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ARTICLE



Getting beyond analysis by anecdote: improving intelligence analysis through the use of case studies*

Erik J. Dahl

ABSTRACT

Since the 9/11 attacks critics of the American intelligence community have often complained about the lack of scientific rigor in intelligence analysis, and much of the work of the intelligence community has been described as mere ‘analysis by anecdote.’ In response, the intelligence community has made a considerable effort to increase the rigor of its analysis. But surprisingly little has been done to examine how intelligence professionals might benefit from adopting one of the most common methods used in the social sciences: case study analysis. This article argues that a greater understanding of how case studies are used by political scientists and other scholars can help improve the quality of intelligence analysis and help the intelligence community assist policymakers as they attempt to understand the threats and challenges of today’s world.

Introduction

Since the 9/11 attacks critics of the American intelligence community (IC) have often complained about the lack of scientific rigor in intelligence analysis, and much of the work of the intelligence community has been described as mere ‘analysis by anecdote.’¹ In response, the intelligence community has introduced new methods for educating analysts, a large literature has been developed to help analysts make greater use of scientific techniques and methodology, and a number of structured analytic techniques (SATs) have begun to be adopted, including the well-known ‘analysis of competing hypotheses.’²

Most of this work, however, focuses on the use of statistical and other quantitative techniques, and relatively little concerns the use of qualitative social science techniques. The few studies that have been done on qualitative techniques tend to neglect what may be the most common qualitative method employed in the social sciences: case study analysis. Some work has been done to look at the value of case studies for intelligence professionals,³ but what is sometimes seen as a case study in intelligence is not what most social scientists would call a case study. This article argues that a greater understanding of the use of case studies can help improve the quality of intelligence analysis and help the intelligence community assist policymakers as they attempt to understand the threats and challenges of today’s world.

The article will first review the reasons why critics often complain about the lack of rigor and methodology in intelligence work. The subsequent section describes the new interest among intelligence experts in methodology, but notes that this work usually advocates for the use of quantitative, statistical techniques, rather than qualitative analysis, and rarely includes discussions of case study approaches. The article next describes how case studies have at times been used by intelligence professionals:

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as narrative descriptions of specific events in order to help educate intelligence personnel about decision-making. This is quite different from the way case studies are used by political and social scientists: as examples of some type of situation or phenomena, studied primarily in hopes of gaining better understanding of that broader phenomenon. The article then reviews three ways the case study approach may be useful to intelligence analysts: in helping to study and understand specific situations, in examining the broader effects of government or intelligence policies, and in estimating the future. It concludes by suggesting that intelligence professionals could make use of the case study approach today as they consider the long-term implications of a wide variety of situations, such as the future nuclear policies of Iran and North Korea, the stability of Ukraine, or the future prospects of al Qaeda and ISIS.

Complaints about lack of rigor

Complaints are often heard about the lack of scientific methodology in intelligence work. Sometimes these complaints come from critics outside of the IC, such as Michael German of the American Civil Liberties Union, who writes that

You would think that with an annual budget topping \$70 billion, the intelligence community would employ the most rigorous scientific research methods and conduct exacting empirical studies to support its assumptions and evaluate the effectiveness of its programs. You would be wrong.⁴

At other times complaints come from experts who have spent considerable time working with the intelligence community, such as political scientist Robert Jervis. In examining why the intelligence community failed to understand the threat to the Shah during the Iranian revolution in 1979, Jervis writes that

CIA officers writing on Iran were more like journalists than social scientists. That is, they drew heavily on their sources and tried to construct a coherent story. Use of explicit methodologies and analytical frameworks, drawing on generalizations, and posing of alternative hypotheses were foreign to most of them.⁵

Another notable recent critique is from Thomas Kean, chairman of the 9/11 Commission, who was disappointed when for the first time he was able to read the President's Daily Brief (PDB), one of the most sensitive products of American intelligence. Philip Shenon's book *The Commission* describes how the 9/11 Commissioners initially understood that even the name, 'president's daily brief,' was classified, so they avoided saying it.⁶ When Kean finally was allowed to go to the New Executive Office Building and read a set of PDB's for the first time, he assumed that he would finally be seeing the 'holy of holies,' the best intelligence there is. He expected they would contain 'incredibly secretive, precise, and accurate information about anything under the sun.' But he was terribly disappointed with what he found. 'They were garbage. There really was nothing there – nothing, nothing.' If he had been given them as papers by his students at Drew University, 'I would have given them an F,' he said.⁷

Former CIA analyst Carmen Medina has described the current practice as 'analysis by anecdote,' by which analysts support their judgments by stringing together a series of anecdotes.⁸ When decision-makers receive such analysis, according to Medina,

they might wonder why this analysis, based on a certain set of anecdotes, differs from something else he or she may have read or been told. Analysts may claim that their collection of anecdotes is authoritative, but given the vagaries of collection and its serendipitous nature, that claim is not easily justified.⁹

The problem with anecdotes is that one story or incident, when told without any broader context or framework, is what a social scientist might call a single data point. The mere fact that some event happened once, or that a leader made a particular decision, tells us little about whether such a circumstance might happen again. Social scientists are typically interested in patterns of behavior, and see specific incidents – individual cases – as mostly interesting for what they can tell us about how similar situations might play out in other places, or at other times.

There are, to be sure, good reasons why intelligence analysts may wish to pay more attention to anecdotes than political scientists would. Intelligence professionals probably care more about exceptions to the rule than understanding what that rule is. And what a political scientist might consider a mere anecdote, an intelligence officer might find to be a key piece of data.

