



International Journal of Intelligence and CounterIntelligence

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/ujic20

Complexity in Military Intelligence

Bram Spoor & Peter de Werd

To cite this article: Bram Spoor & Peter de Werd (2023) Complexity in Military Intelligence, International Journal of Intelligence and CounterIntelligence, 36:4, 1122-1142, DOI: [10.1080/08850607.2023.2209493](https://doi.org/10.1080/08850607.2023.2209493)

To link to this article: <https://doi.org/10.1080/08850607.2023.2209493>



© 2023 The Author(s). Published with license by Taylor & Francis Group, LLC



Published online: 30 May 2023.



Submit your article to this journal [↗](#)



Article views: 5983



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 1 View citing articles [↗](#)

BRAM SPOOR  AND PETER DE WERD 

Complexity in Military Intelligence

Abstract: Intelligence studies missed social science’s “complexity turn” more than twenty years ago. The aim of this article is to examine military intelligence from a complexity science perspective and discuss related concepts such as sensemaking and reflexivity. For this, military and intelligence theory, doctrine, and practice are studied. Complexity insights from military sciences are used to review mental models and current thinking in military intelligence. Rather than viewing it as a clearly defined and autonomous field or function embodied by a closed intelligence cycle, military intelligence is best seen as a situated practice. This situatedness is illustrated in two cases regarding vertical and horizontal contextual

Bram Spoor is a Ph.D. candidate at the Netherlands Defense Academy and Leiden University. He holds a master degree in International Relations and is an officer in the Dutch Army, including deployment with the International Security Assistance Force in Afghanistan. His research focuses on the innovation of intelligence with complexity science. The author can be contacted at bep.spoor@mindef.nl.

Peter de Werd is Assistant Professor in intelligence and security at the Netherlands Defense Academy and has worked for the Netherlands Department of Defense in various positions and deployments over the last two decades (including both Operation Enduring Freedom and the International Security Assistance Force in Afghanistan). The author can be contacted at pg.d.werd@mindef.nl.

© 2023 The Author(s). Published with license by Taylor & Francis Group, LLC

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

influences. First, a discussion of North Atlantic Treaty Organization deployments in Afghanistan shows important vertical influences: the impact of (political) context and task. Second, a review of United Nations missions exemplifies the horizontal dimension: the need for informal collaboration, ad hoc organization, and a holistic approach. However, both cases show vertical and horizontal influences. Overall, this article stresses the applicability of sensemaking rather than the intelligence cycle and makes suggestions for further incorporating complexity research into intelligence.

The idea that the world is increasingly complex is not new. Globalization, advancements in communication technology and a changing international order constitute a world that is ever more interconnected and interdependent. The influence of people and ideas, and the effects of events travel fast and unpredictably. In this context, war is also increasingly seen as complex, or as a complex system.¹ For some, however, the (erroneous) implicit assumption is that earlier manifestations of war are somehow simpler. It has also led to the critique that complexity is just another buzzword in military jargon, lacking substance or deep understanding.² Mountcastle had called it “the myth of the new complexity.”³ Yet a fundamental review of core complexity concepts reveals important insights.

In this article, complexity means more than just a synonym for very complicated. It refers to complexity science that studies systems “in which large networks of components with no central control and simple rules of operation give rise to complex collective behavior, sophisticated information processing, and adaptation via learning or evolution.”⁴ This complex behavior takes place at an aggregate level, which means that at a higher system level radical new behavior appears from the interplay of underlying agents—this is called emergence. These agents are diverse and connected and interact and adapt.⁵ This makes the system exhibit nonlinear dynamics: the system output cannot be predicted based on knowledge of the input. Emergence and nonlinearity constitute a break from the Newtonian mechanistic idea that the world can be studied according to linear causality. It is also a break from the associated method of analytic thinking whereby difficult problems can be broken up into their constituent parts whose properties explain the behavior of the whole, also known as reductionism.⁶ Complexity thus constitutes a new paradigm to look at (intelligence) problems, even though the problems themselves have not changed necessarily.

The parallels between complexity science and intelligence are apparent. Moreover, intelligence can be viewed as part of a complex system, employing “sophisticated information processing” to learn about its environment and better deal with prediction issues. Drawing on a deeper understanding of complexity, the aim of this article is therefore to examine military

intelligence—as a process—from a broader perspective. It draws on a literature review and two case studies—based on document analysis and illustrative interviews. As military intelligence is a marginal topic within academic Intelligence Studies, various contributions to this special issue make a useful effort to define and delineate what is military intelligence.⁷ Taking a step back, this article emphasizes how military intelligence is a situated process rather than viewing it as a clearly defined and autonomous field or function—as embodied by the closed intelligence cycle. It is situated in the operational environment and broader sociopolitical system—all elements of its complexity.

This complex viewpoint has implications for (doctrinally) conceptualizing military intelligence. This can best be seen as adaptive sensemaking: a form of continuous data exploration and iterative abductive reasoning to achieve meaningful understanding in support of operational and tactical military decisionmaking. Because of complexity, there exists no general knowledge from which to infer understanding to understand the particular. Therefore, knowledge is created in a repeated process of testing and refining conclusions (iteration) from information that locally and temporarily provides the best available probable knowledge (abduction). As the case studies show, this applies especially, although not exclusively, to intelligence in support of out-of-area stability and peacekeeping operations.

For a fundamental rethinking of military intelligence that doctrinally still clings to traditional ideas on objectivity and hierarchy, complexity is a potentially rich source that also connects to the contemporary debate on reflexive and critical intelligence studies that relativize such traditional linear ideas in intelligence.⁸ To contribute to this, the article proceeds in five parts. First, this article compares present complexity perspectives in intelligence and the broader military sciences. Subsequently, it sketches the implications of increased complexity for military intelligence as a process. After that, two case studies each highlight dimensions of complexity that characterize military intelligence in practice. An analysis of Dutch troop contributions to the North Atlantic Treaty Organization (NATO)'s International Security Assistance Force (ISAF) in Afghanistan demonstrates the impact of (political) *context and task* on military intelligence sensemaking. Next, the development of United Nations (UN) military peacekeeping-intelligence is discussed, further illustrating the need for *a holistic approach, organizational flexibility*, and informal *collaboration* at the working level. To some extent, the first emphasizes a vertical dimension and the latter a horizontal, although in both cases the two dimensions are a factor. Contrary to its supposed closed nature and objectivity, these cases will illustrate how open military intelligence is to outside influence. The fifth and last part will discuss the current status of complexity thinking in military intelligence and present suggestions for further research.

