to resolve the issue, the company suggested that the entire matter be referred to the Attorney General for his opinion, which the company was prepared to accept as final.

Two years after the Paris dispatch, and with only three months remaining as Secretary of State, Seward wrote his last letter to the cable company. In one sentence, he explained that he had no authority to make, nor the Attorney General to entertain, an adjudication of the claim.²⁴

Paying Up, Finally

When the new Secretary of State, Hamilton Fish, endorsed his predecessor's position, the company finally decided to go to court. On 25 February 1870, the New York, Newfoundland and London Telegraph Company filed a petition with the courts requesting that the government pay \$32,240.75 in gold coin for the cable messages.²⁵

The case was heard before the Chief Justice and Judges of the Court of Claims in Washington, DC, on 26 May 1871. The Court decided for the claimant in the exact amount requested by the company. But the State Department had one victory: payment in gold was not required. Finally, on 28 August 1871, almost five years after the cable to Bigelow in Paris, the Comptroller's Office paid the full amount in dollars and cents!

NOTES

- Bigelow to Seward, 3 August 1866, in Record Group 59, General Records of the Department of State, Dispatches from US Ministers to France, Microcopy 34, Roll 62, National Archives. Hereafter cited as RG 59, M34, R62, NA.
- Deposition of Wilson G. Hunt, 8 June 1870, RG 123, Box 307, NA. In his deposition, Lathers said at first he thought Seward was being facetious, and the conversation began rather jocularly; it then turned serious as Hunt listened carefully to Seward's criticisms.
- 3. Petition of the New York, Newfoundland & London Telegraph Co. vs. the United States, filed 25 February 1870, Claim No. 6151, RG 59, M179, R319, p. 7, NA.

- In November 1866, a gold dollar equalled about \$1.40 in greenback currency: cf. Wesley Clair Mitchell, Gold, Prices, And Wages under the Greenback Standard (Berkeley: The University Press, 1908), p. 302.
- Deposition of William Seward, 27 July 1870, RG 123, B307, NA. Seward knew that Hunt, Peter Cooper, and Cyrus Fields, all of New York, were principals in the cable company.
- 6. Deposition of Seward, RG 123, B307, NA.
- 7. Seward to Bigelow, Washington, D.C., 10 November 1866 in RG 59, M77, R58, NA.
- 8. At least one principal European power was using a code similar to the Monroe Code: cf. Haswell, "Secret Writing, *Monthly Magazine* 85 (November 1912), 88.
- William Seward to John Bigelow, Washington,
 November 1866, in RG 84, Instructions to the
 US Legation at Paris, Ci.1, NA. The letter book copy of the dispatch may be found in Diplomatic
 Instructions of the Department of State,
 1801-1906, RG 59, M77, R58, NA.
- John Haswell to John Sherman, Washington,
 D.C., 20 January 1898. Photocopy in author's possession; the original letter is in the possession of Mrs. Lester Thayer, Albany, New York.
- Leonard Whitney to George Baker, Washington, D.C., 20 November 1866. RG 59, Records of the Bureau of Account: Miscellaneous Letters Received, Entry 212, NA.
- 12. Leonard Whitney to George Baker, Washington, D.C., 17 December 1866, *ibid*.
- 13. Fields received a letter from Baker, which included Seward's request to come to Washington for a discussion of the cable issue: cf. Fields to Seward, New York City, 12 December 1866, Seward Papers, R98, Library of Congress.
- 14. Deposition of Wilson G. Hunt, 8 June 1870.

- Russian Minister Stoeckl to Gorchakov, Washington, D.C., 25 March 1867, RG 59, Telegrams Sent by the Department of State, 1867-69, Entry 309, NA.
- 16. Stoeckl to Gorchakov, Washington, D.C., 25 March 1867, *ibid*.
- 17. Seward to Hunt, Washington, D.C., 11 June 1867, *ibid.*, p. 38.
- 18. Whitney to Baker, Washington, D.C., 19 June 1867, RG 59, E209, NA.
- Seward to Minister to France John Dix, Washington, D.C., 19 August 1867. RG 59, M77, R58, NA.
- John Haswell to Hamilton Fish, Washington D.C., 8 July 1873, Hamilton Fish Papers, R95, Library of Congress.
- 21. State Department Telegrams, 1867-1869, in RG 59, E209, NA reflect the complications posed by this code.
- Hunt to Seward, New York, 20 November 1867, in the Petition, RG 59, M179, R319, p. 40, NA.
- 23. Seward to Hunt, Washington, D.C., 23 November 1867, *ibid.*, p. 41.
- Seward to cable company, 21 November 1868, as reprinted in the Petition, RG 59, M179, R319, p. 51, NA.
- 25. The Petition, RG 59, M179, R319, p. 56, NA.
- "Findings of Fact and Conclusions of Law, Court of Claims, 26 May 1871, RG 123, B307, NA.
- 27. Had payment in gold been stipulated, the cost to the government would have been \$35,787 in greenback currency: cf. Mitchell, *Gold*, p. 316.
- 28. No. 180406, Comptroller's Office, 28 August 1871, *ibid*.

Cuban missile crisis

A Crucial Estimate Relived

Sherman Kent

This article originally appeared in the Spring 1964 edition of Studies in Intelligence.