Journalism is another profession where a specific incident may be critically important. Reporters instinctively know the value of an anecdote, and a popular way to begin a newspaper or magazine article is with an anecdote. A famous example is an article Jimmy Breslin wrote for the New York Herald Tribune in November 1963, which opened with this unforgettable passage:

Washington: Clifton Pollard was pretty sure he was going to be working on Sunday, so when he woke up at 9 a.m. in his three-room apartment on Corcoran Street, he put on khaki overalls before going into the kitchen for breakfast. His wife, Hettie, made bacon and eggs for him. Pollard was in the middle of eating them when he received the phone call he had been expecting. It was from Mazo Kawalchik, who is the foreman of the gravediggers at Arlington National Cemetery, which is where Pollard works for a living. 'Polly, could you please be here by eleven o'clock this morning' Kawalchik asked. 'I guess you know what it's for.' Pollard did. He hung up the phone, finished breakfast, and left his apartment so he could spend Sunday digging a grave for John Fitzgerald Kennedy.¹⁰

This use of anecdote is a gripping way for Breslin to begin his article, and this technique may occasionally be useful for capturing a reader's attention in longer-form intelligence writing. But in general it has been recognized that intelligence professionals must learn to use more structured techniques in their work. Political scientist Daniel Byman, for example, writes that 'To make failures less likely, intelligence analysts should be more like social scientists – at least in how they approach problems.'¹¹ He recommends analysts use structured analytical techniques such as alternative hypotheses and competitive analysis.

Intelligence experts argue that analysts need to use structured techniques in part because they suffer from cognitive biases, preconceptions, and mental mindsets that reduce their ability to assess information properly.¹² This problem – which intelligence analysts share with everyone else – is magnified today, because the threats and challenges analysts are facing have become more complex. A CIA publication put it this way:

Understanding the intentions and capabilities of adversaries and other foreign actors is challenging, especially when either or both are concealed. Moreover, transnational threats today pose even greater complexity, in that they involve multiple actors – including nonstate entities – that can adapt and transform themselves faster than those who seek to monitor and contain them.¹³

When faced with new and difficult challenges, experts believe that intelligence analysts should do as social scientists do: think critically about how they go about their work, and use techniques that are designed to help them overcome their cognitive biases and mindsets.

Quantitative vs. qualitative methods

There is a great deal of literature on the need for intelligence analysts to make greater use of social science techniques, and much of that work encourages the use of quantitative methods, using statistics and other mathematical tools.¹⁴ There has been less focus on qualitative analysis, which uses non-mathematical techniques, and even less on case study analysis. For example, a National Research Council study entitled *Intelligence Analysis for Tomorrow: Advances from the Behavioral and Social Sciences*, devotes only a page or two to qualitative analysis, with no mention of case studies.¹⁵ Even among those who do focus on the use of qualitative analysis, the emphasis is usually on techniques such as scenario analysis, and little mention of the use of case studies.¹⁶ For example, the CIA Center for the Study of Intelligence publication 'A Tradecraft Primer' describes a number of techniques including Key Assumptions Check, Devil's Advocacy, and Red Team Analysis, but it does not discuss case study research.¹⁷

J. Eli Margolis is a strong advocate for the use of qualitative methods in intelligence. He writes that quantitative, statistical models can be no more than probabilistic, offering decisionmakers little more than estimates and probabilities of potential outcomes. Intelligence reports based on statistics, he argues, do not offer decisionmakers much information that they can actually use.¹⁸ But qualitative approaches, and in particular structured, carefully constructed qualitative studies, 'play to the strengths of most intelligence agencies, which are long on country experts, but short on statisticians.' He describes a number of structured qualitative approaches that can be useful for intelligence analysts, but does not discuss case study work other than to note that 'case-specific details can teach leaders as well as warn them.'¹⁹

There are a few exceptions to the general lack of discussion of case studies in the intelligence literature. Hank Prunckun, in a book on *Scientific Methods of Inquiry for Intelligence Analysis*, has a brief discussion of the value of case studies, which he writes can be well suited to strategic intelligence analysis.²⁰ Robert M. Clark discusses 'case-based reasoning,' which he describes as 'using old experiences to understand and solve new problems.'²¹ Both of these authors see case studies much the way a social scientist would, but for the most part, when intelligence studies scholars or intelligence practitioners discuss case studies, they are talking about a different kind of methodology altogether.

Case studies in the intelligence community

Within the American intelligence community a particular kind of case study is often used for instruction and education. This type of case study is modeled on the case method of teaching used at many business schools and at the Harvard Kennedy School, which involves cases that are 'written as if by a newspaper reporter trying simply to set forth facts,' with minimal comment and analysis, so that the reader can participate in the case and ask, 'what would I do in this situation?'²² In general, the Kennedy School case studies are narratives of specific, real-life situations in which decisions were made by government or private leaders, designed to support classroom discussions.²³ The Kennedy School had an executive program for senior intelligence community managers from 1986 to 2002, and a large part of that program involved the use of case studies to help officials learn about the intelligence-policy nexus. The goal was not to help the participants learn how to write intelligence analyses, but rather to think more broadly about how the intelligence community can support policy makers and decision-making.

This is the type of case study described in a publication of the Joint Military Intelligence College (JMIC), *Teaching with Intelligence Case Studies*. That document states,

The term 'case' refers to a description of a dilemma that stops short of the outcome. The term 'case study' refers to a description of a past even that has an outcome included in the document and thus is known to the student.²⁴

This publication includes a detailed case study of the bombing of the Marine Barracks in Beirut in 1983, written as a teaching tool.²⁵ The case study provides detailed background on the decision made by President Ronald Reagan to send a Marine Amphibious Unit to Beirut as part of a multinational peacekeeping force in 1982, and on the situation the Marines faced in Beirut up until the bombing. The complex command and control structure American troops operated under is described, and the case study details the increasingly precarious security situation leading up to the morning of October 23, 1983, when a truck drove over the wire barricade around the Marine headquarters and into the center of the lobby, exploding a second or two later in what FBI analysts later described as the largest conventional blast they had ever seen.²⁶

The JMIC case study is primarily intended for use in military education courses, and includes a section entitled 'Where to use the case,' which describes a number of teaching objectives that can be used by instructors. It suggests that for use with junior intelligence or counterintelligence personnel, 'the case provides a stark lesson of what can happen when the fundamentals of force protection are overlooked.'²⁷ For more senior personnel, such as at the Naval War College, the case could be used to generate discussions about the responsibilities of a military commander, and how commanders should respond if their higher headquarters fails to provide the resources that are necessary.

