



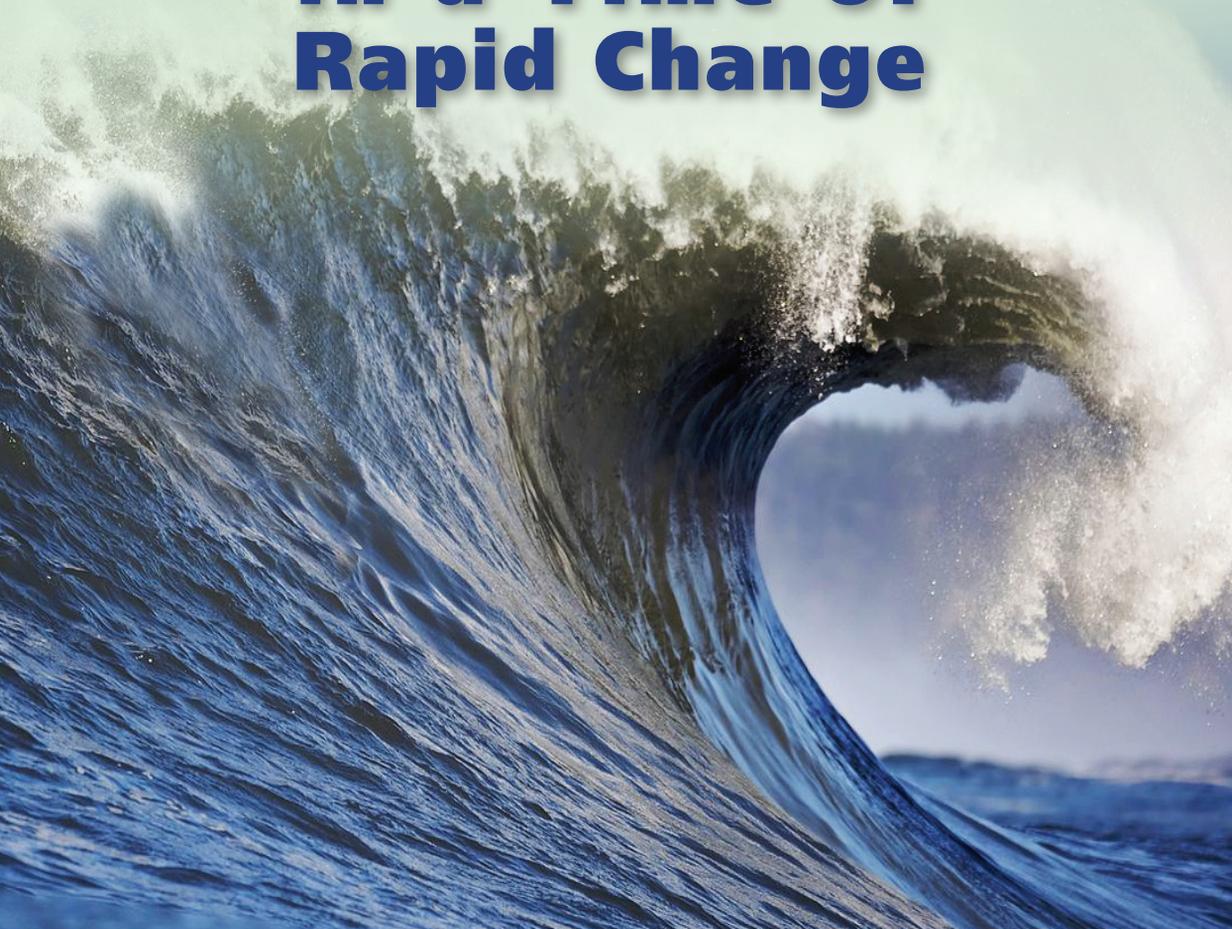
Israel Intelligence Community Commemoration and Heritage Center
The Institute For Intelligence Methodology Research

INTELLIGENCE IN THEORY AND IN PRACTICE

a journal on intelligence methodology

Issue No. 2, NOVEMBER 2017

Intelligence in a Time of Rapid Change



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2

The journal Intelligence - in Theory and in Practice is intended to be a forum for a conversation on intelligence methodology for members of the intelligence community (present and past) and supporters of intelligence in Israel and the world.

Editors: Yossi Kuperwasser and David Siman-Tov
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Publisher: Effie Meltzer

Graphic design: Ze'ev Eldar

Translator: David Hornik

Printing: Cordoba Printing & Binding



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Effi Melzer Research Publishing Ltd.

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Andreas Osel (MSc, M.A.)

Foreword by the Director of Military Intelligence

“It is change, continuing change, inevitable change, that is the dominant factor in society today. No sensible decision can be made any longer without taking into account not only the world as it is, but the world as it will be.”¹

The world around us is changing at accelerating rates. Never was the sentence by Asimov, who made use of the term robot already in the 1930s, as apposite as it is today. It appears it will be even more apposite in another decade, and even more in another hundred years.

The change is likewise evident in the phenomenon of war. Indeed, the nature of war remains similar, with its human, political, and uncertainty characteristics. On the other hand, the Internet has brought with it the information explosion and cyberspace. In the military domain of fire, new capabilities of precision and lethality have burgeoned. In addition, capabilities of electronic warfare and innovations in the world of command and control have changed the nature of war beyond recognition.

With the technology, the enemies have also changed—from a single-digit number of states to a changing and unending assortment of organizations and individuals. These organizations are working to prepare a campaign against Israel that is fraught with surprises, making use of innovative technology such as UAVs, fire capabilities, commando capabilities, and more.

These changes make precise and relevant intelligence more crucial than ever. Today intelligence constitutes an essential compass for initiative in battle, one that can direct the fire and maneuver efforts. The ability to bring intelligence to the field and link it with operational activity, both defensive and offensive, is the real test of the modern army.

As Asimov observed, when we make decisions we must consider the world as it will be. Hence, in today’s world an intelligence organization that aspires to relevance and influence must face new challenges, such as dealing with big data, with maneuver in cyberspace, and with perception as part of every campaign, and going forward, with the incorporation of more and more instruments from the field of artificial intelligence.

In grappling each day with the new challenges, we confront again and again the same dilemma: how to achieve rapid change and relevance without sacrificing professionalism and professional identity. Hence, over the past two years, we have called the strategic process in Aman (Military Intelligence) “Bridges of Amity.”

¹ Isaac Asimov, Jewish writer and one of the theorists in the field of robotics.

During these two years we have worked to build bridges between disciplines, between organizations, and even between states. The advantage of bridges is that they can enable us to remain separate and at the same time connected. Aman can maintain its wide and deep knowledge base and, at the same time, exchange knowledge, insights, and enhance its connectedness to our surroundings.

I would like to congratulate the Intelligence Heritage and Commemoration Center, and the editors and authors, for putting together the second issue of the journal. It is an important forum to promote the methodological conversation in the intelligence community. And I wish the readers valuable and thought-provoking reading.

Gen. Herzi Halevi
Director of Military Intelligence

Introduction

Before you is the second issue of the methodological journal *Intelligence—in Theory and in Practice*. The thread connecting the articles in this issue is the need for intelligence personnel to adapt their methods to the increasing pace and intensity of the changes both in the strategic environment and in the operative and technological environment.

Methodological change is a challenge for any organization; it always entails pain and the difficulties of renouncing prior habits and traditions. Changes can also entail the dismantling of organizations and the abandonment of capabilities, and changes of that kind are all the more difficult. At the same time, when encountering the crisis of irrelevance, every organization faces the need to change, a need that sometimes requires gradual adaptations and even revolutionary measures that fire the imagination.

To ensure that the change will be made at the appropriate pace and in the right way, it must be the fruit of a comprehensive, in-depth learning process that takes into account the characteristics of the existing organization, the changes in the environment that have fostered the relevance gap, and the learning processes occurring among the other actors in the arena, whether they are adversaries, friends, or others (technological aspects, for example). For change to be successful one must win the learning competition against other actors and take deep cultural, social, and economic processes into consideration.

The inherent tension between the need for change and the adherence to familiar practices has provided grist for a wide range of research and writing, and not only in the intelligence context. In this issue we seek to focus the discussion on the intelligence aspects of the subject: changes in the adversary and in the environment, and how these add up to a basic change in the intelligence community in general, in intelligence organizations that monitor the environment in particular, in the patterns of relations between the different intelligence organizations, and in the new and evolving intelligence professions.

Precisely at the present time, when Israel's strategic environment, which had been relatively stable, is changing rapidly, among other things in light of the influence of the Internet domain on human behavior, the intelligence organizations must change the way in which they participate in warfare. A change of that kind necessitates changing the relations of the intelligence personnel with the decision-makers and with the operational personnel, since intelligence must adapt itself to their expectations, and must come up with a product that answers their needs and the needs of the knowledge-development culture in the information era. Thus intelligence becomes an element that is all the more a part of decision-making processes, particularly at the

operative levels.

A further dimension of change to be considered concerns the relations between research personnel and themselves, and also between research personnel and collection personnel. Whereas in the past the intelligence agencies had to operate in accordance with the intelligence cycle, and pluralism was utilized to emphasize the differences between the research organizations, the present era indeed enables and invites the creation of joint spaces and joint intelligence products. Such activity is directed more at the civilian domain, and the intelligence community must ponder whether it should adopt this direction and how.

This issue, like its predecessor, was mostly written by persons active in the Israeli intelligence community.

The issue begins with remarks by the head of Aman, Gen. Herzi Halevi, who describes the tension between, on the one hand, the need to change rapidly so as to maintain relevance in light of the new intelligence challenges, and, on the other, the need to preserve one's intelligence and professional identity.

Part One of the issue deals with change in intelligence organizations themselves. Naomi Fassa Yosef and Sarit Shapira, from Aman's behavioral-sciences division, present the main theoretical concepts that address situations of rapid change, concepts that have emerged in the strategic learning process Aman has conducted in recent years. These authors propose approaches to improving these processes, such as ongoing learning of the changing context and creating a basis for a "multiple conversation." Yahel Arnon, a former senior official in the intelligence community who worked in the force-buildup field, then discusses the challenges that the changing reality poses for the force-builders in the intelligence organizations and suggests directions for dealing with these, such as expanding the joint force buildup of the intelligence organizations and treating perception as a major field in which the intelligence community needs to develop capabilities. This part concludes with an article by Lieut. Col. A. V., who previously served in a technological unit of the Visual Intelligence unit. He presents the test case of a technological organization that he himself lead, and that, when contending with a new reality, was task-oriented and not involved solely with technology. He outlines how to use this organization as a source of inspiration for change in the space that exists between the technological and the intelligence analysis and collection personnel.

Part Two addresses the future of the intelligence-research profession. It focuses on the question of whether research needs to change in the direction of "digital research," which makes greater use of the quantitative domain. In that context Col. (res.) A. H., until recently deputy head of the Research Division, offers his insights on the change that is needed in the relations between the different intelligence personnel and in

the relations between intelligence and its consumers in light of the cultural changes that the information era has fostered. Major D. G., who served as commander of the Research Division's innovation laboratory, then introduces the idea of the "information intelligence officer," whose task would be to create a further aspect of the intelligence researcher's role, along with traditional research. However, Col. Michael Milstein, head of the Palestinian Affairs Division of the Civil Administration and a former Aman official, argues that precisely because of the change that is occurring, there is a greater need to preserve a deep understanding of the Arabic language and of Arab culture as an essential part of the research work. In his view, a gap in this field is emerging in the intelligence community.

Part Three is concerned with organizational research as a new and rising field in current research practice, a response to the changes in the strategic environment. Lieut. Col. U. U., who recently served in Aman, describes a new sphere of activity, which is called "the campaign between the wars" and is a main component of IDF strategy. The innovation of this article, which deals with the intelligence requirements of the campaign between the wars, is the distinction it proposes between a reactive campaign and a formative campaign, which calls for a different kind of learning about other kinds of adversaries and under conditions of growing uncertainty. The second chapter in this part is an article by two officers who served until recently in Northern Command intelligence, First Lieut. S. A. and First Lieut. D. D. They explore the phenomenon of "shelf attacks"—attacks that the adversary keeps "on the shelf" and unleashes at the right moment—and the challenge that these create for intelligence practice. The methodology that has been designed for threats posed by armies, and by terror attacks that are expected to occur at the moment the preparations for them have been completed, is not suitable for shelf attacks.

The fourth part focuses on strategic intelligence. It begins with a survey by Dr. Doron Matza, former senior official in the Israel Security Agency (Shabak), who traces the genealogical development of the approaches adopted in Israeli intelligence by using different interpretations of the biblical story of the spies. Doron presents a challenging approach, according to which intelligence must fearlessly criticize and challenge the national leader. In the next chapter, S. B., currently a research official in the Shabak, outlines a systemic methodological approach that has developed in recent years in the Shabak's Research Division and is applied in practice. This approach makes use of traditional concepts in a new and refreshing interpretation that could be a source of inspiration for an additional research division in the intelligence community. In the following chapter, Lieut. Col. S., head of the Supervisory Division, and Lieut. Col. V. I., who served as deputy head of the Supervisory Division, examine the role of supervision in Aman, the changes that have occurred in supervision, and

the changes that could occur from the overall perspective of Aman, the intelligence community, and the nation. In the concluding chapter of this part, David Siman-Tov and Adi Yaffa, a trends researcher or “trendologist,” describe the profession of studying trends, which has developed in the civilian sector in recent years. They ask in what way it differs from the intelligence approach, and what intelligence research can learn from it.

The fifth and final part concerns a “searchlight beyond the sea.” In it Prof. Andrew Roberts, a historian and one of the major researchers of the Second World War, describes how Churchill coped with the changes that occurred during his leadership from the intelligence standpoint.

Acknowledgments

First and foremost we would like to thank the authors of the articles, who invested time and energy on behalf of developing the intelligence community’s knowledge, and especially the head of Aman, Gen. Herzi Halevi, who wrote the Foreword.

We are grateful to the intelligence personnel in all the organizations, who, with their supportive attitude and professionalism, enabled the publication of the articles.

Finally and as always, thanks are due to the leadership of the Israeli Intelligence Heritage and Commemoration Center: the chairman, Brig. Gen. (res.) Dr. Zvi Shtaubert; the director-general, Brig. Gen. (res.) David (Dudu) Tzur; and the deputy director-general, Hanan Mazor. Thanks are also due to Col. (res.) Dr. Reuven Ehrlich, head of the Intelligence and Terrorism Information Center, and to the Boksenbaum Neta Fund for their support for the publication of the issue.

Our thanks and appreciation are extended to Effie Meltzer, the publisher, and to the language editor Sima Tzimblar, the graphic designer, Ze’ev Elrad, and the translator from Hebrew to English, David Hornik.

We wish you valuable and enjoyable reading, and we hope, and indeed expect, to receive responses. We will also be happy to receive ideas and suggestions for articles on issues that, in your opinion, are relevant to intelligence practice today and in the future.

Yossi Kuperwasser and Dudi Siman-Tov, Gilot, 2017

› Change Within Intelligence Organizations

Bridge over Troubled Water: The Aman Endeavor in the World of Complexity

Naomi Fassa Yosef and Sarit Shapira,
organizational advisers in Aman (in the past and the present)

Introduction

In recent years reality has been characterized by dynamism, uncertainty, and constant change. Numerous articles re written about the implications of this for organizations and for administrations in academia and in the social networks. Also forming the background for this reality are the globalization processes, the far-reaching technological developments, the information revolution and the social networks, the demographic and social changes, the extreme climate changes, and so on. As a result, it is becoming more and more difficult to posit a clear connection between cause and effect, or to assess beforehand the long-term ramifications of decisions and actions. Change itself is becoming the primary and most stable characteristic.

Aman, for which analyzing reality has always been an inherent and central aspect of its role, has in recent years dealt more and more with the implications of the changing reality not only as part of situation assessment but also in the context of improving organizational effectiveness. Analysis of the characteristics

of the current reality and clarification of their implications have been central to the strategic processes of the corps, to strategic processes at the division level, and to other change processes within entities or in certain fields of activity.

This article will address how the intelligence organization contends with the changing reality, making use of two perspectives that are prominent in today's professional literature: complexity and VUCA. These perspectives represent different ways of examining the reality, and, hence, indicate different directions of activity.

In recent years the intelligence branch has carried out learning processes and organizational changes. These are worth examining from the perspective of theoretical knowledge, which is concerned with how organizations contend with a changing reality

We will then consider, in the light of these perspectives, how Aman has dealt with the new reality in three regards: the strategic processes, the process of crafting the work plan, and its self-organization. We will conclude with futuristic thoughts for the intelligence organization in the spirit of these perspectives.

Theoretical Models for Dealing with the Characteristics of the Era

Complexity Theory

The theories of complexity, which originate in the natural sciences, have in recent years won growing popularity in the social sciences, particularly in the fields of organizational and administrative thought. These theories were developed as an alternative to thought that was associated with the Newtonian paradigm, which has misled Western scientific thought for centuries. This paradigm assumed that one can learn about the whole by breaking it down into parts (reductionism), and that one can identify clear logical connections between cause and effect. To a large extent, complexity theories assume the opposite. They emphasize the enormous complexity of human systems, and point to the human difficulty of understanding them in-depth and with high precision, planning their movement, and supervising them. A complex system is one with many components (people, organizations, markets) that are in constant interaction with each other, but not in a linear fashion. As a result, it is impossible to point to clear cause-and-effect relations or to proportionality between the visible power of an event and its effect in practice. Hence a system is extremely sensitive, and any minor change can develop in surprising directions. Because it is impossible to anticipate the countless possibilities of interaction and the feedback loops, it is likewise impossible to predict when changes will create waves and when they will be assimilated without an apparent effect. That is why, in complex systems, it is impossible to foresee processes.

The theories of complexity, which originate in the natural sciences, have in recent years won growing popularity in the social sciences, particularly in the fields of organizational and administrative thought

To shed light on the complexity theories, we will focus on four key terms:² **Emergence** – A process in which coherent global patterns emerge spontaneously from numerous local interactions in the absence of an externally imposed action plan

² Israel Katz and Chen Gratz-Shmueli, “Theories of complexity: Key definitions,” *Analiza Irgunit*, 2010, vol. 15, 107-109 (Hebrew). Zofnat Institute.

or of central control mechanisms. Because the emergent structure has a coherence that does not exist in the separate parts, what emerges is actually something that is new.

Self-organization – A process by which the separate components of a complex system act vis-à-vis each other in the local space, and out of these various local actions global patterns emerge. Systems that are self-organized change frequently, and adapt to their environment in ways that are unforeseeable.

Nonlinearity – A central characteristic of complex systems that undermines the traditional connection between “cause” and “effect.” Nonlinearity is manifested in different phenomena: minimal causes can lead to dramatic effects, and the opposite; a single effect can stem from several causes, and a single cause can lead to several effects. Two processes that begin under almost identical conditions can develop in completely different directions.

The “chaos threshold” – A state in which the system moves between frozen stability and chaotic, wild activity. In this state, stability and instability, repetitiveness and innovation, order and disorder are entwined together. Nonlinear complex systems that are in this state reach higher levels of survival fitness, and hence new phenomena emerge in them: new structures, new combinations, and new connections. Two major conditions generate a chaos-threshold dynamic: the degree of variance between the components of the system and the degree of connectivity between them (i.e., the intensiveness and the frequency of the relations between them).

One cannot derive from complexity theory a generic “recipe for action.” On the contrary, one of the main insights of this theory is the uniqueness of the context. At the same time, great and valuable use of the theory can be made in the organizational context

The Organizational Implications of the Complexity Theories

Clearly one cannot derive from complexity theory an effective, generic “recipe for action” that can be uniformly applied to different organizations. On the contrary, among the main insights of this theory are the uniqueness of the particular context and the limited ability to control and supervise. At the same time, great and valuable use of the theory can be made in the organizational context. To suggest the organizational implications, we will distinguish between two approaches, one of which focuses on perceptual-emotional change, the other on organizational practice.

First Approach: Perceptual-Emotional Change

“A renewed orientation” to understanding the organizational reality – Awareness of the lack of information and avoidance of a state of “false certainty” or “supposed certainty,”³ awareness of the limited ability to predict and plan, and relinquishment of the illusion of control. Thus, one takes an interest in the specific interactions that emerge in a particular context; considers the ways in which we deal with uncertainty in our daily lives, thereby learning about what it means to cope effectively with uncertainty; attends to the gaps that emerge between plans and outcomes, without immediately regarding these gaps as evidence of failure or inability; and one confronts the organizational complexity so as to contend with it, understand it, and not hastily replace it with “simple management models.” To some extent it can be claimed that the main⁴ advantage of the complexity theories is that complexity is a metaphorical tool for a reconsideration of organizations, enabling managers to be more aware of limitations of knowledge and capability, to better understand the organization’s dynamics and behavior, and thus to adapt themselves and the organization to the uncertainty and the changing reality.⁵

Intention – Relinquishing concepts, such as control and supervision, that reflect linear approaches to management and ignore the uncertainty that is part and parcel of reality, and replacing them with concepts of intention, responsibility, and influence. The manager is expected to cope with the anxiety induced by recognizing the limitations of planning and control, while maintaining a strong sense of responsibility and intention. Intention, even when not fully enacted, affects reality, and is therefore of great significance regarding strategy, plans, definitions, and intentionality. These create a reality in which each one both affects and is affected. Along with intention, courage is required – courage to act without knowing (not without thinking, investigating, or planning). Courage to act without the illusion of control.⁶

Inclusion of duality and of paradoxes – Converting a binary discourse of “either... or” to a mindset of “both.” The dual approach is relevant both to dealing with the existing tensions in the specific organization and to a basic attitude toward the organization. An understanding that the organization, like any complex system, is to a certain extent predictable and therefore requires planning and order, while at the same time it is unpredictable and therefore requires spontaneous and improvised

3 Shai Ben-Yosef, “Leading a change in complex surroundings,” *Mashabei Enosh*, vol. 211, 2005, 36-39 (Hebrew).

4 Katz and Gratz-Shmueli, “Theories of complexity.”

5 Burnes, B. (2005), “Complexity theories and organizational change,” *International Journal of Management Reviews*, vol. 7 (2), pp. 73-90; Amagoh, F. (2008), “Perspectives on organizational change: Systems and complexity theories,” *The Innovation Journal: The Public Sector Innovation Journal*, vol. 13 (3), article 3.

6 Chen Gratz-Shmueli, Yael Shur-Shmueli, Lior Porat, and Leilach Wasserman, “Culture of the ‘complexity-friendly’ kind,” *Status*, vol. 249, 2016, 22-25 (Hebrew).

action. The manager, too, is to the same extent and simultaneously at both extremes: “knows” and “does not know,” “forms” and “is formed,” “capable” and “incapable.”

Second Approach: Implications for Organizational Practice

Striving to operate “at the threshold of chaos” – The aspiration to exist in a state where the organization simultaneously includes both order and disorder, based on the notion that such a state encourages development, growth, and innovation. To reach that state the manager must determine the condition of the organizational system and then make the necessary adaptations. When the system is too stable, the manager can introduce disorder and change in various ways: increasing the level of freedom in the organization via decentralization and delegation of authority, raising the level of anxiety and unease in the organization, augmenting diversity among its members, positively utilizing paradoxes and tensions that exist in the organization, encouraging creativity, and so on. At the same time, when the system is in a state of excessive disorder and change that threatens its stability, the manager must take measures to raise the level of discipline and control.

Emergence and self-organization – creating conditions that enable and even encourage the emergence of self-organization in the organization, so that its components will react appropriately and at the right time to changes in the environment. The professional literature on this topic posits a continuum from a minimalist approach, which assumes that things happen (almost) on their own, to an approach asserting that one must produce, in a structured, planned fashion, conditions that will promote a conversation and an exchange of information in the organization, thereby fostering emergences and self-organizations. The minimalist approach emphasizes the creativity and the spontaneity that exist in the self-organization of organizations and individuals. According to this approach, it is sufficient to encourage the emergence of spontaneous, informal encounters without a task that is clear and focused in advance, an agreed criterion for choosing the participants, or an orderly structure of discussion. It is precisely the uncertainty and indeterminacy of these encounters that generates spontaneous, creative ideas, thus increasing the potential for innovation.⁷

The more structured approach proposes that the organizations create conditions for self-organization. This approach calls for establishing structures, policies, and practices that enable greater democracy and equality of power.⁸

That includes, for example, giving the workers a minimum of instructions and detailed plans; a concept of the manager as a participant and as part of

7 Patricia Shew, “Deriving meaning from an encounter and an encounter for deriving meaning,” *Analiza Irgunit*, 2010, vol. 15, 18-33 (Hebrew). Zofnat Inštitute.

8 Burnes, “Complexity theories.”

the work system, not as someone external to it; and the involvement of a large and diverse group of members of the organization, not only its managers.⁹

An additional emphasis concerns additivity: strengthening the networks and connections between internal and external stakeholders, cultivating networks that are informal, availability and transparency in circulating information within the organization, and using varied practices of “multiple discourse” – conducting conversations in groups with numerous participants that include “the whole system in the room” so as to address common challenges.

A third¹⁰ emphasis concerns the role of conflict and discontent in the organization: allowing unstable situations to simmer without a solution instead of imposing one, while intervening only in conflicts that damage the joint work and the relations within the team, and in task-related conflicts.¹¹

VUCA

In recent years the term VUCA has become the common way to describe the new reality. This term was developed in the U.S. army during the 1990s in light of the characteristics of the new battlefield, and it became a useful and major appellation of organizational discourse. VUCA is an abbreviated way to say that the current reality displays four main attributes:

- **Volatility** – Dynamic instability, which emerges as a result of rapid, sharp, and drastic changes. Challenges and opportunities that in the past developed over the course of days or weeks emerge suddenly without prior warning.
- **Uncertainty** – A lack of clarity that weakens the ability to perceive the threats and challenges that face us and to interpret them as required. Uncertainty becomes especially dangerous when we hasten to interpret reality based on excessive reliance on what we have experienced and learned in the past, and out of a mistaken assumption that past solutions for problems that were seemingly similar will also be relevant today.¹²
- **Complexity** – Nonlinearity stemming from the multitude of factors that affect the

In recent years the term VUCA has become the common way to describe the new reality—volatility, uncertainty, complexity, and ambiguity

9 Grobman, “Complexity theory.”

10 Ben-Yosef, “Leading a Change.”

11 Moti Talias, “Interorganizational partnerships: A space for the consultant’s work,” *Analiza Irgunit*, 2010, vol. 15, 34-44 (Hebrew). Zofnat Institute.

12 Kail, E. G. (November 3, 2010), “Leading effectively in a VUCA environment: V is for volatility,” *Harvard*

situation, and that interact and affect each other. It is impossible to isolate variables or to deal with each challenge separately.

- **Ambiguity** – Inability to accurately perceive threats and opportunities before they cause harm to the organization. Ambiguity fosters an inability to fully understand either the current situation or the significance and effects of future events.

The Organizational Implications of the Term VUCA

Because VUCA is a term that describes reality, not a theory or ideological concept, the professional literature offers various approaches to coping with the reality that is thus characterized. Below are two approaches, related to the term VUCA, that entail organizational responses to the attributes it signifies.

First Approach: The Separate Response

This approach posits that it is impossible to give a comprehensive response to a reality characterized by VUCA; instead one must distinguish between the different attributes and give each a relevant and specific response. The supporters of this approach claim that one must first invest in diagnosing the situation and identifying its outstanding attribute, and only then take the relevant measure. An example of this approach is presented by Lemoine and Bennett, who maintain that, in light of the volatility, resources must be developed that allow the construction of an “agile” organization – one that can adapt itself rapidly and flexibly to the changing reality. In light of the uncertainty, channels must be developed for receiving and analyzing information by creating cross-organizational partnerships. In light of the complexity, an organizational structure must be devised that constitutes a mirror of the environment in which the organization operates. In light of the ambiguity, one must invest in experience that enables studying and understanding the interactions taking place in the environment. This requires a culture of risk-taking.¹³

Second Approach: The Comprehensive Response—VUCA Prime

Bob Johansen, a leading researcher at the Institute for the Future, presents a model that he calls VUCA Prime. This model relates to the characteristics and the capabilities that managers and organizations must develop to cope effectively with the new environment:¹⁴

Business Review Blog Network, <https://hbr.org/2010/11/leading-in-a-vuca-environment.html>.

13 Bennett, N. and Lemoine, G. J. (2014), “What VUCA really means for you,” *Harvard Business Review*, vol. 92, January-February, https://hbr.org/2014/01/what-vuca-really-means-for-you?referral=03758&cm_vc=rr_item_page.top_right.

14 Johansen, B. (2012), *Leaders Make the Future: Ten New Leadership Skills for an Uncertain Age*, Berrett-Koehler Publishers.

- **Vision** – Addresses volatility. In turbulent times, managers with a clear-cut vision concerning their organization can better navigate the organization. The vision helps the manager focus on the goal he aspires to, even if the path is twisted.
- **Understanding** – Addresses uncertainty. Particularly in times of uncertainty, the manager must learn to stop, ponder, and listen. A variety of means and methods can enable him to obtain information, analyze it, and come up with insights.
- **Clarity** – Addresses complexity. Given the turbulent reality, managers must know how to rapidly produce clarity for themselves and for the organization.
- **Agility (quickness and flexibility)** – Addresses ambiguity, and enables flexibility and rapid adaptation as things get clearer.

Vision, understanding, clarity, and agility are entwined with each other and affect each other; together, in the present era, they make managers more effective. To operate successfully in the changing reality and implement the principles that were described, the manager must look toward the distant future and try to identify the relevant patterns that will emerge (foresight). Based on such assessments he must determine the significance of the future for the present (insight) and act in light of this significance in the present (action). That is, his activity in the present requires looking far ahead and preparing for future events.

Aman in the World of Complexity

The unique characteristics of Aman affect how it responds to reality. Aman is an intelligence organization responsible for providing national, strategic, operative, and tactical intelligence to the national leaders and the military commanders. As an intelligence organization it engages in ongoing analysis of “the other” – the regional system and the international system – and hence is in constant friction with the changing reality of the adversary and of Israel’s strategic environment. It is also in a state of great friction with diverse environments; hence it is exposed to change in the external reality, infused and influenced by it more than other military entities. Thus, for example, because of its national responsibility, Aman engages in interactions with the political system and with intelligence entities in Israel and the world. Moreover, Aman maintains far-reaching relationships with defense and civilian industries in contexts of technology and R&D.

Likewise, Aman is an organization with great internal heterogeneity. So that it can fulfill its mission, entities operate within its framework that differ from each other in nature, purpose, organizational structure, culture, language, influence, and power. In light of the changing strategic environment, the nature of the intelligence challenges, and the technological environment, over the past decade and a half Aman has deepened its involvement in a wide range of roles. Among other things, it has

emphasized and expanded intelligence-guided warfare, cyber, secret operations, and the campaign between wars. This expansion has even further augmented its internal variety and produced competing vectors and internal divisions. This complex internal reality affects Aman's functioning and behavior, and repeatedly raises questions about its ability to achieve integration and to function in a uniform, centralized fashion.

