

When Knowledge Systems Collide

Why the war the United States is losing was lost before it began.

By Reinout Schotman



I'm sorry, Dave

The drone passed at eye level. We detected it. We projected its flight path. The mathematics was precise.

How someone decided for it to be launched, we could not measure.

Benjamin Franklin said the only certainties in life are death and taxes. He might have added a third. There is a mathematical law, proven in 1945 and undisputed ever since, that places a hard limit on what can ever be known from data. It is called the Cramér-Rao lower bound. It states that the precision of any estimate is bounded by the amount of information the data actually contains about what you are trying to know. When that information is absent, more data does not help. More data is then only more noise.

This is not a theory. It is not a perspective. It is a mathematical law with the same status as the laws of thermodynamics. You can ignore it. But that is like insisting the earth is flat. The mathematics does not care.

The law does not discriminate between civilisations. It discriminates between variables. Any system that operates through inference, observing data, building models, generating predictions, hits the same wall. The United States hits it. China would hit it. Russia hits it. The wall is not cultural. It is structural. It is a property of inference itself.

The war in the Gulf has just demonstrated what happens when a superpower builds the most sophisticated inference system in human history and encounters variables that carry no information in its data.

The variables that determined the outcome of this conflict were four: intention, patience, belief, and the willingness to sacrifice. The data collected by the technical systems that the United States and its allies used to plan and prosecute the war carries no Fisher Information about any of them.

Consider intention. In February 2026, Oman brokered what mediators described as a breakthrough. Iran agreed to downgrade its enriched uranium and submit to full verification by the International Atomic Energy Agency. Talks were scheduled to resume on 2 March. On 28 February, the United States and Israel launched their attack. The system could not determine whether Iran's diplomacy was sincere. Both hypotheses, genuine engagement and tactical delay, produced the same observable behaviour. The system could not distinguish between them. Not because it lacked data. Because the data contained no information about which hypothesis was true.

Consider patience. On 15 March, Iran's foreign minister stated publicly that Tehran had never requested a ceasefire and was prepared to defend itself for as long as necessary. On the same day, the American president claimed that Iran wanted to make a deal. The energy secretary predicted the conflict would end within weeks. Two systems looking at the same situation, drawing opposite conclusions. One was inferring from observable pressure that the adversary must be seeking an exit. The other was operating on a timescale the inference system could not model. Patience measured in decades does not appear in data generated by a system calibrated to political cycles.

Consider belief. The Karbala narrative is not a metaphor in Iranian strategic culture. It is an operational principle. Hussain went forward knowing what awaited him, not because victory was certain but because the act was its own answer. This is not culturally unique. Christ knew at the Last Supper what awaited him and chose to go forward. The three hundred at Thermopylae knew they would die and held the pass. Every civilisation carries stories in which someone advances knowing the outcome, because the act itself is the answer. It is a decision architecture as old as human consciousness. No inference system can model it, because it operates on a logic that does not optimise for outcomes the system recognises. When intelligence analysts observe Iranian behaviour, they interpret it through a framework that assumes rational cost-benefit calculation. The

assumption is not wrong. It is incomplete. And the part that is missing carries no information in the data they collect.

Consider the willingness to sacrifice. Three weeks into the war, over three million Iranians have been displaced. More than fourteen hundred civilians have been killed. The system assumed that mounting costs would drive Iran to the negotiating table. That assumption is an inference based on the system's own cost function. It treats the adversary's tolerance for loss as a variable that can be estimated from observable damage. But willingness to sacrifice is not a function of the damage inflicted. It is a function of what the sacrifice means to the people making it. Satellite imagery carries no Fisher Information about that meaning.

The system did not fail to listen. The system cannot listen when its data carries no Fisher Information about the variables that matter. This is not a choice. It is a mathematical condition.

Much has been written in recent weeks about where and when American decision-making failed. What has not been asked is why it failed, and why it could not have succeeded. The question is not whether better people in the room would have produced a better outcome. The question is whether any system built on inference could have produced a different one.

And yet the failure goes deeper than the law itself.

Because there are instruments that can get closer to these variables. They are called human beings. A CIA officer with a source inside the decision-making circle generates data that carries Fisher Information about intention. An ambassador with thirty years of regional experience generates data that carries Fisher Information about the theological and political context in which decisions are made. An experienced diplomat who has spent years building trust across negotiating tables generates data that carries Fisher Information about whether a counterpart is engaging sincerely or stalling.

These instruments existed. The system dismantled them.

Reporting from the first weeks of the war revealed that the National Security Council had been deliberately reduced in size. Interagency coordination had collapsed. Pre-war intelligence assessments from the Defense Intelligence Agency concluded that military action was unlikely to produce regime change. The assessment was circulated. It was ignored. One senior official was quoted saying that most of the people originally identified for key planning roles were no longer available. The institutional knowledge was gone.

The negotiations preceding the war were reportedly led by individuals with transactional backgrounds who expected a deal within weeks. Experienced diplomats had warned that this kind of negotiation requires years of sustained engagement, cultural sensitivity, and patience. The system sent negotiators whose observations could generate no Fisher Information about the variables that mattered.

Ambassadorial posts, which in most countries are held by career diplomats who spend decades building sensitivity to signals that no technical system can detect, have in the American system become political appointments. Campaign donors and political allies replaced the human instruments that could operate closest to the bound.