Another example of such a case study was published in the CIA journal *Studies in Intelligence*, and is available from the National Security Archives.²⁸ This case study is a fascinating story about President Jimmy Carter and decision-making about Korea. It is quite useful for intelligence professionals looking to understand the history of intelligence analysis and policy-making concerning Korea during the time discussed. More recently, Timothy Walton has written a collection of case studies of historical decision-making intended to help improve intelligence analysis,²⁹ and Sarah Miller Beebe and Randolph H. Pherson have published a fascinating volume of cases designed to help intelligence analysts use structured techniques to examine real-world and hypothetical situations.³⁰

Case studies such as these can be effective teaching tools to help students, intelligence officials, and others think about decision-making, to put themselves in the shoes of actual participants in key events,

and to think about what they themselves might have done in such situations. But these are not what most social scientists, such as political scientists and international relations scholars, would consider to be a case study. The next sessions reviews how such scholars use case studies.

How do political scientists use case studies?

For political and social scientists, a ‘case’ is simply one observation, or one example of a phenomenon to be studied. Alexander George and Andrew Bennett, who have written one of the most widely cited guides to case study research, define a case as ‘an instance of a class of events.’³¹ A case study, then, is an examination of one or more such observations or instances. Crucially, however, a political scientist does not conduct a case study with the primary goal of learning more about that case. Of course, he or she does want to learn about the specific case under study, but the broader goal is to see how that case can inform his or her understanding about *other* cases and *other* situations. This is why one prominent political scientist describes a case study as ‘an intensive study of a single unit for the purpose of understanding a larger class of (similar) units.’³²

A political scientist might study the French Revolution as a case of political revolution, in hopes of learning something about why revolutions come about and what factors promote or discourage them. Not all scholars take this approach. A historian, for example, might study the French Revolution for its own sake, hoping to add to our understanding of what happened in France in 1789. But a social scientist would be more likely to try to make generalizations from this case study that can apply elsewhere.

To put it another way, a political scientist will often look at a specific instance or incident – a case – and ask, ‘what is this a case of?’ If a particular situation seems to be unique; if it offers no lessons or insights into other aspects of politics or society; if it appears to not be a case of anything; then it is not likely to hold much interest for a political scientist. But if a situation is a case of something significant, an example of some important phenomenon or some puzzle, then it will most definitely be worth studying.

Case studies are a type of *qualitative* method, usually examining a relatively small number of cases or situations in some depth. *Quantitative* methods, on the other hand, gather statistical information from a large number of cases or observations, and analyze that data using a variety of mathematical techniques. In some areas of American political science, case studies and qualitative analysis in general are not prized as highly as quantitative methods.³³ As Kenneth Lieberthal has pointed out, the fields of area studies and regional specialization – which often rely on case studies – are not seen as a very reliable route to tenure at many top-tier universities.³⁴ There has been a lot of work done among political scientists in recent years to try to put qualitative analysis and qualitative methods on a somewhat equal footing with quantitative methods, but there continues to be a feeling among many political scientists, and on the editorial boards of some political science journals, that quantitative methods are more rigorous, more scientific, and more useful in explaining social and political phenomena.

Whatever the particular method being employed – whether qualitative or quantitative, case study or not – the broader goal of much political science work is to develop theories that can help us understand the world better. Robert Jervis writes that

the use of general theories is an essential part of the scientific method, although in science as in intelligence this way of thinking can lead to over-looking fundamental discoveries and incorrectly affirming what is already believed. But facts do not speak for themselves, and broader beliefs are necessary for making sense of a complex and contradictory world.³⁵

Inside view vs. outside view

Taking a case study approach is in some respects contrary to the traditional intelligence approach. Most intelligence professionals might argue that the logical way to understand something is to examine it very closely. But the case study method implies that one way to understand a phenomenon may be to *not* look ever more closely at the phenomenon itself. Instead, the researcher or intelligence analyst should look outside that situation, at other cases that may or may not be analogous. Case studies are

what Daniel Kahneman describes as the 'outside view' of decision-making, as opposed to the 'inside view'.³⁶ Kahneman writes that the inside view is the one that most of us will usually take when we want to assess the future of some situation or project. We focus on the specific circumstances of the situation at hand, and try to extrapolate from what we know about it. But a better forecast can be made, he argues, by taking the outside view: looking outside one's own situation, outside the case, and considering how other, similar cases have turned out.³⁷

David Brooks describes the difference between these two points of view in a column in the *New York Times*. If you were asked to predict whether the government of Egypt might fall, for example, one approach to the problem would be to learn everything you can about Egypt; that is the inside view. But instead of examining the specifics of the situation in Egypt, writes Brooks, you can ask about the category of events it falls into: 'Of all Middle Eastern authoritarian governments, what percentage fall in a given year?'³⁸ That's the outside view. A political scientist taking this approach would probably ask further questions, such as, are there examples of Middle Eastern authoritarian governments that have faced similar pressures and have fallen? What about cases of governments that have remained in power? How did different outcomes occur, and what clues do those cases suggest we look for in the case of Egypt?

