

Applying the Revolution in Military Affairs to Intelligence

Michael, Kurliak, Simon Fraser University

Abstract

This paper identifies how the concept of the ‘Revolution in Military Affairs’ can be applied to the intelligence process to address the overabundance of information produced by contemporary technologies. Three tenets from the ‘Revolution in Military Affairs’ are examined as possible remedies for failings in the intelligence process. Drawing on previous intelligence failures, the case is made that applying the ‘Revolution in Military Affairs’ will improve the intelligence process and allow for agencies to stay on top of the large quantity of information they handle. The finding is that by incorporating these tenets, intelligence services can improve the quality of intelligence that they produce.

Keywords: Revolution in Military Affairs (RMA), intelligence, information

The concept of the ‘Revolution in Military Affairs’ (RMA) goes back as early as the 1970s (Metz and Kievit, 1995), and theorizes that information technology is altering the “knowledge available to armed forces, and thus the nature of war” (Ferris, 2009, 455). RMA is based on an understanding that information gives forces an edge over their opponents, and the usage of technology allows this to happen at a faster pace than ever before (Lucas, 2010). The definition of RMA for this paper is adapted from Betz (2006) and Ferris (2009) to mean the usage of information technology by either state or non-state forces to achieve and maintain a force’s dominance in warfare faster than their opponents can.

The problem with RMA, however, is that there is now an overabundance of information and the current methods used to determine what is useful for commanders and decision-makers cannot keep up (Betz, 2006; Betz, 2008; Ferris, 2009). This represents an issue in the intelligence process. In response, the question has been asked, if there is a RMA relating to the way information and technology are changing war, can the same concept be applied to intelligence? This paper argues that the concept of RMA can be applied to intelligence to address the issue of information overabundance and the methods used to determine how useful information is. This can be accomplished by incorporating three elements into the intelligence process: flexible command

structures, parallel planning, and real-time decision making. This paper will be structured into five sections. The first three sections will examine the three elements of incorporation in turn. The fourth section will address potential counter-arguments. The fifth section will then conclude the paper.

Flexible Command Structures

Flexible command structures refer to a force's ability to conduct operations with "centralized command and decentralized execution" (Ferris, 2009, 471), achieving dominance in warfare through rapid reactions. To incorporate this into intelligence, a centralized intelligence database that serves as a hub for information must be created which allows various intelligence agencies to share information and intelligence products (Ferris, 2009). In doing so, agencies should be able to provide products as effectively and efficiently as possible when ordered to by customers. 'Centralized command' already exists in the form of the customer who orders specific products (Richards, 2010, 10), so 'decentralized execution' represents the analysts who craft said products. Therefore, a centralized database accessible to the whole of a force's intelligence community consolidates the quantity of information and improves how quickly analysts can sort through it and produce intelligence, thereby helping forces maintain dominance in warfare.

There are two examples of non-centralized command and information causing flawed executions. During the Cuban Missile Crisis, different American agencies were producing intelligence products regarding Cuba. But, given the amount of secrecy and limited interaction between members of the intelligence community at the time, information was not shared between agencies that could have helped analysts craft products that in turn would have established American dominance in the region (Blight and Welch, 1998; Wirtz, 1998). A second example is that during air missions in Kosovo, the Supreme Allied Commander Europe made a snap decision in the absence of readily available intelligence to order a drone strike on possible enemy combatants (Woodcock, 2003, 134). These events highlight the need for the sharing of information and constantly updated intelligence products to be at the disposal of decision makers, as without them they have less accurate information to base their decisions on.

Parallel Planning

Parallel planning is when operations and intelligence are fully integrated with one another to allow for continuous evaluation of intelligence as it is produced (Ferris, 2009, 457-458), providing forces with the information needed to assert dominance quickly. To incorporate this into intelligence, two things must happen. First, there must be a centralized intelligence database. Second, the function of analysts must change from the current system, where individual pieces of information are gathered before being synthesized and analyzed collectively in an intelligence product, to a new system where analysts “constantly gather, analyse, synthesize, fuse, and update intelligence from all sources on all aspects of an enemy in real time” (Ferris, 2009, 458). This allows for ongoing adjustments to be made, removing the need for customers to return to analysts every time they need updates and reduces the risk of intelligence being either received too late or not providing the information needed (Richards, 2010, 33-34). This efficiency is important because constantly producing intelligence allows decision makers to act quickly, maximizing their ability to maintain dominance in warfare. Therefore, incorporating parallel planning into intelligence helps reduce the burden of information overabundance and improve the methods of analysts in determining the use of information by analyzing it as it is received and updating intelligence products accordingly.

The Iraq War demonstrates this well, with two major examples. The first is the September Dossier, a publication from the U.K. government regarding alleged weapons of mass destruction (WMD) in Iraq. This was one of the documents that led to the Iraq War, but the allegation was eventually proven false and has been the source of controversy ever since (Herring and Robinson, 2014). If parallel planning had been in place and analysts carried out ongoing evaluations of information as it was received, it is possible that enough evidence could have been found to refute the allegation of WMDs in Iraq and prevent the war from breaking out. Although there is no guarantee that this would have been the case, the increased speed and efficiency of analysis would have at least provided a better picture of what was happening in Iraq. The second example comes from the Pentagon’s Director of Force Transformation in 2003 Admiral Cebrowski’s reflections on Operation Iraqi Freedom. Cebrowski claimed that the intelligence community is limited in its function, as agencies collect different sources before producing different reports (Ferris, 2009, 457). Cebrowski also pushed for both centralized information databases as well as a continuous cycle of collection and analysis as the ideal way to remedy the issues of information

overabundance and flawed methods for finding useful intelligence (Ferris, 2009, 458).