A further internal challenge that affects how Aman reacts to reality concerns the size of the responsibility, which stems from the multitude of functions and their national importance as well as past experiences of success and failure, which continue to resonate over the years. The size of the responsibility and the shadow of the past induce caution and fear, which, in turn, hamper the organizational decision-making processes. The characteristics of the VUCA era are experienced in Aman in their full force; they are manifested both in changes in the intelligence environment that Aman contends with and in changes in Aman itself.

The Story of Aman from Three "Spotlights"

To clarify how Aman conducts itself in the changing reality, we will consider that topic from the vantage of three "spotlights" that complement each other: the corps-level strategic processes, the process of crafting the corps-level work plan, and the self-organization throughout the organization.

Spotlight 1: The Aman-Wide Strategic Processes

Over the past year and a half Aman has conducted four large-scale strategic processes: the "Constitutive Idea" (2003-2005) led by Gen. (res.) Aharon Zeevi (Farkash), "Aman as an Arm" (2006-2009) led by Gen. (res.) Amos Yadlin, the "Aman Endeavor" (2011-2014) led by Gen. Aviv Kochavi, and "Bridges of Amity" (2015-today) led by Gen. Herzi Halevi. The factors that impelled the launching of these processes were varied, some of them overt and some less so: a budgetary challenge, the rising influence on the military of systemic thought, the lessons of the Second Lebanon War, the experience of "information explosion" and the difficulty of containing it within the traditional intelligence work procedures, the IDF reorganization in the cyber contexts, the figure who stands at the head of Aman and the concepts he relies on, and so on. These processes generated a new language and fostered processes of strategic, structural, and cultural change.

In this article we choose to focus on the latter two strategic processes, the Aman Endeavor and Bridges of Amity. To arrive at suitable and relevant responses to the changing reality, these processes involved deep and wide learning about the external environment in which Aman operates with its different spheres: the military, the intelligence environment, the technological environment, the Israeli society

and economy, and so on. These processes were guided by senior officials of the organization, under the aegis of the head of Aman, in a series of strategic workshops and roundtables. Also incorporated in these processes were various mechanisms intended to enable the inclusion of members of the organization, provide additional ideas and opinions, and assimilate the main messages that were formulated. These mechanisms include conferences of colonels and lieutenant colonels, the participation of colonels and lieutenant colonels in the design and planning teams, open conversations with commanders of different entities, an “open door,” an organizational diagnosis that reflected the views of those serving in Aman, and so on.

At the end of the design process, strategic directions were adopted and a plan for their implementation was written. The implementation of the strategic directions involved processes of monitoring and supervision by the senior forum of Aman. Views expressed later from the field, along with difficulties that arose in implementing the directions that were adopted, meant there was a need to conduct additional learning processes and to invest in crafting appropriate responses. A prominent example of an outcome of such rethinking is “Aman in Colors,” which grew out of a process called “Aman Endeavor 1.2” and began because of difficulties in implementing the idea of a “Networked Aman,” which emerged in the course of the initial Aman Endeavor.¹⁵

Consideration of these VUCA Prime processes points to the importance of devising an effective response. These processes posited a vision and a direction to which the organization should aspire, involved the understanding of both the external and internal environments, helped produce clarity and coherence in understanding the reality and functioning within it, and posited the idea of agility as an objective to aim at. Agility, as manifested in these processes, was translated into desirable organizational mechanisms, such as specified mission teams, a knowledge community, trans-arena mechanisms, and a transition to the thinking of cross-organizational systems. However, incorporating agility into the Aman organization is not easy, as was evident in the many challenges encountered when working to apply these new mechanisms. Among the obstacles were Aman-related cultural variables, such as the power of the divisions, and the natural tendency of entities

Among the factors that impelled strategic processes of thought and change in Aman over the past decade: the rise of systemic thinking in the IDF, the lessons of the Second Lebanon War, and the emergence of cyber

15 Aviv Kochavi and Eran Ortal, “The Aman endeavor: A permanent change in a changing reality,” *Bein Haktavim*, 2014, vol. 2, 9-57 (Hebrew).

to safeguard their resources and status; the emergence of rifts and the tendency to local optimization at the expense of comprehensive optimization; the increase in the professional disciplines and specializations, which makes it difficult to transfer people between roles and units; and the IDF language of resources (job positions, ranks, average manpower), which fosters stability and reinforces organizational structures; the proliferation of tasks and the “short blanket” syndrome, the fear of failure, and so on.

Viewing the corps-level strategic processes from the vantage of the complexity theories points first and foremost to the fact that these processes have made great use of language and ideas taken from these theories. Two short quotations from former Aman chief Aviv Kochavi serve as illustration:

Upon entering the post I emphasized the need to deal with the challenge of the changing reality. Sometimes the changes are linear and exhibit distinct tendencies; sometimes they are chaotic or supposedly chaotic or apparently chaotic. In any case, the aspect of emergence and constant change is the most prominent attribute of the reality we are living in.... Aman, like any modern organization, must at all times be capable of change so that it can adapt to the changing reality.

In terms of the concept of systemic learning, the need to do more within the given framework of resources does not constitute a contradiction but, rather, a tension that needs to be handled through clarification and learning.

This tension has enabled us to clarify, once again, basic assumptions and modes of activity that we had come to take for granted. Replacing dichotomous choices with a concept of tensions is, then, a fundament of systemic learning. Insistence on a concept of “both” not only did not reduce the effectiveness of the process but indeed provided an important basis for action.

Itai Brun, former head of the Research Division, likewise illustrates the point with his description of the intelligence-research challenge:¹⁶

The system is always viewed in terms of “the whole,” and not just of its parts (since the “whole” is different from the sum of “its parts”). The nature of the system is determined by the relations, the connections, and the links between its parts, but

The obstacles to change included: the natural tendency of entities to safeguard their status, a tendency to local optimization instead of comprehensive optimization, and fear of failure

¹⁶ Itai Brun, *Intelligence Research: Responsible Practice in an Age of Transformations and Changes* (Glilot: Israeli Intelligence Heritage and Commemoration Center, 2015) (Hebrew).

to understand the form (and particularly the logic) of its activity one must clarify the concrete context in which it operates. Every system has parts within it that can work against each other, and at the same complement each other. Actions performed at different times and in different places can produce an effect on the entire system. The issue of “emergence” strongly underlines the great importance of deciphering the concrete circumstances of the specific research problem. Experience teaches that every problem one deals with is unique and new in nature.

At the same time, a deeper look at the corps-level strategic processes reveals that, along with the thinking and the complex language reflected in them, they still largely manifest classic concepts of supposed control over what occurs in the organizational reality. Thus, for example, an in-depth analysis of the external environment once every two or three years does not really suffice to monitor constant and frequent change, and does not provide a response in real time. This can be likened to “still” photographs of the reality, which inevitably miss the movement that occurs in time and enable only a circumscribed view of a particular resolution. Furthermore, these pictures exist in a specific context, which also exists within an ongoing motion that a photograph of this kind does not reflect. In addition, the methodology employed in these processes is by nature a classic managerial one of top-down change. The members of the organization are indeed included in the process, but the aim of this inclusion is to adjust, supply, and enrich the conceptual framework that was designed “from above.” These processes were less grounded in self-organization that develops “from below.”

An in-depth analysis of the external environment once every two or three years does not really suffice to monitor constant and frequent change, and does not provide a response in real time

The premise behind the structure of the process is that the heads of the organization include the knowledge and the concepts within the sub-organization for which they are responsible, and thus it is they who can and should craft the organizational responses to the changing reality. A standpoint of complexity suggests that much relevant knowledge, and capacity to influence the system, also exists among the members of the organization, whoever they may be, and not necessarily among the most senior officials. That knowledge is not sufficiently manifested in these processes.

When it comes to the assimilation and implementation of the strategic directions that were fostered by these processes, management of the process is based on the assumption that one can guide a top-down change in a way that is planned, structured, and controlled. Accordingly, the process is assessed in terms of planning versus

performance, without taking sufficient account of the attributes of the complex reality, in which countless factors operate and affect the situation. From a standpoint of complexity, one must consider the different factors that have influenced the way in which the strategic directions were implemented, and learn from them what was not taken into account, what exerted greater influence than what was assessed in advance, what did not operate as anticipated and why. This perspective is less judgmental about the achievements of the process in terms of implementing the decisions, focusing more on additional, deeper learning and understanding that the organization reaches by means of the process.

Spotlight 2: The Process of Crafting the Work Plan in Aman

The process of crafting the work plan draws from the strategic ideas on the one hand, and from the actual intelligence reality on the other. Its purpose is to develop a synchronized organizational practice of tasks and projects. Whereas the strategic processes highlight the vertical dimension that involves connections between the senior forum and the junior echelons, the work-plan process highlights the horizontal dimension that involves the interactions between the units and divisions in Aman and the Aman headquarters bodies, and the differences between the various units and divisions. Over the years, the headquarters bodies have guided the process with different methodologies: a collection department, the Research Division, the Operations Division, and the Planning and Organization Department, along with the collection and technological units. The significant role of these units in this process stems from the understanding that the friction with the changing reality exists to a large extent in them, and hence the knowledge and the insights develop from them. In recent years the process includes defining the main intelligence tasks in each arena, mapping the nature of the response for each task, and determining the Aman-level prioritization for the tasks and the arenas. Subsequently the main Aman projects are defined and prioritized as a response to the tasks that have been defined. Along with the regular process that is conducted toward the beginning of the year, there is an understanding that the dynamic reality requires reexamination of the prioritization of the tasks and projects in the course of the year so that they can be adapted to the changing needs; such a reexamination is conducted each quarter.

Over the years the work-plan process reflected the tensions in the Aman organization between centralization and decentralization, between long-term planning and ad hoc responses to a volatile reality, between an attempt to “control” the reality and acknowledgment of uncertainty, between investing in collection and in operative activity. In the organizational practice, these tensions are manifested in frequent power struggles between the analysis, collection, technological, and operational units

and the Aman headquarters bodies, and between the units themselves, in an effort to dictate the agenda and influence resource allocation. A look at the units within Aman reveals two different patterns of organization with regard to the work-plan process. In the first pattern, the work plan is a central axis of the organization, and most of the activity focuses on the large projects that the plan has stipulated. In the second pattern, the work plan suggests directions and trends, and the activity is less defined in advance and much more dynamic. These patterns are related to different organizational cultures, which are adapted to the characteristics of each unit in Aman. A unit that engages in large, resource-rich, long-term projects requires prior planning and exhibits less flexibility and dynamism. However, a unit whose instruments are flexible, relatively easily adjustable, and very affected by what occurs outside AMAN is characterized by more flexible and dynamic patterns of activity and organization.

From the standpoint of VUCA Prime, the corps-level work-plan process aims to produce clarity based on analysis and understanding of the reality. In certain domains the process also creates spaces of flexibility in response to change and its effects. In terms of complexity, the work-plan process combines order and structuring while also allowing space for disorder and constant change. Although there is a need for the dynamism and uncertainty that are an integral part of the reality, that does not entail giving up and renouncing the goal of prioritization and strategic decisions. Although the prioritization is determinate, it is conditioned on developments and changing circumstances, and hence is constantly reexamined in light of the friction with the reality. In addition, the nature of the process reflects a practice of dialogue and negotiation between the headquarters bodies and the units. Generally speaking, the corps' headquarters bodies seek to introduce order and control, while the units add dynamism, changing needs, constraints, and uncertainty to the process. A similar dynamic occurs within the units between the unit-level headquarters bodies and the executive bodies.

Spotlight 3: Self-Organization throughout the Organization

Along with the corps-level processes that are guided by the organization's management—the strategic processes and the work-plan process—there are infrastructures in Aman that enable self-organization; in other words, they encourage the growth of ideas and innovation among the organization's members in general. In the Aman culture each individual has legitimacy, whatever his rank and status, to express his opinion. Moreover, there is a “duty to warn”: if any member of the organization feels that the supervisory echelon has made a mistake in judgment or decision-making, he must present his professional opinion on the matter. As an organization that believes in expertise, this principle pertains not only to intelligence

activity but also, to a large extent, to Aman's technological domains. In these domains, too, the opinion of a person who is considered an expert in his professional field, even if he is at a junior level, wields great influence. An approach that allows the expression of a "personal opinion" reflects such values. Any professional has the prerogative to write a document expressing his personal opinion without hewing to the organization's opinion, and it can be sent to the helmsmen of the country and the military as an instance of disagreement or a less accepted perspective. Even if, in practice, this mechanism apparently is not used very much, the fact that it exists reflects an organizational ethos that affects the reality of Aman.

Beyond the individual level, over the years the organization has created platforms that enable and encourage the germination of ideas and innovation "from below." First, an external platform is routinely used to encourage creative and innovative thinking, based on providing space and freedom to choose. An example is the SOOB (SIGINT out of the Box) methodology, which is used in Unit 8200 and encourages out-of-the-box thinking about problems for which no solution has been found so far. In the framework of SOOB, a group of top-quality soldiers and officers concentrate on innovation for a week under boarding-school conditions. In the course of the week, they work in subgroups on projects or ideas that they have formulated or decided to develop. Second, there are defined spaces within Aman. Although, in routine times, these do not have a specific task, they have a mandate and the freedom to define for themselves a gap that requires intervention, and to propose solutions for it. Third, there is a certain flexibility in translating the work-plan process into the specific bodies' activity. Hence organizational energy can be channeled into initiatives that do not get high priority in the work plan but are potentially useful for future projects. This flexibility is based on a certain proportion of the output capacity of the entity (a section, a branch) that is not assigned in advance to a project or a specific task. In this way individuals or small bodies can invest considerable time in the problem or the challenge that they regard as important, and can choose to advance it on their own initiative and independently.

In the framework of SOOB, a group of soldiers and officers gather for a week of innovation during which they work in subgroups on projects or ideas that they have formulated and decided to develop

Beyond these platforms, a number of organizational mechanisms encourage interdisciplinary encounter and conversation, enabling cross-fertilization and the emergence of ideas. Examples are the specified mission teams and the corps'

command training. Despite the substantial gap between them, in both organizations people from different units and professions participate, and together they maintain a space that allows reexamining the reality, asking questions, and consulting on challenging issues that are on Aman's agenda.

The perspective of VUCA Prime is less relevant to analyzing these phenomena of self-organization throughout the organization because, as noted, this approach focuses on the actions of managers and on the capabilities they require to lead the organization in the current era. In terms of the theories of complexity, however, these phenomena are major and essential components of the organization's effective engagement with the complex reality. Despite being a military and hierarchical organization, Aman has succeeded over the years to create "islands" in which relatively great freedom exists, fostering the spontaneous growth of ideas and innovation among the organization's members. That these phenomena are made possible in Aman is due, apparently, to the close structural links it maintains with different spheres outside the military, with an emphasis on the intelligence community and on technology organizations in Israel and the world. In addition, because the intelligence mission demands openness, out-of-the-box thinking, creativity, as well as technological and operational capabilities at the far end of the spectrum, Aman must come up with unique answers that will enable this. At the same time, in the current era, coping effectively with the complex and changing reality evidently requires increasing and augmenting these phenomena.

Looking Ahead

Looking ahead, we would like to offer some thoughts and practical directions that could promote a "complexity-friendly culture" in Aman:¹⁷

- **The constant asking of questions**—The intelligence organization is in perpetual tension between "knowing" and "not knowing," and constantly strives to be in a position of "knowing." Whereas "knowing" is generally perceived as related to answers, in the spirit of complexity and the VUCA era it is in fact of great importance to increase the organization's asking of questions. One should encourage the asking of challenging questions that generate debate and a variety of views, questions of an open kind that challenge the imagination; one should construct spaces in which to clarify what are the "right" questions when it is not clear what needs to be asked or what information is lacking; and one should deal constantly with questions of relevance and impact on the surroundings. These existential questions should resonate and inspire thought not only in the senior echelon but throughout the organization, thereby helping it, in an ongoing fashion, to improve the strategy and adapt it to the changing reality.

17 Gratz-Shmueli, Shur-Shmueli, Porat, and Wasserman, "Culture of the 'complexity-friendly' kind."

- **Ongoing learning of the context** – As noted, the Aman organization operates in many environments, and is itself a heterogeneous organization with multiple actors and forces. The dynamic reality requires that Aman thoroughly understand the broad external context in which the organization functions as well as the factors that influence it from within. Such understanding entails ongoing attention to and analysis of the context and its ramifications. With regard to the intelligence environment, Aman must always have a “finger on the pulse.” Likewise, it must construct mechanisms that will constantly examine the organization’s external and internal contexts that affect its activity. A relevant metaphor is a good chess player who does not focus only on the opponent’s king but keeps analyzing the location of all the other pieces in the game and adjusts his strategy accordingly.¹⁸
- **A platform for a “dialogue of many”** – In recent years the Aman organization has placed great emphasis on common activity and on jointness, additivity, and networkedness. These concepts are all related to boosting the interaction between different “actors” in the organization, out of awareness of these actors’ mutual dependence and the importance of the success of the Aman tasks. This orientation is particularly vital in the era of complexity, and one must consider how to even further augment it. Moreover, there is a need to generate more plentiful organizational opportunities for cross-organizational encounters, without predetermining a required achievement and “bottom lines.” It is important that these meetings be interdisciplinary and interechelon, allowing a heterogeneous conversation with multiple opinions and viewpoints. Examples of possible platforms for encounters of this kind include Open Space, “nonconferences,” roundtables, and so on.¹⁹
- **Diversity** – One of the basic conditions for a culture of rich and creative dialogue is diversity. Diversity allows for an abundance of perspectives on the reality, combines different forms of observation and behavior, and thus creates “noises” in the positive sense. In recent years Aman has evidently made considerable progress in grasping the importance of the issue, and accordingly has encouraged the integration of diverse populations, particularly women, ultra-Orthodox Jews, people from peripheral areas of the country, people with Asperger’s syndrome, and others. Nevertheless, Aman is still for the most part a quite homogeneous organization, characterized by a male, mostly upper-middle-class population that comes mainly from the central part of the country. In light of the challenges of the current era, Aman must find ways to achieve diversity, even if it entails breaching common norms of professional suitability.

18 Mancesti, M. (March 2015), “Is VUCA the end of strategy and leadership?” Tomorrow’s Challenges, IMD blog, <https://www.imd.org/publications/articles/is-vuca-the-end-of-strategy-and-leadership>.

19 Ben-Yosef, “Leading a change,” 36-39.

- **Innovativeness** – There is great innovativeness in Aman. It makes possible the technological quantum leaps and the unprecedented operational achievements. At the same time, this innovativeness exists in delimited places and does not belong to the whole organization. Along with these “islands of innovativeness,” not a few domains of Aman are in fact characterized by relative conservatism. The challenge facing Aman in the current era is to make innovativeness a common culture for all the members of the organization. Such a culture entails encouraging the organization’s members to think creatively in a structured and systematic fashion, fostering experience and “play” as a means of developing imagination, promoting curiosity, enhancing and developing intuitive thinking, investing time in pondering problems from various angles, openness to ideas of others, preparedness to take risks, and so on.²⁰

Conclusion

Many articles have been written about what the current reality, with its dynamism, uncertainty, and constant change, means for organizations and managers. In this article we chose to present two perspectives on the current reality, namely, the theories of complexity and VUCA. Complexity is a theoretical perspective originating in the natural sciences; over the past two decades it has also influenced theoretical concepts in the social sciences. In recent years VUCA has become a major approach to describing the prevailing reality. Although the two perspectives ostensibly describe the same reality characterized by complexity, nonlinearity, and instability, there are significant differences between them. They are distinguished particularly by how they relate to the classic managerial models: whereas the theories of complexity naturally reflect opposition to a “managerial formula” that is generic and effective for management, and place great emphasis on the specific and unique context, VUCA and the responses it offers, particularly VUCA Prime, appeal to managers in their own language, and their aim is to help provide practical and generic tools.

The complex reality has manifested itself with great intensity in the Aman organization. On the one hand, Aman “lives” the intelligence reality with its dynamism and change; on the other, it is itself managed in heightened friction with different environments. Aman is indeed a military organization, subject to the rules requiring military hierarchy and order, codes and structure, a military language and military values; but it is also an organization with deep professional links to the intelligence community, to security bodies in Israel and the world, to academia, and to the civilian high-tech industry.

In considering the Aman organization’s suitability for the challenges of the current

²⁰ Innovation People (2013), “Leading in complex and uncertain times: The implications of a VUCA world,” <http://www.spiceframework.com/static/downloads/leading-in-uncertain-times.pdf>.

era, it emerges that in recent years Aman has adopted an organizational language that reflects concepts drawn from complexity theories and from VUCA. These ideas have now been assimilated into the organizational discourse, and have indeed become a lingua franca in Aman. However, as a military organization Aman is typified by a great degree of “order” as evidenced in processes that are guided “from above,” in a methodology of planning in conjunction with performance, in stable organizational structures that have difficulty becoming more flexible, and so on. The challenge facing Aman is to broaden the domains in which it facilitates “disorder” so that innovation, creativity, and effective and relevant responses to the changing reality can develop from such “disorder.” In fact, thanks to the unique characteristics of Aman that were described above, the basic conditions for this already exist in the organization; what remains is primarily to find the ways to expand and amplify them.

Force Buildup in the Intelligence Community in a Changing Reality

Yahel Arnon²¹

In light of the changes in recent years in the strategic and operative environment, long-term strategic planning is becoming increasingly difficult. The pace at which reality is changing is very rapid, the threats are getting more complex, and the arena has multiple actors, some of them with unique characteristics that require different preparations than in the past. Hence capabilities and responses must be developed both for defensive and offensive purposes, particularly when the threat is not necessarily immediate. Force buildup is positioned between the immediate and the long-term, and at a different location on the axis of measures of achievements, which in many cases are defined in a timeframe corresponding to the tenures of leading officials.

Crafting a plan for effective force buildup is a complex and deep process that requires integrating data, analyzing them, drawing conclusions, and particularly, decision-making. The decisions that are made have great significance for the future, and they are based more on integrative situation assessments, not only on data that reflect an accumulation of facts. Hence, future-oriented force buildup inevitably requires investing many resources without full certainty as to how the force being built will be used. Devising and implementing an effective

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force-buildup plan is a unique challenge in itself and is especially significant in operative organizations, which, busy and burdened, are very committed to immediate tasks. The organizational and personal criteria for success are not calibrated to achievements that involve building up and establishing capabilities mainly for the long term. In such organizations, assigning the appropriate priority to force buildup is sometimes in tension with aspects of the organization's spirit, culture, image, its workers' motivation, and of its competition with other organizations.

The force-buildup process is unique in the intelligence community insofar as it must provide simultaneously for needs and capabilities with regard to three problems:

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- Providing an ongoing and quality intelligence response to the needs of the security frameworks with regard to the range of immediate threats.
- Identifying future threats and developing an ability to meet challenges that will have to be addressed in the medium and the long term.
- Providing a response for the ongoing and dynamic intelligence effort without depending on long-term processes.

This article will focus on aspects of force buildup in the changing reality of the intelligence community. It must be stressed that some of the processes, insights, and recommendations have already been implemented in one way or another in different parts of the intelligence community. In some areas of practice, future planning is still in initial stages. From a community perspective, it is worth pointing out that there is a significant difference between Aman, an organizational framework of the IDF whose force-buildup plans are part of the overall IDF plan, and other organizational frameworks, particularly the units that are subordinated to the Prime Minister's Office, which build their own independent plans and are defined separately in terms of resources (budgets and manpower).

Principles, Methodology, and Crafting a Plan for Force Buildup

In light of the abovementioned complexity of formulating a plan for a future force buildup, and of the need to deal with a simultaneous strengthening process on the enemy's side (plans for force buildup are dipolar in nature, and according to most of the information about the other side's strengthening processes, these are partial and not yet complete), it is very important to conduct an orderly and meticulous methodological process. Such a process should enable focusing on orders of priority, choosing the appropriate frameworks for buildup, and finding the right organizational work point between deploying force and building it up.

In the past, the basis and point of departure for the staff work for these plans was a reexamination and validation of the "organizational vision." The more advanced approach focuses on the organization's objective and tasks. The point of departure for the process is the building of capabilities that, at each work point on the future time axis, will enable the organization to fulfill all its goals and tasks, while also allowing sufficient flexibility for rapid preparation and responses to changing situations and challenges in the future. The methodology is based on deep analysis that develops gradually from the broad strategic level in the international arena (macro), with a focus on three main elements: economy, technology, and the human resource (as well as, in certain cases, the ability to protect the "organizational secret"). The analysis continues through the regional and political reality to the level of the intelligence community, with an emphasis on each organization and its special needs (micro). The

product of this process must be a reflection of all the challenges that the organization faces in the present, and a diagnosis of the future threats that require a response. It should be noted that the preparation of a plan for force buildup is entwined with intelligence research work and with assessment, and is based on these as one of the main axes.

Also worth noting is that the specific resources for collection and research are not always directed to creating the intelligence foundation for constructing the basic threats and scenarios and for force buildup as the enemy strengthens. What is mainly utilized is the overall intelligence assessment, which is based on the ongoing intelligence work. It may be worth giving one of the organization's strategic assessment bodies the responsibility for constructing a broad scenario, with a focus on incorporating the enemy's force buildup into all the arenas of the threats. This scenario will serve the relevant planning teams and will be valid for each agreed span of time.

Sometimes there is a lack of clarity and a difficulty in distinguishing between annual work plans, multiyear work plans (MWP), and plans for force buildup and strengthening. The work plans and part of the MWP deal with force buildup in the short and medium terms, while the strategic force-buildup plan goes beyond the MWP, and in many cases is interpreted for a longer timeframe than a single MWP. The final product of the methodological process of building a plan for force buildup, which usually takes several months, must be the presentation of a clear and detailed plan. The orders of priority must also be clear in case all the resources needed are not provided, and the plan will have to be implemented according to an order of priorities. It is very important to include the entire senior command at all stages of the process. It is strongly recommended to include more junior levels of command and management in the work teams as well. Often their location in the organization gives them a different perspective, and it is important to hear their opinions and to incorporate them as an executive level after the plans have been approved and after they have understood all the considerations.

Built-In Tensions in Managing the Resources

Each body and each organization has limited resources, and there will always be someone who feels that those allocated to him are not sufficient. He will feel that, if he had received a response to his demands and needs, he would have fulfilled his immediate and future tasks optimally. The need for prioritization creates an intricate "competition" for resources, and at the end of a process the leaders are supposed to make a decision about the final order of priorities. One of the classic difficulties for the intelligence community is to reconcile security sensitivity with the need to protect a classified, departmentalized, and shielded work environment and with the inability

to reveal sensitive domains, including those that need to be built. The ongoing work in the secret domain is far from the public eye and sometimes also from the eye of some of those involved in the economic management of the state. Hence the difficulty of widening the circle of those privy to the secret and of explaining all the operational needs, particularly regarding the sensitive ones among them (and sometimes those are the ones that need abundant resources, including extensive funding and manpower).

To maximize the implementation of the plans for force buildup and strengthening, and to receive the required resources in a maximal quantity, the relevant officials who allocate the budgets and manpower, namely, the Finance Ministry, must be appropriately involved. In some cases there is a complex history of negotiation processes and agreements about multiyear plans and strengthening plans. Experience proves that when there is mutual openness, transparency, work relations based on trust, and proper involvement, the chances of receiving the required quantity of resources increase. It appears that at present, in some cases, there is a need for a change of approach and for effective and resolute measures for building trust and transparency so as to arrive at the right work point. It is recommended that a professional and serious external team, without disturbances and with a proper security classification, be integrated into different organizations of the community from the initial stages of crafting the force-buildup

One of the classic difficulties for the intelligence community is to reconcile security sensitivity with the need to protect a classified, departmentalized, and shielded work environment and with the inability to reveal sensitive domains, including those that need to be built

plans, and that the team should contribute to a better understanding of the needs and to the optimal adaptation of the resources allocated to those needs. To provide a suitable solution for the force-buildup processes, and taking into account the aforementioned built-in tension between using force and building it up, it is proposed that the force-buildup budgeting be separated from the overall budget (a “colored” budget) in a way that is not subject to change and flexibility in a given period except with special approval. In this manner a budgetary balance will be established without detracting from administrative flexibility and long-term strategic processes.

Main Areas of Force Buildup and Strengthening

A common work assumption is that the role of the secret organizations and the intelligence organizations in the future campaigns will increase, and this requires

preparation. Among the reasons: the growing weight of substate military organizations (while the military threat from conventional armies decreases) and of conflict with states with which Israel does not share a border, and the need to maintain significant deterrent capabilities. Hence there is a growing need to carry out important, secret operational measures, beneath the threshold of war, and these fall primarily (but not only) within the responsibility of the intelligence community with its different frameworks. Based on these assumptions, a number of issues need to be promoted (apparently some are already being dealt with at one level or another) in which, with regard to the future, important capabilities must be built and strengthening frameworks must be created:

Building a Joint Community Force

A retrospective look at the development of the “DNA” of the different organizations in the Israeli intelligence community (and not only in it) indicates that the deep-rooted cultural instinct is to establish independent and autarkic capabilities, to the extent possible, in each organization. The reasons for this are numerous, some of them historical and not necessarily erroneous. It is widely believed in the Israeli intelligence community that to facilitate administrative and command flexibility and proper management of the internal order of priorities in line with the objectives and tasks of each organization (according to the best understanding of its leadership), sometimes the same capabilities should be maintained in each framework, even at the price of a certain duplication with other organizations. There is a built-in tendency not to take an unnecessary “risk,” since, in time of need, if the capabilities are concentrated under one roof, a conflict could develop between the orders of priorities, which could prevent the performance of the mission in the right way and at the right time.

The challenges of the intelligence community point to the need to broaden the joint activity in force buildup in all the bodies of the community

In recent years a welcome change in this tendency has emerged. An improved culture of collaboration has developed, and the extent of joint interorganizational activity is far greater than in the past. At the same time, an analysis of the threats and challenges facing the intelligence community points to the need to broaden the joint activity in force buildup in all the bodies of the community. Data mining, VISINT, SIGINT, perception, robotics, “HUGINT,” miniaturization, online guidance and advanced simulators, UAVs, and capabilities that enable working beneath the threshold of exposure in a secret domain—these are only examples of issues on which

each of the bodies must develop strength and build different capabilities that accord with the future threats. The time appears ripe for a joint process of integrated force buildup in the intelligence community, at least in the first stages of development, and of building generic capabilities that will eventually, to the extent required, constitute a basis for a unique interchangeability according to the requirements of the different bodies and based on their relative advantages.

