



Data-Rich but Knowledge-Poor: The MI Corps Has a Writing Problem

by Chief Warrant Officer 3 Michael W. Gabel

Introduction

In the modern era of warfare, the United States Army has an unprecedented ability to leverage both organic and inorganic collection capacities. Through a sophisticated array of sensors, cyber capabilities, and open-source aggregation tools, the modern intelligence enterprise can inhale massive quantities of information from the battlefield. Despite this deluge of data, however, the U.S. military frequently finds itself struggling to answer fundamental questions about the operational environment. Mounting institutional critique suggests that the intelligence community has mastered the science of collection while neglecting the art of analysis. Specifically, the Army suffers from a cognitive deficit rooted in the devaluation of formalized intelligence production. By prioritizing technical collection over the foundational skill of clear and concise analysis, honed through effective writing, the Military Intelligence (MI) Corps only answers immediate requirements without creating or contributing to bodies of knowledge that provide context for the next fight, becoming a force that is data-rich but knowledge-poor.

Puzzles vs. Mysteries

The MI Corps' prioritization of technical collection is driven by the belief that if it collects enough data, the truth will inevitably emerge. However, this collection-centric mindset fundamentally misunderstands the nature of intelligence analysis.¹ To fully diagnose this issue, we must distinguish between two types of intelligence problems: *puzzles* and

mysteries. Puzzles have definitive, factual answers that can be solved given enough data, such as the location of a specific enemy unit or the technical specifications of a weapon system. Mysteries, however, involve complex, contingent factors that depend on human interactions and future intentions, such as assessing an enemy commander's operational intent by analyzing the results of individual engagements along a forward line of troops.

Technical collection excels at solving puzzles. Advanced sensors and data analytics can track movements and intercept communications with extreme precision; however, data-driven tools struggle with mysteries. Data alone cannot reveal what doesn't exist, such as an adversary's intent.² Solving a mystery requires deep contextual understanding and the ability to construct logical arguments that are honed through writing. By over-investing in the tools required to solve puzzles, the Army has under-invested in the cognitive skills required to solve mysteries.

This leads to an intelligence apparatus geared toward plugging gaps in data rather than addressing gaps in knowledge. As intelligence scholars Paul Symon and Arzan Tarapore observe, intelligence missteps are frequently met with demands for "more or better data" rather than more critical thinking.³ This creates a dangerous feedback loop where the sheer availability of data drives the analytic agenda, resulting in a force that prioritizes analyzing irrelevant data simply because it has a lot of it.