Special National Intelligence Estimate 85-3-62, entitled "The Military Buildup in Cuba," became the official pronouncement of the United States Intelligence Board on 19 September 1962. This estimate was undertaken when reporting from Cuba began to indicate a steep acceleration in Soviet deliveries of military supplies to Cuba. The tempo of its production was more rapid than "routine," but far less rapid than "crash." At the time it was completed, those of us engaged in it felt that its conclusions A and B represented a basic analysis of the situation. Here they are:

A. We believe that the USSR values its position in Cuba primarily for the political advantages to be derived from it, and consequently that the main purpose of the present military buildup in Cuba is to strengthen the Communist regime there against what the Cubans and the Soviets conceive to be a danger that the US may attempt by one means or another to overthrow it. The Soviets evidently hope to deter any such attempt by enhancing Castro's defensive capabilities and by threatening Soviet military retaliation. At the same time, they evidently recognize that the development of an offensive military base in Cuba might provoke US military intervention and thus defeat their present purpose.

B. In terms of military significance, the current Soviet deliveries are substantially improving air defense and coastal defense capabilities in Cuba. Their political significance is that, in conjunction with the Soviet statement of 11 September, they are likely to be regarded as ensuring the continuation of the Castro regime in power, with consequent discouragement to the opposition at home and in exile. The threat inherent in these developments is that,

to the extent that the Castro regime thereby gains a sense of security at home, it will be emboldened to become more aggressive in fomenting revolutionary activity in Latin America.

And conclusions C and D were an attempt to predict what further developments might occur. They read:

C. As the buildup continues, the USSR may be tempted to establish in Cuba other weapons represented to be defensive in purpose, but of a more "offensive" character: e g., light bombers, submarines, and additional types of short-range surface-to-surface missiles (SSMs). A decision to provide such weapons will continue to depend heavily on the Soviet estimate as to whether they could be introduced without provoking a US military reaction.

D. The USSR could derive considerable military advantage from the establishment of Soviet medium- and intermediate-range ballistic missiles in Cuba, or from the establishment of a Soviet submarine base there. As between these two, the establishment of a submarine base would be the more likely. Either development, however, would be incompatible with Soviet practice to date and with Soviet policy as we presently estimate it. It would indicate a far greater willingness to increase the level of risk in US-Soviet relations than the USSR has displayed thus far, and consequently would have important policy implications with respect to other areas and other problems in East-West relations.

As is quite apparent, the thrust of these paragraphs was that the Soviets would be unlikely to introduce strategic offensive weapons into Cuba. There is no blinking the fact that we came down on the wrong side. When the photographic evidence of 14 October was in, there was the proof.

Soon after the consequent crisis had subsided, a number of investigations were set in train aiming to understand why the Estimate came out as it did. What follows are my own thoughts on the subject and some philosophical generalizations about the business of intelligence estimating. My central thought is that no intelligence mechanism imaginable can be anything like one hundred percent sure of predicting correctly the actions of a foreign government in a situation such as this one was. If similar situations develop in the future and if their course must be estimated from the same sort of evidentiary base, these situations too are bound to be susceptible to the same sort of misjudgment.

The Estimating Machine

Although many of our readers are aware of the process by which National Intelligence Estimates are produced, it is perhaps desirable to set forth again the general ground rules.

When time allows (and it did in the case of the Cuba estimate) the process is fairly complicated; it involves a lot of thought and planning at the outset, a lot of research and writing in the intelligence research organizations of the military and the State Department, a drafting by the ablest staff in the business, and a painstaking series of interagency meetings devoted to review and coordination. Before it gets the final USIB imprimatur a full-dress NIE goes down an assembly line of eight or more stations. At each it is supposed to receive (and almost always does) the attention of a highly knowledgeable group. The Cuba estimate passed through all these stations.

The laborious procedure has seemed to me worth-while if for no other reason than that it is aimed at achieving three important goals: the production of a paper tailored exactly to the requirements of the policy consumer; the full deployment of every relevant intelligence resource (documents and knowledgeable people) within the community; and the attainment of a best agreed judgment about imponderables, or lacking unanimity the isolation and identification of dissenting opinion.

In any of the major estimates it would not be difficult to demonstrate that a thousand, perhaps thousands of, people in intelligence work scattered all over the world had made their modest witting or unwitting contribution to the finished job. Foreign service officers, attaches, clandestine operators and their operatives, eavesdroppers, document procurers, interrogators, observers, "photographers" and the photo interpreters, reporters, researchers, sorters, indexers, reference and technical specialists, and so on have been gathering, forwarding, arranging, and sifting the factual stuff upon which the Estimate rests. Final responsibility for the form and substance of the ultimate blue book rests with far fewer, but a good number just the same. These are the estimators throughout the community, including the staff of the Office of National Estimates, the DCI's Board of National Estimates, and the USIB principals themselves.

So much for what might be called the physique of the process: it has also its purely intellectual aspects. Like any solid conceptual construction, the National Intelligence Estimate is prepared in rough accordance with the procedures of the scientific method.