The nuts and bolts of case study research

The goal of conducting case study research is often to look for factors or variables that tend to produce certain kinds of outcomes. A distinction is frequently made between 'independent variables' and 'dependent variables.' Independent variables are those factors that are believed to possibly have an effect on the phenomenon or event that is being studied. The thing being studied is the dependent variable – so named because it is expected to be 'dependent' on the nature of the independent variables. A study of revolution, for example, might identify several key variables, such as per capita income or the level of political freedom, which may or may not be related to the outbreak of revolution in a country. These are independent variables. The outbreak of revolution – or the lack of a revolution – is the dependent variable. In this example the researcher might be examining whether countries with lower income levels and little political freedom (low scores on the independent variables) are more likely to suffer from revolution (the dependent variable).

Among political scientists the number of cases examined in a given study is known as 'N,' and a distinction is often made between works that examine a large number of cases (and thus have a large *N*), and those that examine only a few cases (small *N*). Typically, more is considered better, because a study based on only a single case – a single example or observation, such as a single instance of a revolution, or one war between two countries – may not hold much value for understanding the larger class of events that it belongs to. A single case, for a political scientist, may be little more than an anecdote. This is one of the reasons why large *N* work, analyzing many cases, possibly hundreds or thousands and using statistical methods, is more highly prized by many scholars than small *N* studies that examine fewer cases but in more depth.

The literature on qualitative methodology has identified a number of useful tools and techniques for doing case studies. One technique is *process tracing*, in which the researcher 'attempts to trace the links between possible causes and observed outcomes.'³⁹ A scholar utilizing process tracing is likely to use historical documents and other material to attempt to follow (or trace) the causal chain to determine why something happened the way it did.⁴⁰

Another common method is known as *structured, focused comparison*. This method requires the researcher to do more than merely study intensely the case or cases at hand.⁴¹ The study should be structured, in that the researcher asks the same set of standardized, general questions of each case. And it should be focused, in that the researcher realizes he or she will not be able to investigate every possible aspect of the case or cases. The researcher should focus on the specific objectives or questions that are directing the study. George and Bennett note, for example, that the case of the Cuban Missile Crisis can and has been studied as an example of many phenomena, such as decision-making, deterrence, and crisis management.⁴² But for any study to be most useful, it should have a particular focus.

How can case studies be useful in intelligence analysis?

It should be noted that case studies can mislead as easily as they can inform, and intelligence analysts, like political scientists, should be careful not to read too much into case study research. Thomas Mockaitis writes, 'Like most tools, case studies can also be misused, with disastrous results. Academics and practitioners will sometimes fixate on a successful example, turning it into a template and then applying it slavishly to future campaigns.'⁴³ But with that caution in mind, this section offers three ways that the use of case study techniques can be helpful for intelligence analysts. Studying events through the lens of the case study method can help analysts understand the broader significance of specific situations, such as individual terrorist attacks or intelligence failures; it can help them examine the effects of government or intelligence policies, such as the targeting of terrorist group leaders; and perhaps most important, it can be a tool to help assess future developments.

Drawing lessons from specific situations

Although there is a debate among social scientists about whether or not single case study research is worthwhile, there can be benefits for intelligence analysts in looking at individual problems the way a political scientist might study them as a case study. For example, many of the most significant studies of failures in the intelligence literature, such as Roberta Wohlstetter's classic study of Pearl Harbor, have been case studies, designed partly to understand a specific situation but even more importantly to draw lessons from that case for policy today and in the future. Wohlstetter stated explicitly in her book that while she was writing about Pearl Harbor, her real interest was in learning how to avoid another such attack today:

Today a thermonuclear surprise attack not only might kill tens of millions, but also might cripple both the immediate military response of the attacked nation and its chances of slowly mobilizing a war potential. . . . Pearl Harbor may therefore be illuminating at this time as a case history on the conditions of surprise.⁴⁴

One of the best known single case studies in American political science is Graham Allison and Philip Zelikow's study of the Cuban Missile Crisis.⁴⁵ In this classic work, the authors examine a critical event in world history through the lens of three different models or theories. They ask, can the events of the crisis be best explained by a theory based on the decisions of rational actors, the actions of complex bureaucracies and organizations, or the political motivations of government groups and individuals? Although their book is an outstanding narrative and explanation of the missile crisis, the authors make it clear that their goal is to examine the broader lessons of the crisis for nuclear confrontations, crisis management, and government coordination today.⁴⁶

A case study focused on intelligence issues is an article I wrote about the Marine barracks bombing in Beirut. I did not examine the Beirut bombing in an attempt to discern why leaders made the decisions they did, the way the JMIC case study on Beirut described above does. Instead, my study was a focused, single-case study, which viewed the bombing as an example of intelligence failure against terrorism. My goal was to try to figure out what went wrong – why intelligence failed to prevent or anticipate the attack – and what lessons the disaster might hold for the future.⁴⁷

Most analysts who had studied the bombing, and the official Department of Defense commission that investigated it, had not found the intelligence community at fault. Most reviews placed blame either on the American political leaders who put the Marines in an impossible situation, or on the operational chain of command for failing to take needed defensive measures. There had been a lack of human intelligence on the terrorist threat in Beirut, but the conventional view of the bombing held that this was the result of decisions made at the DoD level to reduce human intelligence worldwide, and did not represent any particular failure on the part of the intelligence staffs that supported the Marines in Beirut.

My case study, however, found that this conventional understanding of the role of intelligence in the Beirut bombing was wrong. I argued that the intelligence community deserved a greater share of the blame than previous assessments had indicated:

While precise humint would no doubt have been useful, it should not have been necessary. Prior to the Beirut bombing the threat was just as evident, and the intelligence data nearly as voluminous, as before the attack on Pearl Harbor.⁴⁸

I argued that the intelligence failure was largely one of poor analysis, as the intelligence system supporting the Marines was good at producing large volumes of raw data, but poor at interpreting and assessing the meaning of that data. And because intelligence was better at warning than analyzing, the result was what might be called 'over-warning,' with commanders becoming weary of receiving a constant stream of unspecific threats. The article concluded that the lesson of the Beirut bombing was that intelligence analysts and agencies must do more than merely pass on large quantities of threat warning – passing them over the transom, so to speak. They must analyze and synthesize those warnings, and equally important, they must also ensure that the warnings are being received and understood properly by commanders.

