Deception and Denial in Iraq—

The Limits of Secret Intelligence

and the Intelligent Adversary Corollary

Running title: Deception and Denial in Iraq

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Abstract

Prior to the Second Gulf War Iraq accomplished the remarkable feat of convincing the world that it possessed weapons of mass destruction by truthfully denying that it had them. I examine the multiple layers of deception involved and consider the question of whether, faced with an intelligent adversary, it is generally possible to distinguish truth from falsehood. An "Intelligent Adversary Corollary" to the Efficient Markets Hypothesis is formulated. I conclude, in analogy to the general belief that stragetic surprise is inevitable, that such intelligence failures are also inevitable unless one possesses channels of information whose existence is unsuspected by the adversary.

Deception and Denial

Introduction

"Deception and Denial" are as old as warfare[1]. Denial is straightforward; it refers to denying an adversary useful information, usually concerning one's own forces and plans, but also other intelligence of military value, such as weather and geographical data. The methods of information denial are also straightforward. They include hiding objects under opaque covers, indoors or in forests or caves, encrypting communications or making them hard to intercept by other means, jamming, moving in darkness, reducing incidental emissions of observable signals (this can be as simple as blackouts and radio

silence), closing communications channels, *etc.*

Deception involves supplying false information rather than denying true information. It depends on successful prediction of how an adversary will use that false information, and has been studied by sociologists[2]. It requires understanding the adversary's thought processes ("getting inside his decision loop") and manipulating them to the deceiver's advantage.

Deception and the "Decision Loop"

Sometimes deception is simple. Painting a tank to look like a truck, or *vice versa*, requires only knowing how the human eye and mind recognize patterns in imperfect images. Although the neurology of pattern recognition is subtle and complex, we can build on plenty of everyday experience. Camouflage[3] is largely an exercise in deception.

Deception can involve a deep understanding of the adversary's state of mind. Perhaps the oldest recorded example of deception in warfare was the Trojan Horse[4,51]. This ruse was successful because the Greeks prepared the ground for it with a false "defector" and an apparent withdrawal of their forces. Most importantly, the Greeks knew enough of the Trojan character and war-weariness (the war had lasted and Troy had been besieged ten years and the Trojan losses included the recent death of their prince Hector) to

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[1]Because Homer and Virgil (our principal sources) wrote long after the event it is possible that their accounts are inaccurate or even entirely fictitious. However, for our purposes it is only important that they had insight into the psychology of war and deception, not whether they were historically accurate. See also Tuchman[6].

be confident that the Trojans would accept the Horse as the peace-offering of a defeated and departing foe. The Greeks had sufficient understanding of the Trojan "decision loop" to make the shrewd guess that the Trojans would ignore any cautionary counsel (that in fact was offered by the priest Laocoön and the princess Cassandra) and even the evidence of their own senses (sounds from within the Horse) because they were so eager to believe that peace had come. At a strategic level this deception is most often employed by dictatorships against democracies, for example, by the Germans against the British and French in 1933–39 and by the Japanese against the United States in 1931–41, as described by Kagan[7].

The classic modern example of tactical deception by getting inside the adversary's "decision loop" was the successful British deception (Operation Mincemeat) of the Germans regarding the invasion of Sicily. The well-known story is told by Montagu[8]. The British did not do the obvious by providing the planted corpse with fake invasion plans. They realized that it would not be credible that a mid-ranking officer would carry with him, and be in a position to lose, such critical documents; their discovery would discredit them. Instead, they created putative frank private letters between the highest commanders, of the sort that would plausibly be sent by a private emissary. One letter chattily discussed the use of Sicily (the genuine and obvious objective) as a cover story, while mentioning cover objectives elsewhere as if they were the real ones. A second letter steered the Germans toward Sardinia by referring to sardines, as if tip-toeing around security. The putative recipient

might be expected to take the hint, and the Germans to recognize this and come to the same conclusion. They did so, and sent forces to the cover objectives while leaving the real objective undefended. As Montagu explains, the success of the deception depended on understanding how the adversary would read the false intelligence. While the Greeks could assume simple wishful thinking on the part of the Trojans, the British had a more difficult task. Lying is easy, making the lie believed is harder, and hardest of all is to make someone believe one is lying when one is actually telling the truth.