Such a process will not only be more economical and efficient; it can also become a basis for promoting collaborations in the operative domain when these means are deployed in the future. It is proposed that cooperation be strengthened between the frameworks responsible for force buildup in each organization of the intelligence community, sharing among all the entities, in a structured fashion, the situation assessments, work plans, and processes of crafting the multiyear work plans, and that an intracommunity mechanism be created. This mechanism will constantly examine joint areas of activity and possibilities for new processes of development, characterized by transparency and the full exhaustion of resources. It is likewise recommended to consider establishing a forum of senior officials that would be responsible for the force buildup in the organizations (consisting of the chief of staff, the head of the Operations Branch at GHQ, the head of the Planning Directorate, and others). This forum would meet regularly several times a year, and would ensure the sharing of information and the use of proper procedures regarding directions to take, insights, the drawing of lessons, and so on. Such a forum would facilitate greater jointness in planning the force buildup, even if, naturally, no synchronization is required along the time axis between the work plans and the multiyear work plan of each organization.

It is recommended to consider establishing a forum of senior officials that would be responsible for the force buildup in the intelligence organizations, and would facilitate greater jointness in planning the force buildup

Perception

In recent years it has appeared more and more that perception in its broad sense is actually an arena of warfare in itself. It includes sensitive areas on the adversary's side such as public opinion, the motivation to fight, and the sense of vulnerability. Perception is an open, borderless form of battle that is waged through complex measures of psychological and cyber warfare, particularly via the social networks. The global concept is that the flow of information and the ability to transfer it in

short timeframes, with wide dissemination, facilitates effective campaigns in the new battlefield, though this requires advanced weaponry that suits the attributes of the arena, which, as noted, is not in physical space. One must also develop a combat doctrine that enables constant upgrading of the capabilities at the necessary pace.

The development of capabilities in these areas requires force buildup of a different kind, with frequent innovations. Unlike other strategic weaponry, which is planned in advance to provide a long-term response, the “perception war” requires updating and upgrading of instruments at a dizzying pace, making use of maneuvers and movements. These are capabilities of a different kind, from which new and updated definitions will be derived for basic terms such as victory, defeat, defense, offense, field of activity, and so on. Also necessary is to devise an updated approach to other forms of activity within the context of international law, such as the international repercussions of perceptual activity and the relation between perceptual activity vis-à-vis the adversary and possible effects on perception within Israel itself.

Augmenting the arsenal of devices in the perceptual campaign can perhaps contribute to broadening the missions, to adding further directions of activity, and to expanding the areas of activity in the various fields of intelligence warfare—for example, the struggle against BDS. It is worth planning for the future with significant development in this field based on existing capabilities and current organizational frameworks. It is also worth considering the establishment of joint, all-community frameworks with a wide systemic perspective, which would conduct a comprehensive and multilevel coordinated campaign utilizing the relative advantage and capabilities of each body in the community.

The Human Technological Resource

Looking several years ahead, it is hard to build a stratum of human resources that will be sufficiently proficient in advanced technology. The intelligence community needs, and will need in the future, young people with exceptional abilities in various contemporary domains of cyber and technology. Two main population groups are relevant here: young people toward the age of recruitment for military service, and outstanding individuals after their military service who must decide between serving in the intelligence organizations and developing a civilian career in the high-tech industries. If significant measures to build manpower are not adopted in these areas, the gap will grow. It is necessary to identify young people nearing recruitment age as early as possible (as is being done today), to channel them into preparatory programs, courses, and various future service programs, and to create for them attractive and challenging foci of interest. As for the older population, it is worth considering their involvement, with support, in technological hothouses and startups that can provide,

directly or indirectly, added value to the intelligence community. This will be done by using developing technologies, as well as technologies that have not yet reached economic viability but, in the development process, have raised relevant issues that are not necessarily economic. It is worth recalling that force buildup in this area can also be extended to other areas, not necessarily technological ones, and that the community's involvement in academic and other study programs can also help build a quality force of workers that can fill present and future gaps in many fields.

Outsourcing

There are fields of knowledge and technological expertise that are openly accessible to a civilian sector with very advanced abilities to mine and process data that are part of the free market. This situation has significantly decreased the relative advantage that the intelligence community enjoyed. An example is the research in the socioeconomic fields, or on states and blocs all over the world with which Israel has no direct conflict and that are not high on the intelligence order of priorities. In these domains, appropriate force buildup requires a different and innovative approach. It is worth considering greater use of research institutes and of companies that engage in open intelligence research, and perhaps also of some of the perceptual areas of expertise, presenting these with a challenging demand for a product on a high professional level. This will enable cutting back the manpower frameworks that deal with these domains in the organizations, and channeling them into other work. In that way resources will be saved, and better use will be made of the manpower that is allocated to domains in which access to those outside the community will not be permitted.

Robotics and Miniaturization

The technological world is making great strides toward the extensive use of robotic devices and miniaturization in many domains of practice. The future battlefield is already emerging, and it appears that the military and security engagement with it will mandate far-reaching changes. This is a major technological race marked by important breakthroughs at sea, in the air, and on land. The intelligence community can and should be a pioneer in these areas. It is precisely the clandestine domain that can be a fertile ground for the growth of unique capabilities, of innovative and creative devices that can provide responses both in the collection and operational spheres.

Strengthening What Already Exists

The building of manpower is also an appropriate framework for strengthening and improving existing capabilities. In the past, when basic areas of activity were neglected and all resources were primarily channeled into innovation, a price was paid. For several years the American strengthening plans neglected vital areas, such as HUMINT, and most resources were directed to developing advanced technologies. Investigations of the September 11 attack identified the gap in human sources and in other complex operations stemming from mistaken orders of priorities, and this was seen as a lesson for the strengthening processes.

Because force-buildup plans are, as noted, long-term in nature, strategic decisions and their implications have greater weight. The allowed margin of error is small, and the extent of damage can be large. Therefore, when one reaches the stage of completing the plans, and is close to deciding the final division of resources, it is worth recalling that sometimes old is also good, and that preparing for the future does not necessarily entail a preoccupation with gaps and with building new forces and capabilities, but also the strengthening of existing capabilities such that they will remain significant and relevant in future campaigns as well.

Conclusions

Much has been written and said about the ability to predict and its limitations. Nevertheless, the need to be ready for future scenarios and to be structured accordingly requires appropriate preparations, with an emphasis on force buildup. Thorough strategic staff work, which well defines the goals and the gaps that require resource allocation while setting proper orders of priorities, is an important condition for the robustness of the intelligence organizations and of the Israeli intelligence community. Given the great importance of devising a plan that addresses the future, the task of force buildup is complex and challenging. The responsibility is weighty, especially with regard to long-term strengthening projects, most of which are resource-rich—requiring deep, thorough, and balanced professional work.

The organizations of the intelligence community are operative in nature, with many ongoing missions, and at crucial junctures are supposed to play an important role in top-level decision-making in a wide range of fields. Naturally, the need to provide immediate solutions and achievements with regard to urgent, persistent gaps can pose a threat to the investment of resources for the long term, something that is likely to affect force buildup. The right responses are for senior managers to be aware of the issue, and to create mechanisms requiring a balance of resources that takes into account the plans for strengthening that go beyond the tenures of one official or another.

The main elements of force buildup in intelligence organizations, some of which are not only characteristic of the clandestine world, are: outsourcing (as far as it is possible and logical), special and community-level concern with the resource of leadership-level manpower, promoting the field of robotics and miniaturization, and promoting the field of perception both from an organizational standpoint (it is recommended to consider establishing a community-level body on the issue) and from the standpoint of developing technologies, some of which are more advanced in the civilian sector.

When it comes to promoting force buildup in the Israeli intelligence organizations, a deepening of the common space of jointness between the organizations should be considered. This could involve both establishing a committee of senior officials to deal with force buildup, which would meet from time to time, and joint plans according to need. Proper, sober, and balanced attention, decision-making that accords with responsible systemic conduct, observational capability and the building of preparedness for threats that are beyond the horizon as well, will enable a strong stance toward the challenges of the future.

A Tactical Technological Body as Bringing Change to the Field Intelligence Deployment

Lieut. Col. (res.) A. V.

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Introduction

Opening scene: The discussion room at the Intelligence Corps School is full of commanders of units of the force. I, a young major, sip water and start presenting the missions and the basic working principles of a new department I am going to establish. The essential idea is to set up a technological entity oriented to solving intelligence problems through advanced technologies in the field of visual data. The entity will communicate with all the intelligence bodies (including those outside the unit) and will work with them. The presentation ends in relative quiet, but it is clear that the quiet is illusory; the atmosphere is tense. When the time comes for the comments and the summing up, the commanders of the subunits address (I esteem and appreciate all of them), each in his turn, the idea of setting up the department. Sentences such as “I don’t understand what the department is supposed to do,” “What is its responsibility?” “I tried similar things in the past,” “We already have entities that are doing that” are tossed into the air. At this stage I again sip from the glass of water, and take a deep breath. The unit commander, Col. R., responds to what has been said and defends me and the idea that I presented. He is resolute and does not give in. We’re on the way!

Final picture after five years: I mount the stage leading a group of 10 soldiers and officers, a worthy representation of all the units of the Intelligence Corps. I salute the head of Aman, Aviv Kochavi, and he returns me a salute. I approach him, he smiles and shakes my hand with his characteristic warmth, and he gives me a prize for the significant change that we as a group have brought about in the force. I step down from the stage, smile, and recall that presentation of mine at the intelligence school.

During those years we created a technological entity that not only dealt with technology but became one of the significant factors in bringing about a paradigm change in how the force worked. As with every story, this is a personal perspective and a description of a reality that is very complex and many-sided.

Visual Intelligence

Visual intelligence in its military-tactical contexts deals with geographic and visual

information and with its operational implications, such as the ability to advance and to move from place to place on foot or by conveyance (vehicles, tanks, armored personnel carriers, etc.). The process of generating terrain intelligence includes sensory and collection stages, whereby the data is collected that describes the natural and man-made topographical features, the products that were obtained are processed and structured (for example, the precise location of satellite imaging in the territory), and a research process translates the information that was collected into insights pertaining to the territory. These insights are provided to consumers who make use of the field intelligence, whether for an operational or an intelligence purpose.

The Conditions That Enabled the Process of Setting Up the Department

The department was established against the backdrop of certain changes in the challenges confronting field intelligence, including processes of change among the enemy, technological developments in the world and in the IDF (a “technological opportunity”), and organizational ripeness that included the support of commanders and a conducive culture (an “organizational opportunity”).

Change in the Enemy

Enemies have monitored the different technologies inundating the new battlefield, such as remotely piloted UAVs, on which different kinds of cameras are installed, and intelligence satellites. These capabilities have enabled the IDF to achieve visual-intelligence superiority, which is based on imaging data in any weather and on the ability to rapidly close collection-attack cycles. The enemies have concluded that they need to reduce their visual signature as much as possible so as to prevent exposure and vulnerability to attack with precision weapons. They have begun using various methods to reduce their signature, from camouflage to concealment (using underground and crowded urban spaces) to blending into the civilian population. They have thereby tried to offset the advantage that the means and methods developed by visual intelligence and field intelligence have provided over the years.

Technological Developments in the World and in the IDF

Technological developments such as satellite photography and remote sensing, satellite navigation, computational geographic information systems, and the cyber phenomenon in general strongly affect the domain of field intelligence and mapping in different regards: collection, research, and information sharing. This is an ongoing process that came to fruition at the start of this millennium. A transition occurred from mostly analogic methods and processes to methods and processes based on digital computer systems. The digital revolution began in military research laboratories, primarily in the United States, but was considerably accelerated by

civilian applications of these technologies and by the commercial capital that was invested in them.

The transition from analogic processes based on physical entities (photographic films) to digital entities (bits), along with the mechanized identification of changes, made it possible to shorten the time needed to produce and disseminate intelligence. It also facilitated carrying out information fusion between different levels, that is, analyzing electro-optic satellite imaging and combining it with radar-imaging data and other spatial databases, such as the level of roads and buildings. This capability did not exist in the past, but in the digital era it is well utilized. Furthermore, the ability to achieve extensive and unlimited integration of information from different collection disciplines, such as VISINT and SIGINT, is possible only in the digital age, in which all entities are represented structurally as bits. In the past it was impossible to fuse the map or the photographic film with the analogic information that was obtained by the Sigint personnel.

The digital revolution began in military research laboratories, primarily in the United States, but was considerably accelerated by civilian applications of these technologies and by the commercial capital that was invested in them

Organizational Ripeness and an Enabling Culture

In the period after the Second Lebanon War (the period of Gen. Amos Yadlin as head of Aman), modes of organization began to emerge in Aman in which several bodies integrated the unique professional knowledge of each body into a single, combined, interdisciplinary body, the aim of which was to create the large whole from the sum of its parts. These bodies were established in response to an enemy that was striving to reduce its signature. Each of the disciplines “absorbs” partial information, emitted by the enemy, in its collection sensors (SIGINT separately, VISINT separately, and HUMINT separately). The basic assumption was that integrated bodies could gather all the indications into a more accurate and fuller description of the reality. The linkage between disciplines had already been practiced in Aman since its establishment. But when Aman reached a much higher level of ripeness thanks to a spirit of organizational creativity and innovativeness, the different entities could be linked more closely than in the past. This was an accelerating factor in the establishment of the department.

Aside from the ability to solve intelligence issues and incidents, these integrated bodies enabled mutual learning about the capabilities and modes of organization of the different bodies in Aman. One of the most significant factors in establishing the

department was the technological task-oriented bodies in Unit 8200, to which we were exposed through the joint work and the collaborations that emerged in that period. Such collaboration posed a challenge for us along with positive competition (a kind of “scholars’ envy” of 8200), and suggested the possible approaches of technological bodies oriented to solving intelligence problems.

An Encouraging and Enabling Commander

Every new body (military or civilian) requires resources. The department in question needed quality and suitable manpower for the mission, and it needed backing for when difficulties were encountered. It was very hard, to the point of impossible, for such a body to be created without the support of an “initial investor” who believed in its concept and in its people. In this case the investor was the commander of the technological center at that time, Col. R. Without his ongoing vision and backing, the department would not have been established, and certainly the changes in the force would not have occurred.

Characteristics of the Department

The department was established through the integration of several R&D teams, which until then had been organizationally subordinate to different departments within the framework of the technological center of the VISINT unit. Each team dealt with a certain technology, and until then had tried to find an operational use for that technology (a technology-oriented process). The new department’s approach to operation was different and oriented to solving the intelligence problem. One of the first challenges that the department faced was the “ingathering of the cultures” into a single, task-oriented, departmental culture positing a clear, agreed goal and vision for all of the department’s personnel. The consolidation and crafting of the culture, and its assimilation by the personnel, took a great deal of time. Only after about three years since the department’s establishment did we succeed to forge a coherent culture and code. Because the personnel were mature individuals with solid opinions and experience of life, one could not carry out a cultural change with the same ease with which one would change a computer’s operative system. Not all the people could or wanted to adapt themselves to a new culture. At different stages of establishing the department, individuals left who had not adapted themselves to the emergent departmental culture and its operative principles.

The department’s point of orientation is based on the recognition that the intelligence problem is important and not the technology, which is only the means

The Department's Operative Principles:

- **Problem-, not technology-oriented:** The department's existence theorem is based on the principle that the main point of orientation is the intelligence problem and not the technology, which is actually only the means. This orientation point makes it possible to assess and measure the extent of the department's progress, and requires deep familiarity with the intelligence problem. In light of this principle, the department made recourse to personnel whose objective was to identify significant intelligence problems, help solve them, and study them in-depth. These workers were referred to as the department's Business Development people. We also expected that the department's technology developers would gain familiarity with the intelligence problems they worked on. Such familiarity strengthened their motivation since they understood the need to make decisions during the development process and to come up with creative ideas that enabled the solving of intelligence problems.
- **Raising doubts as an ongoing means of improvement:** The department placed critical emphasis on posing questions at every level and at every time with regard to any insight that was relevant to its work. This constant raising of doubts enhances the clarification of reality by considering it from various perspectives. Asking questions must not remain a kind of intellectual exercise; it must also influence the department's practice at every level and time. From the moment of its establishment the department has dealt with development on a basis of short iterations, a method known as Scrum. In this method, a partial capability develops in a time span of about three weeks; there is then a process of learning and asking of questions, and a further iteration is planned. The methodology of the investigation is also central to this type of development. Each year the department conducted a kind of learning workshop and an examination of the year that had passed, pointing to future opportunities. To address the tension between the asking of questions and practice, one must ensure that the questions will lead to practice characterized by "friction with the reality" and that they will facilitate renewed learning. In that regard, activity was ongoing and also included the asking of questions that did not paralyze the activity in the department (Reflection on Action).
- **Cooperativeness:** Because the department was established with the notion of cooperativeness in the background (as when intelligence teams cooperate with entities outside of the VISINT unit), it was only natural that this principle would be central to its mode of operation. The cooperativeness principle entailed several objectives. First and foremost was the desire to solve intelligence problems, at whatever level of significance, that in a considerable number of cases had been dealt with by bodies outside the units of the field force. In addition, the cooperativeness

allowed the department to engage in accelerated learning about needs, capabilities, and methodologies that would enable it to progress and solve more difficult problems. The cooperation between the department and Unit 8200, and with other entities in the community, was so close that some members of the department served within the sections of 8200, and development personnel of other entities in the community served and were trained in the department. The department concentrated a community of developers in its operational technological fields of activity, and shared the knowledge with all the entities in the Israeli security community.

- **Initiative and the taking of broad responsibility:** The department was established with the goal of helping solve complex intelligence problems that also required complex technological solutions. In these cases uncertainty is high, and the division of responsibility between different bodies is not clear and demarcated.

Therefore, among the department's operative principles, we posited the principle of taking the initiative, of being able to "wander around" in the domain of the problems, the solutions, and the organizations and to locate problems that the department could solve or could help solve. This principle was evidenced in the departmental mode of operation; at the same time, we expected each soldier in the department to uphold the principle in his daily activity as well. As a technological department we found ourselves responsible at certain stages for producing intelligence from a certain source that the department had developed, until another suitable mode of organization for its production was determined (involving production-oriented intelligence bodies). The department carried out the first training, which was techno-intelligence training, in the field of information use in the intelligence school until systemic organization was devised in these new areas.

The cooperativeness of the elements of the intelligence community was a central idea in the department's functioning—some members of the department served in development sections of Unit 8200, and development personnel from other units served in the department

The Departmental Method of Operation

At the time the department was established, a dilemma arose. It concerned whether to move as rapidly as possible, creating collaborations with entities outside the force so as to achieve significant successes quickly (the "racing car" model), or to forge links with entities within the unit and, together with them, turn to entities outside the unit. In that way the department could already, from the first stage, advance the force in an

inclusive fashion (the “locomotive” model) at the expense of speed and flexibility. I decided that, at the initial stage, the preferable mode of operation would be the most rapid and flexible one. I understood that this approach would prompt opposition from within, but I preferred being able to reach significant and rapid results over a situation in which, from the very beginning, we would be a cumbersome, conservative body. The results were not late in coming, and neither was the opposition from within. Here too Col. R.’s backing was critical to our progress, indicating the importance of the support of commanders for an innovative body that is generating a change (as well as opposition). At later stages we replaced this method of operation with a “locomotive model,” striving as a department to produce an overall systemic improvement. Clearly we are not speaking of dichotomous models that require a decision on whether to use one model or the other, but of combining the methods of operation simultaneously (and thus we indeed continued to operate).

Conclusion: The Paradigm Shift in the Force

During the initial years after the department was established, we experienced successes as well as not a few failures. The departmental mode of operation, the developmental methodology, and the personnel of the department enabled us to “wander around” in the different domains and develop a field of activity. This field of activity was intended to significantly expand the capabilities with which the force produced field intelligence. Because the department was well networked and connected to different elements of the community, it was indeed natural for it to point to new opportunities in a particular area of collection.

To be fair, it should be noted that the department was not the only body in the field force that dealt with this area, and not the only one to point out a new topic having great potential. The department’s main function is to create the methodological and conceptual basis, along with the appropriate relations with elements of the community, to get this revolution started. Naturally, the department engaged in developing technological capabilities that supported this revolution. The department’s flexibility, multifaceted nature, and principle of broad responsibility enabled it to perform tasks that, at the first stage of this paradigm shift, were not established tasks. At a certain stage we found ourselves responsible as a technological body for guiding sources, producing intelligence, and providing intelligence training until new organizational structures emerged that institutionalized, took responsibility for, and kept developing these capabilities.

About two years before the department was formed, we could not have predicted and imagined the change we would be involved in. As is often the case, the path is very winding and complex, and at first the opportunities appear risky and intricate.

However, a team that is agile and strives to understand what is required, that inquires and improves, that forges collaborations enabling a comprehensive outlook, that initiates and takes risks, is the kind of platform that allows the organization to identify opportunities in advance and to make them the property of the entire organization.

› The Characteristics of Intelligence Research and the Researcher in the Future

Does Intelligence Research Need to Change, and How?

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For years the research bodies played a critical role in the process that yields intelligence for decision-making. It is the researchers who have defined what is needed from the tasks of collection and processing, and it is they who have translated the products of collection and processing into intelligence assessments adapted to the decision-makers' requirements. Creating a complete and meaningful intelligence picture from the puzzle pieces of the processed collection findings was one of the researcher's main functions. Because of the complexity of the collection and processing tasks, large agencies for collection and processing have been established that specialize in separate disciplines: SIGINT, VISINT, HUMINT, and others. The researchers' knowledge of where to find the relevant information items, how to understand them, and how to piece them together into a complete and relevant picture meant that intelligence research occupied a critical point in the process. Without the research it would have been impossible to convert the large majority of the collected and processed information into assessments relevant to decision-making. Indeed, in his book *Intelligence as a State Institution*, Yehoshafat Harkabi wrote that "Research is the crowning glory of the intelligence system."

Over the past two decades changes have been occurring in the researchers' work environment. Technological developments in information collection, processing, and dissemination generate more numerous and varied raw materials, and provide a steadily improving mechanized solution for many aspects of the processes involved in producing an intelligence picture. At the same time, the environment in which the decision-makers must operate, and about which the researchers must formulate an assessment, is changing at an increasing pace. These changes necessitate more frequent updating of the research questions, premises, research tools, and of the way in which the answers are presented. Such changes pose challenges to the researcher. This article will consider the changes that the researcher needs to effectuate in order to keep making his important contribution and maintain relevance.

The Changes in the Research Bodies' Work Environment

Recent years have seen a real revolution in the capabilities for collecting and processing intelligence information. It is part of a global information revolution that is occurring in the civilian sphere. Today it is much easier to collect information, collate it digitally, and process it with mechanized tools. One can collect telephone communications with much wider accessibility than in the past, receive photographs at a rapid pace and in real time from satellites and remotely piloted UAVs, and obtain secret documents in large quantities through cyber accessibility. The information that is collected can be assembled in the form of digital media, enabling accessible and rapid retrieval. Mechanized processing capabilities are also developing, such as conversion of audio to text, automatic translation of speech and documents, identification of faces in pictures, identification of words in a text, and so on. All this entails no need for numerous people who listen, translate, read, or observe pictures or films. In addition to collection through task-specific military accessibility, huge quantities of relevant information are collected by people and organizations all over the world that document, summarize, and share their knowledge: battle films on cellular instruments, times of takeoffs and landings, or the location of ships at sea. This information is available in vast quantities and in real time to anyone who requests it.

Technology enables much more than extensive collection, collating, and processing of information. Developing capabilities can do more and more of the work of “putting the puzzle together” that intelligence researchers perform. For example, a researcher who in the past wanted to find a secret enemy site had to read transcripts of conversations about ways to get to the place, examine the cellular telephone locations of the people going to it, read reports of visual decipherment of suspicious sites, view remotely-piloted-UAV films of the area, and try to identify familiar vehicles in them moving near to the site; finally he had to connect the pieces of the information so as to identify the site. Today, too, not a few researchers use those methods. With the developing technology, however, it is not only the tasks of the initial information processing that can be performed in mechanized fashion, but also the utilization of the numerous and various data from different sources (cellular locations, vehicle locations, home addresses, etc.) to

Technology enables much more than extensive collection, collating, and processing of information; new capabilities allow the mechanized performance of an increasing portion of the work of “putting the puzzle together” that is carried out by intelligence researchers

identify suspicious sites. The mechanized tools are improving. Today mechanized systems can—and will do so to a much greater extent in the future—process diverse information in larger quantities, more rapidly, more completely, and more precisely than a human being can. These technological developments open a door to operational capabilities that did not exist in the past, such as the capability to monitor a large number of concealed sites with a wide network of visual collection; to point rapidly and automatically to a site from which a launcher departs; to rapidly analyze the communication network of an enemy configuration; to understand who is the commander, who are the deputy commanders, and what is their importance; and to locate them with real-time photographs—all this without the involvement of an operator.

The technological developments of extensive collection and the technological developments of information analysis are closely connected. The human ability to analyze information is clearly becoming inadequate to the “information explosion,” which yields raw materials in huge quantities that can be obtained either in real time or after a protracted time. Without the ability to analyze them in mechanized fashion, however, the raw materials that are collected will be utterly useless.

Along with the change in the technological environment, a far-reaching change is occurring in the environment for which the researchers must formulate intelligence assessments. The “old” world was characterized by relative stability and order, had relatively few actors, and they were usually constant. Today the number of significant actors has grown substantially, and many of them, including nonstate entities, dramatically affect the development of reality. The rapid and borderless stream of knowledge creates new and irregular connections between actors and accelerates change. The state of Israel and the IDF are part of the changing world, and they must devise a response to the new challenges—such as BDS, or a local development involving weaponry in states or organizations that are part of the arena. It can reasonably be assumed that the questions the decision-makers are asking are no longer the same questions, and that the kind of answers that was given in the past is no longer sufficient.

The change is also occurring in our cultural environment. The great availability of information in daily life not only enables familiarity with numerous details, but also strengthens and cultivates such familiarity. On websites and in smartphone applications, we are more and more accustomed to receiving immediate and tailored answers to a growing variety of questions that interest us. We are also getting used to receiving, by “push,” answers to questions we have not even asked because the systems have discerned that we are probably interested in them. This learned expectation is also applied when consuming intelligence information. The decision-

makers understandably want to receive more rapid, detailed, and precise answers than in the past. Moreover, the operational concepts and the developing operational capabilities assume that intelligence will provide rapid, detailed, and precise answers. The fire plans assume that the precise location of thousands of targets will be known in advance, and that in real time intelligence will be able to provide a reasonable assessment of the presence of people in them.

The collection and processing technologies are providing more rapid and comprehensive answers to numerous questions. What characterizes these questions? They are mostly questions for which the answer describes the state of affairs in the present or in the past—"facts." Investigation of the past benefits greatly from the collection and processing capabilities, as was evident in the solving of the Mabhouh assassination some years ago. Pictures and telephone communications are recorded; so are the details of the passports in international flights, or of SIM and credit cards. Analysis of the present also benefits from the wide-ranging collection and processing capabilities. In the past, constructing a detailed intelligence picture of a civil war in Iraq took a great deal of time and yielded only a partial answer. Today there is extensive documentation in pictures, films, statements, and Tweets of various events during combat, and an ongoing, updated picture can be generated.

What Will the Researchers Have to Do Less?

In the future, technology will enable mechanized systems to replace researchers in tasks that today are at the heart of their activity. The beginnings of such a capability already exist. In my assessment, over time fewer and fewer researchers will deal with questions of the "solve the riddle" kind, and likewise, in each discipline, fewer processing personnel will deal with filtering and upgrading pieces of information. Just as the Sisyphean endeavor of "ticketing" (cataloging all the information that reached a research body) declined until it was replaced by a computational technique of searching a text, the automatic-processing capabilities will make it possible to replace researchers in tasks of filtering, upgrading, and cross-checking pieces of information, and indeed will perform those tasks better: more rapidly, more accurately, and with a wider view of the collection sources over time, of a geographic space, and of connections between research objects. Mechanized processing of collection findings will be faster,

The role of the researchers in mediating products to the decision-makers is likely to diminish or change, mainly because the consumers have new expectations and abilities to consume intelligence directly

more accurate, and richer than human processing, and hence will successfully replace researchers in the operative aspects of the research task, which were in the past and are still today a considerable part of the research work.

Not only is the need for researchers as “puzzle constructors” and “riddle solvers” likely to diminish, but so is their role in mediating products for decision-makers. In the past, the intelligence officer needed to tailor his research products to the information consumers, and to present the product so as to make them aware of it. Today the information technologies enable to a certain extent—and will enable to a large extent in the future—the automatic tailoring of the answers to the information consumers, from national leaders to end users. In the civilian environment such capabilities are applied to various websites and smartphone applications, but in the military environment they play a larger role as well. A pilot in the cockpit of an F-35 receives the information he needs at the moment, and only at that moment, that the plane’s computer “decides” to present the products it has processed in accordance with the information that has reached the plane and been collected by its sensors.

The iNet system is supposed to tailor the information needed by the national leaders according to areas of interest. Today it appears on the computer screen; in the future it will appear in the palm of their hand. Mechanized systems can disseminate information adapted to the needs of various recipients more efficiently, cheaply, quickly, and precisely than human dissemination can. Complex assessments and complex ideas indeed require human dissemination; but the updating of information already requires—let alone in the future—much less mediation. Today’s decision-makers are a product of a more sophisticated society that has learned to be a sophisticated information consumer: to manipulate information, understand statistical data, and read diagrams. Thus they can manage better with intelligence products consisting of details and facts, and need less mediation by an intelligence officer to explain the details of the assessment to them.

What Will the Researchers Have to Do More?

Here the question arises: What is required of the intelligence researcher in the era of advanced collection, processing, and dissemination technologies? It appears that, to be relevant to the decision-making process, the intelligence researcher must understand what questions need to be answered, and what will be considered an answer relevant to the decision-makers in the concrete context. Take, for example, the question: “What territories does Islamic State control?” There is no difficulty in finding updated maps in which those territories are marked. We can also find them through our own efforts—after collecting all the pictures in which Islamic State flags appear, precisely locating the places where there are people in Islamic State uniforms,

and identifying all the places where the population has to pay taxes to Islamic State. Will we then be able to answer the question? Not necessarily.

If this were merely a simple factual question, there would not be different maps that give totally different answers, some focusing on Syria and Iraq while others reach as far as Islamic State zones in Europe and the Maghreb. To answer the question of what are the Islamic State's territories, one has to suggest an interpretation and make assumptions that do not exist in any database, and that do not define what is meant by "territories" and by "Islamic State." Is it accurate to view the Yarmouk Martyrs Brigade and the Sinai Province as part of Islamic State? In some contexts it may be accurate to include them, and in others it may not be. What is the "territory of Sinai Province"? Is it the area in which the members of Sinai Province operate unhindered, or does it also include areas where the Egyptian army operates? Any answer to a question about facts assumes that we know what we mean by the concepts that emerge in the question, and what kind of answer we are looking for. But these concepts are context-dependent, and they cannot be found in any database nor with a thorough search. They define what data should be sought and how to process them. Hence they precede collection and processing, and without them there is no clear answer to the question of what we are to do with the databases.