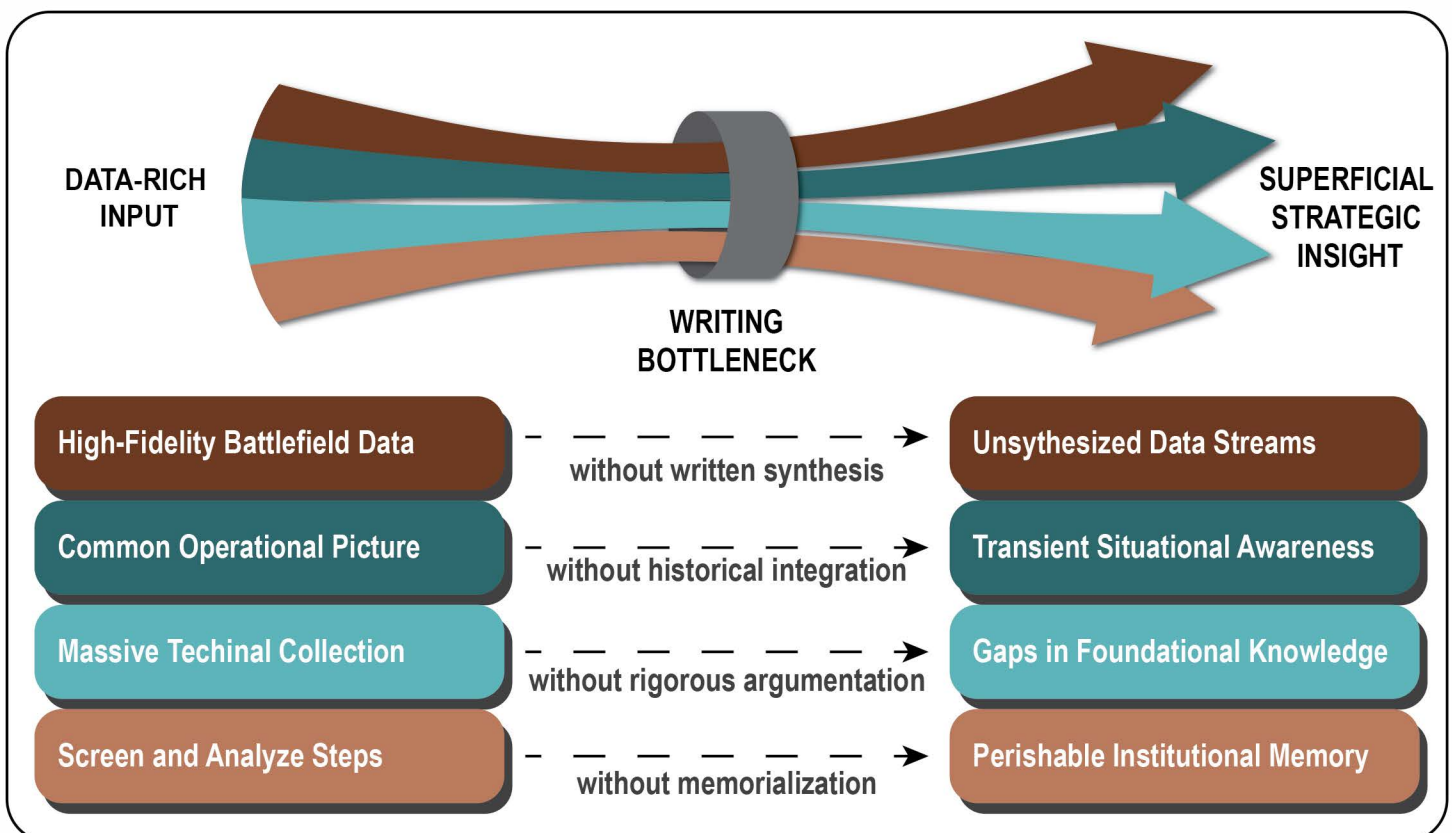


Figure. Collection to Analysis Deficit

The Broken Doctrinal Link: The “Integrate” Step

This analytical shortfall is not merely a failure of general skills; it is a specific violation of the Army’s own analytical doctrine. Army Techniques Publication (ATP) 2-33.4, *Intelligence Analysis*, outlines the analytical process in four distinct steps: *screen*, *analyze*, *integrate*, and *produce*.⁴ The failure to build a body of knowledge occurs specifically in the *integrate* step, defined as the process of “combining new information with current intelligence holdings” to confirm or deny hypotheses. It is in this step that isolated data points are woven into a cohesive narrative, turning perishable situational information into enduring knowledge.

However, the prioritization of data collection over analytical writing has disrupted this cycle. Overwhelmed by the volume of data from the *screen* step and lacking the writing proficiency to synthesize and communicate it, analysts frequently skip the *integrate* step, moving directly to *produce*. Instead of integrating new reporting into a historical baseline to create context, analysts merely report raw data as it arrives. This breaks the chain of knowledge creation. Without the discipline of writing to force the integration of new facts with existing holdings, the Army fails to build or enhance the bodies of knowledge necessary to understand the enemy’s evolution. The result is a stream of disjointed reports that provide immediate situational awareness but fail to provide the historical context required to predict future action.

Analytic Tradecraft Standards: Writing as a Requirement

The Army’s de-prioritization of writing proficiency also undermines its ability to meet regulatory tradecraft standards. ATP 2-33.4 mandates adherence to Intelligence Community Directive 203, which establishes the standards for analytical rigor.⁵ Specifically, the directive requires analysts to “use clear and logical argumentation,”⁶ presenting a main conclusion supported by coherent reasoning. This is not a discretionary luxury; it is a functional requirement for validity.

When analysts are not required to document their assessments for posterity, they skip an important step in creating a cohesive assessment. In their 2016 paper for *Air Power Review*, British MI officers John Hetherington and Keith Dear highlight how intelligence professionals often use vague probabilistic terms such as “possible” or “likely” to protect themselves from negative scrutiny.⁷ Without the discipline imposed by precise writing that sharpens arguments, these terms become so diluted that they convey no real meaning. By ignoring Military Occupational Specialty (MOS)-specific training for analytical writing, the MI Corps is fielding a force that cannot meet its own codified standards for analysis. A sensor can detect a tank, but only a skilled analyst and writer can articulate the argument for why that tank’s presence indicates an impending offensive rather than a defensive feint.

Writing Is Thinking

The reliance on data collection is fundamentally an attempt to ensure certainty in an uncertain world. However, doctrine explicitly warns against this. ATP 2-33.4 directs analysts to “accept and embrace ambiguity” because they will never have all the information they need. It warns that being “data-rich” with raw information does not prevent an organization from remaining “knowledge-poor” in its understanding.⁸

Writing is the primary tool for managing this ambiguity. Structured analytic techniques such as the analysis of competing hypotheses (ACH) or devil’s advocacy are pillars of rigorous doctrinal analysis.⁹ At their core, these techniques are literary exercises: they require analysts to externalize their thought processes, write out hypotheses, and systematically record evidence. One cannot create a complex ACH matrix or perform a devil’s advocacy review using only a sensor feed. By producing technicians who can operate collection systems and manage workflows, but who struggle to write, the MI Corps disarms itself of the tools required to navigate ambiguity.¹⁰ The result is a force that retreats into the certainty of what it can *see*, ignoring the ambiguity of what it must *understand*.