COMPLEXITY, INTELLIGENCE, AND MILITARY SCIENCES

Intelligence Studies remains an isolated field that often leaves relevant knowledge from other domains and disciplines untouched.⁹ An exception is intelligence sensemaking. David T. Moore and others have long advocated that this is a useful way to conceptualize contemporary analytic processes.¹⁰ In general, sensemaking entails the social practice in which groups of people define and give meaning to their environment.¹¹ They create and adapt their views—while also taking generic ideas and frames about a particular subject area into account—such as existing maps, identities, and particular versions of events or political ideas. Important sensemaking traits are a reluctance to simplify, deference to expertise rather than hierarchy, and enactment (reflecting on activities or military operations while performing them).¹² Sensemaking can be hampered by barriers such as unwieldy organizational means or infrastructure, cultural constraints, projection of worldviews, or “unsavory” political considerations.¹³ As an approach focused on synthesis, sensemaking accommodates the complexity and offers an alternative to traditional analysis or Newtonian reductionism.

The call by Moore et al. for a conceptual transformation to facilitate twenty-first-century intelligence is particularly relevant when considering military intelligence. Intelligence sensemaking promotes active self-reflection of the intelligence professional regarding mental frames and established thinking patterns. Reflexivity increases self-awareness of how contextual influences such as (inter)national political stakes, socialized assumptions, or self-image can shape methodological preferences, routines, or procedures—or how this can create a reciprocal or self-fulfilling dynamic of threat description and creation.¹⁴ An antidote for this lies in stimulating creative experimentation, and adopting perspectivism and analytic diversity. Reflexivity is about realizing that intelligence and the intelligence problem are part of the same complex system and influence each other. In a military context, this is not always logical, as traditionally it’s the task of the intelligence section only to assess the environment, while influencing it is the task of other staff sections. In addition, secrecy limits the internal and external distribution of intelligence, also hampering more cooperative (military intelligence) sensemaking with outsiders.

Apart from some exceptions, in general, intelligence studies did miss the “complexity turn” in social science more than twenty years ago. This academic turn was the adoption of ideas and methods of complexity science in social research.¹⁵ Attention in intelligence studies for complexity has remained marginal.¹⁶ Compounding this for the military field is the small representation of military intelligence within Intelligence Studies. Consequently, complex approaches to military intelligence specifically are few and far between.¹⁷ This is problematic given “the complex environment in

which defense organizations of today operate only make[s] the need for a strong body of knowledge more urgent.”¹⁸ In contrast, in broader military sciences, complexity is often used to study war and warfare.¹⁹

Complexity is not only used as a purely theoretical perspective to study war and warfare. Osinga and Lawson both show complexity thinking is also part of several fundamental aspects of modern military doctrine and practice. Several strategists, among whom are John Warden and John Boyd, formulated stratagems based on complexity thinking. Among others, this led to Boyd’s famous OODA loop (Observe, Orient, Decide, Act), which represents the decisionmaking process in war. Also influenced by complexity are concepts such as maneuver warfare, mission command, swarming, network-centric warfare (NCW) and command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR).²⁰ Next to these more implicit applications of complexity thinking, other doctrinal publications, such as some current U.S. and Australian doctrines, use terminology and language derived from complexity science.²¹

A more recent example of the application of complexity is military design thinking.²² As opposed to traditional linear thinking, military design thinking “as an emerging practice evokes eclectic combinations of philosophy, social sciences, complexity theory, and often improvised, unscripted approaches in a tailored or ‘one of a kind’ practice.”²³ It rejects standard operating procedures and formats for mindful attention to detail in an iterative manner to adapt to changes in the problem (environment). Design thinking sees military operational art as making sense of complexity by assuming multiple perspectives (paradigms) on a problem, including reflexive examination of how the problem is framed and formulated.²⁴

The adoption of complexity thinking into military theory and practice does not mean armed forces are turning into complex systems themselves. Kerbel argues that doctrine often uses complexity terminology far removed from its meaning in complexity science.²⁵ Furthermore, the bureaucracy and rigid hierarchy in many military and intelligence cultures and organizations still prevail over a decentralized structure that enables fast adaptation. Another argument against the full adoption of complexity is the assumption in much present military thinking that, through technology, information superiority brings victory. With data overload as the only problem, intelligence is seen as reliable, clear, and on-call. Therefore, many military concepts, such as NCW and C4ISR, cannot be considered fully complex, as these do not question the idea of the objectivity of information or the feasibility of accurately measuring social reality—as is common in reflexive approaches within complexity science.²⁶

The implications for military intelligence in missing the military complexity turn are profound. Regarding intelligence as reliable, transparent, and on-call

means the boundary with target acquisition becomes blurred. Intelligence is less concerned with uncertainty and the time-consuming process of understanding the operational environment but instead focuses only on finding targets regardless of context.²⁷ Vivid examples of this are operations Desert Storm and Iraqi Freedom, where intelligence's most important job was to detect and track targets and shorten the sensor-to-shooter time. Notwithstanding these battlefield successes, another implication of missing the complexity turn for intelligence became clear in the postinvasion insurgency after Iraqi Freedom and in the war in Afghanistan. The overreliance on technical collection led to an apparent lack of human intelligence sources. Furthermore, war is a social phenomenon and the culture, language, and religion of the people of Iraq and Afghanistan cannot be understood through technical collection alone.²⁸ The counterinsurgencies in both countries had to adopt a population-centric approach instead of only focusing on combating "insurgents." In an atmosphere of "war amongst the people" as Smith stated, and the *US Counterinsurgency Field Manual* echoed, intelligence did adapt some practices to attune to the complexity of counterinsurgency.²⁹ One notable example was the adjustment of the intelligence preparation of the battlefield process. "Battlefield" was replaced with "environment" to encompass the multitude of actors and factors in a population-centric campaign instead of an enemy-centric focus. Another example is the U.S. Human Terrain System (HTS), which was meant to address the social and cultural complexities of the environmental system. Anthropologists and other social scientists augmented deployed units to attune them more to their local environment.

While complexity in intelligence is not entirely new, it pales when compared to broader military sciences. Formulating broadly acknowledged stratagems based on complexity—let alone explicit and broad incorporation into doctrine—is still far away for intelligence. Through the doctrinal conceptions of NCW and C4ISR complexity is part of the Revolution in Military Affairs (RMA). Contrarily, a Revolution in Intelligence Affairs (RIA) as to mirror a RMA, including its complexity thinking, never was a popular topic.³⁰ Adding to the problem is that the RIA "focuses mainly on the strategic level of intelligence and the restructuring of national intelligence services. By contrast, there seems to be only a limited academic debate [...] concerning the intelligence process at the operational and tactical levels."³¹ However, as discussed later, while dominant Western doctrine might formally not reflect a full complexity turn, (informal) military intelligence practices during deployments do show more of this.