In the dynamic operative environment—today and in the future—there is a growing need to frequently re-examine the questions and the assumptions on which the research is based

In most cases we do not often ask ourselves what is the right question, what is an appropriate answer, or what are the right concepts, because the answers are "obvious." However, in the dynamic operative environment of today, there is more and more of a need to reexamine—and frequently—the questions and the assumptions. The relevant assumptions, the right questions, and the appropriate concepts are not to be found in the databases, and cannot be a product of mechanized processing. They are inevitably a human product that requires a creative process of interpretation and criticism. In today's dynamic operative environment and in the future as well, intelligence officers will have to more frequently scrutinize the perceptual and conceptual framework on which the collection, the processing, and the intelligence assessment are based.

Decisions are made about the future based on assumptions about what is likely to occur and in what future context. The answers about the future are rarely to be found in the crowded databases pertaining to the present and the past. Indeed there are calculative techniques for quantitative prediction, which offer quantitative assessments about the future according to the data known so far, and which can,

at least, discover patterns in past events, formulate them as laws, and hypothesize what will happen in the future if the patterns continue. However, the development of history is a process in which there are no strict laws. Although one can predict the size of the population of Arab countries by calculating natural growth in the past and using it to predict the population in another 20 years, an automatic calculation process does not take into account, for example, the effect of modernization on Arab populations. To take such a factor into account one must formulate hypotheses and make assumptions, not suffice with a mathematical calculation when we are trying to predict human processes on both the individual and group levels. Our assumptions about the connection between the picture of the past and the present on the one hand, and assessments about the future on the other, are part of the conceptual framework that the intelligence officer who is a researcher must examine and develop.

Assessment of the enemy's future activities must take into account the decisions that people are likely to make. To a certain extent one can learn from the collection findings about what people are thinking today. Although one can know what many people are currently saying and writing, there still is no way to find out what they will know in the future, how they will interpret the picture of the world at that time, and how they will decide to act. How was Mahmoud Abbas likely to act in September 2015? How will the commanders of a ground-to-air missile battery behave when they find out that the radar has been blocked by electronic warfare? How will launch teams behave when they find out in wartime that their contact with headquarters has been severed? Very important assessments depend on assumptions about what people will know, understand, and do, and such assessments cannot find answers merely in detailed and exhaustive processing of the existing information, however rich. In light of experience, we can hypothesize to a certain extent what people will choose to do if the conditions remain the same. But we cannot learn directly from experience what they will choose to do when the conditions change, and we certainly can assume that they will change. Here too the research intelligence officers must design and critique a conceptual framework.

On the Connection between the Researcher and the Processing Technologies

The automatic-processing technology is vital and will contribute greatly to crafting a better, more precise, and more rapid intelligence assessment in many areas. As noted, the technology will probably render redundant a considerable part of the researchers' work in the operative aspects of the intelligence assessment. It cannot, however, render redundant the need for researchers to design the required conceptual framework so as to formulate the questions, guide the processing tool, and understand

the actual significance of the findings that emerge. These operations require two qualifications that human beings possess, which in the foreseeable future will not be possessed by machines: self-awareness and understanding of the other. Self-awareness is the basis of reflective thought, without which one cannot critique the framework of assumptions behind the guidance of collection, the processing task, and the crafting of the intelligence assessment. A mechanized system can run a check of an algorithm that was designed jointly by a researcher and a technologist, and that must operate under defined conditions, but such a system cannot reach a conclusion that running the algorithm check is unnecessary (if there is no algorithm to make that determination). The system cannot understand that the algorithm check has erred and decide to act otherwise. Neither can it know that the question needs to be changed; that the assumptions that serve in the algorithm for processing the findings, and for interpreting the results of the processing, need to be updated; or that the set of concepts with which the answers are formulated need to be altered. A human being can do that. He can criticize himself, understand that his assumptions and his questions are unsuitable, and also create a new, more appropriate framework for the updated context.

Hence it is clear that the automatic-processing technology does not compete with the research bodies; instead it is a tool whose purpose is to contribute to the set of capabilities involved in formulating the intelligence assessment. The systems will be able to provide some elements of the assessment that until now were provided

The automatic-processing technology does not compete with the research bodies; instead it is a tool whose purpose is to contribute to the set of capabilities involved in formulating the intelligence assessment

by researchers, and even do so better than the researchers. They will not, however, be able to provide other critical elements, certainly not a full picture of assumptions and of adaptation to the context. To exhaust the advantages of mechanized processing, the connection between the collection and processing aspects and the researcher must be tightened. The technological development of mechanized processing systems enables the development of a direct connection between the intelligence researchers and both the raw and the processed information. As long as the processing is human and complex, there must be an organizational separation between the research bodies and the processing bodies, and it is important that the processing bodies be close to the collection units. The more mechanized the processing, the more feasible and proper it is to link it more closely to the research process. One can thus achieve two important contributions to producing more relevant and suitable intelligence assessments.

On the one hand, the processed information will be more closely and rapidly incorporated into the intelligence assessments. The researchers will be able to analyze the data more richly, and hence can bring the processed products to fuller expression in the complete intelligence assessment. The assessment will be more richly and deeply connected to a wide variety of processing products, and the processing products will be presented within a wide context of assessment that is needed to indicate their significance. The intention is not that all processed information will be disseminated to the recipients only as part of a complete intelligence assessment. If the researchers have close access to the information, they can more flexibly determine which processed information can and should be conveyed automatically and directly to the decision-makers in two tracks:

A “green track” that suits the rapid transfer of processed information in a structured and familiar format that the recipients know how to consume, such as updating target data or presenting economic and social indicators that describe the state of the population. The researchers will be able to determine whether the recipients can consume this information effectively without the help of interpretation.

A “red track” that requires a new perspective on the processed information as part of a wider concept that needs to be detailed (for example, whether a decline in water consumption means the residents’ basic needs are not being met, or reflects the departure of some of the residents while the consumption per person remains the same).

On the other hand, tightening the connection between the researchers and the collection and processing will enable the researchers to more efficiently and rapidly guide the collection and processing tasks. The researchers will be able to adapt the processing tools more dynamically to the updated questions, which depend on a broad understanding of the context and of the nature of the answers needed by the decision-makers.

Should processing and research be more closely connected, and if so, should the processing bodies be located within the research bodies? This question requires a more wide-ranging discussion than this article can offer. Such a discussion must address a variety of issues. First, it is not clear when and to what extent the automatic-processing tasks will make the human information-processing roles redundant—the radio operator, the translator, the decipherer, the aerial photographer. At present numerous people are required in the processing bodies, and these are larger than the research bodies and cannot be “swallowed” by them. Second, the tasks of the processing bodies need to be more clearly defined. At present these tasks include both the processing of information that comes from sensors and the translation of the vital-information marking into the orienting of the sensors and of the algorithms

of the processing (the outstanding example is Unit 8200). Analyzing the different components of the processing task will facilitate distinguishing the components that must be nearer to the research and those that are nearer to the collection. Third, in the current structure of the Israeli intelligence community, a number of processing bodies provide processed information to a number of research bodies. Transferring processing functions to research requires an organizational solution involving processing functions like those in the different research bodies, a measure that could cause a waste of resources and damage to the quality of the products of the processing.

Attributes of the Researchers in the Future

As noted, for many years a considerable part of the research personnel dealt with the operational aspects of intelligence assessment. Researchers were also educated to specialize and excel in those operational aspects, and were esteemed for their ability to expose secrets, solve riddles, and even to remember important information. As the mechanized capabilities improve, however, researchers will have to be oriented to a different work point.

Researchers will have to make use of information-processing systems for tasks that used to require human work. For example, they will be able to leave to the systems (hopefully they will do so willingly) a large part of the endless race to identify anomalies so that warnings can be given. Even now algorithms are capable -and they will be more so in the future - of identifying anomalies from a wider perspective of utilizing numerous and varied data. Researchers are needed to develop new algorithms, but the “dirty work” will be done by computers. Intelligence officers will have to improve the warning models according to which the mechanized systems utilize the abundant information, but they will not have to manually analyze the database.

“Information intelligence officers”- giving researchers the capability to carry out mechanized processing of the databases available to them

There are many questions whose answers can be found by utilizing automatic information instead of an intelligence officer doing “dirty work.” Some questions of that kind require ongoing processing of the database to obtain an intelligence picture: updating the picture of the enemy’s deployment, monitoring the location of a particular individual, monitoring and identifying changes in the broadcasting characteristics of the communication system, continuous mapping of the processes of constructing buildings in a given area, or monitoring the topics of conversation in the social networks. Other questions for which researchers will use mechanized systems

are focused questions that are attuned to a changing need, such as the correlation between a population's economic behavior and characteristics of behavior in the social networks, or the connection between the success of experiments with precision weapons and weather conditions.

One needs to know how to use processing systems so as to exhaust data. This entails both formulating relevant questions and knowing how to deal with the results. That, in turn, requires relatively deep understanding of the databases and the algorithms, of their capabilities, and of their weak points. Several years ago a task-specific course was opened for researchers from different research bodies; its purpose was to train them to use mechanized processing systems and their products effectively. The concept was to provide the research bodies with an independent capability among experts in the field (information intelligence officers) to make use of mechanized processing. The researchers' questions could then be translated into a wording that was relevant to the processing systems, and the products of the processing could be mediated for the researchers. The lesson that was learned from providing the course is that a small amount of training does not fulfill the research bodies' needs. Hence the basic course that trains intelligence researchers for the Research Division and the commands was restructured. The updated course includes training for practical knowledge about the use of mechanized processing systems. This comes at the expense of some of the time devoted to enriching the researchers with informative knowledge, on the assumption that they can more effectively accumulate such knowledge as part of their work, whereas they cannot accumulate the practical knowledge to a similar extent. The goal of the change that has been made is that in a few more years all the intelligence researchers will be qualified to use these systems competently.

The ability to use the systems for processing tasks that currently demand extended work time of researchers will allow them to shift their time from "dirty work" to a higher level of intelligence assessment based on the products of mechanized processing. This will involve understanding the context, engaging in deep dialogue with the decision-makers at all the echelons, formulating questions, and critiquing assumptions and conceptualizations.

That, in turn, will entail the need for a further adaptation of the researchers' attributes: they will have to be better qualified for creative and critical thinking about questions, assumptions, and concepts based on a clear formulation of positions and an ability to detect covert assumptions. The researchers' training must be more oriented to internalizing the research mode of thinking. While important, training courses for research are not sufficient. The capabilities in question must be improved by the researcher, over time, through ongoing experience with applying them and under effective guidance. These capabilities are not unique to intelligence research; they

are typical of what is needed by researchers of all kinds—in academia, technological-research organizations, military-research units, and strategic-research institutes.

These capabilities were always needed in the intelligence-research bodies. But in today's rapidly changing environment, it is more and more important for a large number of intelligence officers to have a research capability of that kind, and for the group of intelligence officers to include a variety of viewpoints. Hence today it is crucial, even more than in the past, for the intelligence-research bodies to include researchers from a variety of fields. In a more static environment in the past, a deep familiarity with the details of the intelligence picture may have been sufficient in the eyes of most intelligence officers. Today, though, it does not suffice when it comes to crafting relevant intelligence assessments. It should be stressed that these conclusions about the nature and capabilities of the researcher must influence the process of sorting and identifying intelligence researchers in Aman and in the community.

Conclusion

Intelligence research is undergoing a period in which it must change, in light of two processes that are occurring simultaneously: changes in the operative environment for which an intelligence assessment must be formulated, and changes in the technology that is used to formulate an intelligence assessment. The increasing ability to collect and collate information in growing quantities, along with the capability of mechanized processing of huge quantities of information, greatly reduces the need for the research intelligence officer to deal with the operational aspects of crafting the intelligence assessment. The changes in both the technological and operative environments enable and require the researchers to focus more on the higher level of intelligence assessment—devising the conceptual framework of the assessment while critically clarifying the questions, assumptions, and concepts. The research bodies are already in a process of change, each of them at a different stage of development. What is needed is a comprehensive process that will show the research bodies the path to adapting the research concept in an orderly fashion, to developing the technological tools and the ways to use them, and, most of all, to developing manpower with the requisite capabilities for research in the future—both the competent use of the technological tools and the ability to formulate an assessment.

The “Information Research Officer”: A New Concept in Intelligence Research

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Background

Already from the period of the Yishuv and the SHAY (Information Service) , Israeli intelligence was influenced by concepts in Israeli academia. The similar features of academic research and intelligence research meant that intelligence could be based on the theoretical and methodological knowledge that is acquired in academia, and also on scientific research methods so that its knowledge-development methods could be improved. It was also necessary, of course, to find the appropriate adaptations for the military-intelligence context of knowledge development. In that context, in recent decades Yitzhak Ben Israel has made an outstanding contribution to the intelligence conceptual discourse.²²

One of the interesting methodological developments in the social sciences and the humanities in recent years is the attempt to harness the computerization field to the qualitative research fields. This trend has been evident in different schools of thought including computational social sciences, digital humanities,²³ cultural²⁴ analysis,²⁵ and remote reading.²⁶

This methodological-academic development fits many of the intelligence community’s current challenges like a glove. In the operative environment of these research fields and of the intelligence organizations, similar processes of change are occurring with regard to a number of factors. These factors particularly include the surplus of available information on the internet, from commercial satellites, and so on. In the intelligence environment one must also add the infinite and unprecedented potential of the cyber dimension with the information surplus it entails.

An additional factor common to academia and intelligence is the desire and the ability to learn from technological and methodological developments in the business

22 Yitzhak Ben Israel (1988), *Dialogues on Science and Intelligence* (Tel Aviv: Misrad Habitachon) (Hebrew); Yitzhak Ben Israel (1999), *The Philosophy of Intelligence* (Tel Aviv: Misrad Habitachon) (Hebrew).

23 Lazer, D., Pentland, A., Adamic, L., Aral, S., Barabasi, A. L., & Brewer, D., (6 February 2009), “Life in the network: The coming age of computational social science,” *Science*, 721-723.

24 Berry, D. (2012), *Understanding Digital Humanities* (Palgrave Macmillan).

25 Manovich, L. (2017), “Cultural Analytics, Social Computing,” Amsterdam University.

26 Moretti, F. (2013), *Distant Reading* (Verso Books).

sector. Both sectors seek to “import” tools and methods from the field of data science, tools that were developed, for example, to improve the efficiency of resource allocation in the domain of focused online marketing - “recruited” and adapted to research needs.

Naturally, the changes in the information environment and in the tools available to researchers do not only affect academia and the intelligence community in Israel. The American RAND Corporation, for example, recently published a study that was solicited by the American intelligence community, which proposes ways to incorporate data-science capabilities into the U.S. Defense Department.²⁷

These developments recently led Aman to formulate a new concept in intelligence research: that of the “information intelligence officer,” which has implications both for Aman’s operative concept and its force buildup. In this article I will try to illustrate the directions in which this concept is headed, both in terms of the benefit to intelligence and of the requirements of the force-buildup endeavor.

On the Data-Science Field Today and on the Implications for Intelligence

In this section I will briefly survey two typologies that help clarify the already-existing potential to adapt these tools to intelligence purposes: types of questions for which tools already exist in the data-science field, and types of data for which manipulations of that kind can be used.

Types of Questions

An article recently published on Microsoft’s website proposes a division into three types of questions for which data-science tools already exist:

- **Classification** (“Is it X or Y?”): In the business world one can think about questions such as “Is a certain mail junk mail?” In the humanities world one can find examples of questions such as “Was the work written by author A or B?”²⁸ In the intelligence world one can think about questions such “Is report X authentic or is it an attempted forgery?” or “Is day X the day on which a training session of a certain unit is scheduled or is it a routine day for the unit?” and so on.
- **Identifying anomalies** (“Is X out of the ordinary?”): In the business world one can think about questions such as “Does a certain action with a credit card indicate a

27 Knopp, B., Beaghley, S., Frank, A., Orrie, R., & Watson, M. (2016), “Defining the Roles, Responsibilities, and Functions for Data Science within the Defense Intelligence Agency,” http://www.rand.org/pubs/research_reports/RR1582.html.

28 Khmelev, D. & Tweedie, F. (2001), “Using Markov Chains for Identification of Writers,” *Literary and Linguistic Computing*, 299-307.

fraud attempt?” In the intelligence world the implications with regard to warning are clear (“Is the behavior of unit X routine or anomalous?” or “Is the behavior of a certain person routine or anomalous?”), and some organizations have already been using the tools for several years.²⁹

- **Assessing quantity** (“How many X are there likely to be?”): In the business world one can think about questions such as “What is likely to be the demand for a certain product in the next quarter?” In the social science world one can find examples of attempts, having intrinsic intelligence importance, to predict the number of internal crisis events in certain countries. In the intelligence world one can point to classic³⁰ intelligence questions from the field of assessing the enemy’s strength, which inherently involve assessing quantities (stocks of weaponry, for example).
- **Identifying groupings** (“According to which groups can the information be organized?”): In the business world one can think about questions such as “Which user groups exist among the company’s customers?” In the social science and intelligence worlds one can find examples such as mechanized division into groups of Twitter users who tweet about the fighting in Syria.³¹
- **Mechanized help with decision-making** (“What is worthwhile for me to do now?”): In the business world there are automatic systems that must make numerous small decisions independently (“Is it worthwhile for the robot vacuum cleaner to keep cleaning the room, or should it return to the loading point?”). It is indeed difficult to think of academic examples of data use of that kind. In the intelligence-operational context, however, there are a number of examples, such as the Perdix automatic-collection remotely piloted UAV that the Pentagon is developing, which, according to official publications, makes decisions about how to carry out the collection task³² without human involvement.

An interesting point in the context of this categorization is that, counterintuitively, the questions for which one can use computerization capabilities concern both deductive intelligence processes based on defining the question in advance, and inductive intelligence processes based on identifying phenomena in the data themselves (such as the question of identifying the groupings). The decisive question becomes the type of data for which there are known practices of manipulation for questions of this type.

29 Bernard Marr (2016), *Big Data in Practice* (Wiley).

30 Keneshloo, Y., Korkmaz, G., Cadena, J., & Ramakrishnan, N. (2014), “Detecting and forecasting domestic political crises: A graph-based approach,” *Proceedings of the 2014 ACM Conference on Web Science*, 192-196.

31 Lynch, M., Freelon, D., & Aday, S. (2014), *Syria’s Socially Mediated Civil War* (Washington, DC: United States Institute of Peace).

32 Pentagon website (2017), “Perdix Fact Sheet,” <https://www.defense.gov/Portals/1/Documents/pubs/Perdix%20Fact%20Sheet.pdf>.

Types of Data

There are three main types of data for which the “proof of feasibility” in the area of data science and intelligence relevance is clear. At the same time, it is clear that one can perform manipulations of the abovementioned kinds on other types of data as well. The three types are:

- **Structured information:** Information that exists at a high organization level such as tabular databases, in which the location of the datum (which table, which column, which row) indicates its “context.” Examples of data of this type can be found in numerous websites (social networks, government websites, etc.) that enable one to “interrogate” the database, on which the site is based through the mechanized service API, and to receive an output of structured information. Structured information is defined as information that allows relatively easily manipulations such as those described above, when there is a sufficiently large quantity of reliable, full, and low-“noise” information.
- **Textual information:** Many studies take the “Text as Data” approach, in which the researcher does not read the text and interpret it in his mind but, instead, uses a computer to perform manipulations based on the incidence of words in different texts. Similarly, some studies are concerned with identifying the tone of the speaker based on the vocabulary he uses, with identifying attributes related to the personality of the text’s author, and with finding similarities between different texts, such as revealing parties with similar political stances based on the vocabulary in their platforms, etc.³³
- **Visual information:** Many studies in the field of computer vision deal with identifying items in pictures, identifying faces and symbols, dividing pictures into groupings, and so on.

These types of data are available to the intelligence person at all levels of analysis and for all research objects, whether based on open material, commercial material, or material attained in some other way.

The Vision of the Information Intelligence Officer

The theoretical description of the field may well sound vague to the reader who is not involved in the developments that have occurred in it, whether in the civilian sector or in the intelligence community. I will try to characterize the directions of thought in which the field is leading. I will do so regarding an area that may be perceived as less intuitive, that of political research.

Because political research is based to a large extent on analyzing actions that

33 Grimmer, J. & Brandon, S. M. (2013), “Text as Data: The Promise and Pitfalls of Automatic Content Analysis Methods for Political Texts,” *Political Analysis*, 1-31.

occur in the public domain, it is of great importance to open-sources collection. The traditional intelligence approach strongly emphasizes qualitative analysis (of texts, pictures, etc.) and “in-depth reading” of each piece of information. However, in the information-explosion era, open-sources intelligence is inundated with pieces of information: reports in the written media, television, and radio, opinion articles, interviews, speeches, conference transcripts, official publications (for example, versions of legislation, publications of central statistical bureaus, and of course, statements in the social networks).

“In-depth reading” of each of these pieces of information requires not only knowledge of the relevant language but also familiarity with the relevant political arena, with relevant models from the field of political science, with the international relationships, and so on. Therefore, in the traditional intelligence approach, conducting an optimal intelligence process requires dividing the force between, on the one hand, “collection and production personnel,” whose task is to read as many pieces of information as possible and filter out only the “most important,” and, on the other, “research personnel,” whose task is to achieve in-depth knowledge of the arena and of the theoretical models and to formulate from them a “picture of the situation.”

The “information intelligence officer” approach maintains, however, that one can produce relevant intelligence information even from a great many pieces of information that are “less important.” From this perspective, one can use statistical and computational tools for this purpose (as manpower resources do not allow delving into each piece of the information). An intelligence process of that kind does not filter out only a few important texts and read them in-depth. Instead it identifies, for example, according to the incidence of the words in all the texts, what is on the public agenda in any given country, or what are the fluctuations in how Israel is framed in the official statements by members of one or another regime or among populations as a whole.

Thus one can also add the analysis of trends concerning diplomats’ visits to countries of the world. Even if not every visit is important in itself, one can identify trends of “warming” and “cooling” between states based on a large quantity of details of that kind, analyze common voting patterns in different international institutions, joint statements in the world media, trade data, and so on. Political research is one (convenient) example, but similar methodological approaches are also possible in the fields of military intelligence, terror research, economic and social research, technological research, and also, undoubtedly, in the cyber field (which is data-rich in nature).

To sum up, in lieu of an intelligence process that is designed to “filter” a small number of “important” pieces of information out of the “medley of noise,” the

“information intelligence officer” approach entails an intelligence process that is designed to create intelligence value by using statistical and computational tools to collate the maximal amount of information (including supposedly “negligible” pieces of information).

Implications for Force Buildup in Intelligence

In the training field: Similarly to processes currently occurring in social science and humanities faculties, adapting intelligence to the new concept necessitates changing the skills that are imparted to researchers. The “information intelligence officer” seeks to influence the “DNA” of the intelligence research expert, and likewise to influence the intelligence organizational culture that deals with the question “What is intelligence research?” In this way, and based on the model of the skills required for a data-science team of the Booz Allen Hamilton firm,³⁴ in the context of the “information intelligence officer” approach we focus our training on three areas:

- **Constructing a story:** As part of their training, the intelligence researchers learn tools for critical thinking and qualitative analysis. The emphasis is on the ability to construct a coherent and persuasive narrative that enables the decision-maker (who was not part of the research process itself) to understand and internalize the insights that emerge from it.
- **Quantitative and statistical thought:** In this field the trainees acquire tools for checking the validity and reliability of hypotheses about the “behavior” of the data. The premise is that it is not sufficient for the intelligence researcher - the same holds true in academia³⁵ - to learn how to use “shelf tools” that facilitate, for example, manipulations in the field of social networks analysis (SNA) or agent-based simulation (ABM). The researcher cannot obtain the “verdict” of a certain algorithm of division into a grouping as a “black box”; instead he must understand in-depth the theoretical basis of these tools. He can then make a wise choice of which tool to use for which problem, or acknowledge that there are no relevant data or tools and he must take a different approach.
- **Computer skills:** The researchers must learn basic skills of cleansing, organization,

The “information intelligence officer” seeks to influence the “DNA” of the intelligence research expert, and likewise to influence the intelligence organizational culture that deals with the question “What is intelligence research?”

34 Booz Allen Hamilton (2015), “The Field Guide to Data Science.”

35 Rieder, B. & Röhle, T. (2017), *Digital Methods* (Amsterdam University Press).

and manipulation of data. Thus emphasis is placed on the preliminary investigation of databases structured by the SQL language, or on basic programming through the Python language, advanced uses of Excel, and so on.

On the Organizational and Conceptual Level

Apart from the changes required at the level of the intelligence expert's skills, this conceptual shift calls for considering a change in the relations between the intelligence organizations. While preserving existing patterns, which emphasize principles of the "intelligence cycle" and narrow search, it is worth promoting the wide collection of numerous data about the research object, even if each one in itself is "worthless." It may also be necessary in the future to redesign the relations between the researcher and the collector—a point that at present constitutes an additional challenge among the many that are confronting the "intelligence cycle" as the central ordering idea of Aman.³⁶

Conclusion

In the course of history, intelligence has often changed in a way that reflected social, technological, and other changes concerning the question "What is knowledge?" or "What is the relevant knowledge for the decision-makers?" In the present era, the "computerization shift" is apparently one of the significant factors affecting this question, even in "soft fields" such as the social sciences and humanities, which often have been based only on qualitative-analysis skills. As workers in a new research profession who have qualifications that will be imparted in the future to all the researchers, the "information intelligence officers" face the task of adapting intelligence to the current strategic environment.

³⁶ David Siman-Tov and Lieut. Col. Ofer (2013), "Intelligence 2.0: A New Approach to Intelligence Practice," *Tzava v'Esstrategia* (Hebrew).

**“Thou Shalt Never Change...
Thou Shalt Change”:
The lack of in-depth understanding
about objects researched by the
intelligence community.**

Michael Milstein³⁷

On both sides of the Atlantic, the intelligence bodies, especially those in charge of research and analysis, have been experiencing a profound crisis in recent decades. This is a crisis rooted in questions of destiny and identity. The crisis stems mainly from the dramatic changes that have taken place in the environment and in the objects of research with which intelligence has dealt for long periods, but no less important - also from the profound change that is taking place in the image of the intelligence expert.

The purpose of this article is to deal with the “elephant in the room,” a phenomenon that is rarely dealt with or even noticed. The problem that will be analyzed is the significant devaluation of the weight of **in-depth understanding of the objects of research** - those that stem from familiarity with their culture, language and history - among intelligence bodies of recent decades. This is reflected in the reduction in the scope of those with skills in these fields in intelligence systems, in the reduction or disappearance of these components in the training of intelligence personnel, and in the reduction of their weight in the process of formulating a situation overview, assessment and recommendations.

**And he said: “I want to add two more commandments to the ten:
The Eleventh Commandment, “Thou shalt not change”
And the Twelfth Commandment, “Thou shalt change”
So said my father and walked away from me and disappeared into his
strange distances.**

Yehuda Amichai³⁸

This is not a completely new problem. The preoccupation with the devaluation that

³⁷ Senior Advisor on Palestinian Affairs in COGAT (Unit of the Coordinator of Government Activities in the Territories), and former head of the Palestinian arena in the Military Intelligence Research Division. Author of the books: *Between Revolution and State: Fatah and the Palestinian Authority (2004)*, *The Green Revolution - The Social Portrait of the Hamas Movement (2007)*, and *Muqawama - The Rise of the Resistance Challenge and its Impact on Israel's National Security Concept (2010)*.

³⁸ Yehuda Amichai, *Open Closed Open* (Tel Aviv: Schocken, 1998), p. 85.

has taken place in the understandings has been a constant element in the intelligence discourse in recent decades. The topic was raised as a lesson learned in Western intelligence investigations in the wake of formative traumas such as the Yom Kippur War in Israel or the September 11 attacks in the United States. However, this old problem appears to have reached a critical stage. The control of in-depth understandings is on the verge of extinction in the intelligence bodies, the discourse about the problem is almost nonexistent, and worse, over the years, a perception has developed that these are “anachronistic skills” that are not necessary in “modern research.”

A sense of discomfort has accompanied intelligence officials for several decades, inter alia in light of the change in the environment, the research objects and the intelligence targets. Out of this discomfort, a mountain of research studies has emerged that attempted to identify the intelligence problems of today and offer a solution to these problems. In this context, several points of discussion were prominent: the methods of reasoning used by the intelligence expert to formulate a picture of reality and assessments; The patterns of discourse used by intelligence agencies; The organizational structure of the intelligence systems; and the dynamics between intelligence and leaders. As stated, dealing with in-depth understandings is virtually nonexistent in this discourse. Thus, **precisely in an era of dramatic changes in which the importance of interpreting the cultural components of the objects of research becomes more acute, the intelligence community faces a situation in which the group of experts on these issues is an extinct species.**

As in many cases of dealing with crises, it is likely that a fierce clash with reality is expected to expose fundamental problems and sharpen the understanding that the period prior to that clash was accompanied by a “hidden crisis.” In this context, it is necessary to cite former US Secretary of Defense Donald Rumsfeld on the variety of states of consciousness, in which he claimed that **the most problematic situation that a person can be in is not knowing that you don’t know.**³⁹

Between “Arabists” and “analysts”: the characteristics and roots of the crisis

Much has already been written about the changes that have taken place in the reality and objects on which intelligence is now focused. The “old” intelligence world that focused on the intentions of leaders and on the capabilities of states and armies has been replaced in recent decades by a more diverse and complex reality, in which

39 The remarks were made at a February 2002 press briefing that analyzed the evidence that Saddam Hussein’s regime possessed weapons of mass destruction, which was the key pretext for promoting a US military campaign against him in 2003.

the weight of audiences, non-state or semi-state organizations, and cyberspace is prominent. This phenomenon is clearly manifested in the Middle East in the “era of upheaval.” It is embodied in the rise of the role played by the public in shaping reality and in the intensification of struggles stemming from religious, ethnic, tribal and clan rifts, some of which even lead to the disintegration of state entities in the region.