A recent single-case study with direct relevance to intelligence analysts is an article by John A. Gentry that examines the problem faced by analysts when warning about new and emerging threats today.⁴⁹ Gentry argues that potential adversaries – states as well as non-state actors – will recognize that they are materially weaker than the United States. Instead of challenging the American military head on, they may attempt to exploit what they perceive to be political or other non-military vulnerabilities on the part of the U.S. leaders, such as leaders' psychological biases and political preferences.

Gentry examines the Balkan wars of the 1990s as a case study of such an approach, and describes how Yugoslavian leaders attempted to exploit what they saw as a weakness on the part of President Clinton: his aversion to taking military casualties. That casualty aversion forced the American military to use less accurate high altitude bombing, and although the U.S. and NATO effort ultimately proved effective, Gentry argues that the conflict might have been resolved more quickly if warning analysts had understood and reported that Yugoslavia had based its strategy on Clinton's concern about force protection. Gentry's study is not designed to help the reader understand the Balkans conflict, however. He uses that case study to develop a general model of how adversaries may attempt to manipulate vulnerabilities on the part of states and national leaders.⁵⁰

Gentry's approach could be useful today as the intelligence community wrestles with challenges such as assessing how policy makers can best blunt ISIS's efforts to manipulate the West's vulnerabilities. For example, case studies could be helpful in addressing the problem of young people in the West being recruited by ISIS and other groups through the use of online social media. Drawing the lessons from case studies of past counter-recruitment campaigns – whether successful or not – could be a first step in determining a way forward against this threat.

Examining broader questions and policies

Although the case study approach can be useful in understanding the lessons of specific situations or circumstances, it is even more valuable in helping an analyst examine broader questions that can apply to a number of situations. Here it is often useful to examine more than one case or situation, by conducting a comparative case study. Many well-known works on intelligence failure and surprise attack are of this sort, including Richard Betts' classic book on surprise attack, and Robert Jervis's more recent study of intelligence failure.⁵¹ Another useful example is a study by the Institute for the Study of Diplomacy at Georgetown University on the problem of strategic surprise, which examined cases including the 1998 bombings of U.S. embassies in Kenya and Tanzania, the Soviet invasion of Afghanistan in 1979, and the Asian financial crisis of 1997–1998.⁵²

Michael Freeman used this approach in studying the effectiveness of targeting terrorist group leadership.⁵³ Freeman argues that targeting terrorist leaders will be more effective when those leaders are themselves more effective leaders, and he develops a theory to explain what makes a terrorist leader important. He proposes that terrorist leaders can potentially perform two main functions: providing inspiration, or providing operational direction. When leaders fulfilling those functions are killed or captured, the effect on the terrorist organization is likely to be greater. To test this argument he conducts

case studies of leadership targeting involving three terrorist groups: Aum Shinrikyo in Japan, the Shining Path (Sendero Luminoso) in Peru, and the Armed Islamic Group (GIA) in Algeria.

Freeman finds that in the case of Aum Shinrikyo, Shoko Asahara had been a critically important leader, providing both charismatic inspiration and firm operational leadership. After his capture, the group turned to non-violence and many members left the organization. As Freeman puts it, Aum Shinrikyo was particularly vulnerable to leadership decapitation 'because, to a large extent, Asahara was Aum.'⁵⁴

In Peru, Abimael Guzman was the charismatic founder of Sendero Luminoso, a man whose inspirational leadership was so strong that his followers worshipped him 'almost as a deity.'⁵⁵ By the time he was captured in 1992, however, he had become less important operationally, as other leaders made decisions about what targets should be attacked, and how and when. After he was captured the group was never able to find another leader who could serve as such an inspirational and unifying force. The group split into factions, and no longer represented as significant a threat to the Peruvian state.

The case of the Algerian GIA is more complex, because the group had a number of leaders during a relatively short period, with at least eight leaders killed and two captured or arrested from the group's formation in 1992 through 2004.⁵⁶ But the history of the GIA does support Freeman's argument, because in its early years the group was decentralized, and its leaders provided relatively little overall inspiration or direction. The removal of these leaders had little effect on the tempo and focus of the organization. By 2002, the GIA had become more centralized and its leaders provided operational direction and served as ideological, inspirational leaders. These developments left the group vulnerable to leadership decapitation, and after several leaders were killed from 2002 to 2004, the GIA disintegrated and lost many members to a competing organization, the GSPC (Salafist Group for Preaching and Combat).

Freeman concludes his article by considering the implications of his analysis for an assessment of the likely future of al Qaeda following the death of Osama bin Laden. In the years leading up to the raid on his Abbottabad compound, bin Laden had become a somewhat marginalized leader, and al Qaeda has been described by many experts as 'more of a movement or ideology than a coherent organization'⁵⁷ Because bin Laden was no longer an important leader, Freeman argues, his death was unlikely to have much effect on al Qaeda.

Freeman's conclusion concerning al Qaeda appears to have been borne out at least in part, as al Qaeda remains a compelling brand and has been able to expand its presence and bring in new recruits, despite bin Laden's death and the rise of ISIS.⁵⁸ More broadly, his study suggests that the comparative case study method might be very helpful to intelligence analysts who are attempting to examine questions such as, 'how effective are sanctions likely to be against North Korea?' or 'How likely is it that Iran will abide by the nuclear agreement it reached in 2015?' Most analysts might initially seek to answer such questions by examining the situation in question – such as by studying the available indicators about how North Korea or Iran are likely to behave today. But a different and possibly more effective approach would be to ask, how effective have sanctions been against other countries in similar circumstances? When and under what conditions have other nuclear agreements been successful?