IMPLICATIONS FOR THE MILITARY INTELLIGENCE PROCESS

To examine the implications of complexity on the intelligence process at the operational and tactical levels, this part reviews the intelligence cycle as the doctrinal process of military intelligence. The advantage of the cycle is that it enables a shared understanding of what constitutes an intelligence requirement, collected data, information, and intelligence products. It facilitates international cooperation, for example, within NATO. Despite this advantage, a growing body of literature points to flaws in the model.³² The main topic of critique is the cyclical and sequential appearance of the cycle. In reality, the order of the steps is not always followed and there are many internal feedback loops. Therefore, the cycle is better described as nonlinear operating “computer software than the prevailing metaphor of an electromechanical feedback system.”³³ However, the literature mostly sees flaws in the intelligence cycle as malfunctions of components or variables like unclear questions, availability of information/sensors, or absence of correcting feedback loops. This blocks the perspective that the cycle as a whole is becoming obsolete.³⁴ The overarching problem is that the cycle as a standardization model “assumes the process works the same way for all objectives, regardless of complexity and cognitive demands.”³⁵ Several authors draw on complexity to look into different perceptions of intelligence problems and their methods. One well-known example is Treverton’s typology of intelligence problem-types (puzzles, mysteries, complexities).³⁶ Gill and Phythian use complexity to argue intelligence is better depicted as a web than a cycle.³⁷ A more recent example is Menkveld who examines how intelligence problems vary in complexity and the consequences this has on the certainty of assessments that can be provided.³⁸ An aspect less emphasized by Menkveld is intelligence’s situatedness and the need for self-awareness.

The cycle—as the archetypical model for military intelligence—begs the question of where, or if, there is a capability present in it to adapt to different problems reflexively. The intelligence cycle is a cybernetic feedback loop.³⁹ This means it’s seen as closed, with a focus on control through an established feedback process, and behavior that is “regular, or determinate, or reproducible.”⁴⁰ “The [intelligence] cycle is a metaphor of a cybernetic system, in which a control unit “senses” feedback and is programmed to make constant small adjustments of output. [...] In the metaphor of the conventional military cycle, the users are the control unit, constantly adapting their stated needs to optimize their intelligence inputs.”⁴¹

More specifically, in the traditional cycle the dissemination of intelligence to the initiating military commander starts the cybernetic feedback. It adjusts the initial intelligence requirements of military commanders, or controllers, leading to new requirements and starting the process over. This is where the only adjustment takes place; with a new direction by intelligence users. Only the

direction input changes but any flexibility in the rest of the cycle is excluded. Whatever is the intelligence problem, from tactical combat to strategic complexities, there is minimal possibility to adapt to the issue at hand. This focus on a process of control and feedback is mirrored in the prevalence of the topic of producer–consumer relations in much of the intelligence literature. While the intelligence cycle has remained basically the same for over 70 years, cybernetic ideas on control and organization have evolved into complexity science that offers a broader range of thinking about systems.

To better understand the cybernetic and complexity themes, Boyd's OODA loop is informative. When discussing the RMA or NCW the OODA loop is often invoked.⁴² In a truly military interpretation, the RMA/NCW idea is to use modern technology to speed up the OODA loop. Going through the loop faster than the opponent is to be victorious. While this is partly true, especially for the tactical level, Boyd also argued that it is about processing the evolving conflict situation and adapting to it faster than the opponent.⁴³ This misconception of speed over adaptation reduces the OODA loop to a cybernetic decision cycle that passes info. However, Boyd stated information not only passes the system but also shapes it.⁴⁴

The OODA loop's focus of adaptation (next to speed) is in contrast with the observation that the cybernetic intelligence cycle instead is severely limited in its ability to adapt; it only passes intelligence but is not shaped by it. The cycle offers a simple solution to often complex problems. To improve the military intelligence process it would benefit the profession to take the complexity turn further and expose itself to ideas beyond cybernetic feedback in closed systems. This is not only a (purely) theoretical argument, as the following case studies demonstrate.

NATO AND (INTER)NATIONAL PERSPECTIVES ON AFGHANISTAN

The specific hierarchical and bureaucratic organization and culture in the military can limit the bandwidth for intelligence to indicate and assess.⁴⁵ In case of multinational out of area deployments there is also an international political mandate that specifies a context and task. For example, an international military presence is required to establish a safe and secure environment and ensure freedom of movement. This implies there are certain adversarial elements, and the identification of such opposing groups is (at least partially) a political act. Contributing nations often also impose additional restrictions and caveats to military operations. Particularly for smaller participating countries (international) political factors and framing can have a great impact and become barriers for sensemaking.

In Afghanistan, Dutch military units contributed to various ISAF missions. One of these was Task Force Uruzgan (TFU), with a mission to “promote stability and security by increasing the support of the local

population for the Afghan authorities and eroding the support for the Taliban and related groups.”⁴⁶ Instrumental to this was the adoption in public reporting by the Netherlands’ Defense Intelligence and Security Service and letters from government to parliament in 2005 of the U.S. frame “Opposing Militant Forces” (OMF).⁴⁷ It was as a way of generically categorizing any actors unaligned with the ISAF/TFU mission aims. It mirrored the United States “with us or against us” logic of the Global War on Terror, which had also equated the Taliban to al-Qaeda.

However, societal and political debate in the Netherlands also resulted in the need for politicians to explain publicly the TFU was to engage in reconstruction, not combat.⁴⁸ In addition, it was determined that certain tribal leaders and *de facto* power brokers with whom U.S. special operations forces chose to work were off limits for the TFU. By this, Dutch parliamentarians sought to ensure that the actors with whom Dutch soldiers worked had “clean hands,” maintaining a high ethical standard. In practice, the resulting power dynamic counterproductively caused local tribal relationships to be framed in terms of Taliban or OMF. It even drove several tribal leaders actually to seek the support of the Taliban.⁴⁹ Over time, local experiences and tribal-informed intelligence analysis produced a more fine-grained understanding for successive TFU rotations. Yet it also proved difficult for some TFU commanders, staff, and military intelligence units to shift from the initial enemy-centric to a population-centric focus.⁵⁰ Another complicating factor for intelligence was the way ISAF was organized along provincial lines; for example, dividing sensemaking on developments along the Helmand river between TFU and Task Force Helmand.⁵¹ Just as the Dutch in Uruzgan, the British troops in neighboring Helmand province were also confronted with a complex reality on the ground that differed from the British political aims and strategic narrative.⁵² In particular, the eradication of poppy fields was dangerously insensitive to local dynamics and socioeconomic needs, alienating actors by “pressing buttons in the blind.”⁵³

For another Dutch ISAF contribution—the police-training mission in Kunduz province—a hard-won consensus on political support was reached among a majority in the Dutch parliament. However, as a condition, graduates needed to be tracked to make sure they would not engage in fighting activities or be deployed outside the province. The demand proved unrealistic in the Afghan context where police and military roles cannot be strictly separated and tracking people is very challenging.⁵⁴ The official mission evaluation also concluded that the primary (Dutch political) need to contribute militarily to ISAF after ending the TFU mission overshadowed how the Kunduz mission would contribute in the long term to the police and justice system.⁵⁵ More generally speaking, international political considerations for contributing troops, such as alliance diplomacy or

reputation building by “having a flag on the map,” can shift focus from conducting effective operations and collecting relevant military intelligence to minimizing casualties. Broader interests, like the future of an alliance, can also influence what can or cannot be said or recognized as relevant.