It was only natural that in this age, the need to deepen the understanding of the culture and consciousness of the “other side” would be sharpened. Here, however, the second problem that characterizes the intelligence crisis is clearly evident. This problem is related to the image and basic tools of the intelligence expert. The statement in this context is clear: In Western intelligence agencies, particularly those engaged in research and assessment at the strategic level, **there has been a decrease in recent decades in the number and weight of researchers whose professionalism is based on content-related proficiency and especially on a command of the research objects’ language and an understanding of their culture.**

This trend is largely a “reverberation” of a widespread global phenomenon, which has also been evident in Israel in recent decades, namely the devaluation of the status of the humanities and social sciences, and the reduction of the willingness of governments and companies to invest in their cultivation. This is due in part to the collective perception of these branches of study as “secondary” in comparison to the exact sciences or to studies with a “profitable edge.” In Israel, this is reflected in the relatively limited investment in Arabic language studies in the education system, and consequently in the decline in the number of speakers of the language and those studying Arabic and the history of the Middle East literature at institutions of higher learning.⁴⁰

The ongoing reduction in the number of researchers with knowledge of the world of the “other side” leaves no void. The emerging alternative to in-depth understanding embodies the third problem that characterizes the intelligence crisis and is also related to the researcher’s basic tools. The study of the language, history, and culture of the research objects is gradually being replaced by a collection of “theories” - some of them fairly eclectic - that pride themselves on the desire to be portrayed as “progressive,” sometimes presenting the skills of the past as “anachronistic.” These “theories” purport to provide the intelligence researcher with a means of integrating into the discourse that deals with clarifying the reality, assessing future trends and formulating recommendations. This circumvents the need for an in-depth knowledge of the reasoning and behavior of elements that are not part of the culture in which he lives and are generally motivated by a logic that is different from his own. In

40 See in this context: Yehouda Shenhav, Maisalon Dallashi, Rami Avnimelech, Nissim Mizraichi and Yonatan Mendel, *Command of Arabic among Israeli Jews* (Jerusalem: Van Leer Institute, 2015).

this context, methods such as “competing options” and “reverse engineering” are described, are of considerable value **as additions to depth and proficiency, but often establish themselves as the almost exclusive “backbone” of the research analysis.** Thus, the modern researcher – both in Israel and in the Western world – **has gradually changed from “Arabist” to “analyst,” that is, from a professional whose essence is focused on the effort to decipher the “soul of the other” into one who attempts to identify (or impose) order and consistency in a reality often characterized by internal contradictions and chaos.**

Another attempt to fill the void created by the disappearance of in-depth understanding is reflected in the ever-increasing overuse of modern research tools, especially network research and Big Data. It should be made abundantly clear that **the intelligence researcher (and the academic researcher as well) of today cannot ignore these tools or make do with their limited use.** His lack of familiarity with them and his failure to make extensive use of them will make him very limited, even if he is equipped with in-depth understanding. **The warning presented in the article is against excessive reliance on these modern tools, often accompanied by the belief that they are “a reflection of reality,” and not another component, which is fundamentally limited and biased, and must be weighted into a diverse and deep picture.** The built-in availability and simplicity of these tools can be deceptive, and often deludes the researcher into thinking that he can “understand reality” while sitting in his office, typing on his keyboard and running some programs on his computer. This is based on the belief that the findings of the algorithms and graphs emerging from the screens are an authentic reflection of the entity that he is researching. **Excessive reliance on modern tools (ostensibly) makes the intelligence researcher more knowledgeable about reality, but does not necessarily improve his understanding of it and possibly even makes it more superficial.**

A focused look at the world of intelligence researchers today illustrates the difference that has taken place in the way they are exposed to reality, formulate their perception of it and assess the directions of its development. Direct contact with the “other” has become a rare spectacle among intelligence personnel. Meetings with people from the “other side,” field trips or reading texts in the original language that are published in the environment of the research objects (including materials from the cultural world, and not only political and strategic analyses) - do exist, albeit on a limited scale. The alienation between the researchers and the objects of their research is sharpened, inter alia, by almost total reliance on translated materials, often without sufficient sensitivity to the discrepancies that this causes. In this context, veteran diplomat and Middle East researcher Shimon Shamir said that knowledge

of the language enables the reader to grasp content and recognize nuances that are almost impossible to convey in translation. It opens a window to the world of values, attitudes, wishes and hopes of the neighboring society in an irreplaceable way.⁴¹

A possible response to the alienation of the researchers from their subjects may be found in the patterns of activity and output of members of the **Coordinator of Government Activities in the Territories (COGAT)** unit, and especially the unit's intelligence and evaluation entities. The situation, assessments and recommendations formulated by COGAT are based not only on reports that originate in the mass media and on intelligence, but also on unique elements. The most important of these elements is a unique and ongoing dialogue with representatives of the "other side" (from taxi drivers and merchants in the street, through local heads of political and public organizations, to the top political and security echelons in the Palestinian arena). The other elements are a presence on the ground that will inject a tangible dimension into the learning process of COGAT personnel, and a command of the language and cultural codes of the "other." All of the above gives COGAT's personnel the ability to clearly (and sometimes even early) identify basic processes in the Palestinian arena, along with in-depth interpretation and assessment of current developments. **This is a recommended form of hands-on experience for intelligence officers, which is expected to refine their reading of reality and contrast the theoretical knowledge that they have accumulated and the insights that they have formulated with the "real reality."**

Aluf Hareven, an intelligence expert and Middle East researcher, has described very clearly the advantages embodied in hands-on experience such as that of COGAT. According to him, they **liberate the researcher from imprisonment in a world of abstract and theoretical concepts and from enslavement to texts, anthropomorphizing his perception of reality and giving it an experiential and tangible dimension.** He said: "A research paper on the Arabs - for example, in the field of ideology or political science - runs the risk of concealing reality from us behind a veil of abstract concepts. 'The Arab family,' when we read about it in a sociological essay, is in many cases an abstract and therefore cold concept; But it is an experience filled with impressions when we cross the threshold of the Arab home and go inside."⁴²

41 Shimon Shamir, in "Studying the Arabs and Studying Ourselves," in *Getting to Know Close Peoples: How Israel deals with the Study of the Arabs and their Culture - A series of discussions* (Jerusalem: Van Leer Institute, in cooperation with the Israeli Oriental Society, 1985; in Hebrew), p. 8.

42 Aluf Hareven, "How will we learn what we don't know about the Arabs?" in *Getting to Know Close Peoples: How Israel deals with the Study of the Arabs and their Culture - A series of discussions* (Jerusalem: Van Leer Institute, in cooperation with the Israeli Oriental Society, 1985; in Hebrew), pp. 25-26.

The “Elephant in the Room”: The Discourse on the “Intelligence Problem”

For several decades, the intelligence discourse has been accompanied by a sense of unease about the gaps or flaws that exist around a number of questions: what is intelligence and what is its purpose, how relevant it is for the various consumers, how to increase its effectiveness and how to produce intelligence statements or assessments that are profound and at the same time, clear to the consumer and easy to present.

Many books and articles have been written about the changes that are taking place or should take place in the field of intelligence. A significant portion of the research studies attempted to establish intelligence as “science,” focusing on the logical analysis of problems or the quantification of human phenomena. Another research approach attempted to focus on maximizing the relevance of intelligence, with an emphasis on refining the patterns and channels of discourse between it and the political echelon (“strategic intelligence”), or developing the capabilities and impacts of intelligence at the tactical-operative level. In addition, there were a few relatively weak voices that also pointed out the problematic trend of reducing the intimate familiarity with the research objects and the loss of “traditional tools.”

Noteworthy studies in this context are those written by American intelligence officials in the wake of what they perceive as failures stemming from a lack of familiarity with other cultures, especially the Middle East. One prominent study was published in 2014 by a team of researchers, most of whom served at security agencies in the United States. Its title is: *Improving Strategic Competence: Lessons from 13 Years of War*. One of the most prominent statements in the study is that **“Technology cannot substitute for expertise in history, culture, and languages because of the inherently human and uncertain nature of war.”** The analysis criticized the revolution in military affairs (RMA) concept, whereby control of modern technology and “information dominance” could provide rapid and significant decision-making capability in military systems, based on the American experience in the First Gulf War. Reliance on this concept in the complex cases of Iraq and Afghanistan proved to be a dismal failure. According to the researchers, reliance on technological superiority alone, coupled with ignorance of the cultural environment in which the military force operated, led to a failure to achieve the strategic goals. Too little and too late, the Americans realized that in order to improve the chances of advancing their goals, they must intensify their understanding of the complex political and social systems, and their knowledge of the culture in both countries, as well as promote projects at the civilian level vis-à-vis the local populations.⁴³

43 Linda Robinson, Paul D. Miller, John Gordin IV, Jeffrey Decker, Michael Schwille and Raphael S. Cohen, *Improving Strategic Competence: Lessons from 13 Years of War* (Santa Monica: RAND, 2014), pp. 59-63.

The Israeli discourse about the reduction in in-depth understanding is limited in comparison with that of American intelligence agencies. The discourse in Israel correctly reflects the recognition that there is a problem in the ability of intelligence to cope with the challenges of the present time. In this context, the difficulty of intelligence to address the often frenetic nature of the Middle East and the dominance of the public and cyberspace is accurately identified. However, the proposed response focuses on the “new tools,” with almost no mention of the need to deepen the understanding of the world of the “other.” In this framework, there are significant calls (which are correct in and of themselves) for establishing a flat network structure for the intelligence system, developing the internal discourse within the intelligence agencies, deepening the knowledge and use of the network world, and converting the quantitative collection and analysis methods that were developed mainly for tracking military objects for use in tracking “soft” targets such as public conduct as well.⁴⁴

Itai Brun’s essay⁴⁵ – “Intelligence Analysis – Understanding Reality in an Era of Dramatic Changes” (2015), reflects to a large extent the foundations of the crisis described, but sometimes also the way it is disregarded. The essay attempts to describe the problems that accompany intelligence in dealing with the current challenges, and to propose possible solutions to them. The noteworthy shortcomings mentioned by Brun include the “failure of imagination” and “adherence to the concept” (the important heritage of October 1973, which is deeply rooted in the consciousness and experience of Israeli intelligence). His discussion of the possible solutions includes an analysis of methods such as “reverse engineering,” “competing options,” “the wisdom of the crowd” and “red teams.” This is in addition to increasing the use of Big Data, partly in response to the need to understand the public with its increasing role in shaping reality. However, the study does not deal with the need to improve or reinforce the in-depth understanding of the “other side.” Thus, while the study contributes greatly to improving the intelligence researcher’s working methods, while focusing on the analytical-logical dimension, it ignores the foundation without which these efforts will be fairly ineffective or inaccurate. The important advice presented in the essay is essential as an addition to in-depth understanding, not as an alternative to it.

All aspects of the intelligence crisis, first and foremost of course the reduction of in-depth understandings, are liable to lead to the loss of relevance of the intelligence

44 In this context, see a number of prominent essays: Ephraim Kam, “The Middle East as an Intelligence Challenge,” *Strategic Assessment*, Vol. 16, No. 4 (January 2014), pp. 83-93; Dudi Siman Tov and Ofer Gutterman, “Intelligence 2.0 - A New Approach to Intelligence,” *Military and Strategic Affairs*, Vol. 5, No. 3 (December 2013), pp. 27-42; Shmuel Even and Amos Granit, *The Israeli Intelligence Community - Where to?: Analysis, Trends and Recommendations* (Tel Aviv: The Institute for National Security Studies, 2009).

45 Head of the IDF Military Intelligence Research Division from 2011 to 2014.

assessment bodies, especially those dealing with the strategic dimension and operating by virtue of the status of a “national assessor.” In the “flat and network-based” world of today, strategic thinking is the domain of everyone (especially the leaders), Big Data tools are available to every user in cyberspace, and the academic research institutes strive to lead the analysis of in-depth processes. **In this world, the relative advantage of intelligence as an entity that purports to possess an in-depth and lateral understanding of reality and to analyze the direction of its development is threatened. Therefore, it is liable to be pushed into the operational-tactical space where it has a clear relative advantage and enjoys considerable success.**

Summary: Tradition and progress in intelligence - contradiction or complementarity?

The mere assertion that there is a crisis in the intelligence agencies of today, as stated, is not an agreed issue, let alone the claim that a significant portion of the problems stem from the reduction of the intelligence personnel’s familiarity with the culture of the “other side.” However, even if the problem is limited in scope, **it is imperative for it to become a subject of discussion in the defense establishment, and perhaps even be recognized by the general public.** This is because intelligence serves as the main “compass” for the country’s leaders. Even a deviation of a few degrees in this compass is liable to have dramatic implications in navigating the country in the stormy ocean of reality.

The response must be both integrated and up-to-date. First, the intelligence expert must **fortify the world of proficiency and depth as a distinct relative advantage**, with an emphasis on mastery of the language of the “other side” and familiarity with its culture. It is recommended that this effort be part of a national project whose goal is to improve the familiarity of Israeli society as a whole with the Arab world, mainly by strengthening language studies in the education system. At the same time, the researcher must possess extensive familiarity with advanced research methods and must make use of them. **Without in-depth familiarity with tools such as network research and Big Data, the researcher will be very limited, just as absolute reliance on these tools alone will make him very limited.** Second, researchers, especially those in strategic-political fields, must be exposed to disciplines that are not usually prevalent in the defense establishment, such as sociology, anthropology, communications, psychology and economics. In the same context, it is also necessary to strengthen the ties and the discourse between intelligence agencies and academia (especially those that provide a long-term perspective for analysis of the present), and to maximize the use of academic and journalistic materials in the intelligence work processes.⁴⁶

⁴⁶ In this context, see Elie Podeh, *The Gray Area in Intelligence Research: The Role of Long-Term Processes in the Assessment of Intelligence*, Maarachot, Vol. 331 (August 1993; in Hebrew), p. 56.

Prominent Western intelligence experts raised the aforementioned conclusions years ago, but they have apparently failed to penetrate significantly into the intelligence culture. In this context, former top CIA official Martin Petersen offered advice to intelligence researchers, especially those dealing with the political-strategic level. First, he warned that researchers are liable to lose their relevance in their encounters with decision-makers. He wrote: **“If the Intelligence Community is to help policymakers make the best-informed decisions possible, then analysts must bring something to the party – in short, they need to be seen as credible sources of needed expertise. [...] The key is our ability to put the political behavior that policymakers see into a larger cultural and historical context - that they do not see - with enough sophistication to demonstrate that the context matters.”** In his view, the relative advantage and credibility of the researcher will be built through the systematic study of the history, philosophy and literature of the entities that he examines, and these tools are of greater importance in dealing with non-Western entities and are not driven by a world of values and logic identical to that of the researchers. He stresses that “there is no substitute for the ability to speak or read the language of the country.” This, he says, is a tool that helps to better understand the reasoning of the “other side” and greatly strengthens the researcher’s credibility vis-à-vis the entities that he serves.⁴⁷

In the same context, over 60 years ago, Yehoshafat Harkabi, former head of Israeli Military Intelligence – who embodied a unique combination of analytical thinking, strategic analysis and profound knowledge of philosophy, coupled with familiarity with the culture and language of the peoples of the Middle East – raised seemingly “anachronistic” insights that seem relevant today:

“I saw two levels in understanding intelligence [...] One is the level of mathematical intelligence: a collection of information on facts, quantities, numbers of personnel, tactical units, weapons, arrays [...] Above the mathematical intelligence there stands a higher stage – human intelligence, the intelligence that reached man, his thoughts, his attitude, his mood and his responses [...] Human intelligence is the intelligence of feelings, feelings attained after many years of processing and studying the opponent [...] I think that we will not achieve this unless we promote Arabic in our country [...] And therefore I have placed emphasis in my work on the issue of promoting Arabic here [...] Just as it is impossible to study the State of Israel without being familiar with Zionism, so it is impossible to study the Arab nations without reaching their thoughts.”⁴⁸

It is not possible to end the article without discussing the obvious question, i.e., whether the possession of in-depth understanding necessarily improves the ability

47 Martin Petersen, “The Challenge for the *Political Analyst*,” *Political Analysis*, Vol. 47, No. 1 (2003), pp. 51-56.

48 Yehoshafat Harkabi, *Intelligence as a State Institution* (Tel Aviv: Maarachot Publishing and the Israel Intelligence Heritage & Commemoration Center, 2015; in Hebrew), pp. 25-26.

to predict the future. In reality, there have been quite a few embarrassing encounters between Middle East expertise and attempts to predict the future. This holds true for the greatest Middle East scholars of our generation, headed by Bernard Lewis who, on the eve of the Yom Kippur War, estimated that Egypt, which was in deep financial distress, was not expected to initiate a military campaign. Shortly before the outbreak of the Second Gulf War in 2003, he believed that “the American project for the establishment of a democratic nation-state in Iraq” had a good chance of success.⁴⁹

Fouad Ajami, another of the greatest scholars of the modern Middle East, failed at a more contemporary point in time. At the beginning of the Arab Spring, he was quick to estimate that the Arab world was at the “beginning of an optimistic era.”⁵⁰

It seems that when it comes to predicting the future, those who possess in-depth understanding enjoy no advantage, and the main contribution of this understanding is manifested in a more accurate reading of the present. On the basis of this understanding, more balanced assessments of the future and recommendations that are more deeply rooted in reality are formulated. Historian Elie Podeh commented in this context that Middle East scholars cannot predict revolutions, but they can indicate the trends and circumstances that may lead to them. His conclusion was that familiarity with the contemporary culture of the research subjects should be intensified and, if possible, intelligence personnel be provided with “hands-on anthropological experience,” in particular field trips and meetings with representatives of the “other side.”⁵¹

In the current reality, where knowledge and insights are not the purview of selected groups alone, the solution proposed in the article may strengthen the added value and relevance of intelligence. It should be clarified that these are not “magic formulas” that will grant the user immunity from errors. Professional and accurate intelligence work will forever depend on the collective mentality and personality structure of

49 On the eve of the Second Gulf War and immediately afterwards, a political-academic-security debate ensued regarding the chances of success of the American effort to establish a “new order” in the spirit of democracy in the Middle East in general and in Iraq in particular. On one side of the divide were those who claimed that, like the models of Germany and Japan after World War II, Washington would succeed in establishing stable and democratic nation-states in the Arab world as well. On the other side, there was a movement that claimed that the deeply rooted and profound hostility to the West, the power of radical Islam and the deep animosity between sects and religions in the Middle East are elements that are expected to thwart the American attempt. For more on the subject, see Michael Milstein and Alon Tam, “American Optimism and Middle Eastern Pessimism,” *Maarachot*, Vol. 393 (February 2004; in Hebrew), pp. 4-11. In the discourse that developed at the time in the Israeli intelligence community, there were arguments about the existence of Middle East scholars and intelligence researchers in Israel who rely on historical research methods in a sort of “dream palace of Orientalists” that makes it hard for them to discern the profound positive change emerging in the region.

50 See interview with Ajami entitled “The Change Has Come, and It’s Good”: *Haaretz* Israeli daily, February 25, 2011.

51 *Haaretz*, February 24, 2011.

those engaged in this field. In addition to nurturing his expertise, the intelligence expert is committed to adopting values of modesty and caution, and especially to recognizing the element advocated by Donald Rumsfeld - **striving to identify what you do not know.**

From Intelligence for the Campaign between the Wars to Intelligence in a Reality-Shaping Campaign: A Further Conceptual Revolution

Lt. Col. U. U.,
recently served in Aman

From Routine Security Measures to the Campaign between the Wars

After the battles in the War of Independence, Israel's security concept, which was designed to ensure its existence, was built from a basis of defensive and preventive logic. This concept was aimed at lengthening the periods of quiet (preserving the status quo), enabling Israel to flourish, and convincing its enemies to give up their aspirations to destroy it. Regarding wartime, emphasis was placed on rapid victory (and in recent years on defending the homefront as well); for the spans of time between the wars, the emphasis was on deterrence and warning. Until the 1990s the IDF was mainly oriented to war against regular armies; between the wars it was occupied with routine security measures and with preparations for war. Preemptive operations (such as the bombing of the nuclear reactor in Iraq) were specific and did not reflect an ongoing mode of IDF operation.⁵²

The change in the nature of the threat, along with the transition from fighting against regular military forces to fighting against substate organizations, has forced the IDF to emphasize the periods between the rounds of warfare. Doing so compensates for the difficulty in deterring threats of this kind. Hence in recent years the concept of the campaign between the wars has become established in the IDF. The campaign between the wars is different from a state of routine or from routine security measures because it is more active, entailing the crafting and conduct of a campaign directed against

The campaign between the wars should be seen as a revolution in intelligence affairs because it requires the intelligence community to develop in new operative directions and in new fields of research

52 Udi Dekel and Omer Einav, "The Need to Update the National Security Concept: A Strategy of Multidisciplinary Influence," *Mabat Al*, no. 733, INSS, August 2015 (Hebrew); Shai Shabtai, "The Concept of the War between the Wars," *Ma'archot*, no. 445 (Hebrew).

a defined actor and achieving objectives that are defined in advance.⁵³ Its purpose is “to prevent or at least delay the processes that erode Israel’s strategic advantage (so as to distance the next war), in line with the logic of maintaining the routine.” As this⁵⁴ definition makes clear, the basic goal of the campaign between the wars dovetails with the defensive goal of Israel’s traditional security concept: to lengthen the periods of quiet, to prevent a threat from materializing, and to maintain the IDF’s military advantage so as to deter and to create better conditions for a war when it does erupt. The change lies in the fact that this is an active, established, and planned campaign, which receives the efforts and the resources needed to conduct it.

As part of the campaign between the wars, the Israeli intelligence community has to identify the emerging threats and provide the intelligence needed to deal with these threats in advance or to prepare for them in wartime. The premise of the⁵⁵ intelligence work was and still is that the more we know about the enemy’s plans and ways to implement them, the better we can disrupt or thwart them. What occurs, then, is a competition between two sides in which each side tries to prevent the other from gaining achievements. In a competition of that kind, it is important to create an intelligence picture that is as accurate as possible so that the relevant operational response can be adapted accordingly. Such intelligence, therefore, is oriented toward uncovering the secrets of the enemy. The enemy exists somewhere, and if we can just reach the enemy - as indeed is often the case - we can foil its plans and its actions.

At the same time, the concept of the campaign between the wars requires the intelligence community to develop additional areas, and constitutes a kind of revolution in intelligence work. The campaign between the wars necessitates combining the use of military force with “soft” tools, including economic, legal, diplomatic, and perceptual means. Intelligence must generate products that will enable recruiting those who make use of these tools, and must produce for each of the tools intelligence that will be relevant to the person who does the work. For example, legal pressure on a person or entity that supports a terror organization does not require the kind of precise intelligence that is needed to attack a target from the air, or for a special-forces operation. What is required is evidence at a low level of classification, on which legal arguments can be based. Hence there is a need for intelligence researchers who also have legal knowledge.

53 Eštrategiat Tzahal, p. 20, August 2015, <http://goo.gl/fGpGiu> (Hebrew).

54 Gur Lish, “The Main Points of the National Security Council’s Security Concept: In Routine and in Emergency,” *Eshtonot*, no. 10, p. 43, the National Security College, July 2015 (Hebrew).

55 David Siman-Tov, “The Role of Intelligence in ‘IDF Strategy,’” *Eštrategiat Tzahal: b’Rei Habitachon Haleumi*, INSS, p. 122 (Hebrew).

From the Campaign between the Wars to a Reality-Shaping Campaign

In recent years the response that the campaign between the wars provides to the challenges between the wars (at least according to its original definitions) has not covered the whole range of possibilities that require security attention. In the reality of instability and rapid change that has characterized the countries of the region since the current decade began, possible scenarios are difficult to assess. In such a state of affairs the challenge is not only to prepare for manifest threats but also for those that may develop in the medium or long term by taking preventive measures. This does not only involve secrets that need to be uncovered, such as an infrastructure for hostile activity that is working to perpetrate an attack, or early identification of a secret weapons deal; it concerns, in fact, *intelligence enigmas* for which there is not necessarily an objective reality that one can apprehend. For problems of that kind, *the intelligence-operational discourse produces an interpretation of the reality, and this interpretation affects the reality*. That, for example, is the situation in the Golan Heights and in Sinai. Salafi-jihadist groups have been entrenched there for years, and even though, for now, they are focusing their efforts on fighting within the state in which they operate, their existence and their fundamental hostility to Israel constitute a developing threat for the future. The intelligence-operational interpretation of these situations determines how the IDF deals with the operational challenge.

At the same time, the challenge with regard to such sectors lies not only in identifying the potential threats and dealing with them in advance, but also in identifying the opportunities and exploiting them on behalf of Israel's national security. In the situation that has emerged, Israel can influence the shaping of the environment in a way that serves its strategic interests, not just craft a response to threats.⁵⁶

Such an organizing concept can be referred to as a "reality-shaping campaign." Unlike the original campaign between the wars, which responds to a threat in light of a clear objective (thwarting and prevention), for the reality-shaping campaign it is difficult to define a tangible goal. Sometimes one can only offer a general vision, or only define the campaign's goal in the negative (what reality we do not want to emerge), or sometimes the goal changes along the way and the reality-shaping

The reality-shaping campaign differs from the original campaign between the wars because it does not point to a clear threat that needs to be thwarted but, instead, to a more amorphous objective of preempting threats before they emerge

56 Dekel and Einav, "The Need to Update."

campaign takes on a different significance. Although some claim that Israel failed to implement these ideas in Lebanon in the 1980s, these approaches must not become an intellectual fixation. One must learn the lessons of past events (which occurred in a different strategic environment) in order to enhance the effectiveness of the strategy required in the present.

The policy Israel is pursuing in the region (even if it is a restrained one) directly affects the actors on the other side and creates a set of expectations. It is difficult to deal with such situations solely through an orderly and linear process of situation assessment based on stages of adaptation, planning, and implementation, since the rapidly changing reality is too multifarious. Thus a simultaneous process of friction is required, one in which there is continuous learning. Accordingly, thought processes and other intelligence tools are needed: not only a traditional intelligence process, which has been constructed to identify the risks and facilitate an orderly process of situation assessment, but an initiatory and “lively” policy that seeks opportunities and “investments” that will yield outputs in the future.

In addition to the familiar task of formulating a picture of the different power factors, intelligence experts must produce a different kind of intelligence assessment that takes account of interests and tensions, not clear plans of a specific enemy (a “secret” from which one can infer the possible mode of operation). The intelligence assessment must focus on tensions and scenarios and seek to develop an intelligence-operational discourse that allows identifying opportunities and risks and taking action in light of them.

Since Israel’s establishment, intelligence has been oriented toward research on armies and has built various methodological tools (such as ground analysis, systematic research on established organizations, and crafting a possible mode of operation). In an unstable environment, intelligence must investigate networked structures that call for additional tools, such as in-depth analysis of interests and tensions, deep research on cultural characteristics, analysis of relationships, and so on. From my experience with reality-shaping campaigns, I have found that several principles exist that should be part of the intelligence work:

- **Learning:** In-depth, ongoing learning about the sector and about the “underground” currents that foster the instability. The aim is to explore the depths and the roots of the interests of the different actors, and the way in which they learn their behavior. Although this may seem a trivial principle, it usually entails directing research toward aspects that so far have not been the focus of intelligence attention because they have not constituted a military threat. It is also necessary to find different sources of knowledge than those we have—first and foremost, the history books that probably reflect the sources of the tensions and the interests of the different

power brokers in the environment being shaped. Until the outbreak of the war in Syria in 2011, intelligence researched the Syrian military forces that sat at their positions and bases and made preparations for war against Israel. Accordingly an intelligence array was built in the north, and collection capabilities were developed that made it possible to produce an intelligence picture of the regular army with large frameworks and heavy tools. The new reality that has emerged at the Golan front calls for formulating a different concept of the reality.

- **Carefully avoiding an intellectual fixation:** This is especially important in light of the fact that the arena is changing. Indeed, we intelligence personnel are educated in accordance with that rule. But in a reality that is especially fragile and emergent, we must pay heed to it all the more. The notorious example is the mistaken assessment in the summer of 2011 that the Assad regime would fall in a very short time. Here, in fact, it is important to rely on knowledge centers that have longstanding familiarity with the sector and its “aformal” nature.
- **Friction:** It is necessary to *initiate* friction with the arena so as to study its components and assess the opportunities and the extent of freedom of action that it affords. In a changing reality, given the irrelevance of the basic assumptions and the lack of intelligence sources on the components and on new factors, friction is crucial to understanding the limits on freedom of action and the operative possibilities in the sector, or at least to understanding the situations and the risks that we do not want. It is clear that friction must be generated carefully through a trial and error approach, in a way that will not heat up the sector and lead to escalation or even war, which the campaign between wars is meant to prevent. In my opinion, when fire trickled into Israeli territory from forces of the Syrian army as it fought the rebels on the Golan front, the reaction of Northern Command contributed to understanding the scope of Israel’s freedom of action in the Syrian arena. As noted, as a result of friction (or its absence) the enemy also studies the Israeli side, something to which attention must be paid. In my humble opinion, Israel has the capabilities needed to engage in this competition with great success.
- **Flexibility and adaptation:** Although the need for flexibility and adaptation in a changing environment is obvious, these are not things we like to do. It is not just a matter of structural or professional flexibility but mainly of intellectual flexibility, as I described above, with regard to the familiar thought processes such as the situation-assessment process. In my opinion, time, exercise, and training should be devoted to improving these capabilities while maintaining a strong professional foundation.
- **Creativity and dialogue:** The reality-shaping campaign requires great creativity at all stages of the intelligence activity. In the first stage, this entails developing

sources to which less weight was given in the past, such as open-source intelligence and particularly the social networks. Subsequently, thought processes should be conducted that will challenge the basic assumptions and, finally, the manner of presenting the complex picture. Creativity occurs when it is given a role, a space in which to develop, and time for jointness and dialogue with colleagues and with people outside the intelligence community. That is one of the challenges of time management within the military framework, and with regard to ongoing practice.

Conclusion

The challenges with which Israel (and within it the intelligence community) is now contending are fundamentally different from those in the era in which Israel had to safeguard its existence against invasion by hostile armies. Even if those armies were inferior to the IDF, it was clear to the country's leaders that, unlike our neighbors, Israel could not withstand a defeat in a war.

The reduction in the military threat and the rise of the substate organizations gave birth to the concept of the campaign between the wars, which generated the updated conceptual framework for Israel's defensive needs between the wars. From the intelligence standpoint, even though many tools could be adapted from the rich experience of the campaigns against regular armies, the concept of the campaign between the wars brought about a revolution in the ways and means with which intelligence collects and analyzes the plans of Israel's enemies for reducing their qualitative gaps vis-à-vis Israel.

In this article I have tried to animate the conversation about another stage that needs to be developed at present, which takes the form of the reality-shaping campaign. Israel's power relative to the unstable reality of its neighbors creates challenges of a new kind: on the one hand, threats that are still difficult to estimate, and on the other, opportunities whose exploitation can shape the strategic environment in a way that suits Israel's interests. The intelligence community needs to create the organizational culture and the analytical and collection tools to help meet these challenges.