And then the system compensated by investing more heavily in the instruments that cannot reach the bound at all. More satellites. More signals intelligence. More artificial intelligence. The United States confirmed in the second week of the war that it was deploying advanced AI tools for targeting analysis. The AI processes data faster. It does not process different data. It accelerates inference within the bound. It does not move the bound. And when an AI system operating on data without Fisher Information about what occupied a building produced a targeting recommendation, the result was the bombing of an elementary school. The system was not slow. It was fast, precise, and wrong.

This is the mechanism that produces catastrophe. The instruments that could get close to the bound are removed. The instruments that cannot reach it are expanded. Each layer of technology increases the system's confidence without increasing its knowledge. The dashboards turn green. The AI reports high confidence scores. Ninety-two percent of missile installations destroyed. Every metric confirms progress. And every metric measures variables that do not determine the outcome.

The result is not ignorance. Ignorance produces caution. The result is false certainty. The system does not know what it does not know. Worse, the system is reassured by the volume of what it does know, and that reassurance masks the absence of knowledge about what matters. False certainty does not hesitate. False certainty commits aircraft carriers, launches thousand-missile salvos, and spends nine hundred million dollars a day on a war whose outcome is determined by variables it cannot measure.

And then consider the circle that everyone can see and no one can break. Iran provides drones to Russia. Russia uses them against Ukraine. The United States shares intelligence about Russia with Ukraine. Russia shares intelligence about the United States with Iran. Iran uses it against American targets. The United States lifts sanctions on Russian oil to contain the energy crisis. Russia uses the oil revenue to fund weapons against Ukraine. Full circle. Everyone sees it. No one breaks it. Because the system has no column for strategic coherence over a time horizon longer than a single political cycle.

The president of the United States, when asked how he would know that the war's objectives had been achieved, said: "When I feel it. Feel it in my bones." This was not a figure of speech. It was an answer to the most consequential strategic question of the conflict: when does destruction become sufficient? The definition of success in a war costing nine hundred million dollars a day has no model, no metric, no threshold. It resides in the intuition of a single individual. Personal intuition replaced institutional epistemology. But intuition is not magic. It is unconscious inference from data that carries Fisher Information. A property developer's intuition about a building's value draws on decades of accumulated observations. That data exists. It carries information.

The intuition works. But intuition about when a war in the Middle East has achieved its objectives requires data about variables that this president has never observed and that the system around him can no longer generate, because he dismantled the instruments that produced it. When the data does not exist, intuition is noise indistinguishable from signal.

This pattern is not new. And it is not exclusively American.

Vietnam. The Soviet Union in Afghanistan. The United States in Afghanistan. Iraq. Russia in Ukraine. Now Iran. Six wars. Two systems. Both built on inference. Both assumed that overwhelming assets would produce the desired outcome. Both failed to measure the variables that determined the actual outcome: the willingness of a population to sacrifice, the patience of a leadership to outlast, the institutional resilience to absorb destruction and continue functioning.

The pattern repeats not because leaders fail to learn from previous wars, but because the next generation of leaders has the same gap in its education. The Cramér-Rao bound is taught in statistics, in signal processing, in physics. It is not taught at West Point. Not at the Kennedy School. Not in war colleges. Not in the boardrooms where decisions about strategy are made. The people who decide about war and peace have never learned that there is a mathematical limit to what their data can tell them. And so they build ever larger systems, ever more confident, pressing ever harder against a wall they do not know exists.

What lies beyond the bound is not ignorance. It is judgement.

Not intuition. Not more data. Judgement: the trained ability to act on incomplete knowledge, knowing that the knowledge is incomplete. The bound tells you two things. First, what you cannot know. Second, that you cannot know it. The second is the information value. A system that recognises that intention falls outside the bound acts differently from a system that infers intention from proxy variables and presents the result as knowledge.

The drone passed at eye level. We detected it. We projected its flight path.

We measured that the decision to launch it was made. We never measured how. The data the system collected carried no Fisher Information about that gap. It was outside the bound. It always was.

The mathematics told us so. They simply chose not to listen.

From the author

This is the fifth and final essay in a series examining the strategic consequences of the 2026 Gulf conflict. The first, "The Overlooked Risk Behind the Gulf Conflict," examined expatriate confidence as the most consequential overlooked economic variable of the war. The second, "The Network the UAE Already Has," proposed a mechanism for rebuilding that confidence. The third, "When Strategies Fail," analyzed the strategic architecture of the conflict and the model of power that produced it. The fourth, "The Silent," explored the consequences of that architecture through strategic fiction.

The analytical framework underlying this series draws on concepts developed in the Outdoor Connect methodology, including the distinction between assets and control points, and the role of the Cramér-Rao lower bound as a structural limit on inference, as described in "The Illusion of Knowing."

Outdoor Connect is an independent strategy advisory platform focused on board-level value creation for mid-sized, growth-driven companies (€50–€1B). We bring direct senior engagement—without the traditional consulting pyramid—to help founders, CEOs and boards set direction, make sharper capital allocation choices, and embed an execution rhythm. Core areas include growth strategy in technology and the energy transition, strategic repositioning in fragmented markets, and board-level sparring on value creation and M&A preparation.

© Outdoor Connect 2026. All rights reserved. 3/26