Estimating the future

There is a long-running debate among political scientists and international relations scholars about whether predicting and forecasting are legitimate endeavors.⁵⁹ But while many political scientists argue it is risky if not impossible to try to forecast, many others believe that in order to be useful, political science needs to have one eye on the future. Historian John Lewis Gaddis, whose work often crosses the boundary between history and political science, puts it this way: 'Theories provide a way of packaging patterns from the past in such a way as to make them usable in the present as guides to the future.'⁶⁰

A similar debate can be found in the intelligence world. Some scholars of intelligence and intelligence professionals caution against attempting to peer into the future,⁶¹ and a number of works on intelligence analysis cite as a caution the quote that has been attributed both to Yogi Berra and Neils Bohr that 'It's hard to make predictions, especially about the future.'⁶² When the IC does venture into what some might call 'futurology,' such as in the occasional publications of the National Intelligence Council, it tends to

get criticized for being wrong, obvious, or as one critic wrote, 'mind-numbingly, bone-blisteringly dull and repetitive.'⁶³ Paul Pillar complains that 'the Intelligence Community is routinely criticized for not predicting certain historical events, and much less frequently given credit for accurate predictions.'⁶⁴

A number of other scholars and intelligence experts, however, argue that it should be a key function of intelligence to consider the future. It is recognized that forecasting future events is extremely difficult, and recent research has suggested that the answer may not be to simply develop analysts who know more facts and can demonstrate greater expertise. As Michael Horowitz and Philip Tetlock note, 'Research shows that expert predictions over five years are often no better than chance.'⁶⁵ But whether it is considered under the rubric of estimating, assessing uncertainty, or some other term,⁶⁶ the concept of attempting to forecast future events is widely seen as critical for the intelligence community.⁶⁷ Pillar argues, for example, that although formal predictions are often not useful, it is important for intelligence officials to see their role as including the mission of alerting policymakers to possibilities and probabilities in future developments.⁶⁸

Using case studies to assess the nature of future developments and challenges may be particularly challenging for the intelligence community. As Amy Zegart has noted, intelligence analysts are often limited in trying to foresee future outcomes because they 'don't have a rich historical store of comparable cases to help assess future outcomes.' In trying to assess the outcome of the Iranian nuclear crisis, for example, she points out that only nine countries have nuclear weapons, and only one country – South Africa – has developed and voluntarily shed its nuclear arsenal.⁶⁹

But with a little creativity, case study work can help illuminate future challenges that might seem otherwise impervious to research. An example can be found in two of the very few works by historians and political scientists that appear to have anticipated the abrupt end of the Cold War. One of these works is a book published by Stephen Rock in 1989, *Why Peace Breaks Out*.⁷⁰ John Lewis Gaddis has cited Rock's book as being particularly insightful.⁷¹ To be sure, Rock did not actually predict the end of the Cold War, and Gaddis writes that 'nothing in Rock's book would have led a reader to expect the Cold War to end clearly and decisively within months of its publication.'⁷² But Rock was one of the very few scholars who had the imagination to explicitly consider the possibility that the Cold War might end.⁷³ As efforts are being made throughout the intelligence community to encourage the greater use of imagination among analysts, it may be instructive to examine how Rock conducted his research.

Rock began his study by noting that there have been instances 'in which major world powers have overcome virulent and virtually hereditary hostility to achieve a stable and lasting reconciliation. By examining these cases and attempting to explain them, we can shed some light on the nature of the Soviet-American problem and the chances, if any, for its pacific resolution.'⁷⁴ The potential collapse of the Cold War, to Rock, was a case of great power rapprochement, and one way to study that possible future was to look for past examples of similar cases. Rock wondered, what were the causal factors in other cases in which former adversaries had learned to cooperate?

He studied two cases in which great powers did achieve such reconciliation: England and France during the late 19th and early 20th centuries, and Britain and the U.S. from about 1895 to 1905. These cases were contrasted with two cases in which enemies did not reconcile: England and Germany before WWI, and Germany and the U.S. during the same period. By choosing his cases this way – with two that resulted in reconciliation and two that did not – Rock avoided a common problem in case study research, which is that researchers choose only cases that have the same outcome. In social science terms, this is the error of 'selecting on the dependent variable,' or choosing to compare only cases that turn out the same way.⁷⁵

Rock found that three conditions were conducive to great power rapprochement: heterogeneity in the exercise of national power and in economic activities, and homogeneity in societal attributes.⁷⁶ According to Rock, 'If two states' situation in these respects is sufficiently favorable, then a catalytic crisis may set the process of reconciliation in motion.'⁷⁷ He noted that these variables – heterogeneity and homogeneity – are very difficult to measure, and we cannot determine in advance the exact point at which two states will be ready for rapprochement. But these historical case studies did provide clues, he argued, as to whether a reconciliation was likely in the case of U.S. – Soviet relations.⁷⁸ One possibility

that could encourage a rapprochement would be the rise of a third nation, possibly China, whose growth would encourage the U.S. and USSR to appear relatively more heterogeneous with respect to one another.⁷⁹ Or, one or the other of the great powers could undergo a long-term decline and strategic retrenchment, which would serve the purpose of reducing the strategic overlap and competition.

In the short run, at least, according to Rock, there seemed little likelihood that either side in the Cold War would change its ideological and cultural view. One would not expect the United States to abandon its commitment to representative government and liberalism, 'Nor can one expect the Soviet Union to renounce socialism, particularly since Marxist-Leninist doctrine serves to legitimize the existing Soviet regime.'⁸⁰ Of course, that is what happened within two years of his book being published.