The Phenomenon of Shelf Attacks as a Challenge to Early Warning

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and **First Lieut. (res.) D. D.,**
recently served in Aman

Overview

In recent years a significant development has occurred: hybrid terror organizations control a large part of the territory on Israel's borders. These organizations are run both as terror organizations, in their anti-Israeli activity, and as state-like entities, both in terms of the nature of their military practice and their commitment to managing the territory and the population under their control. Sometimes they are in a condition of tension and struggle with the political framework in which they operate and with other organizations. These organizations' considerations concerning anti-Israeli activity are complex; they are committed to operate against Israel and to build capabilities that enable them to attack. The use of these capabilities is not an immediate consequence of their readiness and of the completion of operational preparations, as is usually the case with terror organizations that do not have a hybrid identity.

When dealing with sovereign states, the main challenge to which intelligence must give a response is to provide a warning about the enemy's intention to go to war based on its "classic" military capabilities. It is clear that building a military capability does not necessarily indicate an intention to use it. In order to provide strategic and operative warnings about enemy intentions to go to war, intelligence developed a set of concepts and an operative approach relevant to the problem, centering on the notion of "indicative signs." With the increase in the terror threat, the main intelligence challenge was to provide tactical warnings about terror attacks, and for that purpose a different set of concepts and intelligence approach were developed, centering on the "Four Ws" and the level of the warning. The new reality of recent years includes—in addition to the terror attacks of the past, which were perpetrated a short time after they were prepared—the phenomenon of "shelf attacks," a capability that is built by terror organizations, especially hybrid ones, and intended to be carried out on command. For intelligence, contending with this challenge requires examining the degree of relevance of the deterrence concepts that emerged in the earlier contexts. If there is a gap between the response provided by those concepts and the new challenge, then a methodology and language that are relevant to the new challenge must be developed.

The Connection between the Type of Threat and the Intelligence Signature

Figure 1 presents an aspect that is required to analyze the problem: the direct connection between the gravity of the threat and the attributes of its intelligence signature. The military preparations that a state must conduct to go to war are numerous and wide-ranging, and indeed almost impossible to perform without leaving “footprints” of a significant intelligence signature. If intelligence succeeds in its task of accurately interpreting the intelligence signature and translating it into a warning, then intelligence will probably fulfill its supreme mission—warning about a war. The Yom Kippur War is an excellent example of a case in which, despite huge efforts at concealment and deception, and despite the fact that intelligence did not make use of all the collection tools, the preparation for war created a significant intelligence signature that was, however, not well interpreted, and as a result the intelligence warning was lacking or at best late and insufficient.

The intelligence signature of terror attacks is, however, considerably lower, and sometimes, as in cases of a lone attacker who acts without prior planning, almost nonexistent. Regarding an attack by an organized group, such as those deployed along the Golan and Sinai borders, the turbulent reality in the region makes it difficult to engage in intelligence monitoring of all the elements dispersed in the space. Unlike the army of a state—which is relatively simple to monitor, and the need to monitor it clear and understood by all—the terror organizations, and particularly the small and new ones, are a “slippery threat” both because there are so many of these groups, often changing their identity and modes of activity and thereby fostering a division between collection and research that requires a clear prioritization, and because of the difficulty in understanding their organizational nature and intentions. The Yarmouk Martyrs Brigade, for example, is composed of members of local tribes in the southern Golan Heights, and it underwent a process of ideological radicalization until finally formally joining Islamic State. Achieving oversight of such a group requires predicting in time the change it is likely to undergo and trying to create collection access to it. Clearly the challenge has grown with each new group that emerges, splits, or swears allegiance to one umbrella organization or another. The challenge can be likened to a sprinter in a race for which the finish line keeps getting more distant.

In such a situation, in which the basic access to a new terror infrastructure is limited, the terror threat is likely to be substantial whereas its intelligence signature will be small, and the chances of identifying it low. The concrete operational preparedness to contend with the threat is also likely to be limited.

Fig. 1: The Effect of the Gravity of the Threat on the Intelligence Signature



To sum up this issue, whereas a classic military threat is the gravest, it also has a relatively high intelligence signature and, usually, a reasonable warning can be provided. The terror threat, however, is usually perceived as less grave, mainly because it does not constitute an existential threat to the country; yet the intelligence signature that the preparations for an operation leave in the field is low, so that it will be difficult for intelligence to warn about the operation.

Here it should be explained that in this article we will make extensive use of the concept of warning, and warning, of course, has many aspects. Because this article applies a “magnifying glass” to the issue of the terror threat and the related phenomena, it is important to clarify that we are referring to tactical warning. Such warning concerns an environment where the issues are physical and tangible elements, focused in time and location, which relate information and action to physics, to time and space. Warning of this kind deals with a tangible and concrete action, circumscribed in time and space, which requires local preparation.⁵⁷

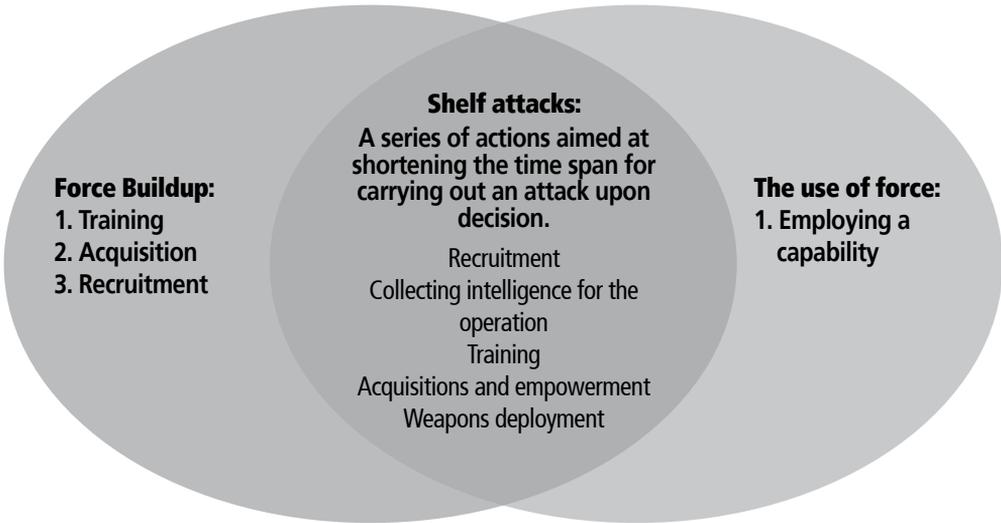
The “Shelf Attacks” Phenomenon and the Challenges It Poses

The “shelf attacks” phenomenon, in which a terror group plans a hostile action, and carries out steps to implement it *when a decision is given, is especially characteristic of hybrid terror organizations*. It differs from a regular attack, which will probably

⁵⁷ Shai Hershkowitz and David Siman-Tov, "Research Warning, Agents' Warning, and Warning by Instruments: The Changing Approach to Warning in the 1950s," *Studies in Israel's Establishment*, 2011 (Hebrew).

be perpetrated after a series of preparations *and with the arrival of “operational ripeness.”* The shelf-attacks phenomenon poses numerous questions and challenges for intelligence. When examining enemy actions, we are used to a crude division into two categories: force buildup and the use of force. These categories usually serve us successfully. That is not the case, however, when shelf attacks are on the agenda.

Fig. 2: The Buildup and Use of Force for Shelf Attacks



The series of actions performed when constructing a shelf-attack task usually include familiar measures that are used by all the terror entities and armies known to us. However, the division into familiar categories is likely to be misleading. For example, active task-specific recruitment with specialization in high-trajectory fire for launching a rocket on the day itself, a rocket that has already been acquired and hidden in the field, is not similar to recruiting operatives as part of a routine “refreshing the troops”; infiltration training for operatives who will carry out an infiltration during a planned attack is not similar to the annual training of infantrymen, and so on. How does one define the laying of an explosive device, already performed, near the border? On the one hand, the device has already been planted, and the operatives have left their base, carried out the infiltration, and deployed the weapon. On the other hand, it may be that the organization intends to leave the explosive device in the field and activate it on a date that has not yet been set. If so, does this constitute the buildup and preparation of a capability, or the use of force? This is the root of the problem concerning shelf attacks: the sense of confusion that stems from the lack of suitable concepts to distinguish the phenomenon can reach the point of real helplessness.

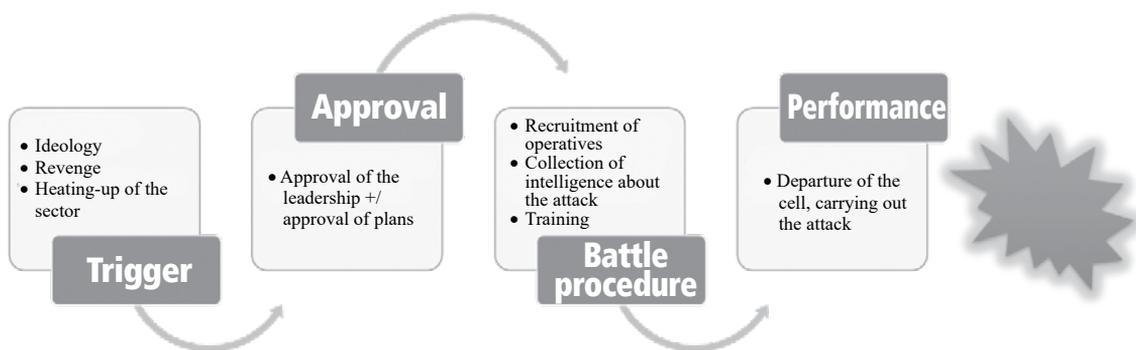
Is the Indicative-Signs Model Appropriate to Providing Warnings about Shelf Attacks?

Phenomena that give a warning (indicative signs) - the warning can be given because of manifestations of the imminent actions, which serve as indicative signs of the intention to initiate a war: first, the emergence of the political background for a war... second, preparation of the homefront for a war or for a military operation... third, the operative military preparations... and fourth, the tactical warning.... Examining these allows one to analyze the adversary's steps and determine what are the indicative signs that the offensive is impending and comes from his side, and afterward - to arrange ongoing monitoring so as to look for these signs.⁵⁸

The indicative-signs model is considered one of the most practical tools for giving a quality warning - whether a warning about a war or a strategic warning about a change in the attack policy of established organizations such as Hizbullah or Hamas. The main emphasis is on adapting a "classic" generic model to the specific organization, something that is enabled by the researcher's intimate familiarity with the enemy. After the work of analysis and dialogue with the collection personnel, we will hopefully be able to point to the main foci of warning, both collection-related and operational.

However, when we deal with small terror organizations that have lower accessibility, their operational history is meager and their leaders are still concerned with determining the general nature of the organization. Relying on the researcher's intimate familiarity with his research object becomes dangerous to the point of being a real gamble.

Fig. 3: A Generic Model of the Course of Terror Attacks



58 Yehoshafat Harkabi, *Intelligence as a State Institution*, 100 (Hebrew).

When the preparations for the action begin, we usually expect to see a trigger—a concrete intention of the enemy to carry out an operation. This intention can be manifested in different ways: a clear statement, measures to boost the enemy's legitimacy vis-à-vis Israel, and so on.

The “trigger issue,” or the enemy's directive concerning the hostile destructive action against Israel, is only a further component of the political research of the enemy's intentions. The problem is that the research responsibility is usually divided into political research and terror research. Those responsible for the political research on intentions usually operate in a departmental framework separate from that of the warning researchers, who are in commands entrusted with detecting tactical and other, similar anomalies so as to provide warnings about hostile destructive activity.

Furthermore, sometimes the intelligence departments in the commands do not include any political-research personnel, and they are completely dependent on contact with the General Staff's Research Division. *This means that a considerable part of the warning model is not under the research responsibility of the warning researcher in the command.* In this situation, the close connection between the warning researcher and the political researcher cannot remain a mere recommendation or luxury; it is absolutely necessary. The Research Division, for example, appears to have internalized this principle and made an appropriate structural change. The territorial commands, where the political knowledge is more limited at best or nonexistent at worst, recognize the problem but are yet to find any clear-cut solution for it.

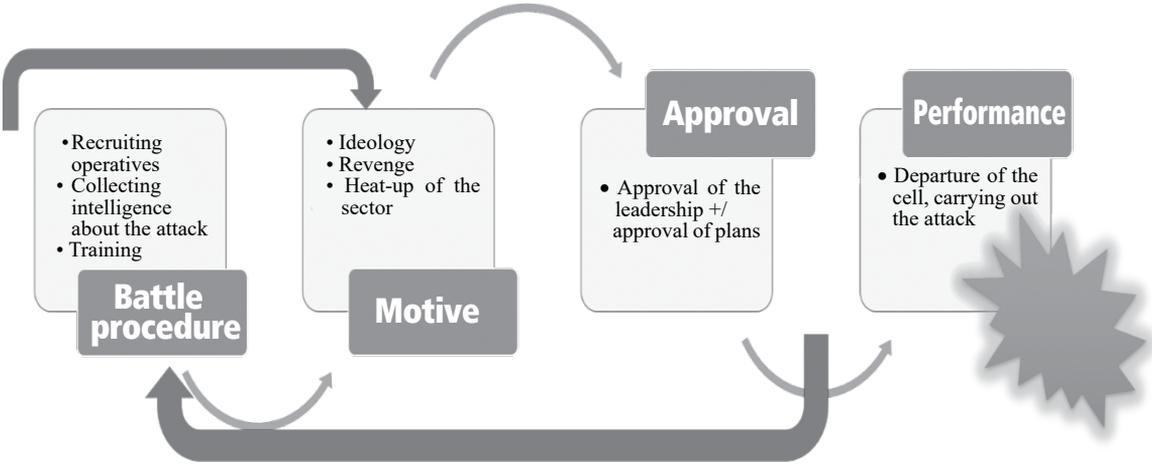
The first issue that arises here is the importance of the connection between the different intelligence bodies and the question of demarcating the boundaries of the research. For example, at present, when a terror organization can operate on a worldwide scale, is it more fitting to do research according to a division into territorial-geographic boundaries or according to an issue-based, organizational division?

The second concern with regard to adapting the indicative-signs model to shelf attacks is a basic paradox that we encounter when dealing with the shelf-attacks issue. Naturally, a terror group that is preparing for a shelf attack often does so without a concrete trigger, that is, in a state of “calm.” What this means is that the first indicative sign in the most basic chronological order—a desire to prepare for an attack—does not exist.

In a situation of that kind, our generic model may have to change its sequence in this way:

Seemingly, reversing the chronological order of the signs in the model is enough to solve the problem. But when the first sign, the trigger, is lacking, the real challenge is to decipher the signs that come after it and to identify the indicative signs for a

Fig. 4: Model of the Attack Sequence in the Case of a Shelf Attack



warning. In the absence of a trigger, we are likely to interpret those signs as actions that the enemy performs in a state of routine.

Let us consider, for example, the Hizbullah organization, which conducts organized force-buildup processes as befits a semi-military body. Let us assume that the organization is taking some steps toward planning a shelf attack, including training for some of its operatives. Seemingly this is an indicative sign for a warning. Yet, because we are sure of our assessment of the policy of the organization’s chief, Hassan Nasrallah, and feel certain that he wants to avoid an escalation at this stage, it may not occur to us to warn about an attack even though we know about the training. Hence we may well miss the first indicative sign and ignore others that may follow until the day itself—in which Nasrallah’s policy will change and the organization will have an attack ready, which, even though it left an intelligence signature, did not prompt an adequate warning response.

The indicative-signs model was never a perfect tool, never a kind of “pocket warning calculator” on which the researcher can merely mark a V or X to get an answer to a question about a strategic warning. That is all the more so when warning about a hostile operation or a shelf attack. Nevertheless, the use of the model could make a certain contribution to the case before us. It inspires a discussion among the researchers and opens their minds to possibilities that are not obvious. In any case, the model needs to be adjusted by making it more flexible with regard to the order of appearance and the nature of the indicative signs.

The Four Ws

Another tool that is very helpful in the warning endeavor is the “Four Ws - a series of four questions that orient intelligence workers toward the main pieces of information required for a warning amid the maze of details: the perpetrator (who?), the format (what?), the place (where?), and the date (when?). The classic intelligence doctrine posits that in providing an answer to three or even two of the four questions, one can raise the level of the warning to the⁵⁹ highest among the three levels. However, if the information indicates an enemy intention to carry out his plan in an immediate time range, one can make a warning even without sufficient information about the perpetrator, format, place, or the action itself. This exception demonstrates that the question of the date is more important than the others.

With regard to the shelf-attacks issue, in most cases we will probably know the answers to all three of the “who,” “what,” and “where” questions—but without being able to specify the date of the planned operation. Whereas the four questions have remained more relevant than ever, it appears that we as intelligence experts are becoming less relevant; we can give the field forces and the commanders accurate information about a hostile action but not about its date.

The situation in which, while we know the details of the planned attack, the question of the date remains without an answer, poses the dilemma of whether to raise the warning level. The intelligence doctrine seems to permit doing so. However, raising the warning when we do not know how long it is likely to be maintained - and in our case, it may be a

matter of long months - is not something to take lightly. Yet when providing explicit information about intentions to carry out an attack, which includes details about its format, location, and perpetrator, one must convey the information in some way, both to higher and lower echelons. The common way to convey the information is through a warning level; but when that is not appropriate, should the information be kept within the purview of the intelligence bodies? We will now consider the most basic tool for conveying a warning.

The situation in which, while we know the details of the planned attack, the question of the date remains without an answer, poses the dilemma of whether to raise the warning level

59 In military intelligence, the term “warning level” is used to alert the military system as prior information is given about an intention concerning an attack or a war. The three levels of warning in ascending order are: warning information, organization, and warning.

The Levels of Warning

The warning research commonly uses warning levels to convey prior information about the enemy's intention to perform a hostile action. There are three levels of warning, in ascending order of severity:

- a. **Warning information:** Indicates that there is information pointing to a concrete intention of the enemy to carry out a hostile action, without additional details such as the exact date or location. This level is not conveyed to soldiers but only to intelligence personnel and decision-makers; its main purposes are to alert the collection bodies, to allocate additional resources to the issue, and to increase the alertness of the commanders.
- b. **Organization:** Information about initial or more advanced preparations to carry out hostile actions, without a danger that they will be enacted in the immediate time range.
- c. **Warning:** Information about the enemy's intention to carry out a hostile action in the immediate time range.

As we have noted, when we look at a shelf attack, things are not so orderly.

Whereas warning information, as mentioned, deals with an initial intention of an attack, a shelf attack is always planned before there is an immediate intention to carry it out, that is, at a time when the organization or group is under a policy of refraining from hostile actions, albeit temporarily. This level, then, is not relevant to the issue.

The warning level rises for one of two possible reasons. Either information has been given about an intention to carry out a hostile action in the immediate time range—a situation that is impossible in the case of a shelf attack, since we do not know the date of the planned attack; or information has been given at the time of mounting a response to two or three of the W questions.

Thus, when a shelf attack is considered in terms of the levels of warning, we will find ourselves in one of two situations: getting organized without information about the date of the action, or providing a warning without information about the date. These two situations are very similar in terms of their effect on the field: both of them alert the forces to the last soldier, and both fail to delimit the time of operational preparedness. The result: if the attack is carried out during the first days of the warning, the forces

It appears that the existing levels of warning do not constitute a sufficient response to shelf attacks. It may be necessary to create an additional level that will convey the existing information but will only require operational alertness at the time itself

will probably be prepared for it; but if the warning continues for a long time, then the operational attrition will probably reduce the effect of the warning to the point of nullifying it.

It appears, then, that the existing levels of warning do not constitute a sufficient response to shelf attacks. It may be necessary to create an additional level that will already convey the existing information—format, operation, and place—during routine, but will only require operational preparedness at the time itself. The forces will thereby be familiar with the existing information about capabilities and means during routine, but only when a “real” situation is declared will they make the real changes in their behavior (bombardment countermeasures, cancellation of patrols, etc.). This is not, however, a perfect solution; the declaration of the “real” situation may come too late to be of benefit.

Conclusion

The shelf-attacks phenomenon does not stand by itself. It is the cutting edge of a much wider transformation that not infrequently leaves us perplexed before new phenomena that we do not know how to tackle. Among other things, sometimes neither the language we use in daily life as intelligence personnel nor our research tools are adapted to these phenomena.

Today’s intelligence personnel grew up with concepts and theories that were formulated in other days, in response to different threats and needs than those of today. Ongoing discussion of the accepted concepts and research methods is needed to forge agreement among all the various intelligence and security personnel, and to propose changes and adaptations where necessary. The time may have come to reopen discussion of several of the theoretical concepts that were developed in the past and require adaptation to the present. After all, the different intelligence entities have long understood that at a time when the reality is changing, we must change along with it. It is enough to consider the organizational changes, or even upheavals, that some of the Aman bodies have undergone over the past two years to confirm this. Indeed, discussions of conceptualization, language, and organizing documents are held from time to time in different places in Aman, but these mostly deal with operative matters. Apparently the need for a conceptual structuring in the field of tactical warning has not yet sunk in, and there may even be a kind of illusion that the existing conceptualization is adequate.

From a practical standpoint, at least in certain cases reality will presumably anticipate us, not the opposite, and it is even more likely that one or another intelligence episode will challenge the existing terms and all who deal with the affair. When that happens, it is recommended that already at the beginning of the episode a discussion be held, in

the presence of all the relevant personnel, on reaching a common stance; the conceptual basis for the episode can thereby be established. Disagreement about basic concepts, which sometimes is considered a marginal problem, can lead to great confusion in the system that can be avoided at a relatively low cost—through dialogue.

To sum up, we must remember: with all due respect to the veteran research methods, they were created in the first place to help research personnel in their work. When a research worker finds himself struggling to make a method suit his needs, he must ask himself whether the method is serving him as a researcher or, instead, he is serving it, and to the extent necessary must develop a new method that will fit the new challenge.

The Four Paths in the “Orchard” of Strategic Intelligence

Dr. Doron Matza,

former senior official in the Israel Security Agency

Introduction

This article is the fruit of a cumulative effort of many years of intelligence practice within the Israeli intelligence organizations, and of observation of them from a critical perspective. That perspective has involved trying to understand what exists under the external peel of what we call reality, which envelops us from day to day and sometimes obscures the underlying structures and the mechanisms that make it what it is.

For more than 20 years I served in various posts in the strategic intelligence establishment. I began in the Research Division of Aman as a research officer and head of the department dealing with the Palestinian sphere. From there I moved to the research and policymaking unit of the Israel Security Agency, dealing with strategic intelligence research as part of an entity with tactical-practice attributes, and I served as director of some research departments. The last of those was the unit engaged in developing conceptual tools and in training directors, as well as developing alternative knowledge to the knowledge that has evolved in the task-specific research departments.

Over the years I moved about, as in the midrashic saying, among the wise men. Among all the sages of the discipline, I will confess that only one deeply influenced my professional path and way of thinking. The paradox is that this figure never dealt with intelligence research but, rather, with preventive intelligence. Yet this person was the first to compel me, after many years of activity, to transcend my own boundaries and observe the nature of my activity from the outside. I learned from him how lacking we can be in self-awareness, devoted to our labor yet with no desire to investigate the logic that dictates our activity or to recognize the limitations of that activity.

All this pertains especially to security organizations and other bureaucratic institutions in which practice sometimes overcomes the ability to observe and think. In some of those institutions, dealing with the self may be seen as heresy, particularly because doing so bears an overt or covert taint of criticism of the establishment and of disloyalty. On the one hand, the knowledge I have accumulated over the years has enabled me to be part of the system, one component out of the many that help

in its overall operation. On the other, it has enabled me to transcend the system's boundaries and view it critically, and sometimes even to request that it be modified in a way that casts doubt on my colleagues' proper functioning.

With What Is the Article Concerned?

The concern of this article is strategic intelligence, which investigates the significance of diplomatic, social, and political processes. In particular it investigates the behavior of entities, from leaders to states, and provides the national leader with an intelligence situation assessment of the regional environment in whose context he operates. Those who engage in strategic intelligence are propelled by the assumption that power relations determine the behavior of political and other entities. Hence the connection between the intelligence official who develops knowledge about the state's external environment and the diplomatic-political echelon that directs activity, sets its objectives and boundaries, and delineates, with the help of the mechanisms at its disposal, the different tasks. The overall goal is to pursue the country's strategic interests fittingly.

In recent years Israeli strategic intelligence has changed in nature, almost leaving behind the original premises of the intelligence establishment's growth stage from the 1950s onward. This was seemingly a natural process of change that was influenced by different factors. The result of the process, however, was a decline in the status of strategic intelligence. The article seeks to clarify the change process, outline the conceptual adjustments that strategic intelligence has undergone, and to suggest a

The article seeks to clarify the change process that Israeli strategic intelligence has undergone and is undergoing, to outline the conceptual adjustments that have been made in it, and to suggest a possible alternative for its activity that is yet to be fully attempted

possible alternative for its activity that is yet to be fully attempted. To structure the discussion, I will address these issues in terms of the four "paths in the orchard" of strategic intelligence. Each one of them defines a different concept and relies on a different methodology of knowledge development along with other basic assumptions, such as a unique relationship between the professional intelligence echelon and the political echelon.

An Organizing Framework for the Discussion: The Story of the Spies

The story of the spies whom Moses sent to explore the land is perhaps the most ancient intelligence story. According to the Shelach portion of the Book of Numbers,

at the people's request he dispatched 12 spies to explore Canaan, the Promised Land, which the People of Israel were to enter in a complex civilian and military process that entailed contending with the peoples dwelling in it. The spies, who represented the 12 tribes, were sent on a defined mission (with the aim of gathering the "essential elements of information" in the intelligence jargon):

And see the land, what it is, and the people that dwelleth therein, whether they be strong or weak, few or many;

And what the land is that they dwell in, whether it be good or bad; and what cities they be that they dwell in, whether in tents, or in strong holds;

And what the land is, whether it be fat or lean, whether there be wood therein, or not. And be ye of good courage, and bring of the fruit of the land. Now the time was the time of the firstripe grapes.

The spies' mission lasted 40 days. In that time span they explored the land from the wilderness of Zin in the south to Hamath in the north, collecting information. Returning with a cluster of grapes that they cut down at the brook of Eshcol, they describe the goodness of the land: "We came unto the land whither thou sentest us, and surely it floweth with milk and honey; and this is the fruit of it."⁶⁰ At the same time, 10 of them foresee failure when attempting to conquer it:

Nevertheless the people be strong that dwell in the land, and the cities are walled, and very great: and moreover we saw the children of Anak there.

The Amalekites dwell in the land of the south: and the Hittites, and the Jebusites, and the Amorites, dwell in the mountains: and the Canaanites dwell by the sea, and by the coast of Jordan.

Indeed they denigrate the land with an expression that many years later found its way into the Israeli lingo: "a land that eateth up the inhabitants thereof." One of the spies, Caleb ben Yefuneh, disagrees and says the people are strong enough to take over the country: "And Caleb stilled the people before Moses, and said, Let us go up at once, and possess it; for we are well able to overcome it."⁶¹

However, the people are convinced by the other spies' words:

And all the congregation lifted up their voice, and cried; and the people wept that night.

And all the children of Israel murmured against Moses and against Aaron: and the whole congregation said unto them, Would God that we had died in the land of Egypt! or would God we had died in this wilderness!

And wherefore hath the LORD BROUGHT US UNTO THIS LAND, TO FALL BY THE SWORD,

60 Num. 13:27.

61 Num. 13:30.

THAT OUR WIVES AND OUR CHILDREN SHOULD BE A PREY? WERE IT NOT BETTER FOR US TO RETURN INTO EGYPT?

And they said one to another, Let us make a captain, and let us return into Egypt.⁶² Caleb and Joshua bin Nun, who eventually will succeed Moses and lead the people in conquering and settling the land, rend their clothes and reiterate their stance:

The land, which we passed through to search it, is an exceeding good land.

If the Lord delight in us, then he will bring us into this land, and give it us; a land which floweth with milk and honey.

Only rebel not ye against the Lord, neither fear ye the people of the land; for they are bread for us: their defence is departed from them, and the Lord is with us: fear them not.⁶³ But these arguments, too, fail to convince the people, who even want to “stone them with stones.”

The story of the spies ends with the conversation between God and Moses about the punishment to be meted out not only to the 12 spies but to the whole people for failing the test of faith. After Moses’ supplication, in which he claims that killing the People of Israel in the desert will cause a desecration of God in the eyes of the nations, the punishment is moderated. It is decreed that the Israelites will remain in the desert of Sinai for 40 years—an echo of the 40 days that the spies spent in the land—until the rebellious generation dies out and a new generation arises that will unhesitatingly fulfill

the injunction of faith in God. The 10 skeptical spies find their deaths in the plague, while Caleb ben Yefuneh and Joshua bin Nun are granted life because they took a different stance, and Joshua, of course, will be bestowed with the leadership after 40 years.

The story of the spies offers a fascinating framework for discussing strategic intelligence. It is a kind of intelligence endeavor in every way, since the spies, who can be viewed as intelligence workers, must collect information, bring proof (the cluster of grapes), and provide an assessment and a strategic analysis of the enemy (the peoples of Canaan). What occurs is a dialogue between a (political) echelon responsible for the decision-making (God and Moses) and a professional

The story of the spies offers a fascinating framework for discussing strategic intelligence. What occurs is a dialogue between a (political) echelon responsible for the decision-making (God and Moses) and a professional echelon (intelligence) of collectors and strategic analysts (the 12 spies)

62 Num. 14:1-4.

63 Num. 14:7-9.

echelon (intelligence) of collectors and strategic analysts (the 12 spies). Woven into this dialogue is another important discussion that concerns not only the role of the “knower” but also the significance of the “knowledge” and of the “information.” This discussion also addresses the question of the extent to which the knowledge and the information manifest a large truth, or perhaps reflect only a partial understanding of reality that is dictated not only by operative considerations but also by other motives of the responsible echelon. The story also highlights the possibility of giving a different research-intelligence interpretation of the same database (pluralism), as we have sought to do since the Yom Kippur War.

One can read the story in the light of different interpretations that signify the four paths, which I will present when discussing the nature of strategic intelligence. Three of the interpretations represent milestones in the development of the Israeli strategic intelligence establishment since the 1950s; the fourth will concern a proposal about another way in which, in my opinion, strategic intelligence can be defined. The four interpretations denote different conceptual worlds. There are built-in tensions between the conceptions, to the point that it sometimes appears that one approach cannot coexist with the other. But just as the story of the spies encompasses all four approaches, one can think of strategic intelligence as an endeavor in which the four approaches can exist side by side as a combined set of tools that, ultimately, produce among them an operative harmony and a system of checks and balances that is affected by their defined contexts.

First Path: Prophetic Strategic Intelligence

The story of the spies opens with a mission that the spies receive before entering Canaan: “To spy out the land...”

