

# WAR **GAMING** FOR LEADERS



STRATEGIC DECISION MAKING FROM THE  
BATTLEFIELD TO THE BOARDROOM

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## INTRODUCTION

It was two o'clock in the afternoon, only a few hours after Americans had awakened to the news that Saddam Hussein's military forces had invaded Kuwait, and we already had assembled a team to take on the Iraqi dictator. Our "battlefield" was a conference table in suburban Virginia, within hailing distance of the Pentagon and the nation's capital across the Potomac River. Our war council included a few colleagues from our firm, Booz Allen Hamilton, and several experts from the National Defense University, especially its Institute for National Security Studies.

We knew what Iraq had done that day in early August 1990. We had mustered our forces to ask why Saddam had acted, what he intended to do next, and what the United States and the other good guys could do about it.

Before us on the table was "Gulf Strike," a board wargame Mark Herman had designed for hobbyists seven years earlier. It was one of the dozens of commercial wargames that he had authored, a reflection of his fascination with military history dating back to the age of 12, when he mapped out his first wargame, on the Battle of Balaclava. The Charge of the Light Brigade wasn't top of mind on August 2, 1990. Instead, we were concerned with Saddam's Republican Guard and what was then the fourth largest army in the world.

We had divided our participants into teams representing the nations and interests in the game. Before them was a detailed map of the countries in the region, with pieces or symbols representing various military, transportation, and economic assets.

Iraq's military had provided the opening real-world scenario in this wargame, but why? Money was plainly a key motivating factor, the players agreed. Saddam was deeply in debt to Kuwait, and seizing the tiny emirate would erase the red ink and give him access to a rich state treasury to boot. He also would gain control of Kuwait's oil wells, expanding his influence in the OPEC oil cartel.

One scenario, then, was that Iraq would consolidate its gains and hold Kuwait, advancing no farther. "Kuwait isn't exactly beloved within the Arab world," one of the members of our group said, acknowledging a resentment on the Arab street for a perceived arrogance among oil-rich Kuwaitis. "Maybe Saddam figures his stature in the Arab world will grow, and there'll be no outcry if he stays put."

Sure, and pigs fly. The key to the crisis, the players felt, was Iraq's huge neighbor to the south, Saudi Arabia. The Saudis sat on the richest oil fields on the planet and produced more crude than any other member of OPEC.

A second scenario was that Saddam would secure Kuwait and then, in relatively short order, invade Saudi Arabia, aiming to grab the prodigiously productive oil fields in the kingdom's eastern province. If he was successful, Saddam Hussein would gain effective control of OPEC production and the global price of crude—the oil weapon writ large. Assembling a military force to stop him couldn't happen overnight, but could he be checked to buy some time? And if so, exactly how?

Wrestling with such critical questions on this particular day was hardly a casual exercise in our professional specialty. We had received a phone call that morning from Andrew Marshall, the legendary director of the Office of Net Assessment (ONA) in the U.S. Defense Department. Andy Marshall had run ONA, a kind of internal think tank at the Pentagon, for nearly two decades. (Now in his eighties, he still runs it.) The group Mark Herman heads at Booz Allen had built a reputation for the quality of its wargaming work for the Defense Department. What Marshall wanted was a quick-reaction wargame on the Iraq crisis, and he wanted it fast. The results certainly wouldn't dictate the U.S. government's action

in the weeks and months ahead, but the knowledge and reasoning employed by the players around that conference table might well contribute to the mix.



Wargaming, a creative tool for replaying military history or trying to anticipate battles to come, goes back thousands of years to the ancient conflicts documented in countless books and other accounts. Sun Tzu, the Chinese military philosopher whose writings in *The Art of War* 2,500 years ago have found a modern audience among contemporary business executives, certainly was an early practitioner. More recently, Benjamin Franklin encouraged his fellow Americans to play chess, the better to learn about their own defenses. But chess, as intoxicating as it can be, is a wargame only in a limited sense. When a game of chess begins, the two opponents have complete information: All the warriors are on the chessboard, and they can be moved only according to a strict set of rules.

Modern wargaming—what we and our colleagues do for our clients in the military, large corporations, and nonprofit organizations around the globe—differs in one essential way: The participants do not have complete information when they play one of our wargames because we design wargames to reflect the real world; in the real world, decision makers almost always are forced to make choices that are based on *incomplete* information. An economist, Thomas Schelling, got a Nobel Prize in 2005 for his work applying game theory to the interactions of people and nations. A central point of his “impossibility theorem” states: “One thing a person cannot do, no matter how rigorous his analysis or heroic his imagination, is to draw up a list of things that would never occur to him.”

The genius of modern professional wargaming is that it embraces the impossibility theorem and provides a methodology to get at the things that one leader, no matter how visionary, cannot grasp on his or her own. How? Not by relying on computers, which

we use mainly in a variety of supporting roles. Instead, we bring together the real experts on the issue at hand and allow them to “experience” the future in a risk-free environment and find answers to questions that had not been on their radar screens before they began the wargame.