Rock might have come closest to anticipating what actually was about to happen in wondering whether other factors, such as the role of individuals – which has typically been downplayed by mainstream political scientists – could prove decisive in the future. He wrote,

A diplomatic historian of traditional bent might, for example, ask: what is the role of individuals in this framework? Is it not possible that highly motivated and especially imaginative leaders could achieve a reconciliation when geopolitical, economic, and ideological/cultural conditions are less than optimal?⁸¹

Rock did not pursue this line of thinking very far, however, noting that 'it seems doubtful that even the most talented statesmen could effect a state of peace without the proper conditions.'⁸²

Gaddis had taken a similar approach to thinking about the future in an article published in 1987 entitled 'How the Cold War Might End.'⁸³ A traditional approach toward answering that question might have begun by looking closely at the inner workings of the U.S.-Soviet relationship to search for signs of a thaw, or perhaps inside the Soviet regime to look for signs of a collapse. But instead, Gaddis started by looking back in time at examples of great power rivalries 'that evolved unspectacularly into something else, without vast conflagrations or annihilations.'⁸⁴ Examples – case studies – he considered included the 'long cold war' between Britain and czarist Russia in the 19th century. This rivalry was finally broken by the rise of Germany as a third power and threat to both, a causal factor Gaddis referred to as a 'Martian scenario.' Another possible cause of the end of a great power rivalry, he wrote, could be exhaustion on the part of one of the rivals. But Gaddis noted that history shows such a situation can be very dangerous, as the power in decline may try to lash out in an attempt to redress the balance while it still can. Such was the case with Japan, which felt pushed by its sense of decline in the 1930s to mount the attack on Pearl Harbor.⁸⁵

Despite Rock's tentative assessment about the possible role of individuals in possibly ending the Cold War, his work and that of Gaddis showed a level of imagination and intellectual creativity that many believe has been lacking in the intelligence community.⁸⁶ These examples suggest that intelligence analysts looking to make forecasts and estimates about the future might want to start by analyzing case studies about the past.

Conclusion

Although considerable effort in recent years has been placed on increasing the methodological rigor of intelligence analysis, surprisingly little work has been done to examine how intelligence professionals might benefit from adopting the common social science tool of the case study. Case studies are often used in intelligence education and training programs, but these are typically historical narratives designed to help personnel understand how decisions were made and enable them to put themselves into the shoes of senior personnel at the time. As they are used by political scientists and other social scientists, however, case studies are something quite different: careful, focused examinations of one or more situations, designed primarily to help provide lessons learned for similar situations – similar cases – that might be encountered elsewhere.

This article has argued that the case study approach may be useful for intelligence professionals in three distinct ways. First, single case studies – close examinations of individual events or phenomena – can help intelligence analysts break apart the driving factors involved in a situation, especially if they ask, 'of what is this a case?' Second, comparative case studies that look at a number of situations can be useful in studying the effectiveness of particular intelligence procedures or government policies.

Finally and perhaps most important, historical or comparative case studies can help analysts think about the future. The value here is not in providing a road map for making predictions, but rather in providing a method for helping analysts imagine possible futures. Case studies can suggest possible drivers or other key factors that should be monitored, driving collection and analysis requirements. They can even stimulate thought about possible futures that might otherwise seem impossible. While in 1989 it might have been difficult for most intelligence analysts to imagine the Cold War coming to an end, it is just possible that through the use of case studies such as those developed by Rock and Gaddis, an analyst might have been able to imagine the possibility that great powers could reconcile. And it does not seem like too much of a reach to suggest that such an analyst might have been better prepared to understand the events that resulted in the collapse of the Soviet Union.

The intelligence community today faces increasingly difficult challenges of assessment and forecasting, whether about rogue states such as North Korea and Iran, unstable nations such as Ukraine, or non-state actors such as ISIS and criminal cartels. Case study analysis should be one of the tools used by analysts as they address these challenges.

Notes

1. Medina, "The New Analysis," 245–6.
2. Central Intelligence Agency, *A Tradecraft Primer*, 14.
3. One example is Hoven and Lawton, "Locally Nuanced Actionable Intelligence."
4. For example, German, "Does Intelligence Have to be so Unintelligent?"
5. Jervis, *Why Intelligence Fails*, 23.
6. Shenon, *The Commission*.
7. *Ibid.*, 220.
8. Medina, "The New Analysis," 245–6. Ferris has referred to the focus on anecdote instead of analysis as "the Bloomsbury syndrome," in his "Coming in from the Cold War," 98.
9. Quoted in Marrin, *Improving Intelligence Analysis*, 43.
10. Breslin, "Digging JFK Grave Was His Honor."
11. Byman, "Intelligence and Its Critics," 272.
12. See for example Shelton, "The Roots of Analytic Failures."
13. *A Tradecraft Primer*, 1.
14. See for example Marrin, *Improving Intelligence Analysis*, and Bruce, "Making Analysis More Reliable." A useful review of the debate over the value of quantitative vs. qualitative methods for intelligence analysis is Bang, "Pitfalls in Military Quantitative Intelligence Analysis."
15. National Research Council, *Intelligence Analysis for Tomorrow*.
16. Skinner, "Qualitative Analysis for the Intelligence Community." See also Treverton and Gabbard, *Assessing the Tradecraft of Intelligence Analysis*, and Johnston, *Analytic Culture in the U.S. Intelligence Community*. On scenario analysis, see Feder, "Forecasting for Policy Making," 120–2. I am indebted to Stephen Marrin for bringing this article to my attention in his *Improving Intelligence Analysis*.
17. *A Tradecraft Primer*. For an extensive discussion of many structured analytic techniques, see Heuer and Pherson, *Structured Analytic Techniques for Intelligence Analysis*.
18. Margolis, "Estimating State Instability."
19. *Ibid.*, 15.
20. Prunckun, *Scientific Methods of Inquiry for Intelligence Analysis*, 82.
21. Clark, *Intelligence Analysis*, 201.
22. May and Zelikow, *Dealing With Dictators*, 3.
23. See the web site of the Harvard Kennedy School Case Program, <http://www.case.hks.harvard.edu/>.
24. Joint Military Intelligence College, *Experiences to Go*, 1.
25. The case was written by Col. Thomas W. Shreeve, USMCR. The JMIC publication mentions the Intelligence Community Case Method Program, which contains mostly classified cases.
26. *Experiences to Go*, 36.
27. *Ibid.*, 43.
28. Wood, "Persuading a President."
29. Walton, *Challenges in Intelligence Analysis*.
30. Beebe and Pherson, *Cases in Intelligence Analysis*.
31. George and Bennett, *Case Studies and Theory Development*, 17. Another often-cited source on case study work is Yin, *Case Study Research*.