In very general and, I fear, oversimplified terms, the process goes like this. After a confrontation of the problem and some decisions as to how it should be handled, there is a ransacking of files and minds for all information relating to the problem; and an evaluation, analysis, and digestion of this information. There are emergent hypotheses as to the possible aggregate meaning of the information; some emerged before, some after, its absorption. No one can say whence come these essential yeasts of fruitful thought. Surely they grow best in a medium of knowledge, experience, and intuitive understanding. When they unfold, they are checked back against the facts, weighed in the light of the specific circumstances and the analysts' general knowledge and understanding of the world scene. Those that cannot stand up, fall; those that do stand up are ordered in varying degrees of likelihood.

The Search into Uncertainty

As an NIE begins to take form, it carries three kinds of statements. The first is easily disposed of; it is the statement of indisputable fact ("The Soviets have a long-range heavy jet bomber, the Bison"). The second and third kinds do not carry any such certainty; each rests upon a varying degree of uncertainty. They relate respectively (a) to things that are knowable but happen to be unknown to us, and (b) to things which are not known to anyone at all.

As an example of the former, we have seen the Bison up close and from afar, photographed it in the air and on the ground, listened to it and timed it in flight; but no reliable source we have access to has had his hands on one or put one through its paces. Its performance characteristics are accordingly a matter of calculation or estimate. Likewise, although some Soviet official knows with perfect assurance how many Bisons there are, we do not. Our calculation of Bison order of battle is an estimate, an approximation.

Over the years our estimates of these knowable but unknown things have probably come closer and closer to the objective fact, but it is sobering to realize that there is still a notable discrepancy between the CIA and Air Force estimates of operational Bisons, and that only last year our seemingly solid estimate of Bear order of battle had to be revised upwards some fifteen percent.

It is worth noting here that matters far less esoteric than Bear order of battle can and often do present literally unsolvable problems. An innocent might think that such knowable things as the population of Yemen, the boundaries of Communist China, the geodetic loci of Russian cities, and thousands of other obvious matters of fact could be had for the asking. Not only can they not be had for the asking, they cannot be had at all. The reason is, of course, either that no one has ever tried to find them out, or that those who have tried have approached the problem from different angles with different methodologies and gotten different answers, of which no single one can be cited as the objective fact.

The third kind of statement, in (b) above, represents an educated guess at something literally unknowable by any man alive. Characteristically it often deals in futures and with matters well beyond human control: Will Nkrumah be with us for the next two years? five years? Or it deals with matters under human control but upon which no human decision has been

taken: How many Blinders will the Soviets have five years hence? What kind of antimissile capability? What will be their stance in Cuba next year? It may be that the Soviet leaders have temporized with these issues, agreed to go planless for another six or eighteen months. Or it may be that they have decided, but at this time next year will drastically alter this year's decision. Ask almost anyone what he plans to do with his 1965 holiday and see what you get. If you do get anything, write it down and ask him the same question a year from now.

If NIEs could be confined to statements of indisputable fact, the task would be safe and easy. Of course the result could not then be called an estimate. By definition, estimating is an excursion out beyond established fact into the unknown—a venture in which the estimator gets such aid and comfort as he can from analogy, extrapolation, logic, and judgment. In the nature of things he will upon occasion end up with a conclusion which time will prove to be wrong. To recognize this as inevitable does not mean that we estimators are reconciled to our inadequacy; it only means we fully realize that we are engaged in a hazardous occupation.

It has been murmured that a misjudgment such as occurred in the Cuba SNIE warrants a complete overhaul of our method of producing estimates. In one sense of the word "method," this cannot be done. As indicated earlier, the method in question is the one which students reared in the Western tradition have found to be best adapted to the search for truth. It is the classical method of the natural sciences, retooled to serve the far less exact disciplines of the so-called science of human activity—strategy, politics, economics, sociology, and so forth. This is our method; we are stuck with it, unless we choose to forsake it for the "programmer" and his computer or go back to the medicine man and his mystical communion with the All-Wise.

What can be done is to take a hard look at those stages of the method where it is most vulnerable and where a relaxation of vigilance or an undue inflexibility may lead to error in judgment. First consider the so-called evaluation of the "facts."

The Matter of Mental Set

In our business we are as likely to be faced by the problem of a plethora of raw intelligence as by one of its paucity. In many of our tasks we have so large a volume of data that no single person can read, evaluate, and mentally file it all. It gets used in a finished intelligence study only through being handled along the line by a group of people who divide the labor. Obviously the individuals of this group are not identical in talent or anything else, and each brings to the task his own character, personality, and outlook on life. There is no way of being sure that as they read and evaluate they all maintain the same standards of criticism or use common criteria of value and relevance.

Merely as an example of what I am saying: it could have been that half a dozen such readers were inclined to believe that the Soviets would put strategic weapons into Cuba and another half-dozen inclined to believe the opposite. In some measure the subsequent use of a given document depends upon who handles it first and gives it an evaluation. It could be that a valuable piece of information falls into disrepute because its early readers did not believe its story. The obverse is also possible—that an incorrect story should gain great currency because of being wholly believed by wishful critics. It is a melancholy fact of life that neither case is a great rarity, that man will often blind himself to truth by going for the comforting hypothesis, by eschewing the painful.

What is true of the evaluation of raw intelligence at the reporting or desk officer level is generally true all along the line. The main difference between the early evaluation and that at the national estimates level is the quantity evaluated, not necessarily the quality of the evaluation. The relatively few people on the national estimates staff and board cannot, indeed do not try to, read all incoming reports. They read and appraise what survives the first few stages of the winnowing-out process—still a formidable amount of paper. For the rest they rely upon the word of the specialists who have handled the material in the first instance. The senior estimates people have had more experience than the average and their skills are probably greater, but they are still men with normal human fallibilities.