And see the land, what it is, and the people that dwelleth therein, whether they be strong or weak, few or many;

And what the land is that they dwell in, whether it be good or bad; and what cities they be that they dwell in, whether in tents, or in strong holds;

And what the land is, whether it be fat or lean, whether there be wood therein, or not....

Two tasks are defined for the endeavor: assessing the strength of the peoples who dwell in the land and clarifying the nature of the land. The spies are given the mission straightforwardly. They collect information and even bring evidence (“and cut down from thence a branch with one cluster of grapes”), and they primarily provide data about the nature of Canaan and an assessment of the Israelites’ ability to contend with those living in it: “We be not able to go up against the people; for they are stronger than we.” Although seemingly this is a simple fulfillment of the mission, it takes

more than a little courage to adopt a stance opposed to that of the responsible (i.e., divine) echelon, to disagree with it, and to express their professional-personal view that the enterprise of conquering the land from the people living in it is infeasible and beyond the capabilities of the 12 tribes. They do so in the knowledge that the tidings will be difficult not only for God and his emissary but also for the population, which has borne the yoke of the sojourn in the desert and undergone the crisis of the exodus from Egypt in the expectation of a kind of redemption, in the form of the Promised Land, that will put an end to their travails and their ongoing state of exile and slavery.

The spies in the story operate not only as information collectors and collators but also as analysts. Their analysis indeed presents an intelligence picture based on “difficult” information, along with an assessment and a prediction drawing on serious professional work and on encounters with reality. The responsible level (God and Moses) in this story does not accept the professionals’ assessment, and indeed dismisses (in the organizational physical sense) most of them. This act establishes the boundary and the dichotomy between the role of professionals in collecting information, crafting an intelligence picture, and providing an assessment, and the role of the diplomatic-political echelon, which is responsible for leading the whole system and issuing the overall directive. This in fact reflects the first path of strategic intelligence in the sense of prophetic intelligence, which is supposed to offer a situation assessment of the adversary system based on information collected from various sources, and render an assessment about the future that ultimately concerns issues of warfare.

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Since its establishment, Israeli strategic intelligence has seen its role as one of providing an intelligence assessment about the enemy systems as well as a forecast for the future. The core of the notion of prophetic intelligence is found in these words of the prophet Ezekiel: “But if the watchman see the sword come, and blow not the trumpet, and the people be not warned; if the sword come, and take any person from among them, he is taken away in his iniquity; but his blood will I require at the watchman’s hand.” This approach is influenced by the⁶⁴ historical context in which the state of Israel emerged—namely, the conflict that was waged before statehood between the Zionist movement and the Palestinian national movement along with the Palestinian inhabitants of the land, which entailed substantial security challenges for the Jewish Yishuv. Among those were the events of 1929, which surprised the Yishuv,

64 Ezek. 33:6.

and later the events of the Great Arab Revolt of 1936-1939. These developments revealed the need for an intelligence body that could provide forecasts about the intentions of the adversary Palestinian system. With the declaration of statehood, and particularly with the end of the campaign in 1948, the military-intelligence effort turned from the internal Palestinian sphere to the regional sphere for monitoring, surveillance, and assessment of the intentions of the neighboring Arab states—particularly Egypt, Syria, and Jordan, which became the main enemies of the new country.

Tactical intelligence on the battlefield also had a considerable impact on prophetic strategic intelligence. Its task was to serve the fighting force in collecting information on the opposing force's organization, implements, and size, and to assess its military intentions. Tactical intelligence perceives reality in objective terms, and strives to maximize knowledge about the adversary system as to reach the greatest possible understanding of it. The world of information is seen as a puzzle with a number of predetermined parts, which one can attempt to collect so as to discern the enemy's intentions. If those pieces are lacking, the intelligence worker will assess the contents of the missing parts so as to arrive at the same result.

From the standpoint of prophetic strategic intelligence, the enemy is defined in terms of political entities: an organization, a party, a state, and a leader, toward whom, as the one at the top of the system, the effort is usually directed. There is a certain conceptual "importation" here from the operative world, in which the general is the head of the system and deciphering his intentions is critical to conducting the campaign. Thus strategic intelligence has striven to "get inside the leader's head." That ambition was also influenced by the modernistic outlook, which assigns importance to the person as the one who constructs the reality. The intelligence enterprise similarly views the leader as the Archimedean point of the state. Discerning the enemy's intentions was made conditional on the ability of strategic intelligence to collect strategic intelligence, that is, information about the leader's ambience, and to assess his intentions.

The focus on the "mind of the leader"—human intelligence as Yehoshafat Harkabi defined it—in predicting military threats also dictated the research methodology. This methodology employs the distinction between "military research," which collects information on the enemy's tactical capabilities, counts his weapons, and estimates the number of fighters and how they are organized, and "political research," which assesses intentions by investigating the decision-making echelon. The "political" endeavor is conducted by analyzing the political behaviors of the leaders and by using interpretive research methods based on the analysis of political texts: statements of leaders, media commentaries, protocols of discussions at the level of the political and

military leadership, and so on.

In the Israeli context, prophetic strategic intelligence derived its methodological sources from research by Middle East scholars as it developed during the 1950s and 1960s in the two large academic centers: in Jerusalem the Truman Institute, and in Tel Aviv the Shiloach Institute, which operated in proximity to the Department of Middle Eastern Studies and was established under the auspices of the Foreign Ministry. “The institute” was built, actually, in the image of the Research Department (now Research Division) of Aman as an establishment of “desks,” which were defined in terms of the Arab states of the region and employed interpretive-textual research. Its researchers had engaged in intelligence practice as part of the Aman Research Department, and to a great extent (as some academic researches in recent years have noted) the heads of the department influenced how the political echelon in the Arab world was viewed.

Prophetic strategic intelligence posited a partially symbiotic relationship between the intelligence professional level and the diplomatic-political responsible level. The two sides operated on the basis of similar premises regarding both the threats stemming from the enemy system and the need to focus the discussion on threats. Even more so, the two sides maintained a clear division of roles: the professional level was expected to provide an intelligence picture and predict the future, while the political level was entrusted with the decision-making process on the question of

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whether to go to war. This division of roles made intelligence a “relevant” body within the military and political system; raised its professional status, since the role division gave it the responsibility to determine the Israeli security strategy by addressing the question of the possibility of war; and granted it a kind of independence in crafting the intelligence picture of the enemy or in making assessments about the future.

Second Path: Strategic Intelligence in Operative Form

The second reading of the story of the spies eschews the somewhat romantic motif of the first reading; it presents the intelligence workers’ role as one of providing an accurate picture of the dangers along with a warning about them. This reading ascribes a common operative purpose to the spies and to those who send them: not merely of predicting the future and making a sort of sterile observation of the reality, but of shaping the reality by making a military operation possible. From this standpoint,

Moses' objective is not really to investigate the country in order to make strategic decisions, since there is a divine promise that cannot be questioned and whose course cannot be changed; it is, instead, to prepare the anticipated operative campaign of conquering and settling of the land. That is why the spies who are dispatched to Canaan represent the 12 tribes of Israel, which will take part in the great campaign; the operative endeavor is to be a joint one. The goal of the mission is to conduct an investigation that will exhaust the operative intelligence, as Moshe tells the spies: "And see the...people that dwelleth therein, whether they be strong or weak, few or many...and what cities they be that they dwell in, whether in tents, or in strong holds."

This analysis explains the harsh reactions of God and Moses to the inexplicable prerogative that the intelligence workers took in interpreting the enemy and casting doubt on the ability to contend with it, thereby casting a heavy shadow on the political echelon's directive to prepare for a campaign of conquering the land. The clash of expectations between the spies, who saw themselves as representing professional truth, and God and Moses, who saw them as partners in a common operative endeavor, explains the heavy punishment of the 10 spies who acted according to their conscience, and the heavy punishment of the people—the postponement of their entry into the Promised Land for 40 years of life in the desert. Such a reading of the text assigns the role of strategic intelligence to the responsible echelon: actively participating in the operative task by analyzing the enemy system, in the context of an asymmetrical relationship between the responsible echelon and the professional one. This relationship entails the complete and unquestioned subordination of the professional level to the strategic objective of the responsible level. Those who accept this set of rules are Joshua bin Nun and Caleb ben Yefuneh; hence it is they who will eventually, when the punishment of the people draws to its end, lead the battle for the land.

The operative reading of the story of the spies represents the later development of Israeli strategic intelligence toward the early 1990s. This process was actually an outcome of two processes. The first was the critical assessment of intelligence in its role as prophetic intelligence. The great failure of the 1973 war, along with other failures in the endeavor of predicting the future, posed a major challenge to the Israeli strategic intelligence units. An attempt to rectify the liability was made by clearly defining the monitoring processes and setting up dissenting bodies; this was accompanied by an attempt to create intelligence pluralism. To that end, units for strategic research were established outside of the IDF, such as in the Foreign Ministry, the Mossad, and the Israel Security Agency (Shabak). However, the reform was limited in nature. The monitoring bodies were outside the work routine and

did not influence the knowledge-generating process. Nor did the pluralism prove itself; the additional research bodies had an inferior status, and they used the same methodological tools and intelligence raw materials, which raised the question of whether pluralism was really being practiced.

The second process was the conceptual revolution in the IDF concerning the nature of military campaigns. This revolution was influenced by postmodern philosophical theories and inspired by systems concepts from the breeding ground of the U.S. army, which, for its part, adopted them from the Soviet army. The revolution redefined the role of the general as responsible for crafting an operative concept, with the objective of serving the political echelon's strategic goals by effectively utilizing the tactical tools at the military's disposal. The planning of the operative campaign also altered how the military leader viewed the enemy side. It was now seen as a system in which the army was only one among a range of components that interact and are oriented to a common strategic purpose. The ability to defeat the enemy system does not only depend on mapping its military capabilities but also on understanding the network of tensions within it, the relationship between its parts that affects how it defines its goals, and the way in which it conceives the meaning of victory or defeat.

From this perspective, the intelligence echelon's role is to be a senior and necessary partner of the military echelon in crafting the campaign. Unlike strategic intelligence, which regarded itself as a partner at the table of the political echelon, intelligence in its operative version saw its main role as sitting at the general's table as an active participant

in crafting the operative campaign. Thus intelligence found itself freed of both the difficulty of predicting the future and the concomitant, potential tensions with the political echelon. It now primarily occupied a place at the planning table for the military operation, particularly when it came to describing the enemy system. It was not required to predict the future but instead to take part in shaping it, based on the assumption that reality is not static and is conditional on how we ourselves interpret its contents. This endeavor also required a change in methodological practice: instead

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of interpretive research on the leader, intelligence now engaged in broader scrutiny of the enemy entity as a multidimensional system that builds its military power and prepares for a campaign. Intelligence now sought to understand the network of interconnections within the enemy entity, the internal tensions, the economic frameworks, and the political culture, along with the enemy's self-conception as part of the region and its interpretation of the notions of victory and defeat.

This approach became dominant in the late 1990s with the approach of the Second Intifada (which began in September 2000). It was implemented, at least in the initial months, on a basis of prior operative intelligence and operative planning, mainly via Central Command. The approach drew criticism in the wake of the Second Lebanon War (summer of 2006), among other things because it was seen as distancing the army from its professional principles in order to pursue postmodern theories that had no connection with reality. In the years after the war, the IDF underwent a certain regression with regard to its systemic concept. This, in my view, was accompanied by a change in the culture of discourse between the national leaders and the intelligence officials. The result was that the strategic intelligence establishment sought a new path, albeit without totally abandoning the operative approach. Over the past decade a different prototype of operative strategic intelligence began to develop, and it has indeed defined the third path in the orchard of strategic intelligence.

Third Path: Agreed-Upon Strategic Intelligence

According to this approach, Moses' dispatch of the spies is not simply an intelligence procedure; it is a political act of the first order. More than it is intended to enhance knowledge about the situation in Canaan, whether that of the people or that of Moses himself, it is intended to fortify the willingness to enter the land. It is meant to persuade, to prepare the population for the imminent large-scale action. Two facts from the story attest to this point. One is that the spies are not just outstanding warriors; they are chosen on the basis of representing the 12 tribes: "of every tribe of their fathers shall ye send a man, every one a ruler among them." As we saw, the original intention was to make the work of persuasion easier once the spies had returned. The second fact is Moses' clear instruction to the spies to "bring of the fruit of the land"—a kind of positive evidence of Canaan's high agricultural quality. Again, this is meant to increase readiness, to motivate the population to take on the difficult mission of conquering and settling the land. The biblical text also hints that Moses does not really require information about the military strength of the peoples of Canaan or about the land's agricultural produce: "Now the time was the time of the firstripe grapes." That is, even though Moses was aware of the land's fertility, he insisted on the bringing of bunches of grapes as examples to be shown to those who would

be shouldering the mission. Likewise, he certainly knew about the difficulties to be encountered when entering the country and foreseeable opposition of the peoples. Yet no description of those peoples' determination and power could convince Moses to retreat. The bequeathing of Canaan was a divine promise and a great and sacred truth, regarding which—at least for Moses and a few other leaders of the People of Israel—no critical discussion could raise any doubt about the decision to be made.

The importance of the great truth, to which Moses asks the population to commit themselves, is evident in the harsh punishment they receive for doubting the chances of successfully taking over the land. The spies' mission, then, is not for purposes of operative intelligence, or of renewing the discussion of the strategic objective. It is a way of mobilizing the population to achieve the strategic goal. Yet only a small minority of the 12 spies—Caleb ben Yefuneh and Joshua bin Nun—take part in mobilizing them. These two not only understood the political significance of the mission; they also gain from it twofold. Unlike their 10 comrades, they were spared from dying; and eventually they were promoted in the leadership hierarchy and, as Moses' successors, led the endeavor to conquer the land.

Strategic intelligence is also the youngest approach. Its development is an outcome of two processes. One is the criticism of the IDF's systemic approach, which underwent a crisis following the Second Lebanon War; some claim that this approach is now making its way back. The criticism that was leveled

(unjustly) at the military echelon after the war, concerning some commanders' use of systemic operative definitions (which only those who formulated them understood) and concerning the IDF's fighting capability, was reflected not only in the change in the IDF's senior command and the appointment of Gabi Ashkenazi as chief of staff, but also in the cold water that was thrown on the ambition to change the military endeavor into a kind of intellectual-operative effort, with intelligence playing a central role not only in deciphering the enemy system but also in crafting the campaign and determining its nature in the future.

The second process concerns the change in the culture of the Israeli intelligence discourse, and particularly the retreat from the norms and accepted practices that characterized intelligence practice after the Second Lebanon War, and particularly after the publication of the Winograd Commission's grave conclusions about the political-security echelon's conduct during that war. The publication of these

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conclusions and their adoption by then-prime minister Ehud Olmert caused a certain increase in the activity of the intelligence bodies, including those that were responsible for the strategic domain. These entities found themselves with an enhanced role as partners in the decision-making process on the political level, both in presenting the intelligence picture and in making policy recommendations. During this period, the Israel Security Agency, for example, upgraded the status of its research unit, which was made subordinate to the head of the agency, and set up a task-specific body alongside the unit that dealt with formulating policy recommendations in the strategic arenas.

The culture of open discourse, practiced at the end of Ehud Olmert's tenure in light of the Winograd Commission's conclusions, was made into an approach that sought to limit, at least on certain issues, the involvement of the military-intelligence echelon in the political echelon's strategic calculations. The political echelon, instead of expecting strategic declarations, now expected the expert discourse to be harnessed to the political echelon's strategic path. This was accompanied by a process of adapting the research products. Complex surveys were replaced with the culture of "briefings," that is, succinct presentations and telegraphic-Internet messages describing the "dry" intelligence picture without delving into the interpretive domain, let alone offering recommendations.

These processes were meant to create a complete dichotomy between, on the one hand, the powers and responsibility of the political echelon to set the strategic path, and on the other, the intelligence agency, whose purpose was to use its expertise to support the great truth of the political echelon. The result was not only a change relative to the previous period in terms of the culture of discourse and the role of strategic intelligence, but also a transformation in how the chiefs of the strategic intelligence entities conceived of their role. Seeking to reformulate their relevance amid the changing political reality, the strategic intelligence entities identified the meeting point between them and the political echelon. *Instead of defining practice as a kind of partnership with the national leader, aimed at giving advice and recommendations as well as developing strategic knowledge about the regional and international systems, the intelligence chiefs accepted the political narrative of the political echelon and restricted their role to what Antonio Gramsci defined as "organic intellectuals."*⁶⁵ These experts do not produce new knowledge, do not challenge the discourse, and do not even cooperate with the political echelon in shaping policy; they only help the political echelon implement policy by steadily providing "hard" information, or in the intelligence lingo, "data" that conform to the political echelon's diplomatic and strategic approach. In many regards this can be seen as a conceptual adaptation

65 Antonio Gramsci, *On Hegemony* (Tel Aviv, 2002) (Hebrew).

of the operative strategic intelligence approach, since both are based on leveraging intelligence to meet operative needs. In the second approach, these are operative needs of the military echelon, and have to do with planning the military campaign. In the third approach, they are operative needs of the political echelon that are promoted by turning intelligence into an intellectual factor that, with its expertise, anchors the political interpretation of the political echelon and helps it impart this interpretation as a kind of exclusive diplomatic-political truth.

Fourth Path: Critical Strategic Intelligence

The story of the spies hints of a fourth possible approach to strategic intelligence, and it is embodied in the text in two ways.

The first concerns the disparity between the intention of the responsible echelon, that is, God and his emissary Moses, and the viewpoint of the spies along with aspects of their role. Moses not only sends the spies to explore the country, but also demands that they come back with evidence regarding the Promised Land: “And be ye of good courage, and bring of the fruit of the land. Now the time was the time of the firstripe grapes.” Moses is not naïve; he knows what this agricultural season in the Land of Canaan has to offer, and seems to have gathered intelligence prior to the intelligence that the spies are supposed to bring. Moses, then, sends the spies in order to substantiate the notion of the fine quality of the land, and on behalf of the great faith in the mission of those who will be entering it. This will be clearly manifested by his anger when the group of emissaries, except for Caleb ben Yefuneh and Yehoshua bin Nun, fail to cooperate. The 10 spies return with a different view than that of their senders, and indeed tell the story of a conceptual paradigm that contravenes the conceptual hegemony of the responsible echelon. If one sees their role as that of presenting a competing interpretation, not in order to mock or to oppose a hypothesis out of contrariness, but to offer an interpretive truth that emerges from an investigation, then what they have done is to observe and clarify the enemy system, a kind of intelligence methodology that Moses does not accept. It is here that the text reflects a strategic intelligence approach, a kind of paradigmatic critical attitude. Indeed it emerges again in the fascinating stance of Caleb ben Yefuneh and Joshua bin Nun, who present a position different from that of the other 10 spies - precisely because they, too, have taken part in the intelligence activity, in collecting and interpreting knowledge. They thereby adopt Moses’ position:

And Joshua the son of Nun, and Caleb the son of Jephunneh, which were of them that searched the land, rent their clothes:

And they spake unto all the company of the children of Israel, saying, the land, which we passed through to search it, is an exceeding good land....

Here they have indeed supported the opinion of the responsible echelon, that is, Moses, while also presenting a dissenting and very unpopular view in the eyes of the people, who want to attack them: “But all the congregation bade stone them with stones....”

The fourth approach, which views intelligence as a critical person views it, is indeed anchored in ideas about the role of intelligence personnel and in the norms of their work. So far, though, it has never asserted itself as a foundational concept for the intelligence establishment’s activity. The marginality of the supervisory bodies indicated something about the desire of the strategic intelligence bodies to be part of the mainstream, or, in the organizational lingo, “to be relevant” to the system.

The supervision of intelligence was organized within the various intelligence bodies in the form of enclaves, supervisory units, or dissenting tendencies. As such, the influence of these entities on the nerve center of intelligence practice was quite marginal. The supervisory methodology was enacted with limited tools that denied any real significance to its products. The supervisory bodies used the same intelligence research methods and the same intelligence raw materials, so that a different opinion always appeared to be an artificial creation.

Hence criticism is perceived as an activity external to the knowledge-development processes conducted in the task-specific frameworks; and the supervisory bodies acted as a fig leaf that promised the senior command

level a kind of immunity from external criticism. The working assumption of the strategic intelligence personnel was that, ultimately, there is an intelligence truth that one must produce or bring to the attention of the political or military echelon so as to improve the decision-making process (in the case of prophetic intelligence), help prepare for a campaign (in the case of operative intelligence), or enhance the political echelon’s ability to validate this truth (in the case of agreed-upon intelligence).

The approach of critical strategic intelligence seeks (not surprisingly) to anchor its foundational idea in a critical perspective on the other approaches, without wanting to do away with aspects of those other approaches that can be leveraged to promote the critical approach itself. Regarding prophetic strategic intelligence, the critical approach concurs with the claim that the ability to predict the future is somewhat limited, let alone when prophetic intelligence uses a methodology that is not suited to it. Formulating a prediction based on a partial understanding of a system, one that

The critical approach proposes stretching the boundaries and challenging the existing thinking of the strategic establishment in a way that allows making use of dilemmas and tensions to redefine the strategic objectives.

relies on interpretation, not only ignores the fact that the political entity is part of a much broader picture but also falls victim to ascribing more weight to the political entity, the leader, the party, or the unit than to the processes that produce the system.

The critical-strategic-intelligence approach likewise does not accept the orientation of the two alternative approaches, operative strategic intelligence and strategic intelligence, toward the great truth. It particularly rejects their tendency to become part of the practitioners' discourse, whether those in the military or the political echelon. This entails completely subordinating the world of knowledge to the directives of the responsible level, to the point of totally relinquishing the capacity for independent thought that might cast doubt on the great truth of the practitioners and on its implications for Israel's national security.

Critical strategic intelligence draws its sustenance not only from negating what exists, but also, on the positive side, from understanding the world of knowledge as a world that is subject to interpretation, shaped in accordance with the observer's perspective—and some would say as a consequence of the stakeholder's perspective. Here there is a certain similarity to the second intelligence approach. The conception of knowledge is completely different from the one utilized by the strategic intelligence bodies during the first decades of Israeli statehood. Objective, unbiased knowledge that depends on the quantity of information items collected in order to form a true picture is replaced by interpretive knowledge, which depends on perspective and allows simultaneously combining a number of pictures of the situation and strategic observation points on the reality.

This view of the world of knowledge may indeed be regarded as a limitation. That is why, in the two previous approaches to strategic intelligence (operative, and in the service of the great truth), the intelligence bodies abandoned the prophetic strategic discourse and adopted the directive of the political echelon, operating within the directive and propped by a truth formulated by the national leader or the military echelon. However, understanding the complexity of the world of knowledge does not require submitting to the political echelon; instead one can use the complexity as a lever to create strategic intelligence of a different kind. This is intelligence that values conceptual pluralism, precisely because it assumes that even the great truth of the political and military echelon is not absolute and must, too, be subjected to doubt. Here a deeper discussion is held that does not simply accept the political directive but examines it from an external standpoint, taking into account that what may seem an absolute truth reflects a certain political perception of the political echelon.

From this standpoint, the critical path of intelligence dovetails with the notion of the independent activity of prophetic intelligence. It does not, however, seek to lock the political and military echelons into a conclusive assessment but to generate a wide

spectrum of ideas in the strategic domain, requiring a richer discussion that does not shrink from casting doubt on how the strategic reality is understood. This practice alters the pattern of relations between the sides from “Orthodox” relations of formal subordination to “Reform” relations of discourse, of open and emergent dialogue. Hence both sides can engage in a dialectic, with acceptance and harmony on one side and argument and conflict on the other. In this way intelligence can regard itself as serving, not the political or the military echelon, but the national interest in the purest sense.

Implementing the critical approach requires not only recalibrating the orientation, but also readjusting the working tools of strategic intelligence. In recent years the different entities have attempted to develop strategic knowledge and to clarify issues having a social coloration (“social research”), particularly against the backdrop of the failure to understand the upheavals in the Arab world that began in the winter of 2010. However, the addition of “social research” has by no means brought about a change in the existing methodology. It has only entailed a quantitative broadening of the existing method, with socioeconomic entities (elites, publics, women, young people, etc.) now added to the political entities (leaders, parties, states) that are researched. In this regard the research still has not relinquished the familiar inclination to break the system down into subunits, and to clarify the reality in terms of the different components of the sociopolitical system.

A critical discussion can be facilitated by adopting a methodology based on the theories of complex systems, which view the system as a range of factors that operate to ultimately create an integral result. The premise is that the system is managed according to a certain pattern that can be deciphered. This pattern is not constant in time, and is affected by various contexts that must be taken into account when deciphering the nature of the system and its directions of activity. Cracking the system’s genetic code may also shed light on the vectors that guide future activity, assuming that the set of contexts that shape the activity will not be disrupted and will not lead to a change in the logics of its practice. Deciphering the connections is critical to understanding how the different parts of the system operate—that is, the leaders, the public, the military, and any other component. The analysis will always try to connect the two

Although the critical path of intelligence dovetails with the notion of the independent activity of prophetic intelligence, its aim is not to lock the political and military echelons into a conclusive assessment but to generate a wide spectrum of ideas in the strategic domain

end points of the observation of the entities so as to understand the process, and also to connect the two end points of the understanding of the process so as to interpret the entities' behavior. This methodology does not only extend the perspective beyond the sociopolitical entity to the level of the system, and does not suffice with clarifying the connections between, on the one hand, the system that strategic intelligence is observing and, on the other, the regional and global contexts, but also broadens the perspective to include our role in relation to the system being researched, and the way in which Israel's actions and strategy affect the behaviors of the opposing side. The contextual approach becomes holistic and allows intelligence to conduct, with the political echelon, the reality-shaping (as opposed to prophetic) discussion on how we want to influence our surroundings. This reflects the understanding that how we interpret the other affects our own possibilities of action, our choices in the policy domain, and perhaps also our strategic modes of thinking, which may need to be refreshed in light of critical observation.

If so, what is needed is pluralistic intelligence that seeks to leverage the postmodern approaches in order to extend the boundaries, but not in a way that lacks a purpose. On the contrary, challenging the existing modes of thought about ourselves and about the adversary systems enables us to utilize dilemmas, tensions, and interpretations so as to redefine our strategic objectives. This redefinition is performed by leaving the space and returning to it, a kind of movement that entails a broadening of perspective that, in turn, enables a deepening of understanding, and a reconvergence at the next stage. This may involve breaching the old paradigms or returning to the familiar concepts, but out of a richer understanding and a deeper clarification of the possibilities at our disposal.

Where Do We Go from Here?

The trends in the development of strategic intelligence reflect a pendulum motion: from prophetic strategic intelligence to operative strategic intelligence. This trend is affected by the learning process that strategic intelligence has undergone, by changes in the concept of the significance of knowledge, and perhaps no less, by strategic intelligence's concern to produce an organizational meaning, which the security institutions commonly define in terms of the idea of relevance. The critical-strategic-intelligence approach never had a substantial presence conceptually and organizationally in the Israeli security establishment, only taking the form of temporary enclaves. This is not only because recognition of this approach requires deep processes of change in the discourse between the professional echelon and the political echelon, but also, and mainly, because it contravenes the notion of institutional relevance that is based on the consumer-customer approach.

In recent years the strategic intelligence bodies have been going deeper into the operative channel even at the price of a constant diminution of the independence of their approach, both in the maximal critical sense and in the more minimalistic sense of developing strategic knowledge for the purpose of predicting the future. However, the classic pendulum motion, which actually leads strategic intelligence practice toward the dominance of one approach over the others, is not inevitable. Despite the tensions between the different approaches, strategic intelligence appears to require a process of creating jointness between different approaches that can complement each other. Such integration will enable strategic intelligence to develop a rich repertoire of capabilities and qualifications, and the choice of whether, when, and in what framework to use one of the above approaches will of course depend on the concrete contexts of time and place.

The challenge is not simple, whether in terms of the ability to build such an institutional and organizational model or in terms of the ability to use it regularly. At the same time, it may be inescapable in an era in which complexity, flexibility, proliferation, and movement are the name of the game, and require organizations, let alone security institutions, to possess multiple and varied capabilities. This also seems to me the main point that emerges from reading the ancient biblical text of the story of the spies, from which one can derive different readings about the role of intelligence personnel. It taught us that what looks like an integral reality can actually be multilayered, which makes it no less real but gives it a new and special significance.

Fig. 5: A Comparison between the Four Approaches to Strategic Intelligence

	Prophetic intelligence	Strategic intelligence	Agreed-upon intelligence	Critical intelligence
Rationale	Clarifying the reality and warning of war	Planning the military/diplomatic campaign	“Organic intellectual” (explains/speaks/corroborates) in the service of the political and the military echelon	Creating a spectrum of ideas about the strategic reality and shaping it, not necessarily in contexts of war
Relations with the political echelon	Soft subordination while maintaining research independence	Full subordination to the directive	Full subordination to the directive	Symmetrical relations
Research methodology	Collecting facts, performing interpretive analysis focused on personality (getting into “the leader’s head”)	Research of the adversary system while observing processes and broad contexts	Collection research based on pursuing the goals of the political echelon	Research of the adversary system while observing processes and broad contexts
Significance of knowledge and information	Factual and neutral (total modernism)	Knowledge of the significance of the power to shape the campaign (between modernism and postmodernism)	Knowledge of the significance of the power to shape the campaign (“post-truth”)	Context-dependent knowledge that creates a capability of critical observation (total postmodernism)
The “I” in the game	Does not exist, one-dimensional. Regular, outside the assessment picture.	Exists, connects with my strategic objectives in order to take part in shaping the campaign	Exists, connects with the strategic objectives of the political echelon so as to anchor them	Exists, connects with the strategic objectives so as also to create for them, to the extent necessary, alternatives
The independence of intelligence	Partial (consumer-client/intelligence relations in the service of the political echelon and the national interest)	Does not exist (classic consumer-customer relations/intelligence in the service of the general)	Does not exist (classic consumer-customer relations/intelligence to serve the interest of the political echelon)	Complete (intelligence in the service of the national interest)

Proactivism and a Reality-Shaping Approach: Main Aspects of the Methodological Concept in the Shabak Research Division

S.

director in the Israeli Security Agency (ISA -Shabak) Research Division

Background

The Research Division of the Israel Security Agency (Shabak), which was established at the end of the 1980s, has for most of its existence used the classic methodological approach of Aman (the source of most of its researchers in the initial years). This approach, also known as the interpretive approach, emphasizes the role of research as a kind of “national assessor,” and focuses on providing predictions in the strategic-diplomatic domain. It is based on in-depth analysis of political entities (leaderships, organizations) and assessment of their future behavior (in the “researcher as observer” mode).

During the past decade, as management personnel have entered the Research Division who did not come from the research domain, the division has begun to seek new methodological approaches that would better fit its role as a strategic research unit functioning within a preventive-operative organization. Over the years, different approaches have been tested.