Hence, the (international) political context can have a significant impact on military intelligence (collection and analysis) processes, dissemination, and receptivity—especially given the hierarchical and bureaucratic culture in the military. In other words, barriers to sensemaking, such as the projection of worldviews, political demands or organizational inflexibility, can create a vertical misalignment between the political reality, military intelligence, and the operational experience and complexity on the ground. Highlighting this contextual nature is by no means an attempt to oversimplify. Over the years, sensemaking of, and ISAF cooperation with, Afghan institutions and local tribes and stakeholders increased. A broader 3D-approach (defense, diplomacy, and development) was advocated by NATO members such as the Dutch and adopted by the TFU and other ISAF contingents.

The development was aided by new thinking on organizational designs, and concepts for intelligence sensemaking and understanding. A 2010 report on “fixing” intelligence illustrates the rediscovery of more population-centric counterinsurgency (COIN) principles and wider focus for military operations.⁵⁶ The proposed “blueprint” for intelligence included traveling teams of journalist-type analysts and information brokers working in district-level Stability Operations Information Centers (SOIC) to provide military units, local government, and nongovernmental partners with a comprehensive understanding. Some have criticized how such a horizontal reconceptualization goes beyond the traditional nature, duty, organization, and capabilities of military intelligence—or how it should not all be about adapting and “fixing intel.”⁵⁷ Moreover, the networked, collaborative, and more informal horizontal “adhocracy” called for requires a significant investment and transformation, while military intelligence organizations do not only support COIN operations. Yet, arguably, the complex environment of contemporary conflict (and warfare) equally calls for an integral approach and reflexive awareness of vertical influences on military intelligence. Thus, a revision of traditional bureaucratic Cold War conceptions of subordinate military intelligence machinery and (closed) processes is in order—especially in the case of NATO out of area and other international stability and peacekeeping operations.

THE UN AND FLEXIBLE COLLABORATIVE “INTELLIGENCE” PRACTICES

In contrast to military bureaucracy and hierarchy, in practice military intelligence sensemaking can require informal collaboration and ad hoc organization to facilitate creative experimentation, a deference to expertise

and reluctance to simplify. Also, formal doctrinal ideas of what constitutes intelligence versus information can be diffuse. Compared to NATO out of area operations, UN missions formally have a broader scope. Often UN military units are merely one of the components for a head of mission to use. Military information (or intelligence) hence ties to multiple domains. An acronym often used in this regard is X-PMESII; promoting a multidomain approach involving political, military, economic, social, information and infrastructure perspectives. Yet the ISAF case has also demonstrated how NATO has shifted toward a more holistic approach.

Within the UN, the term “intelligence” has long been regarded as a controversial “dirty word.”⁵⁸ It is associated with the secret collection, without permission or consent of those involved and with illegitimate covert action. There are clear legal and ethical limitations for UN peace operations and there lies great emphasis on transparency, objectivity, neutrality, and inclusivity as core criteria of the organization. This is also reflected in a long tradition of observer missions, such as the United Nations Interim Force In Lebanon (UNIFIL), the United Nations Truce Supervision Organization (UNTSO), and the United Nations Disengagement Observer Force (UNDOF) in the Middle East. Reactive registration and reporting has been (and sometimes perhaps still is) the primary activity for UN soldiers. Nevertheless, since the 1990s, the vital importance of information (or intelligence) processes for supporting UN military forces and more expansive missions has been increasingly discussed.⁵⁹ In UN evaluations of peacekeeping operations, it is explicitly stated how mission and military “information management” is merely a euphemism for “intelligence.”⁶⁰ Was the UN doing intelligence without saying so? In 2005, UN oversight reporting still concluded the military information (G2) branch “is usually reactive and heavily reliant on secondary information,” lacking “the concept or security permission” even to collect open-source intelligence to support missions.⁶¹ Yet, as of 2006—early during the United Nations Stabilization Mission in Haiti (MINUSTAH) that targeted criminal gangs—the concept of a Joint Mission Analysis Cell (JMAC) developed into the most important factor for the success of the mission, with a crucial role for informal pioneering.⁶²

The JMAC provided not only strategic briefings for the special representative to the UN secretary-general but also highly timely target packages on gang leaders and locations. Networks of informants and an array of (aerial) imagery provided essential input. The added value provided during the mission made the military force commander and police commissioner decide to dedicate more personnel to the JMAC. Reporting was also informally discussed with various embassies in Haiti and related national intelligence services. There were no formal arrangements for this.

Classification of the information and regulation of how to store it securely was rudimentary. Nevertheless, opportunities for informal horizontal collaborative practices, the specificity of the threat actors (criminal gangs) and operational successes against them had created a specific information (intelligence) process central to the mission.

Recognizing traditional negative perceptions of “intelligence” within the UN, yet also having an eye for increasing complexity, scholar and former chief JMAC for UNIFIL Renaud Theunens has proposed for the UN to adopt the broad concept of “understanding”: “the perception and interpretation of a particular situation to provide context, insight and foresight required for effective decision making.”⁶³ As this definition mirrors NATO and British doctrine on intelligence sensemaking, one could again wonder to what extent avoiding the term intelligence is still mostly a matter of semantics. Since 2015, the momentum has grown within the UN to develop formally an intelligence framework to deal with and counter this. A driver for this was discussions in the Special Committee on Peace-Keeping Operations on the complex challenges, evolving threats and increasing numbers of UN troops and civilian casualties.