There is a long history of tactical deception to cover surprise attacks. Modern examples include the German attacks on France in May, 1940 and on the USSR in June 1941, Pearl Harbor, the Normandy landings, the Yom Kippur War and the terrorist attacks of September 11, 2001. In fact, it is difficult to find a case in which the defender clearly and correctly anticipated a surprise attack, and some[9] consider strategic surprise unavoidable. Generally deception was straightforward rather than subtle, a combination of ordinary operational security (radio silence, encryption, and controlling the distribution of plans) and diversionary operations.

The Limits of Secret Intelligence

The failure of intelligence

The defending sides' intelligence did detect evidence of most "surprise" attacks; their failure was one of analysis and interpretation. It is difficult for an

individual seeing the raw intelligence to recognize the evidence of a surprise attack, and even more difficult for him to persuade (in time) the organization that must respond. This is the downside of Bayesian inference—because surprise attacks are rare and have low *a priori* probability, warning requires extraordinarily unambiguous (high signal to noise ratio) intelligence. The classic account is that of Wohlstetter[10].

In fact, Operation Mincemeat had a mirror-image, the Reinberger papers[11,12] During the Phony War of 1939–40, a German airplane with an officer carrying plans for the invasion of Belgium and Holland got lost and crash-landed in Belgium. The French and Belgian commands (correctly) evaluated the documents as genuine and indicating the direction of the planned German invasion, and changed their defensive plans accordingly. However, the consequences of this valid intelligence, correctly interpreted, were disastrous for the Allies, for the Germans (who, of course, were aware of what they had lost) revised their own plans; the obsolete intelligence became a successful deception.

Are such intelligence failures inevitable? The difference between intelligence and scientific research is that intelligence deals with a consciously deceptive adversary. The scientist constructs a hypothesis about nature and performs experiments to test its implications. The experiments may be technically difficult, the scientist may make mistakes and erroneous scientific results are common, but they can always be corrected by repeated and improved experiments. In contrast, an intelligent adversary is capable

of performing the same analysis as the intelligence analyst, and therefore of knowing what false information to provide to thwart him. Of course, the adversary faces the same problem; the analyst is *his* adversary.

The intelligent adversary may be not only deliberately deceptive but deliberately unpredictable (for example, by choosing among alternatives only at the last moment), while nature does not confuse or deceive consciously or intentionally. The interpretation of secret intelligence is limited by two factors:

- Evidence may be deliberately planted to mislead, so that its correct implication differs from, and may be opposite to, its apparent implication.

- The adversary may make his course of action unpredictable even to an analyst with perfect information.

The scientist does not have to contend with the first of these. He may have to deal with the second, but even then the *statistics* of his experimental results are deterministic, which is not the case for the intelligence analyst's problem.

Iraqi WMD

Prior to the Second Gulf War in 2003, it was accepted by almost everyone concerned that Iraq had active programs to develop weapons of mass destruction, probably including inventories of chemical weapons and advanced efforts towards nuclear weapons. Iraq denied this, but Iraq had denied it

before the First Gulf War, and those denials were lies. However, this time it turned out that (at least after the mid-1990's) Iraq had told the truth. Following the Second Gulf War the Iraq Survey Group[13] found no evidence of WMD programs, and there hadn't been any for several years. Naturally, this led to rounds of finger-pointing as each Washington player tried to blame others for the failure of intelligence. Was this failure the result of a *successful* program of deception by Saddam Hussein rather than just self-delusion in Washington? If so, how and why it was carried out?