In last analysis these fallibilities lie in a man's habits of thought. Some minds when challenged respond with a long-harbored prejudice, some with an instantaneous cliche. Some minds are fertile in the generation of new hypotheses and roam freely and widely among them. Other minds not merely are sterile in this respect but actively resist the new idea.

Any reputable and studious man knows the good and evil of the ways of thought. No worthy soul consciously nourishes a prejudice or willfully flashes a cliche; everyone knows the virtues of open-mindedness; no one boasts imperviousness to a new thought. And yet even in the best minds curious derelictions occur.

The Data on Cuba

I do not believe, however, that any such derelictions occurred in the matter of evaluating the evidence on Cuba. What little data we had prior to 19 September I am sure we weighed and measured with open minds.

What was this evidence? To begin with, there was of course no information that the Soviets had decided to deploy strategic missiles to Cuba and indeed no indication suggesting such a decision. Moreover, months after that decision had been reached, and during the period when the Estimate was being drafted and discussed, there was still no evidence that the missiles were in fact moving to their emplacement. With the benefit of hindsight, one can go back over the thousand and more bits of information collected from human observers in the six months ending 14 October and pick out a few-a very few-which indicated the possible presence of strategic missiles. The report of CIA's Inspector General says: "It was not until shortly after mid-September that a few ground observer reports began coming in which were specifically descriptive or suggestive of the introduction into Cuba of Soviet offensive weapons."

The IG goes on to list the "handful" which "can be related" to these weapons. The list comes to eight. Of these I would agree that no more than two or possibly three should have stopped the clock. None of these was available before the crucial estimate was put to bed. Even if they had been here in time

and even if we had intuitively felt (and a notable number among us did so feel) that such weapons were on the way, these three bits of evidence would probably not, taken in the context of the other thousands, have been seized on as pointing to the truth. In the mass of human observation and reporting there were items to support or destroy almost any hypothesis one could generate. Nor did the aerial photography of September dissipate the uncertainty. Not only did it fail to spot the ominous indicators of missile emplacement but over and over again it also made fools of ground observers by proving their reports inaccurate or wrong. The moment of splendor for the U-2s, cameras, film, and PIs when finally the sites and associated equipment were photographed and identified had not yet arrived with the close of the business day of 19 September.

Thus, of the two classical invitations to error in the estimating business, we cannot be said to have fallen for the first: I refer of course to the neglect or wishful misevaluation of evidence because it does not support a preconceived hypothesis.

Though perhaps tempted, we also did not kick the problem under the rug. We did ask ourselves the big question, "Are the Soviets likely to use Cuba as a strategic base?" We asked ourselves the next echelon of questions, "Are they likely to base submarines, light bombers (IL-28s), heavier bombers, and long-range missiles there?" Our answers are cited above.

The Logic of Intent

How could we have misjudged? The short answer is that, lacking the direct evidence, we went to the next best thing, namely information which might *indicate* the true course of developments. We looked hard at the fact of the Soviet military buildup in Cuba for *indications* of its probable final scale and nature. We concluded that the military supplies piling into Cuba indicated a Soviet intent to give Castro a formidable defensive capability—so formidable as to withstand anything but a major military effort on the part of an attacker. We felt that the Soviet leaders believed the worldwide political consequences of such an effort would be recognized in the United States and would be the strongest possible deterrent to U. S. military

moves to overthrow Castro. Obviously we did not go on to argue that the Soviets might think they could raise the deterrent still higher by supplying the Cubans with long-range missiles, which they would still proclaim to be purely defensive.

As noted, however, we did consider the matter. And in answering the questions that we posed ourselves on the likelihood of the Soviets' building Cuba into what this country would have to regard as a strategic base, we called upon another range of indicators. These were indicators derivable from precedents in Soviet foreign policy.

When we reviewed once again how cautiously the Soviet leadership had threaded its way through other dangerous passages of the Cold War; when we took stock of the sense of outrage and resolve evinced by the American people and government since the establishment of a Communist regime in Cuba; when we estimated that the Soviets must be aware of these American attitudes; and when we then asked ourselves would the Soviets undertake the great risks at the high odds—and in Cuba of all places—the indicator, the pattern of Soviet foreign policy, shouted out its negative.

With hindsight one may speculate that during the winter and early spring of 1962, when the Soviets were making their big Cuba decisions, they examined the posture of the United States and thought they perceived a change in it. Is it possible that they viewed our acceptance of setbacks in Cuba (the Bay of Pigs), in Berlin (the wall), and in Laos as evidence of a softening of U.S. resolve? Perhaps they did, and on this basis they estimated the risks of putting missiles into Cuba as acceptably low. Perhaps, when they contemplated the large strategic gains which would accrue if the operation succeeded, their estimate of the U.S. mood was wishfully nudged in this direction. And perhaps again, to close the circuit, they failed to estimate at all the consequences of being themselves faced down in a crisis. If all these speculations are correct—and there is persuasive argument to sustain them—even in hindsight it is extremely difficult for many of us to follow their inner logic or to blame ourselves for not having thought in parallel with them.