Indeed, over the last five years, the UN DPKO has developed a Peacekeeping Intelligence⁶⁴ Policy, Military Peacekeeping-Intelligence (MPKI) handbook, and train the trainer course.⁶⁵ The content of the handbook and course reflects broadly accepted conceptual and operational frameworks that are similar to content taught in intelligence courses at NATO’s school in Oberammergau: the intelligence cycle and functions, analytical tools, formats for reporting, information requirement management, and collection/acquisition management.⁶⁶ It is recognized in the UN curriculum how MPKI’s analysis of the operational environment is quite similar to both NATO’s intelligence preparation of the battlefield and intelligence preparation of the operational environment.⁶⁷ Both serve to inform the military decisionmaking process. Yet instructors are told not to bring this comparison up as it might confuse students and emphasize how “in UN peacekeeping operations non-military (‘civil’) factors—especially human factors and factors impacting human life and activities—are the focus.”⁶⁸ The commentary underemphasizes how NATO members have widened their scope from enemy-centric approaches and recognize a broad human terrain and complex view of security. Theunens also draws this connection as he compares the concept of JMACs with the SOICs that were eventually established in Afghanistan.⁶⁹ It illustrates the apparent political or bureaucratic need within the UN for clearly marking how policies and documentation on peacekeeping-intelligence differ from NATO. A telling example is also how “peacekeeping intelligence” was subtly changed to “peacekeeping-intelligence” to distinguish it as much as possible from (national) intelligence.⁷⁰

In reality, experiences with NATO inspired intelligence procedures and practices adopted by a small group of troop-contributing countries in the MINUSMA mission in Mali eventually informed working-group members drafting the MPKI documents.⁷¹ This started with the creation of the experimental ASIFU, a capability offered to the UN by countries such as the Netherlands. This can be viewed partly as a vertical influence on the development of military intelligence. Unprecedented for the UN were the intelligence, surveillance, and reconnaissance capabilities that ASIFU had at its disposal. Open-source information was an important resource, as were human, imagery, and signals intelligence. The ASIFU became the first stand-alone unit in a UN mission's military structure dedicated to collecting and analyzing information.

However, sensemaking, sharing, and cooperation were far from optimal due to a multitude of factors. There were mandate restrictions, a shortage of means, limitations to information infrastructure security, and cultural and organizational divides between Western and African troops in the United Nations Multidimensional Integrated Stabilization Mission in Mali (MINUSMA).⁷² For example, ASIFU was tasked to focus strictly on Mali, while the complex situation demanded a regional analytic approach. High-end intelligence collection means could not be used or their information disseminated. For instance, the Apache helicopter camera imagery also contained highly classified data. Western human intelligence and civil-military interaction teams needed to cover immense areas and experienced local language and cultural barriers. Servicemen initiatives to buy commercial cameras partially mitigated material problems, although secrecy and cultural differences still prevented closer cooperation between Western and African Union MINUSMA units. Eventually, ASIFU personnel did liaise with and sought to train other MINUSMA entities and civilian organizations in Mali. ASIFU analysts also started to liaise informally with French (non-MINUSMA) troops active in the region.

Because the ASIFU participating countries insisted on using NATO doctrine and standards, other mission components and (non-NATO) troop-contributing countries still perceived ASIFU as a foreign element to the mission.⁷³ ASIFU's separateness was informed by Western pragmatism and the desire for visibility of the contribution.⁷⁴ Its detachment and secrecy were deemed by some as an essential organizational flaw resulting in intelligence stovepipes, inefficiency, and competition over duplications in tasking.⁷⁵ Moreover, the cultural divide between Western European "skiing nations" and African troops was even characterized by some in terms of race.⁷⁶ The separation was eventually resolved as ASIFU personnel were colocated with the regular MINUSMA intelligence section U2, and JMAC in 2017, recruiting for ASIFU was downsized, and expertise, experience, and practices were shared.

In hindsight, following NATO Concept Development & Experimentation Policy, ASIFU has been viewed as an experiment aimed at advancing innovation of the broader mission intelligence system.⁷⁷ The pragmatic argumentation of nation contribution visibility or resistance among UN officials of European nations trying to “NATO-nize” the UN toward counterterrorism seems to mitigate this view.⁷⁸ Still, once created, horizontal informal collaboration and other practices emerged, influencing wider intelligence innovation in the UN.

In general, for the development of UN military peacekeeping-intelligence since 2006, organizational flexibility and informal collaboration at the working level have shown to be crucial factors. As to the broader or holistic focus and practical methodologies or doctrines of “military intelligence,” the similarities between international NATO and UN missions are increasing. In practice, bureaucracy and the vast complexity—in terms of political mandate, diversity of contributors, organizational structure, and operational environment—are important factors (or potential barriers) influencing the nature, value, and impact of military (peacekeeping-)intelligence. Improving military intelligence sensemaking thus calls for flexible and continuous reflexive examination among working-level professionals. However, despite increasing horizontal cooperation with other (civilian) UN mission elements, conditions of secrecy limit military intelligence practitioners to exchange ideas with nonintelligence outsiders such as scientists or nongovernmental organizations that also inhabit the broader mission-related complex security ecosystem.

CONCLUSION

From a complexity science perspective, both cases illustrated the need for understanding and mindfully managing vertical and horizontal dimensions or influences on military intelligence. Apart from a systems openness, its boundaries are reconsidered as this depends on perspective, circumstances, or context. However, in military doctrine and decisionmaking—despite the influence of complex thinking—systems are still predominantly characterized as closed. This goes even more for military intelligence, which should observe the operational environment objectively without influencing it, rather than recognizing constant interaction.

The traditional intelligence cycle, still doctrinally the defining process of military intelligence, keeps intelligence firmly placed in the cybernetic age. Critiques or alternatives to the cycle employ almost no perspectives focused on issues of complexity and adaptation. This is compounded by the almost complete absence of intelligence in academic examinations of the complexity of war and warfare. To improve the military intelligence process, its capacity to learn and adapt can be examined more fully. The first step should be to end the relatively isolated discussion of military intelligence and connect with

other fields that apply complexity science and thinking, beginning with military sciences. Especially design thinking is appropriate because it enables military intelligence to incorporate an explicit complexity foundation in thinking about new organizational forms, facilitating consideration of multiple perspectives on a problem.

Several ideas in intelligence studies form a good starting point for expanding complexity approaches in military intelligence. Treverton's typology of puzzles, mysteries, and complexities provides a possible inroad to more apparent concepts for designing an intelligence process attuned to complexities. A more extensive approach than the current literature on complexity and (military) intelligence would further emphasize reflexivity. Coming back to Treverton's typology, instead of separate categories, the puzzles, mysteries, and complexities should be seen more as a matryoshka doll: "puzzles are workable simplifications but never excuse analysts from reflexivity."⁷⁹ Closely related are ideas on intelligence sensemaking (such as the reluctance to simplify, a deference to expertise rather than hierarchy, and enactment).⁸⁰

As the case studies demonstrate, reflexive sensemaking can be facilitated by reducing the impact of potential political, cultural, or bureaucratic barriers. Worldviews or political demands can create a vertical misalignment between military intelligence and operational experiences. Simultaneously, creative experimentation and innovative organization should be enabled, valuing expertise and adopting diverse perspectives also to increase self-awareness. Horizontal collaboration initiatives and informal pioneering can prove fundamental for military intelligence to function. Avoiding and nuancing (political) categorizations—such as Opposing Militant Forces in Afghanistan—while actively networking across hierarchical and mission organizational divides, improves understanding and reduces unwanted counterproductive effects on the ground. A reevaluation of the nature and value of (open source) information and "intelligence" is in order, including the function (or limitations) of secrecy. The impact on the sensemaking of formal bureaucratic procedures and concerns, such as negative perceptions or organizational divides within the UN, should be minimized. Tellingly, the cases have illustrated the difference between formal ideas (theory, doctrine), and (eventual) organizational flexibility and informal practices (ad hoc, emergent) as an important driver for change.