32. Gerring, "What Is a Case Study," 342, italics in original.
33. Another research method that is also prized above qualitative methods among many American political scientists is what is known as formal modeling, or the use of formal methods. This usually involves the use of complex mathematical models and equations. There are other kinds of political and social science methods, as well, that do not necessarily fall into the categories of qualitative or quantitative, such as modeling, experiments, and war gaming.
34. Lieberthal, "The U.S. Intelligence Community," 35–6.
35. Jervis, *Why Intelligence Fails*, 189.
36. Kahneman, *Thinking, Fast and Slow*.
37. *Ibid.*, 245–8.
38. Brooks, "Forecasting Fox."
39. George and Bennett, *Case Studies and Theory Development*, 6.
40. For a more detailed discussion, see Collier, "Understanding Process Tracing."
41. George and Bennett, *Case Studies and Theory Development*, 67–72.
42. *Ibid.*, 70.
43. Mockaitis, "The Irish Republican Army," 332. For similar and related cautions about relying too heavily on the lessons of history, see the classic book by Neustadt and May, *Thinking in Time*.
44. Wohlstetter, *Pearl Harbor: Warning and Decision*, 1. Other more recent single-case studies include Jervis, "Reports, Politics, and Intelligence Failures," and Riste, "Intelligence and the 'Mindset'"
45. Allison and Zelikow, *Essence of Decision*. For a discussion of the value of this book as a single case study, see Yin, *Case Study Research*.
46. Allison and Zelikow, *Essence of Decision*, 2.
47. Dahl, "Warning of Terror."
48. *Ibid.*, 46.
49. Gentry, "Warning Analysis."
50. *Ibid.*, 80–1.
51. Betts, *Surprise Attack*; Jervis, *Why Intelligence Fails*.
52. Nolan and MacEachin, *Discourse, Dissent, and Strategic Surprise: The Institute for the Study of Diplomacy at Georgetown* is also a source of excellent case studies written in the business school style.
53. Freeman, "A Theory of Terrorist Leadership."
54. *Ibid.*, 10 (emphasis in original).
55. *Ibid.*, 11.
56. *Ibid.*, 12–4.
57. *Ibid.*, 15.
58. Hoffman, "The Global Terror Threat."
59. See for example, Schneider, Gleditsch, and Carey, "Forecasting in International Relations."
60. Gaddis, "International Relations Theory and the End of the Cold War," 6. One method of estimating the future is through the use of scenarios, which might be considered a type of future counterfactual case study. This type of case study is beyond the scope of this article, but a useful discussion is Junio and Mahnken, "Conceiving of Future War."
61. A classic statement is Betts, "Analysis, War, and Decision." See also "Dealing with the Future: The Limits of Forecasting."
62. For example, Clark, *Intelligence Analysis*, 207.
63. Engelhardt, "The Big Book of Empire." For a less negative view, see Brooks, "Known Unknowns."
64. Pillar, "Predictive Intelligence," 27.
65. Horowitz and Tetlock, "Trending Upward."
66. Friedman and Zeckhauser, "Assessing Uncertainty in Intelligence."
67. A very useful study that takes a case study approach to examining intelligence community forecasts is Armstrong, et al., "The Hazards of Single-Outcome Forecasting."
68. Pillar, "Predictive Intelligence," 34.
69. Zegart, "No One Saw This Coming."
70. Rock, *Why Peace Breaks Out*.
71. Gaddis, "International Relations Theory and the End of the Cold War," 34–5.
72. *Ibid.*, 37.
73. Rock, *Why Peace Breaks Out*, ix.
74. *Ibid.*, 1–2.
75. I have elsewhere noted that this problem is particularly evident in the study of intelligence failures, because almost all such works study only failures. If we truly want to understand what causes failure and what might lead to success, we should attempt to compare failures with success. I make an initial effort to do that in my own *Intelligence and Surprise Attack*.
76. According to Rock's definition, states whose objectives tend not to conflict in very many issues are more heterogeneous, while states which produce and export different kinds of commodities tend to be heterogeneous.

States which are similar to each other in areas such as language, ideology, and form of government, are homogeneous. Rock, *Why Peace Breaks Out*, 12–5.

77. Ibid., 148.
78. Ibid., 149.
79. Ibid., 152.
80. Ibid., 152.
81. Ibid., 156.
82. Ibid., 157.
83. Gaddis, "How the Cold War Might End." Gaddis himself later referred to this article as a "mostly unsuccessful effort at forecasting." Gaddis, "International Relations Theory and the End of the Cold War," note 192, 51.
84. Gaddis, "How the Cold War Might End," 91.
85. Ibid., 92.
86. On the lack of imagination before the 9/11 attacks, see National Commission on Terrorist Attacks Upon the United States, *The 9/11 Commission Report*, 339–48.

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