On 15 October we realized that our estimate of the Soviets' understanding of the mood of the United States and its probable reaction was wrong. On 28 October we realized that the Soviets had realized they misjudged the United States. In between we verified that our own feeling for the mood of the United States and its probable reaction had been correct. In a way our misestimate of Soviet intentions got an ex post facto validation.

Ways Out We Did Not Take

In brooding over an imponderable—like the probable intentions of the Soviet Union in the context of Cuba—there is a strong temptation to make no estimate at all. In the absence of directly guiding evidence, why not say the Soviets might do this, they might do that, or yet again they might do the other—and leave it at that? Or like the news commentators, lay out the scenario as it has unwound to date and end with a "time alone will tell"? This sort of thing has the attractions of judicious caution and an exposed neck, but it can scarcely be of use to the policy man and planner who must prepare for future contingencies.

Even more tempting than no estimate is the "worst case" estimate. This consists of racking up all the very worst things the adversary is capable of doing and estimating that he may undertake them all, irrespective of the consequences to his own larger objectives. If one estimates thus and if one is believed by the planner, then it follows that the latter need never be taken by unpleasant surprise.

Engaging in these worst case exercises may momentarily cheer the estimator. No one can accuse him of nonchalance to potential danger; he has signaled its existence at each of the points of the compass; congressional investigators will have lean pickings with him. But in all likelihood a worse fate awaits. Either his audience will tire of the cry of wolf and pay him no heed when he has really bad news to impart, or it will be frightened into immobility or a drastically wrong policy decision.

It was tempting in the matter of Cuba to go for the worst case: but in the days before 19 September we knew that the evidence would not sustain such an estimate, and our reading of the indicators led us in the opposite direction.

Why No Revision?

If wrong as of 19 September, why did we not put things to rights before the 14 October photographs? Why did we not recall and modify the Estimate when the early ground observer reports reached us or when we finally got the photo of the inbound Soviet ship with its deck cargo of crated IL-28s?

Could we not have repaired the damage a week or so in advance of 14 October and given the policymaker the advantage of this precious time?

In the first place, these pre-14 October data almost certainly would not, indeed should not, have caused the kind of shift of language in the key paragraphs that would have sounded the tocsin. Of themselves and in context they should not have overpowered all to the contrary and dictated a one-hundred-eightydegree change to "The Soviets are almost certainly developing Cuba as a strategic base right now." The most they should have contributed to a new version would have been in the direction of softening the original "highly unlikely" and adding a sentence or two to note the evidence, flag a new uncertainty, and signal the possible emergence of a dangerous threat. If we had recalled the Estimate or issued a memo to its holders in early October we would have had a better record on paper, but I very much doubt that whatever in conscience we could have said would have galvanized high echelons of government to crash action.

In the second place, it is not as if these new data had no egress to the world of policy people except through National Intelligence Estimates. The information was current intelligence when it came in and it promptly went out to the key customers as such. This is of course the route that most, if not all, important items of intelligence follow. That constituent part of an NIE that I earlier referred to as the range of knowable things that are known with a high degree of certainty is often very largely made up of yesterday's current intelligence. In the multicompartmented intelligence business, two compartments are at issue—an estimates compartment and one for current intelligence. They are peopled by two quite separate groups and follow quite different lines of work. Nevertheless, there is the closest interrelationship between them.

The current intelligence people handle almost minute by minute the enormous volume of incoming stuff, evaluate it, edit it, and disseminate it with great speed. The estimates people work on a longer range subject matter, hopefully at a more deliberate pace, and make their largest contributions in the area of judicious speculation. NIEs are produced at the rate of 50 to 80 a year; individual current intelligence items at that of some ten thousand a year. The current people look to estimates as the correct medium for pulling together and projecting into the future the materials that continuously flow in.

The estimators for their part rely on the current people to keep alert for news that will modify extant estimates. The estimators do themselves keep the keenest sort of watch for this kind of news. Indeed, the Estimates board members and staff chiefs start every working day with a consideration of new information that might require revision of a standing NIE. But the board feels that certain criteria should be met before it initiates a new estimate. These are: (1) The subject matter of the estimate must be of considerable current importance. (The situation in Blanka was important at the time of our last estimate on the subject, but it is not very important now; hence today's news, which may give the lie to major portions of the Blanka estimate, will not occasion its formal revision.) (2) The new evidence must be firm and must indicate a significant departure from what was previously estimated. (We would not normally recall an estimate to raise a key "probably" to an "almost certainly" nor to change an estimated quantity by a few percentage points. Unless we adhere to these criteria and let current intelligence carry its share of the burden, very few NIEs could be definitely buttoned up, and those which had been would have to be reopened for almost daily revisions. Maybe this is the way we should direct our future effort; some of our critics seem to imply as much. (Myself, I think not.)

The Enemy's Viewpoint

Some of our critics have suggested that we would have avoided the error if we had done a better job of putting ourselves in the place of the Soviet leadership—that if we had only looked out on the world scene

with their eyes and thought about it the way they did we would not have misread indicators and all would have been clear. Upon occasion this proposition is made in a way to suggest that its articulator feels that he has given birth to a brand new idea. "Your trouble," he says, "is that you do not seem to realize you are dealing with Russian Communists and a Soviet government policy problem." As such statements are made, I must confess to a quickening of pulse and a rise in temperature. I have wondered if such people appear before pastry cooks to tell them how useful they will find something called "wheat flour" in their trade.