REFERENCES

- ¹ Brian Cole, "Clausewitz's Wondrous yet Paradoxical Trinity: The Nature of War as a Complex Adaptive System," *Joint Force Quarterly*, Vol. 96, No. 1 (2020); André Simonyi, "We Need to Rethink Reality: The War Nexus and Complexity," *Journal of Peace and War Studies* International Symposium of

- Military Academies Special Edition (2021); Samuel Solvit, *Dimensions of War: Understanding War as a Complex Adaptive System* (Paris: L'Harmattan, 2012).
- ² Dale C. Eikmeier, "Simplicity: A Tool for Working with Complexity and Chaos," *Joint Force Quarterly: JFQ*, No. 92 (2019); Harri Raisio, Alisa Puustinen, and Jaakko Jäntti, "'The Security Environment Has Always Been Complex!': The Views of Finnish Military Officers on Complexity," *Defence Studies*, Vol. 20, No. 4 (2020).
 - ³ Clay Mountcastle, "The Myth of the New Complexity," *Military Review*, Vol. 96, No. 2 (2016).
 - ⁴ Melanie Mitchell, *Complexity: A Guided Tour* (New York: Oxford University Press, 2009), p. 13.
 - ⁵ Scott E. Page, *Diversity and Complexity* (Princeton, NJ: Princeton University Press, 2011), p. 25.
 - ⁶ Fritjof Capra, *The Web of Life: A New Synthesis of Mind and Matter* (London: Flamingo, 1997), pp. 19–20.
 - ⁷ S. Rietjens, "Intelligence in Defence Organizations: A Tour De Force," *Intelligence and National Security*, Vol. 35, No. 5 (2020), p. 717.
 - ⁸ Hamilton Bean, Peter de Werd, and Cristina Ivan, "Critical Intelligence Studies: Introduction to the Special Issue," *Intelligence and National Security*, Vol. 36, No. 4 (2021), pp. 467–475; Bram Spoor and Maarten Rothman, "On the Critical Utility of Complexity Theory in Intelligence Studies," *Intelligence and National Security*, Vol. 36, No. 4 (2021), pp. 555–568.
 - ⁹ Stephen Coulthart, Michael Landon-Murray, and Damien Van Puyvelde, "Introduction: A Pluralistic Approach to Intelligence Scholarship," in *Researching National Security Intelligence: Multidisciplinary Approaches*, edited by Stephen Coulthart, Michael Landon-Murray, and Damien Van Puyvelde (Washington, DC: Georgetown University Press, 2019), p. 3.
 - ¹⁰ David T. Moore, Elizabeth Moore, Seth Cantey, and Robert R. Hoffman, "Sensemaking for 21st Century Intelligence," *Journal of Intelligence History*, Vol. 20, No. 1 (2021), pp. 45–59.
 - ¹¹ Karl E. Weick, *Sensemaking in Organizations* (Thousand Oaks, CA: Sage, 2009).
 - ¹² Karl E. Weick and Kathleen M. Sutcliffe, *Managing the Unexpected: Sustained Performance in a Complex World* (3rd ed.) (Hoboken, NJ: Wiley, 2015).
 - ¹³ Ibid.
 - ¹⁴ Peter de Werd, "Reflexive Intelligence and Converging Knowledge Regimes," *Intelligence and National Security*, Vol. 36, No. 4 (2021), pp. 512–526.
 - ¹⁵ Pete Barbrook-Johnson and Jayne Carrick, "Combining Complexity-Framed Research Methods for Social Research," *International Journal of Social Research Methodology*, Vol. 25, No. 6 (2021), p. 835; John Urry, "The Complexity Turn," *Theory, Culture & Society*, Vol. 22, No. 5 (2005).
 - ¹⁶ Sarah Miller Beebe and George S. Beebe, "Understanding the Non-Linear Event: A Framework for Complex Systems Analysis," *International Journal of Intelligence and CounterIntelligence*, Vol. 25, No. 3 (2012), p. 510; Bram Spoor and Maarten Rothman, "On the Critical Utility of Complexity Theory in Intelligence Studies," *Intelligence and National Security*, Vol. 36, No. 4 (2021), p. 560.

- ¹⁷ For example, Eddie J. Brown and Tomas D. Pike, "Complex Intelligence Preparation of the Battlefield," (paper presented at the International Studies Association Conference (Baltimore, Maryland, 2017); see also: Thomas D. Pike and Eddie J. Brown, "Complex Ipb," *Small Wars Journal*, <https://smallwarsjournal.com/jrnl/art/complex-ipb>; Donald P. Carter, "Clouds or Clocks: The Limitations of Intelligence Preparation of the Battlefield in a Complex World," *Military Review*, Vol. 96, No. 2 (2016).
- ¹⁸ Rietjens, "Intelligence in Defence Organizations," p. 718.
- ¹⁹ For example, Yaneer Bar-Yam, "Complexity of Military Conflict: Multiscale Complex Systems Analysis of Littoral Warfare" (New England Complex Systems Institute, 2003); Andrew Ilachinski, "Land Warfare and Complexity, Part II: An Assessment of the Applicability of Nonlinear Dynamics and Complex Systems Theory to the Study of Land Warfare" (Alexandria, VA: Center for Naval Analyses 1996); James Moffat, *Complexity Theory and Network Centric Warfare* (Washington, DC: CCRP Publication Series, 2003); Solvit, *Dimensions of War*; Alan D. Beyerchen, "Clausewitz and the Non-Linear Nature of Warfare: Systems of Organized Complexity," in *Clausewitz in the Twenty-First Century*, edited by Hew Strachan and Andreas Herberg-Rothe (Oxford: Oxford University Press, 2007).
- ²⁰ Sean T. Lawson, *Nonlinear Science and Warfare: Chaos, Complexity and the U.S. Military in the Information Age* (Milton Park, Abingdon, Oxon: Routledge, 2014); Frans P. B. Osinga, *Science, Strategy and War: The Strategic Theory of John Boyd* (Routledge, 2007), pp. 115–121; "Organizing for Insecurity and Chaos: Resilience and Modern Military Theory," in *Netherlands Annual Review of Military Studies 2016: Organizing for Safety and Security in Military Organizations*, edited by Robert Beeres et al. (The Hague: T.M.C. Asser Press, 2016).
- ²¹ For example, U.S. Army Training and Doctrine Command, "The U.S. Army Operating Concept: Win in a Complex World," edited by U.S. Army (Fort Eustis, VA: United States Army Headquarters, 2014); Head Modernisation and Strategic Planning—Army and Australian Army Headquarters, "Army's Future Land Operating Concept: Adaptive Campaigning" (Canberra 2009).
- ²² Cara Wrigley, Genevieve Mosely, and Michael Mosely, "Defining Military Design Thinking: An Extensive, Critical Literature Review," *She Ji: The Journal of Design, Economics, and Innovation*, Vol. 7, No. 1 (2021).
- ²³ Ben Zweibelson, "An Awkward Tango: Pairing Traditional Military Planning to Design and Why It Currently Fails to Work," *Journal of Military and Strategic Studies*, Vol. 16, No. 1 (2015), p. 12.
- ²⁴ "Design' Goes Dutch: Army Considerations for Unconventional Planning and Sensemaking," *Atlantisch perspectief*, Vol. 39, No. 6 (2015).
- ²⁵ Josh Kerbel, "The Us Talks a Lot About Strategic Complexity. Too Bad It's Mostly Just Talk," <https://www.defenseone.com/ideas/2021/03/us-talks-lot-about-strategic-complexity-too-bad-its-mostly-just-talk/172549/>
- ²⁶ Antoine J. Bousquet, *The Scientific Way of Warfare: Order and Chaos on the Battlefields of Modernity*, Critical War Studies (London: Hurst & Company,