The experts can be several dozen senior officers in the military or a similar number of executives at a transnational corporation or a group drawn from the public, private, and civil sectors who come together to solve a problem too big for any one of them to handle alone. This is what we call a megacommunity. We stage the wargame, but it is the players who take an opening scenario designed by us to build a story about the future—how a battle might unfold, how a corporate strategy might play out over time—because they live it as a kind of virtual experience.

The power of these minds interacting with one another—what we call “cognitive warfare”—leads to unexpected and often startling outcomes. As you will see in this book, our wargames for government, corporations, and nonprofit groups address many of the vital issues facing leaders in the public and private sectors in the United States and around the world. We do not promise miracles; we leave such matters to a higher authority. Also, what happens in our wargames does not necessarily reflect the organizational policies or real-life reactions of the participants. However, there is no question that the creative and visionary act of cognitive warfare produces powerful results. If you are a decision maker in any organization or enterprise, large or small, public or private, or if you aspire to leadership, ask yourself this question: If I could look into a telescope and glimpse the consequences of a course of action before the point of no return, before committing blood and treasure, would I do so?



Looking into that telescope, of course, was exactly what Andy Marshall wanted us to do on that day in August 1990. The players in our wargame had made enough moves on the conference room

tabletop to feel confident that it would be difficult to stop Saddam if he moved immediately to take Saudi Arabia's oil fields. But assuming that Saddam wouldn't move immediately, we might have a window of opportunity. We generally agreed that the Saudis would have to request formal help from the United States and that Washington certainly would provide it. How, when, and in what form that help would arrive were still matters of debate.

At one point, after we had covered the possible scenarios and variations of them, Mark Herman asked everyone to sit back and respond to the toughest question: Okay, friends, what do you really think will happen? This would be a gut check, informed by expertise and, more important, wisdom.

In modern warfare, there is something called "dominant battlespace awareness," or DBA in military shorthand. DBA is essentially the *science* of war: the satellites, the unmanned aerial vehicles, the acoustic sensors—all the spycraft and technology brought to bear that permit one side to know where the other side is positioned. DBA is important, but it isn't as important as "dominant battlespace knowledge." DBK is the *art* of war, and it's what usually is determinative. It is the dimension that tries to reveal an enemy's intentions and whether, for example, its apparent leverage is vulnerable to feints, bluffs, and small countermeasures. That was what Herman wanted his colleagues to address.

One of our players, the National Defense University professor Phebe Marr, was and remains an Iraq expert who actually had sized up Saddam Hussein in person. Phebe's answer to Herman's question was electric: Saddam was a bully boy, she said, a coward who would take what he could get if no one stood in his path. But it wouldn't take much, at least initially, to stop him in his tracks. The right words from Washington, backed by relatively small military gestures at the beginning, would freeze him in the hot Kuwaiti desert. Do that, she said, and he won't move on Saudi Arabia. His hesitance in turn would give the United States and its allies critical time to try diplomatic means of persuasion even as they prepared for war in the Persian Gulf.



You know what happened next as well as we do. What you don't know is the wargaming that we and our colleagues continued to do for the Pentagon during the Desert Shield buildup of allied forces and the Desert Storm offensive to remove Iraqi troops from Kuwait. Eight years later, in 1999, we found ourselves hard at work on another wargame, "Desert Crossing," that we designed and staged to examine what might happen in Iraq if Saddam Hussein's regime collapsed either internally or from military action by the United States and its allies.

The outcomes of our Iraq wargames will be covered mostly in the first section of this book, which focuses on our work for the U.S. military over two decades. The second section of the book will take you through wargames for commercial clients that illuminate both common and unusual concerns of large corporations in an increasingly complex and competitive environment. The third section places you in virtual jeopardy through global-crisis wargames that examine some of the challenges we all face in the post-9/11 world: terrorism, of course, and threats to port security, public health, and financial institutions.

We end with a chapter on a wargame especially designed and run for this book. This game's objective was at once simple and complex: Drawing on our internal specialists and a few invited experts, we aimed to assess the post-Iraq environment for the American defense, homeland security, and intelligence communities; those communities played and continue to play central roles in the ongoing fight against terrorism. The game's results should resonate with government policymakers and elected officials, strategic planners, and military experts in the United States and other democracies who are focused on what may prove to be one of the great challenges of the twenty-first century.

The glue binding these sections and chapters together is cognitive warfare. In today's world of asymmetric conflict, security threats, remorseless competition, and economic uncertainty, there

is an even higher premium on road testing the plans and strategies of large institutions, whether they are governmental organizations, transnational corporations, or emerging megacommunities that are trying to come to grips with global crises. Wargaming has emerged as a strong tool for such purposes, giving “players” an opportunity to look into an imagined future, learn from what they see in that risk-free environment, and apply those findings to shape the real world in which they live.

This book is for anyone interested in testing assumptions, mitigating risk, and revealing the unintended consequences of decisions yet to be made.