A condition of the cease-fire that ended the First Gulf War in 1991 was that Iraq would dismantle its WMD programs. These had been substantial, and most threatening among them was a nuclear weapons program then considered capable of building a bomb by the mid-1990's. Yet the disarmament and inspection program immediately ran into Iraqi refusal to cooperate. The inspectors were stalled and lied to, their demands (justified under the UN resolutions that ended the First Gulf War) thwarted, and equipment and records spirited away, often from under their very noses. This was called "cheat and retreat", but the Iraqis only retreated when caught red-handed. Progress generally came only with information from high level defectors, most notably in 1995. It appears that the Iraqi WMD effort ended then, or shortly thereafter.

Iraqi Deception

But the non-cooperation with the inspectors did not end. In fact, Iraq became ever more obstructionist, with access denied to more and more sites (no such denial of access was permitted under the UN resolutions that established the cease-fire in 1991), while continuing to deny that it had any WMD programs at all. Finally the inspectors were withdrawn under pressure in 1998, after it became apparent that they were not being permitted to do their jobs. Further, the embargo on weapons-related and dual-use equipment was visibly breaking down, and the disposable income diverted by the Iraqi government from the Oil for Food program and obtained by smuggling oil was rapidly increasing. The story is told by Pollack[14].

To most analysts, professional as well as lay, the explanation was obvious: Iraq, free of outside inspectors, with a rapidly growing stream of diverted and smuggled oil income, and constrained only by an increasingly porous embargo, had resumed its WMD efforts. All the evidence pointed in that direction, and if there was no clear proof, that was only to be expected from a rigidly controlled police state. One could not count on having informed defectors, national technical means cannot see through roofs, and obtaining human intelligence in such an environment was likely impossible. Iraqi denials were, quite plausibly, interpreted as the routine lies of a dictatorship, just another form of propaganda. Faced with an adversary known to have a history of deception, the absence of evidence could be interpreted as evidence

of good operational security, rather than of the absence of a program.

We now realize that that was incorrect. Knowing that the inspectors and the U. S. government expected them to lie, the Iraqis "got inside the decision loop" and got them to believe the truth was a lie. This must be distinguished from a "double bluff"[15] in which contradictory true and false information are both supplied; after 1995 the Iraqi government supplied only the truth, but in limited amounts, truthfully denying the existence of a WMD effort, but not permitting meaningful inspections. The closest parallel may be to a German agent (a French officer) in Algiers whom the British were reported[1,16] to have turned into a double agent and then so thoroughly discredited with false information that they fed him the correct date and location of the Normandy landings in order to lead the Germans away from the truth[2]. The Iraqis had discredited themselves by a previous history of lying. Their deception succeeded because they (like Montagu) well understood their adversaries' assumptions and beliefs, and knew that they expected false denials.

Iraqi motivation

The Iraqi motivation is harder to establish. Why, if it had no WMD program to hide, did Iraq not welcome the inspectors back with open arms and let them see whatever they asked to see, knowing they would find nothing amiss, in order to receive a clean bill of health, be free to resume oil exports and

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[2]This story is not mentioned in the official reports[17,18] and may be apocryphal.

be rid of the embargo? That would have strengthened the Iraqi economy and conventional military, and would have opened a path to resuming WMD programs, once the inspectors were gone for good.

The answer is impossible to establish with confidence, unless Saddam Hussein comes clean. One possibility is that he was afraid the inspectors would stumble on something else, such as mass graves and other evidence of atrocities (which certainly were taking place). Another is sheer stubborness and a refusal to admit defeat by the inspection regime. A third is deterrence, the hope that fear of a hidden WMD program would deter the United States and its allies from a Second Gulf War.

The Iraqis succeeded in a remarkable deception: They told the truth about WMD while convincing the world that they were lying. But they misjudged the American reaction to their deception. They got inside the intelligence decision loop, but not the strategic decision loop, which took the deception as grounds for the Second Gulf War, and will probably take Saddam Hussein to the gallows.