If there is a first rule in estimating the probable behavior of the other man, it is the rule to try to cast yourself in his image and see the world through his eyes. It is in pursuit of this goal that intelligence services put the highest premium on country-by-country expertise, that they seek out and hire men who have deeply studied and experienced a given nation's ways of life, that they procure for these men daily installments of information on the latest developments in the area of their specialty. To the extent that objectivity of judgment about the other man's probable behavior is the crux of the intelligence business, to that extent is the importance of living the other man's life recognized and revered.

Since at least World War I, intelligence services have from time to time set a group of individuals apart and instructed them to think of themselves as the enemy's general staff. Their task as a red team is to ponder and act out the way the enemy will respond to situations as they develop. The idea seems to be that by the creation of an artificial frame—sometimes going to the lengths of letting the personnel in question wear the enemy's uniform and speak his sort of broken English—you will get a more realistic appreciation of the enemy's probable behavior than without the frills. It does not necessarily follow.

Consider the case of one intelligence service that created such a unit to simulate a Kremlin staff. It not only assigned some of its own officers but also employed the talents of some real one-time Communists. This latter move was regarded as the new "something" to cap all similar previous games. In a short time all members of the group became spirited dialecticians and as such were able to give Soviet

problems impeccable Marxist solutions—to which, however, a Stalin, a Malenkov, or a Khrushchev would not have given the time of day. This particular exercise always seemed to me to have reached a new high in human fatuity. Five James Burnhams may afford insights into the working of Communist minds, but by no means necessarily into those particular minds that are in charge of Soviet policy.

Of course we did not go in for this sort of thing. We relied as usual on our own Soviet experts. As normally, they did try to observe and reason like the Soviet leadership. What they could not do was to work out the propositions of an aberrant faction of the leadership to the point of foreseeing that this faction's view would have its temporary victory and subsequent defeat.

The Determinants of Action

Within certain limits there is nothing very difficult or esoteric about estimating how the other man will probably behave in a given situation. In hundreds of cases formal Estimates (NIEs, for example) have quite correctly-and many times boldly and almost unequivocally-called the turn. Behind such judgments a large number of subjudgments are implicit. The other man will act as diagnosed because (1) he is in his right mind or at least he is not demonstrably unhinged; (2) he cannot capriciously make the decision by himself-at a minimum it will have to be discussed with advisers, and in nondictatorial governments it will have to stand the test of governmental and popular scrutiny; (3) he is aware of the power of traditional forces in his country, the generally accepted notions of its broad national interests and objectives, and the broad lines of policy which are calculated to protect the one and forward the other; (4) he is well informed. To the extent that the "other man's" diplomatic missions and intelligence service can observe and report the things he must know prior to his decision, they have done so. He has read and pondered. These and other phenomena very considerably narrow the area of a foreign statesman's choice, and once thus narrowed it is susceptible to fairly sure-footed analysis by studious intelligence types. As long as all the discernible constants in the equation are operative the estimator can be fairly confident of making a sound judgment.

It is when these constants do not rule that the real trouble begins. It is when the other man zigs violently out of the track of "normal" behavior that you are likely to lose him. If you lack hard evidence of the prospective erratic tack and the zig is so far out of line as to seem to you to be suicidal, you will probably misestimate him every time. No estimating process can be expected to divine exactly when the enemy is about to make a dramatically wrong decision. We were not brought up to underestimate our enemies.

We missed the Soviet decision to put the missiles into Cuba because we could not believe that Khrushchev could make such a mistake. The fact that he did suggests that he might do so again, and this in turn suggests that perhaps we do not know some things about Soviet foreign policy decisionmaking that we should. We can be reasonably sure that certain forces which sometimes mislead Western foreign offices are seldom effective in the Soviet Government. It is hard to believe, for example, that a Soviet foreign minister has to pay much heed to an unreasonable press, or to domestic pressure groups, or, in the clutch, to the tender feelings of allies and neutrals.

If these well-known phenomena are not operative, what things are pressing a Soviet decisionmaker towards a misestimate or an unfortunate policy decision? Obviously there are the fundamental drives inherent in Communism itself, but for these and the many things that go with them we, as diviners of Soviet policy, are braced. Are there perhaps other things of a lesser but nevertheless important nature that we have not fully understood and taken into account? I would like to suggest two that are closely linked: the role and functioning of Soviet embassies; and the role of intelligence and the philosophy of its collection, dissemination, and use. I would like to suggest that if we were to study these more deeply we might discover that many a Soviet misestimate and wrong-headed policy is traceable to the peculiar way in which the Soviets regard the mission of their ambassadors and the role they assign to their intelligence service.

Whence the Decisive Intelligence?

Obviously you cannot divine the functions of Dobrynin in Washington by studying Kohler in Moscow. Obviously a Soviet foreign mission has a quite different aura from other foreign missions we know a good deal about. But just what does a Soviet ambassador's job description look like? What does his government expect him to do beyond the normal diplomatic functions all ambassadors perform? What are his reporting functions, for example, and what kind of reporting staff does he have? What do he and they use as the raw materials for their purely informational dispatches—if indeed they write any?