- 2009), pp. 215–235; John Ferris, “Netcentric Warfare, C4isr and Information Operations: Towards a Revolution in Military Intelligence?,” *Intelligence and National Security*, Vol. 19, No. 2 (2004), p. 201.
- 27 Ferris, “Netcentric Warfare, C4isr and Information Operations,” p. 204.
- 28 Kjeld Galster, *The Face of the Foe: Pitfalls and Perspectives of Military Intelligence* (Kingston, ON: Legacy Book Press, 2015), pp. 176–185.
- 29 Rupert Smith, *The Utility of Force: The Art of War in the Modern World* (New York: Vintage, 2008).
- 30 For example, Deborah G. Barger, “Toward a Revolution in Intelligence Affairs” (Santa Monica, CA: RAND Corporation, 2005); William J. Lahnenman, *Keeping U.S. Intelligence Effective: The Need for a Revolution in Intelligence Affairs* (Lanham, MD: Scarecrow Press, 2011); William Nolte, “Keeping Pace with the Revolution in Military Affairs,” *Studies in Intelligence*, Vol. 48, No. 1 (2004).
- 31 Minne Boelens, “The Revolution in Intelligence Affairs: Problem Solved?,” in *Perspectives on Military Intelligence from the First World War to Mali: Between Learning and Law*, edited by Floribert Baudet et al. (The Hague, The Netherlands: T.M.C. Asser Press, 2017), p. 121.
- 32 For example, Arthur S. Hulnick, “What’s Wrong with the Intelligence Cycle,” *Intelligence and National Security*, Vol. 21, No. 6 (2006); Mark Phythian (ed.), *Understanding the Intelligence Cycle*, Studies in Intelligence (Milton Park, Abingdon, Oxon: Routledge, 2013).
- 33 Philip H. J. Davies, Kristian Gustafson, and Ian Rigden, “The Intelligence Cycle Is Dead, Long Live the Intelligence Cycle: Rethinking Intelligence Fundamentals for a New Intelligence Doctrine,” in *Understanding the Intelligence Cycle*, edited by Mark Phythian (Milton Park, Abingdon, Oxon: Routledge, 2013), p. 64.
- 34 Wilhelm Agrell, “Intelligence Analysis after the Cold War,” in *National Intelligence Systems: Current Research and Future Prospects*, edited by Gregory F. Treverton and Wilhelm Agrell (New York: Cambridge University Press, 2009), p. 108.
- 35 Judith Meister Johnston and Rob Johnston, “Testing the Intelligence Cycle through Systems Modeling and Simulation,” in *Analytic Culture in the US Intelligence Community: An Ethnographic Study* (Washington, DC: Center for the Study of Intelligence, CIA, 2005), p. 50.
- 36 Wilhelm Agrell and Gregory F. Treverton, *National Intelligence and Science: Beyond the Great Divide in Analysis and Policy* (Oxford and New York: Oxford University Press, 2015), pp. 32–35.
- 37 Peter Gill and Mark Phythian, “From Intelligence Cycle to Web of Intelligence: Complexity and the Conceptualisation of Intelligence,” in *Understanding the Intelligence Cycle*, edited by Mark Phythian (Milton Park, Abingdon, Oxon: Routledge, 2013).
- 38 Christiaan Menkveld, “Understanding the Complexity of Intelligence Problems,” *Intelligence and National Security*, Vol. 36, No. 5 (2021), pp. 621–641.

- ³⁹ Davies, Gustafson, and Rigden, "The Intelligence Cycle Is Dead, Long Live the Intelligence Cycle," p. 61.
- ⁴⁰ W. Ross Ashby, *An Introduction to Cybernetics*, 4th ed. (London: Chapman & Hall, 1961), p. 1.
- ⁴¹ Michael Herman, *Intelligence Power in Peace and War* (Cambridge: Cambridge University Press, 1996), p. 293; See also: David Omand, "The Cycle of Intelligence," in *Routledge Companion to Intelligence Studies*, edited by Robert Dover, Michael S. Goodman, and Claudia Hillebrand (Abingdon, Oxfordshire: Routledge, 2015), p. 59.
- ⁴² Ferris, "Netcentric Warfare, C4isr and Information Operations," p. 201.
- ⁴³ Osinga, *Science, Strategy and War*, pp. 235–239.
- ⁴⁴ Bousquet, *The Scientific Way of Warfare*, p. 221.
- ⁴⁵ J. L. Soeters, D. J. Winslow, and A. Weibull, "Military Culture," in *Handbook of the Sociology of the Military*, edited by G. Caforio (New York: Springer, 2006), pp. 237–254.
- ⁴⁶ George Dimitriu and Beatrice de Graaf, "The Dutch COIN Approach: Three Years in Uruzgan, 2006–2009," *Small Wars & Insurgencies*, Vol. 21, No. 3 (2010), p. 431.
- ⁴⁷ Anne Breuer, "Securitizing Uruzgan, Threat Identification and Formulation at the Various Levels during the Dutch Military Mission in Uruzgan (2006–2010)" (Master thesis, Radboud University, 2015).
- ⁴⁸ Dimitriu and de Graaf, "The Dutch COIN Approach," p. 432.
- ⁴⁹ Martijn Kitzen, "The Course of Co-Option: Co-Option of Local Power-Holders as a Tool for Obtaining Control over the Population in Counterinsurgency Campaigns in Weblike Societies" (Ph.D. thesis, University of Amsterdam, 2016).
- ⁵⁰ *Ibid.*, pp. 404, 435, 500.
- ⁵¹ Breuer, "Securitizing Uruzgan," pp. 53–54.
- ⁵² Simpson, *War from the Ground Up* (Oxford: Oxford University Press, 2012).
- ⁵³ *Ibid.*; David Kilcullen, *The Accidental Guerilla: Fighting Small Wars in the Midst of a Big One* (London: Hurst & Company, 2009).
- ⁵⁴ Dutch Ministry of Foreign Affairs, *Op zoek naar draagvlak: de geïntegreerde politietrainingsmissie in Kunduz, Afghanistan Post-missiebeoordeling* (2019).
- ⁵⁵ *Ibid.*
- ⁵⁶ Michael T. Flynn, Matt Pottinger, and Paul D. Batchelor, *Fixing Intel: A Blueprint for Making Intelligence Relevant in Afghanistan* (Washington, DC: Center for a New American Century, 2010).
- ⁵⁷ Leo Blanken and Justin Overbaugh, "Looking for Intel? ... or Looking for Answers? Reforming Military Intelligence for a Counterinsurgency Environment," *Intelligence and National Security*, Vol. 27, No. 4 (2012), pp. 559–575; John A. Gentry, "Intelligence Learning and Adaptation: Lessons from Counterinsurgency Wars," *Intelligence and National Security*, Vol. 25, No. 1 (2010), pp. 50–75.
- ⁵⁸ Interview with former chief of the All Sources Information Fusion Unit (ASIFU), 15 November 2021 and UN Department of Peacekeeping Operations (DPKO) official, 27 October 2021.