The Intelligent Adversary Corollary

Was our intelligence failure, and the general failure of intelligence to anticipate surprise attacks, inevitable? Each time such a failure occurs commissions are formed to seek the reason why. At their best they produce a valuable historical record and point to specific failures that may be avoided

in the future. But is failure almost inevitable?

I propose an Intelligent Adversary Corollary to the economists' Efficient Market Hypothesis. This hypothesis states that it is not possible to trade in a market with the expectation of gain on the basis of public information. An efficient market may be defined as one in which all public information is instantly reflected in prices. As such, the Efficient Market Hypothesis is really a definition. The hypothesis is that real markets are close to being efficient.

The Intelligent Adversary Corollary states that it is not possible to make useful predictions about the acts of an adversary on the basis of public information. The adversary has access to this information, and can perform the same analyses we can, and can therefore anticipate our conclusions and our responses, and can act with knowledge (at least statistical) of what they are likely to be. As a result, the adversary can negate the predictive value of our conclusions.

Of course, this is almost obvious. If we perceive a vulnerability, we defend against it. As long as the nature of that defense is public, the adversary is fully aware of its strengths and weaknesses. If strong, he will find some other place and means of attack. If weak, he may choose to attack there.

Strong public defenses can be effective (there have been no hijackings since September 11, 2001, and the Israeli security fence has reduced suicide bombings by about 90%); the Corollary only asserts that attempts to predict the time, place and nature of attacks on the basis of public information

are not useful. Secrecy is a force multiplier, most obviously for the offense (whose attacks would be readily thwarted if the defense knew when or where they were planned), but also for the defense. For example, even lax pre-September 11 airport security could have been effective if supplemented by a secret program of ethnic profiling. Overt ethnic profiling would have been less effective, because it could have been thwarted by using operatives, such as the "shoe bomber", without the expected ethnic characteristics.

The validity of the Efficient Market Hypothesis in actual markets is a matter of controversy among economists. It is possible to profit from small deviations from the Efficient Markets Hypothesis because gains of fractions of a percent per transaction are sufficient. In contrast, for predictions of military attacks or terrorist acts to be useful the Intelligent Adversary Corollary would have to be qualitatively wrong, rather than merely inexact. A ten percent reduction in the likelihood of being the victim of a surprise attack or in the rate of successful terrorist acts would be impossible to demonstrate because of the intrinsic rarity of these events and fluctuations in their frequency, and would not satisfy those responsible for controlling these threats.

The Intelligent Adversary Corollary doesn't make public information, or the collection of open-source intelligence, useless. These are necessary to set the context of secret information, and may be important in themselves. For example, the public information (well-known historic facts) that Sunni Arab cultures have ineffective conventional militaries was essential to planning the spectacularly successful liberation of Iraq by small American and allied forces

in March, 2003. Not recognizing the equally public information that Sunni Arab cultures do not accept defeat, do not readily compromise, and enforce this by the assassination of any of their own leaders seen to be willing to compromise was a strategic failure. Not acting on the public information that these cultures use informal networks of terrorists and suicide bombings as weapons, often targeting crowds of civilians, led to a tactical failure and to our present difficulties.

The consequence of the Intelligent Adversary Corollary is that even secret information (such as that obtained by most technical surveillance) isn't very useful if the adversary considers the possibility that it might be obtained, for he will take this possibility into account in his planning and operations. Although classified as secret, the fact that such information *might* be obtainable is known to the adversary and is effectively public. This is a particular weakness of intelligence obtained through technical means, for the governing laws of nature are generally publicly known, and the state of technology estimatable by a wide technical public. Only secret information that the adversary does not imagine one might have (the Ultra decrypts are a prime example, as are successful penetrations by spies), can make it possible to anticipate, predict or give advance warning of surprise attacks. Rather than look for individuals or institutions to blame for intelligence failures such as September 11 or Iraqi WMD, we should recognize the near-inevitability of such failures and concentrate on defending against their consequences.

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