Does the embassy staff proper compete with the KGB men in its reporting? We know that the top KGB dog in an embassy has a certain primacy over locally domiciled Soviet citizens—including the ambassador. Does this primacy extend to reporting? Does the ambassador check his reports out with the KGB boss before sending them off? One thing we can be sure of—the KGB boss does not check his out with the ambassador. If ambassadorial reports are written and sent, who in Moscow reads them? Does Khrushchev? Do the Presidium members? How do the highest echelons of government regard them as against, say, KGB or GRU clandestine reports and pilfered documents?

I find myself wondering a lot about Dobrynin. Suppose he had been informed of Moscow's estimate that the U.S. resolve had softened. Suppose he had agreed with this estimate in general. Is it possible that he would have gone on to agree with Moscow that the risks of sending strategic missiles to Cuba were entirely acceptable? It may be that he was not informed of this second estimate. But if he was so informed, I have great difficulty believing he would have agreed with it. Dobrynin is not a stupid man, and presumably he must have sensed that Castro's Cuba occupied some special place in American foreign policy thinking. Is it possible that, sensing the U.S. mood, he did not report it, and bolster his findings from what he read in the press and Congressional Record, what he heard on the radio and TV? Is it not more likely that he did send back such appraisals and that Moscow gave them little notice because they were not picked up in a fancy clandestine operation? Is it possible that the conspiratorial mind in the Kremlin, when faced

with a choice of interpretations, will not lean heavily toward that which comes via the covert apparatus?

We have recently learned quite a lot about this apparatus and the philosophy of its operation and use. We think we have valid testimony from defectors who have come out of the Soviet and satellite intelligence services that enormous importance is attached to clandestine procurement of documents containing the other man's secrets of state. We know that whatever overt research and analysis work is done in the Soviet Government is not associated with the intelligence services. That the findings of this type of effort are denied the cachet of "intelligence" may rob them of standing, perhaps even of credibility.

We know that the Soviet practice of evaluating raw reports prior to dissemination is a pretty rough and ready affair (no alphabetical and numerical scale of estimated reliability, for example) that leaves the customer with a very free choice to believe or disbelieve. There is evidence to indicate that a KGB resident abroad has the right to address a report to a military chief of staff or to the foreign minister or to Khrushchev himself. His boss in Moscow is in the chain of communication and can, of course, stop dissemination to the high-placed addressee. But if the resident in question is known to be a friend of the addressee, the boss will think twice before he interferes. We are reasonably certain that there is a hot wire between Semichastny, chief of the KGB, and Chairman Khrushchev and that it is used to carry current raw intelligence between the two.

It is tempting to hope that some research and systematic reinterrogation of recent defectors, together with new requirements served on our own intelligence services, might turn up new insights into the Soviet process of decisionmaking. The odds are pretty strongly against it; and yet the—to us—incredible wrongness of the Soviet decision to put the missiles, into Cuba all but compels an attempt to find out. Any light that can be thrown on that particular decision might lessen the chances of our misestimating the Soviets in a future case.

Danish politics

Taking Arms Against a Sea of Enemies

David P. Fichtner

The longstanding boundary dispute between Denmark and Norway is threatening to break into open conflict. Norway has never accepted the terms of the treaty that ended the last war, especially the provisions ceding ethnically Norwegian territory to Denmark. As a result, Norwegian public opinion, also inflamed by the loss of its popular King during the war, has been sympathetic to young revanchist politicians using the "lost lands" issue to attack the current government as weak and ineffective. The ethnic Norwegians displaced by the conflict provide both a solid political base for these attacks on the government and a source of recruits for the insurgent army forming in areas near the Danish border. Reports state that this army intends to conduct cross-border operations into Denmark in the near future. Although the Norwegian Government knows these activities are seen as provocative by Elsinore, effective measures to disband the insurgents are politically impossible in the prevailing domestic climate. Oslo's inability, or unwillingness, to stop these activities is seen by many in Elsinore as the prelude to a new war.

Denmark Prepares

Denmark is pursuing a diplomatic solution to the dispute while mobilizing its military forces in the event diplomacy fails. According to a well-placed source, Denmark recently dispatched a high-level delegation to Norway's King carrying a handwritten message from Claudius, the new Danish King. Unconfirmed reports indicate this message details Elsinore's knowledge of the revanchists' activities, including the suspected involvement of a member of Norway's royal family, Prince Fortinbras. Danish military units have been placed on full alert, probably to underscore Elsinore's displeasure. Further, steps have been taken to accelerate the delivery of new armaments to Danish units, including:

• Stepped-up production of artillery.

- · Increased purchases of foreign armaments.
- Reassignment of shipwrights from civil to military shipyards to sustain round-the-clock, seven-day-aweek operations.

Norway Responds

Multiple sources report that Norway is promising to clamp down on the anti-Danish activities of revanchists operating from its territory. Norway, however, refused to disband the insurgent army and asserts that Fortinbras intends to direct its efforts against Poland. Many in the Danish Government find this claim credible, given Poland's historic enmity with both Scandinavian powers. Norwegian forces, however, must transit Danish territory to move against Poland. While not adverse to conspiring against Poland, Elsinore views such operations with some trepidation as long as Norway's ultimate objectives remain ambiguous. Meanwhile, clandestine sources indicate that Norway continues to fund the revanchists through covert channels.