Situational Awareness vs. A Body of Knowledge

This dynamic creates an unavoidable paradox: the Army possesses a near-total view of the battlefield’s surface while remaining blind to its underlying dynamics. This failure stems from prioritizing the transient, technology-aided visualization of the current fight over the creation of durable analytic products that provide context for the next fight.

Situational awareness is essentially about mapping relationships in the current moment, often reduced to a process for maintaining the common operating picture (COP). The modern intelligence enterprise excels at this, generating high-fidelity, machine-and artificial intelligence-aided pictures of enemy dispositions.¹¹ However, a robust body of intelligence knowledge is both foundational and predictive. Doctrine describes this as “conducting pre-mission analysis,” a continuous process of creating databases and intelligence products that account for domains and dimensions before a mission even begins.¹² This body of knowledge is not merely a collection of general facts; rather, it synthesizes broad, historical baseline intelligence with specific, theater-focused operational context to create a matrix that allows analysts to anticipate threat behavior rather than simply react to it.

During Operation Iraqi Freedom, commanders lamented that the enemy they were fighting was “not the one we’d wargamed against.”¹³ This was a failure of knowledge, not awareness. The Army had the data on Iraqi unit locations, but it lacked the deep, written analysis required to understand the enemy’s evolving intent. Without sufficient writing skills to synthesize disparate data points into a cohesive narrative, the intelligence staff could not bridge the gap between observing the threat and understanding it.

The Missing Phase: Memorialization

To bridge the critical gap between transient situational awareness and enduring strategic insight, the Army must institutionalize a distinct “*memorialize*” step within the analysis process. The *integrate* step, as noted above, requires analysts to correlate new information with prior holdings; however, operational tempo often compresses this into briefings that vanish post-delivery. Implementing a formal *memorialize* step would compel analysts at all echelons to document judgments and causal reasoning, transforming fleeting data into the durable body of knowledge required for pre-mission analysis as described earlier. This step is essential for unraveling complex mysteries of enemy intent as opposed to merely solving puzzles of location. Memorializing assessments also creates the necessary record for retrospective evaluation. Regardless of their ultimate accuracy, when predictions remain unpublished, analysts avoid accountability for their accuracy, which destroys the feedback loops required for institutional learning. By mandating not just the synthesis of daily reporting into foundational assessments but also the memorialization of those assessments in a written record, the MI Corps can ensure hard-won insights survive personnel rotations. This institutional record protects the force from constantly reinventing the wheel or simply reporting what is easy to see.

Solution

To remedy this analytical imbalance, the Army must expand existing doctrine to include a *memorialize* phase within the analysis process. Crucially, this standard must be integrated into instruction for the entire 35-series Career Management Field at all levels of Professional Military Education. By training and requiring Soldiers to synthesize large volumes of MOS-specific, recurring reports and briefs into durable products, the MI Corps can foster the deliberate practice of analytical writing and reinforce the skills needed to craft durable assessments that persist through personnel turnover.¹⁴ This ensures that battlefield insights are preserved to provide essential context for future operations, transforming analysts from passive data managers into architects of enduring understanding.

Conclusion

The U.S. Army possesses the most advanced sensor network in the history of warfare. It can see, hear, and track adversaries across the globe—however, information is not intelligence, and data is not wisdom. By prioritizing the acquisition of even more data over the cultivation of clear analytical writing to build a durable body of knowledge, the Army has created a bottleneck where vast amounts of battlefield information fail to translate into actionable strategic insight.

The ability to write succinctly is a physical manifestation of the ability to think clearly. It is the filter through which data becomes insight, and insight informs decision—processes that are impossible without writing proficiency. Until the Army values the pen as highly as it values the sensor, its strategic intelligence will remain data-rich but knowledge-poor. ✨

Endnotes

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4. Headquarters (HQ), Department of the Army, Army Techniques Publication (ATP) 2-33.4, *Intelligence Analysis*, (Government Publishing Office [GPO], 10 January 2020, incorporating Change 1, 30 May 2025), xii.
5. Ibid., C-1—C-6.
6. Ibid., C-2.
7. John Hetherington and Keith Dear, “Assessing Assessments: How Useful is Predictive Intelligence?” *Air Power Review* 19, no. 3 (11 January 2016), <https://raf.mod.uk/what-we-do/centre-for-air-and-space-power-studies/aspr/apr-vol19-iss3-5-pdf>.
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10. Jesse Sloman, “Fixing Intelligence Analysis: From Specialists to Experts” *Small Wars Journal* (21 September 2012). <https://archive.smallwarsjournal.com/index.php/jrnl/art/fixing-intelligence-analysis-from-specialists-to-experts>.
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