Real-Time Decision Making

Real-time decision making is when commanders acknowledge they have enough information to act and choose a course of action while still evaluating information as it is received, adapting accordingly so they can maintain their warfare dominance (Ferris, 2009, 468-469). Incorporating this into intelligence requires both a system of parallel planning and “changing the culture of command” (Ferris, 2009, 468). The change in the culture of command is the certainty required in decision making. Traditionally, commanders have waited until they gathered what information is available before choosing a course of action (Ferris and Handel, 1995). However, a force risks losing its dominance if it waits too long, and, given the effects of RMA, the period one can wait is shrinking. This means that decisions must increasingly be made even as new information is arriving, which is counter to how decision makers operated in the past (Ferris, 2009). This issue be understood through the concepts of Type-A and Type-B uncertainty. Type-A uncertainty is an “inability to receive accurate, useful and timely intelligence in time to act on it,” while Type-B is an inability to act in the presence of too much information as there is nearly an endless amount one can know about a situation (Ferris and Handel, 1995, 49-50). Type-B has become a serious issue for decision makers, but because information will constantly be received, it is up to commanders to know when to act even if questions remain. Therefore, incorporating real-time decision making into intelligence addresses the overabundance of information and the methods in determining their use by forcing decision makers to determine when action needs to be taken, regardless of the amount of information they have, in order to maintain their force’s dominance in warfare.

There are two notable examples of decision makers not knowing when to act: one where they waited too long, and another where they acted too quickly without intelligence to back up their decision. Together, these examples highlight the need for decision makers to balance informed decisions with quick response times. The September 11 attacks demonstrate when decision makers waited too long. The literature shows several reports had been produced warning of a possible attack which went unaddressed either because policy makers deemed the evidence of an attack unlikely or because they thought there was no feasible way to counter the threat (Marrin, 2011). Operation Iraqi Freedom is an

example where decision makers acted too quickly. While the invasion was successful from a tactical perspective, American forces lacked intelligence on Iraqi politics and found themselves unable to covertly topple the Hussein regime, could not find weapons of mass destruction, and unprepared for occupying the country post-conflict (Ferris, 2009, 469). Both examples represent the flaws in the current culture of command and demonstrate the need for decision makers to re-evaluate when it is appropriate to act.

Potential Issues

There are a few counter arguments to the incorporation of RMA into intelligence. First, there is debate over the extent to which information technology changes the nature of war, and thus, changes intelligence. Some claim that true dominance is dependent upon human actors and technology is only a tool to aid in situational understanding, while others claim that technology will not result in a fundamental shift in war beyond its usage in fighting (Ferris, 2009). However, the argument in favour RMA and its incorporation into intelligence is stronger because the evidence shows that information technology can provide us with a deeper understanding of events than human analysis is capable of (Betz, 2006), assuming it is handled properly, hence the need to incorporate RMA into the intelligence process.

This ties into a second counter argument, which is how resource intensive incorporating RMA into intelligence would be. With parallel planning, the manpower necessary to be constantly gather and evaluating information would likely be far more than what is currently utilized and would thus represent a large increase in intelligence costs. However, the rebuttal to this is that the benefits received from this method of analysis are worth the cost. Additionally, at least part of the costs could be addressed by restructuring existing intelligence agencies around a centralized information database and cutting the costs of hiring separate information collectors and intelligence analysts to produce intelligence.

A final counter argument is that having decision makers choose courses of action more quickly represents a large risk, and making the wrong decision threatens a force's dominance in warfare. However, the argument in favour of RMA is stronger because uncertainty will always be present in some form, and while gathering additional information before acting does improve a decision maker's certainty, it also gives more time for enemies to act and potentially

assert their dominance first (Ferris, 2009). Thus, while some level of uncertainty will always be present and there is some risk in acting too quickly, waiting too long to act carries graver consequences for continued warfare dominance.

One issue that applying the concept of RMA does not address in the intelligence process is the human dimension of intelligence sharing. While advances in information technology have increased the amount of intelligence that agencies can produce, the mindsets and attitudes of actors involved in the process still plays a large role in the selection of what information can be shared between agencies. While this can be partly addressed by adopting centralized intelligence databases, human actors still make subjective judgment calls shaped by their personal experiences and individual risk assessments. While applying the concept of RMA to the intelligence process does help mitigate the issue of information overload, it cannot by itself remedy errors in human judgment.

Conclusion

RMA has indeed changed the nature of war, and now we are faced with too much information and no way to handle it. Intelligence agencies do not effectively share the information they have with one another, which is becoming increasingly dangerous as an inability to share the volume of information now available prevents agencies from being able to make informed decisions about the issues they are facing. This has manifested in constricted analysts who cannot effectively do their jobs and commanders who are apprehensive about acting in the face of so much information or, at times, a lack of access to the information they need most. To address this, we must apply the concept of RMA to intelligence by developing flexible command structures in our intelligence agencies, adopting parallel planning strategies for our analysts, and emphasizing real-time decision making for our commanders. Incorporating these three principles into intelligence will ensure that our forces are able to effectively utilize information technology to maintain their warfare dominance in the future.

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