- ⁵⁹ For example, Hugh Smith, “Intelligence and UN Peacekeeping,” *Survival: Global Politics and Strategy*, Vol. 36, No. 3 (1994), pp. 174–192; Per Martin Norheim-Martinsen and Jacob Aasland Ravndal, “Towards Intelligence-Driven Peace Operations? The Evolution of UN and EU Intelligence Structures,” *International Peacekeeping*, Vol. 18, No. 4 (2011), pp. 454–467.
- ⁶⁰ United Nations General Assembly, Report of the Office of Internal Oversight Services on the Review of the Effectiveness of Military Information Management in United Nations Peacekeeping Operations, A/60/596, 16 November 2005, p. 5.
- ⁶¹ *Ibid.*, p. 12.
- ⁶² A. Walter Dorn, “Intelligence-Led Peacekeeping: The United Nations Stabilization Mission in Haiti (MINUSTAH), 2006–07,” *Intelligence and National Security*, Vol. 24, No. 6 (2009), pp. 805–835.
- ⁶³ NATO, Allied Joint Publication 3.4.2 (2014), p. 3-1, as in Reynaud Theunens, “Achieving Understanding in Contemporary UN Peace Operations: The Joint Mission Analysis Centre,” in *Perspectives on Military Intelligence from the First World War to Mali*, edited by F. Baudet, Eleni Braat, Jeoffrey van Woensel, and Aad Wever (The Hague: Asser Press, 2017), p. 175.
- ⁶⁴ Defined in 2017 as “the non-clandestine acquisition and processing of information by a mission within a directed mission intelligence cycle to meet requirements for decision-making and to inform operations related to the safe and effective implementation of the Security Council mandate.” This definition was removed in the 2019 revision of the document due to the controversy and lack of consensus among UN member states.
- ⁶⁵ United Nations, DPKO-DFS Policy On Peacekeeping Intelligence, 2 May 2017, *United Nations, Military Peacekeeping-Intelligence Handbook* (New York: United Nations, 2019); United Nations, *Reinforcement Training Package for United Nations Military Intelligence Officers for United Nations Peace Operations* (New York: United Nations, 2020).
- ⁶⁶ NATO, *NSO Course Catalogue*, 25 November 2021, <https://www.natoschool.nato.int/Academics/Portfolio/Course-Catalogue>
- ⁶⁷ United Nations, Reinforcement Training Package, p. 426.
- ⁶⁸ *Ibid.*
- ⁶⁹ Renaud Theunens, “Achieving Understanding,” p. 178; Flynn, Pottinger, and Batchelor, *Fixing Intel*; Michael T. Flynn and C. A. Flynn, “Integrating Intelligence and Information: Ten Points for the Commander,” *Military Review*, 29 February 2012.
- ⁷⁰ United Nations, Policy on Peacekeeping Intelligence (2017); United Nations, Peacekeeping-Intelligence Policy (2019).
- ⁷¹ Interview with UN DPKO official, 27 October 2021.
- ⁷² Interviews by L. Kole with seven MINUSMA intelligence officials, 6 and 12 December 2019, 16 and 23 January, and 7 February 2020.
- ⁷³ Olga Abiblova and Aexandra Novosseloff, *Demystifying Intelligence in UN Peace Operations: Toward and Organizational Doctrine* (New York: International Peace Institute, 2016), pp. 17–19.

- ⁷⁴ Erik J. de Waard, Sebastiaan Rietjens, A. Georges L. Romme, and Paul C. van Fenema, "Learning in Complex Public Systems: The Case of MINUSMA's Intelligence Organization," *Public Management Review*, forthcoming, p. 15; interview with former chief of ASIFU, 15 November 2021.
- ⁷⁵ Ibid.
- ⁷⁶ Ibid., p. 13.
- ⁷⁷ Sebastiaan Rietjens and Erik de Waard, "UN Peacekeeping Intelligence: The ASIFU Experiment," *International Journal of Intelligence and CounterIntelligence*, Vol. 30, No. 3 (2017), pp. 532–556; Hans van Dalen, "ASIFU Baanbrekend inlichtingenexperiment in Mali," *Militaire Spectator*, 7 August 2015.
- ⁷⁸ J. Karlsrud, "For the Greater Good?: 'Good States' Turning UN Peacekeeping towards Counterterrorism," *International Journal*, Vol. 74, No. 1 (2019), pp. 65–83, as in Jemma Challenger, "The Implications of Stabilisation Logic in UN Peacekeeping: The Context of MINUSMA," *e-International Relations*, 10 April 2021.
- ⁷⁹ Peter de Werd, "Reflexive Intelligence and Converging Knowledge Regimes," *Intelligence and National Security*, Vol. 36, No. 4 (2021), p. 513.
- ⁸⁰ Weick and Sutcliffe, *Managing the Unexpected*.

ORCID

Bram Spoor  <http://orcid.org/0009-0006-5965-1045>

Peter de Werd  <http://orcid.org/0000-0001-5337-379X>