Domestic Political Problems

Denmark's ability to resist Norwegian pressure over the long term is questionable as a result of a significant deterioration in the domestic political situation. The current head of state, Claudius, came to power after the unexpected—and by some accounts questionable—death of the previous King, his brother. The succession, legal since Claudius married the widowed Queen, violated Danish custom, and popular expectation, that the Queen resign in favor of the King's son, Hamlet. Reliable palace sources say that Hamlet feels that custom should have been followed because he was of legal age to assume the throne. The same sources state that Hamlet is concerned over his lack of advancement and that he has an ill-concealed distaste for the current government.

Claudius, King of Denmark

Long in brother's shadow . . . uncertain of position . . . not popular with commons . . . plays hardball politics . . . reputed to have villainous nature . . . paranoid on subject of Hamlet . . . bombastic . . . stresses form over substance . . . heavy drinker . . . selfindulgent . . . probably poor war leader compared to late King . . . age about 50.



Hamlet, Prince of Denmark

A paradox . . . ambitious yet indecisive . . . reclusive . . . quiet yet prone to outbursts . . . brooding and sometimes cynical . . . proud, revengeful yet inspires strong loyalties . . . considered unbalanced and dangerous by many . . . spiritualist . . . has visions . . . madness probably overstated, knows hawk from handsaw . . . reputed womanizer . . . athletic, excellent fencer . . . well read, fond of word games . . . age about 30.



Succession Questions

Danish domestic politics are dominated by this contentious, and potentially violent, dispute over the succession. The King has tried to appease Hamlet and his supporters by publicly declaring that Hamlet is next in line for the throne. Hamlet has made no public protest over his uncle's succession, and he appears content with the assurance that his right to the throne is recognized. Embassy reporting, however, states that there is a subversive campaign under way

attacking the fundamental legitimacy of the current government. This campaign, probably originating from sources close to Hamlet, has:

- Planted rumors that the previous King was assassinated and pointed to Claudius's unexpected rise to power as evidence of his involvement.
- Inserted the theme of regicide into the script of a play before its opening in Elsinore, a move clearly seen by court circles as a direct challenge to the King.



Polonius, Lord Chamberlain

Pompous, long-winded . . . Queen sometimes finds him tiresome . . . reputed to be foolish, prating knave . . . holds position by seniority and patronage . . . reasonably effective as security service head . . . monitors Danes abroad closely . . . protects throne vigorously . . . fancies himself counselor to King . . advice sometimes followed . . . age mid-60.

- Asserted that the King's marriage is incestuous to hurt his standing with the commons untutored in the finer points of succession law.
- Criticized the King's drinking bouts at state dinners for reinforcing the stereotype of the "drunken Dane."

So far, Hamlet has had the active support of the younger intelligentsia, artists, and some junior army officers in the conduct of his "active measures" campaign. Hamlet's popularity with the commons has ensured a receptive audience for these attacks on the King.

The Government Responds

The government is making aggressive use of political patronage to solidify its political base while using the Danish security service to undercut Hamlet's position (see DI Intelligence Assessment, *Elsinore's Security*

Service: Something Rotten in Denmark. [U]). Claudius has appointed numerous members of the existing bureaucracy to high positions in his administration, including the Lord Chamberlain, Polonius. Government officials have also been permitted to send their children aboard to obtain a prestigious, and politically advantageous, education in France. The King has also been making extravagant use of state funds to conduct numerous social events to increase his popularity in fashionable court circles.

The government's most effective tool in containing Hamlet has been the Danish internal security service run by Polonius. Several independent sources indicate that Danish security has succeeded in placing agents among Hamlet's inner circle to report on his political aspirations—and that Hamlet may have an inkling of such activities. So far, these sources have enabled the government to stay one step ahead of Hamlet and his fellow conspirators. Hamlet's recent request to continue his education in Wittenberg was probably turned down by the King's order so he could be kept under close observation until the political situation stabilizes. As a result, Hamlet is unlikely to be able to expand his political opposition beyond the current active measures campaign without the government being forewarned. Recent rumors that Hamlet suffers from some rare mental illness, possibly sexual in origin, were probably planted by Danish security to warn Hamlet that active measures are a two-edged sword.

Outlook

There is a better-than-even chance of some serious incident occurring during the next six months. Three alternative scenarios cover the most likely possibilities:

Hamlet is assassinated. The King still maintains tight control over the government and, in extremis, will use the internal security service to remove Hamlet as a potential challenge to the throne. Because of Hamlet's popularity, any assassination attempt traced to the throne would almost certainly result in violent protests and possibly open rebellion. Norway would be likely to use this instability as a pretext for intervention, because Fortinbras is next in line for the throne after Hamlet.

- The King is overthrown or assassinated. Hamlet's faction has clearly been building the case for a violent change of government. Hamlet's indecisive leadership, however, will probably leave the political initiative with the King.
- Norway moves against Denmark. A premature
 move by Norway could force Hamlet and the King
 into a temporary alliance to meet a clear external
 threat. Norway, however, appears content to play
 a waiting game as the political situation develops.

Any one of these events could lead to a series of carnal, bloody, and unnatural acts, of accidental judgments, casual slaughters, of deaths put on by cunning, and forced cause, and in the upshot, purposes mistook, fall'n on the inventors heads.