After an ongoing methodological endeavor, a new research approach was crafted that combines the systemic approach (as a guiding concept) and the interpretive approach (as a platform for ongoing research activity), with the aim of creating a conceptual framework tailored to the unique needs of the Shabak Research Division.

In the Shabak’s Research Division the dominant methodology emphasized the role of intelligence in providing strategic predictions. About a decade ago the division began to seek a new approach that would be suitable to it as part of a preventive-operative organization

What Is the Role of Strategic Intelligence Research in the Service?

The updated concept in the Research Division is based, as noted, on the systemic approach, which views knowledge development as a platform for the shaping of reality by the national leader. According to this concept, the main purpose of the intelligence-research discipline in the Shabak is to provide a platform for crafting

policy on the strategic level (that of the service and that of the nation). The research requires constant movement between the strategic level, in which processes of clarifying and understanding the reality are conducted, and the operative level, which deals with planning and advancing processes aimed at affecting the reality.

Thus research in the Shabak focuses on systems, not on the personality level. The basic assumption is that each research object (terror organizations, publics, and other interest groups) is actually a system, and that understanding its organizing logic requires deciphering the dynamic between its components as well as the links between it and the tangent systems.

The clarification and learning processes within the research unit indicate that the research fulfills two main roles in relation to the decision-makers:

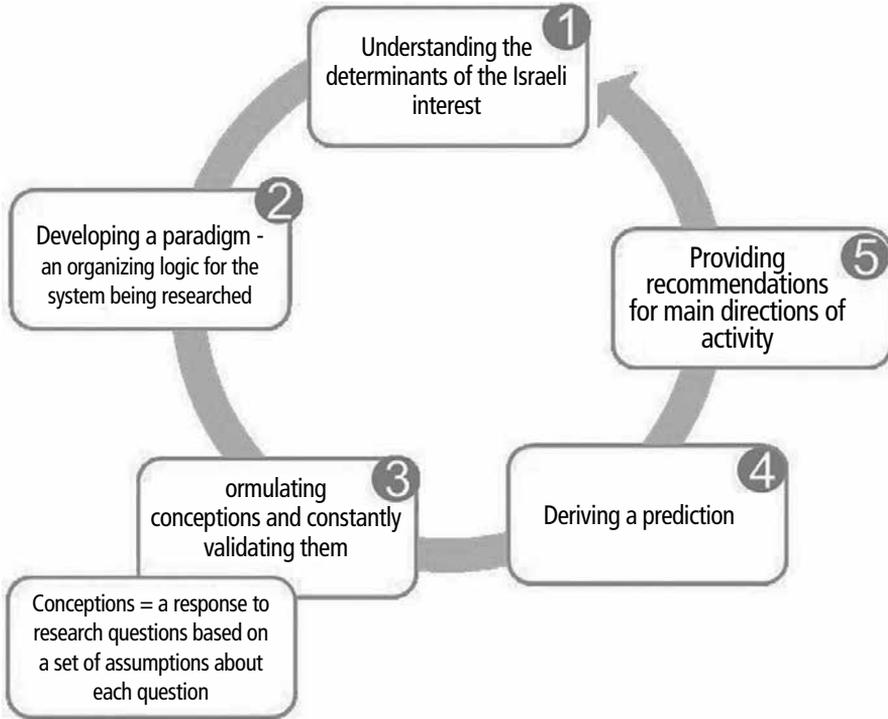
- **“To serve”**: To outline for the national leader a “roadmap” to understanding the strategic reality, in a way that will help him promote his strategic goals in the arenas in which the Shabak operates.
- **“To challenge”**: To identify and emphasize, in the operative arenas of the service, trends and developments that require adaptations (and sometimes also reconsideration) of the determinants of the Israeli interest.

In an era marked by a dynamic and complex external environment, intelligence research cannot focus its products solely on the effort to answer the question of what the future holds. It must aid its customers’ decision-making process by clarifying the complex reality and formulating a strategy and directions of activity.

Thus the research product must be oriented to shaping policy, and it must correspond with the strategic objectives of the national leader. The central question for the intelligence research process is not, then, “What is going to happen?” but “What are the organizing logics and centers of gravity of the systems being researched, from which one can discern the threats and the opportunities facing Israel at the strategic level?”

Components of the Updated Research Approach

In order to address the overarching question, the updated research approach defines five stages that construct the thinking of the research. Combining them together produces the sum of the research.

Fig. 6: The Stages of Thinking of the Research

Defining Israel's Interests

The determinants of interest are principles that mark out the Israeli interest and the way in which Israel works to advance it in each of the arenas in which the Shabak operates. Because these principles usually are not formulated in a direct, clear-cut fashion by the national leader, the research worker must decipher them by revealing the covert and overt assumption behind the behavior of the Israeli actor (examining his open statements, analyzing his actual moves, etc.). Understanding these principles is a condition for identifying the threats and the opportunities facing Israel in the system being researched on the strategic level, and provides a basis for defining the main research questions pertaining to each system that is researched.

Paradigm: Logics, the Centers of Gravity, and Links between the Components of the System and between It and Other Systems

The research process first and foremost requires formulating a paradigm, which is a complex structure of knowledge based on a conceptual system that defines the overarching logic of the system being researched and its centers of gravity, thereby enabling us to understand what motivates the actors and what links exist between

them. The paradigm is, indeed, the “spectacles” with which we analyze every action of the actors, and based on which we can offer a multidimensional analysis of the reality. In a wider context, the paradigm enables us to provide an explanation for each of the events and for the discrete incidents that we encounter.

In 1962 Thomas Kuhn published *The Structure of Scientific Revolutions*, his influential book about revolutions in knowledge, in which he pointed to processes of paradigm change. He described a process in which a dominant paradigm falters because of an emerging incompatibility between the existing, dominant structure of knowledge and the “reality.” The systemic approach (which was formulated in the IDF) refers to this stage as a shift, in which the “true” reality begins to recede from our set of understandings, and a gap in relevance emerges that widens and produces a defect in our understanding of the reality.

This is a deceptive stage, because even though the “reality” shows signs of a change process, it is human nature or the nature of the researchers to interpret these signs in terms of the dominant paradigmatic approach—until the great and dramatic “event” arrives that leaves no further doubt about the change in the reality and the emergence of a new one. This event was conceptualized by Zvi Lanier as the “basic surprise,” and it usually requires the intelligence establishment to develop a new paradigm.

The challenge of strategic intelligence research involves first of all the ability to identify *in time* the signs of the faltering of the existing paradigm, and to understand that the knowledge

structure that serves us in analyzing the system is no longer relevant, especially in an era in which the rate of change of the “reality” is accelerating.

Thus an important component of the intelligence analysis is the development of systemic knowledge, whose purpose is to challenge the existing paradigm and to produce a new one, that is, to identify a structure or a new abstract logic of the system being researched that provides a better way to understand the events that are occurring.

Such processes require: a complex language; analysis of logics and tensions; an

The challenge of strategic intelligence research involves first of all the ability to identify in time the signs of the faltering of the existing paradigm, especially in an era in which the rate of change of the “reality” is accelerating. Thus an important component of the intelligence analysis is the development of systemic knowledge, whose purpose is to challenge the existing paradigm and to produce a new one

ability to devise a genealogy of the processes; clarification of concepts and an ability to generate new conceptualizations; a readiness to “open the camera lens” and include an overall understanding of the price of ignoring details.

It is important to note that the paradigmatic concept must be transparent and clearly formulated—one of the main attributes that allow it to be challenged. After the paradigm is crafted, research questions must be derived from it that will enable monitoring the changes in the paradigm and testing its validity. These research questions should be tested constantly and systematically.

Conceptions and Working Assumptions

The conception (as defined in this approach) is a set of assumptions that can help the researchers answer defined research questions. Questions of this kind reflect the national leader’s need to receive from the research unit a concrete response about a future occurrence as a basis for crafting a policy (for example, the probability of the outbreak of a campaign or of violent incidents). There is a close connection between the paradigmatic approach that guides us and the built-in conceptions about the main research questions. When our paradigm is not adapted to the reality, naturally the assumptions derived from it will be irrelevant in a way that leads to a “basic surprise.”

To reduce intelligence failures, we should systematically make use of our conceptions with regard to the main questions of prediction. This necessitates clearly formulating and defining each of the conceptions and the assumptions they rely on, and perpetually challenging them. The various research products (intelligence reports, presentations) provide insights that emerge in the course of this process, and that the national leader should be made aware of in order to understand the research. This could involve, for example, pointing to a change in the conception, or making a clarification when the conception is still valid despite a certain change in the reality.

Projection as a Component of the Reality-Shaping Approach

Projection is an interpretive weighting of the assumptions that enables testing the degree of validity of the conceptions (the continuation of existing trends or a probability of shifts) and providing the national leader, at each point in time, with a response to the research questions so that he will have policymaking tools at his disposal. Unlike longstanding approaches to research, the approach presented in this article does not view projection as the main goal of the research process but as a component of the overall process that allows the research to serve or to challenge the determinants of the Israeli interest. Thus the test of the research unit is not its ability to predict the reality but to create the relevant basis with which to shape it; the issue is the extent to which identification of the main vectors and of the potential for changes

in the system gives the national leader tools to affect the reality.

Recommendations for Policy and Activity

Recommendations are actually proposals for Israeli measures that will enable implementation of the existing policy or, alternatively, point to the need to reexamine its tenets. The recommendations should be derived directly from the knowledge-development process presented above, and from identification of the changes in the logic of the adversary's activity that are discerned by the systemic-analysis process.

This is a new component of the research product, one that undermines conventions of the "classic" interpretive approach that requires a clear separation between intelligence research and policymakers. The ostensible aim is to prevent "contamination" of the research process so that it can examine the reality objectively.

The research approach presented in this article rejects the principle of separation and the assumption of objectivity. As noted, it views intelligence research as an intelligence discipline oriented toward shaping reality, whose products must correspond with the strategic objectives of the national leader.

Conclusions

- The methodological approach presented in this article offers a new and updated view of the role of strategic intelligence research.
- The approach undermines basic conventions of the "classic" research approach according to which research should be detached from the goals of the "Israeli side" and should clarify the reality "objectively."
- Unlike the "classic" approach, *this approach does not view the supreme purpose of strategic intelligence research as providing accurate prediction and warning; it regards research as a proactive body whose role is to identify threats and opportunities for the national leader, and to produce for him a space in which reality can be shaped.*
- This approach allows research to develop knowledge that is more relevant to the needs of its main customers, and to carry out its mission—to "serve" and to "challenge."

Recommendations are an important component of the research product, one that undermines conventions of the "classic" interpretive approach that requires a clear separation between intelligence research and policymakers, with the aim of preventing "contamination" of the research process so that it can examine the reality objectively

Intelligence Supervision: Creating Relevance in the Present Era

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head of the Supervision Department of Aman,

and **Dr. V. I.,**

former deputy head of the Supervision Department

Introduction

The main role of the IDF's intelligence branch is to provide intelligence on the security and military operative environment in order to support decision-making processes at different levels as well as operative activities. In light of the intelligence failures with regard to warning at the time of the Yom Kippur War, in 1974—as part of various measures taken by Aman and by the intelligence community—the Supervision Department of Aman was established.

The task of intelligence supervision is to help Aman carry out its main missions by reducing the chances of intelligence failure, improving intelligence assessments, and decreasing surprises. This is done by supervising processes, assessments,⁶⁶ and intelligence products of the IDF intelligence research bodies, most of all the Aman Research Division. The Supervision Department is directly subordinate to the head of Aman and enjoys freedom of action, considerable independence, and access to all intelligence information. Directly and without authorization by the head of Aman, the department disseminates its products to Aman consumers and to the senior political and military echelon.

The first part of the article surveys different approaches taken by supervision over the years, defines the overarching methodology of supervision, and describes the department's current activity.

The second part addresses dilemmas and gaps in the⁶⁷ practice of supervision in light of the changes in the strategic, intelligence, and organizational environment, and offers recommendations from an Aman-level and community perspective.

Approaches to Intelligence Supervision

Over the years three operative approaches to supervision have emerged in Aman,

66 Shmuel Even, "On the Contrary: Supervision of Thought and Deed in Intelligence Research," in Amos Gilboa and Ephraim Lapid, *Expert Endeavor: 60 Years of Israeli Intelligence - a View from Within, Intelligence Heritage and Commemoration Center*, 2008, 230 (Hebrew).

67 This article is based on internal work conducted in the Supervision Department in April 2015, and points to different concepts and approaches to intelligence supervision over the years of its existence.

even if informally:

- **The “on the contrary” (*ipcha mistabra* in Aramaic) approach:** Presenting a very important claim about a cardinal research question that contradicts the position of the Research Division, and attempting to prove its validity through selective use of intelligence information and intelligence hypotheses, even when the supervision personnel do not think the claim is correct. “On the contrary” is a “flagship product,” and sometimes the Supervision Department is called, by those who identify it with contentious thinking, the “Devil’s Advocate Department.”

- **The “shadow” approach:** This approach promotes a research “competition” between supervision and the research bodies, creating an atmosphere of “supervision fear” among the research personnel that impels them to improve their practice. In this approach and unlike “on the contrary,” the opinion of “the supervision” reflects the authentic opinion of the supervision personnel, which is based, similarly to the opinion of research, on all of the existing intelligence information, and unlike it on a different interpretation of the data. Supervision examines connections and contexts in the research information process, and issues conclusions and implications that differ from the opinion of research. According to this approach, supervision must strive for expertise regarding the intelligence information on a level as close as possible to that of the researchers working on the topic.

- **The “alternative thinking” approach:** In this approach, supervision as a constant perceptual situation of making an assessment is inevitably different from (though not necessarily contrasting with) assessment carried out by the research bodies and entails adding research questions. The treatment of these may turn out to be deficient or defective thus leading to “basic surprises,” so that the intelligence establishment must use other perspectives in analyzing the reality. The opinion of supervision does not necessarily reflect that of the supervisors, and the alternative assessment’s right to exist is conditional only on supervision’s ability to validate it with research.

The above three approaches do not exhaust one another; that is, the use of one of them does not cancel out another approach. Over the years supervision has used the three approaches in one dosage or another, and in adapting to the changing strategic environment and to the personal approach of the Supervision Department’s chief.

Supervision and the Four “Intelligence Knowledge Situations”

The 1950s saw the emergence of the “Johari window” model.⁶⁸ It posits four

68 This model, created by Joseph Luft and Harrington Ingham in 1955, defines the person’s state of knowledge about himself and about the environment. See also Luft, J., Ingham, H. (1955), “The Johari window, a graphic model of interpersonal awareness,” Proceedings of the Western Training Laboratory in Group Development, University of California, Los Angeles.

situations of human knowledge of reality.⁶⁹

A Johari square arranges the research outputs into four categories according to the knowledge situation in each. In line with these categories, supervision has four functions that are distinguished by their potential contribution to the intelligence assessment:

- Knowledge situation A: A research question exists, and information exists (I know that I know). The contribution of supervision will mainly involve a different interpretation of the existing information.
- Knowledge situation B: A research question exists, and information is lacking (I know that I do not know). The contribution of supervision will probably involve adding scenarios or subscenarios.

Knowledge situation C: The research question does not exist, but information exists (I do not know that I know). The contribution of supervision will be to raise a basic research question and give an answer based on information. Or, alternatively, supervision will raise new questions, which stem from the questioning of conceptions, about an existing basic assumption and will consider existing research objects from a different perspective.

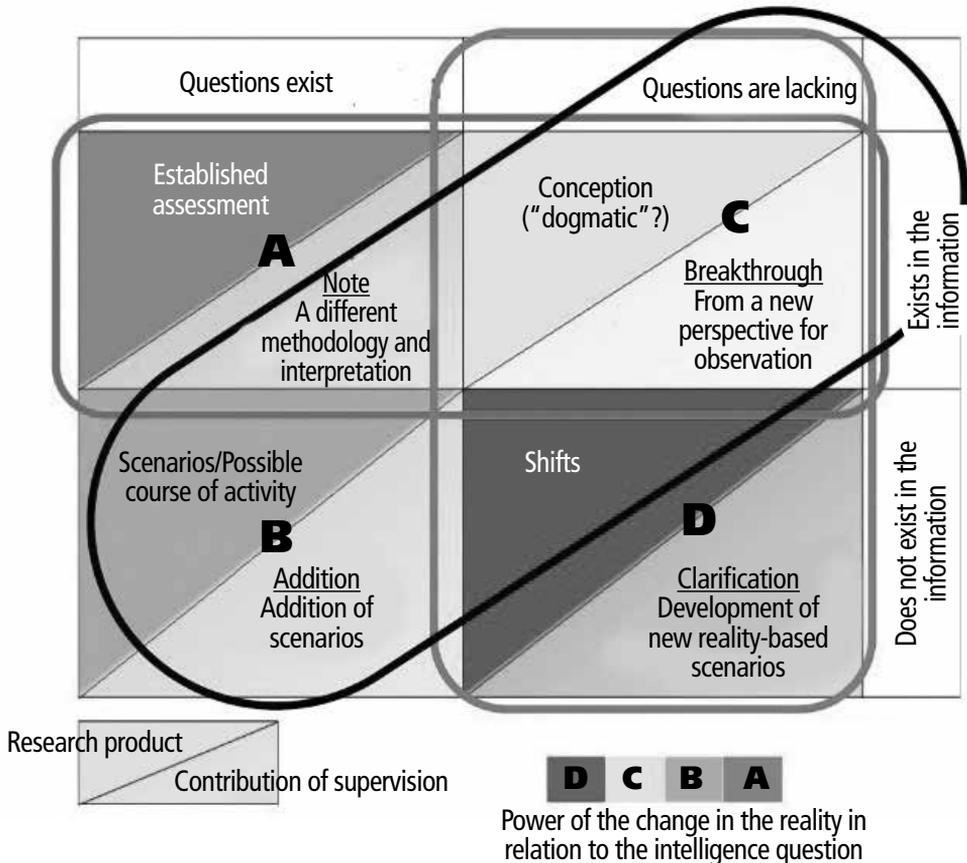
- Knowledge situation D: Neither the research question nor the information exists (I do not know that I do not know). The solution for this knowledge situation lies in the ability to imagine possible future situations for which there are no indicative signs (supporting information) in the current reality, and to define these situations in a conceptual framework. The contribution of supervision in this situation is probably to raise the possibility of a “shift” or to point to the development of, or a rise in the probability of, a “shift.”

The four situations entail a changing potential for a possible surprise, which stems from the gap between the intelligence assessment and the state of the reality. Basic-strategic surprises are more likely to emerge from knowledge situations C and D than from knowledge situations A and B.

Each of the different approaches to supervision emphasizes dealing with particular knowledge situations. The “on the contrary” supervision approach emphasizes dealing with situations B and C, while the “shadow” approach emphasizes dealing with situations A and C.. The alternative-thinking approach covers all four situations but will display greater value for supervision activity in situations C and D, since these entail a gap on the research question relative to situations A and B.

69 Former U.S. defense secretary Donald Rumsfeld made use of these before the 2003 American campaign in Iraq to describe the intelligence situation regarding nonconventional weapons in Iraq.

Square of Supervision Functions



The Aman Supervision Department in the Present Era

The changes in the strategic environment, the rapidity of the changes in the system, the abundance of information, and the increasing complexity of the intelligence issues, while supervision remains a body limited in size, have meant that supervision must make adaptations to the present era. In this regard the alternative-thinking approach has been preferred over the others. Supervision mainly engages in exposing the systemic “blind spots”; that is, it addresses issues in which, in supervision’s assessment, the research personnel are in the third and fourth knowledge situations of the Johari window. The dynamic and rapidly changing environment generates more and more knowledge situations of this kind, which may well produce basic surprises.

At the same time, supervision treats selective intelligence issues flexibly, sometimes using other approaches like “shadow” and “on the contrary” and other methodologies

(such as “red team”) on issues defined in advance and delimited in time. The difficulty of coping with abundant information emphasizes the need to use deductive approaches. Supervision’s contribution in this regard is to raise research questions or proposals for a different research model.

Intelligence consumers are inundated by assessment personnel with publications and plentiful information. Hence they may well ignore the products of supervision amid the great “noise” created by the large intelligence organizations, which also are in a struggle for the decision-makers’ attention.

At the same time, researchers⁷⁰ are more prepared to adopt other methods and assessments in the course of the assessment process than at its conclusion. Thus supervision is considerably involved in processes of formulating the assessment, which are conducted in the research bodies despite the risk of being drawn into groupthink. In addition, the Supervision Department’s written products focus on supervising the research product on key issues. With regard to resources, supervision makes greater use than in the past of “borrowed” research personnel while also resorting to reserve personnel from various fields of specialization, which allows issues to be examined from other perspectives.

Gaps, Tensions, and Thoughts about Supervision Practice Supervision of Assessments for Decision-Makers: Between “Accessories” for Researchers and a “Counterweight”

The institution of supervision in Aman raises the question of whom supervision is intended to serve, or whom it tries to influence. On the one hand, it constitutes an accessory for the intelligence researchers and seeks, through them, to influence the intelligence assessment. On the other, it is supposed to form a counterweight to the research bodies’ assessments, thereby attempting to directly influence the heads of the intelligence and security establishment. The latter possibility highlights the Supervision Department’s role as a state-national institution.⁷¹

Every function develops different outputs and modes of activity. Influencing the intelligence researchers requires that the supervision personnel be highly involved in the research process and in formulating the assessment in the Research Division. On the one hand, the supervision work must place great emphasis on a methodology and on orienting the researchers to use it for the different topics so as to improve the

70 See the statements of Gen. (res.) Yaakov Amidror in “On the Contrary: Summary of a Workshop on the Issue of Supervision and Challenging Thinking,” Intelligence and Terrorism Information Center, September 9, 2015, 11-13 (Hebrew).

71 See different approaches to the issue represented by Gen. (res.) Shlomo Gazit, Gen. (res.) Yaakov Amidror, and Col. (res.) Shlomo Kashi in “On the Contrary: Summary of a Workshop on the Issue of Supervision and Challenging Thinking,” Intelligence and Terrorism Information Center, September 9, 2015 (Hebrew).

assessment. On the other, supervision's role as a counterweight to the research calls for producing an intelligence assessment that competes with the research bodies' assessment on core issues. This entails crafting an assessment independently and separately from the researchers, and being part of the assessment and decision-making processes of Aman and of the decision-makers outside of Aman.

How the Aman Leadership Views Supervision

Discussions that the authors of this article have held with supervision personnel from the more distant past and from the last decade, as well as their personal experience, indicate that the Supervision Department chief's view of how supervision should carry out its mission is what determines the "work point" of supervision practice at a given time. Along with the effectiveness of supervision's outputs in influencing its consumers, and the commitment to a high-quality product as a threshold condition, another condition exists: how the head of the intelligence branch and the head of the Research Division view the institution of supervision, and how they personally assess its chief during his tenure. The higher their assessment, the greater the influence of supervision on the crafting of the intelligence assessment, and vice versa.

Over the years the heads of the intelligence establishment have held different views of supervision, and relations between the head of the Supervision Department and the heads of the intelligence establishment have fluctuated. While the institution of supervision is indeed responsible for research-intelligence supervision, the Aman chief's high esteem for the supervision personnel can be manifested by assigning tasks to supervision in the operative and force-buildup domains and by including it in approval processes for special operations. All this is in addition to, and even beyond, its frequent use for research supervision. Conversely, lack of attention to the products of supervision, meager inclusion of it in assessment discussions and in strategic decision-making by the head of Aman, and a paucity of tasks assigned by the heads of the system usually indicate low esteem for supervision and reinforce its image as an "organizational tax."

An example of a limited notion of the institution of supervision can be found in the words of former Research Division chief (2004-2011) Brig. Gen. (res.) Itai Baron. In his view, the culture of controversy must be the general culture of the community and of Aman and must stem from the researchers themselves. As he sees it, an external supervision department is not a systemic solution (it is, rather, a curiosity, as he put it) and does not really succeed to impel the Research Division or Aman to generate such controversy.⁷²

The dependence of supervision on the changing views of it among the heads of the

⁷² Ibid., 13-17.

intelligence establishment creates a problem of inherent uncertainty about supervision's effectiveness and its existence as an institution. Hence, several times over the past 15 years, the intelligence branch has had to question the need for this institution and for maintaining its existing organizational format. The need to raise this question has sometimes stemmed from personnel changes in the Aman leadership and sometimes from resource constraints. In 2016, as part of adapting the military to the budgetary framework, it was decided in the context of the multiyear Gideon Plan to lower the rank of the head of the Supervision Department from colonel to lieutenant colonel. Also considered was whether to subordinate the department to the head of Aman or to the head of the Research Division; it was decided for the time being to retain the organizational subordination to the head of Aman. It should be noted that in 1983, with the appointment of (reserve General) Yaakov Amidror as head of the Supervision Department, the position's rank was raised from lieutenant colonel to colonel and its subordination was changed from the head of the Research Division to the head of Aman.⁷³

A possible solution for this instability is to detach supervision from changing personal views and from intra-organizational, intra-Aman resource constraints by conducting community-level supervision outside of Aman, with a statutory status. Such supra-community supervision could be a task-oriented body or an additional role as part of a supra-community intelligence function (in the National Security Council? the Intelligence Affairs Ministry?). There is a need for such a body in other regards that we will consider below.

From Research Supervision to Intelligence Supervision?

The Supervision Department's role in the intelligence branch is to supervise the intelligence assessment that the research bodies produce. Sometimes, as noted, because of a request by the head of Aman, supervision deviates from its role and conducts a supervisory process for the intelligence establishment's buildup and use of force on a particular issue. In general, supervision of force buildup and of operative intelligence activities in Aman, or in other words, "intelligence supervision," is delegated to entities in the Aman staff that are responsible for these areas: the Operations Directorate and the headquarters of the chief intelligence officer. It should be noted that when the Operations Directorate was established in the intelligence branch during the previous decade, broadening the role of supervision from intelligence research alone to intelligence in general was under consideration; however, the measure was not implemented.

73 Ibid.

The changes in the intelligence-activity environment to which we pointed in the first part of the article have altered the intelligence paradigm and blurred the boundaries between research and collection, while promoting jointness between entities in the intelligence community.

The rapid rate of change, the abundance of information,⁷⁴ and the rapid development of technologies require relatively rapid development and updating of the approaches to force buildup and use in the intelligence context so that existing and developing intelligence challenges can be addressed. In our view, the need for independent and continuous intelligence supervision, external to the entities engaged in the buildup and use of force in the intelligence context, is increasing.

The “intelligence supervision” products will mainly focus on examining concepts and proposing alternatives, and not so much on the use of the existing procedures, for which supervision is under the responsibility of the responsible commanders and the Aman staff. In our opinion, there are two main ways in which the proposed intelligence supervision could be conducted. One is to broaden the Supervision Department’s areas of responsibility within Aman and to give it more resources for conducting intelligence supervision along with research supervision. The second is to engage in community-level supervision. The challenges for intelligence in the present era require jointness between the entities in the intelligence branch, but to no less an extent they call for intercommunity jointness, for which the community-level perspective offers clear advantages.

From Aman-Level Research Supervision to National Research Supervision

Over the past two decades the Israeli security-intelligence community has expanded. In addition to Aman, the Mossad, the Shabak, and the Center for Political Research in the Foreign Ministry, other bodies have been established and consolidated that provide assessments on various aspects of national issues. The main bodies that have been established are: the National Security Staff (1999), the Political and Military Affairs Bureau of the Defense Ministry (2003), the National Cyber Bureau (2012), the Strategic Affairs Ministry (2009), which is currently leading the fight against delegitimization, and the Intelligence Ministry (2009). In addition, in national-civil domains for which, for planning purposes, knowledge is needed on the environment outside of Israel and on decision-making and activity outside of the country (economics; finances; regional cooperation; national infrastructures, energy, and water; science, technology, and space), these offices produce the knowledge for

74 Kobi Michael, David Siman-Tov, and Oren Yoeli, “The Development of the Concept of Jointness in the Intelligence Organizations,” *Intelligence—in Practice*, no. 1, December 2016, 6-24 (Hebrew).

themselves.

Apart from the “soft” worlds of activity, the globalization processes with their different aspects in which Israel is involved, as well as the development of Israel’s relations with broad parts of the Arab world since the 1990s, have indeed expanded the needs of national-civil intelligence, but they have also affected security and national fortitude. Meanwhile the IDF’s demands on Aman to provide operational military intelligence have greatly increased, accelerated by the Second Lebanon War and the campaigns in the Gaza Strip, with the IDF developing and assimilating a concept of “intelligence-based warfare.” In addition, over the⁷⁵ past decade supervision bodies for intelligence research have also been established in the Shabak and the Mossad so as to strengthen the relevant research entities. The establishment of these bodies highlights the fact that the original supervision unit has focused solely on Aman and has not provided a community-level response.

Since the beginning of this millennium there have been calls to conduct research-intelligence supervision on the community and national levels.

We believe that the⁷⁶ organizational changes, detailed above, that have occurred in the Israeli security and intelligence community point all the more to the need for national research supervision that will produce an alternate supervisory assessment based on an integrated perspective. This should be accompanied, according to need, by the highlighting of gaps between the different assessments in the community on a given issue, using systematic comparison. In addition, national supervisory activity should reveal missing implications based on the inclusion of elements of national-civil assessment that are produced outside the intelligence community, if not discerned by other staff personnel. The best organizational location for national research supervision is a supra-community national framework, such as the Intelligence Ministry or the National Security Council. The location of an intelligence body outside the other intelligence bodies could cause a lack of access to intelligence information and to the intelligence institutions, and hence an inability to supervise them. This constraint indicates that national research supervision could be conducted more simply within the intelligence bodies or by consumers, such as the prime minister or the defense minister, who have regular access to the information.

75 Itai Baron, *ibid.*, “From Clausewitz to Intelligence-Based Warfare: *Intelligence for Combat*,” 83-96 (Hebrew); see also Amir Rapaport, “Intelligence-Based Warfare: Tactical Intelligence to Junior Commanders in the Field,” *Israel Defense*, January 29, 2013 (Hebrew).

76 A letter from the Reut Institute to the Winograd Commission of Inquiry into the Events of Military Engagement in Lebanon 2006, on the matter of “A Strategic Supervision Team for Support of the Prime Minister,” April 2007 (Annex B of the Reut Document submitted to the Winograd Commission) (Hebrew); Even, “On the Contrary,” 233.

Conclusion and a Perspective on the Future

Along with keeping the institution of research supervision within Aman and the IDF alone, it is recommended to conduct supra-community intelligence supervision with a statutory status, in order to examine intelligence and research products and processes from a combined perspective of the intelligence and security community. This has indeed been proposed by others. In our view, however, the above-discussed changes underline this need all the more.⁷⁷ If this recommendation of ours is not accepted, and if a responsible body to deal with supra-community intelligence supervision is not established, we then recommend extending the supervision institution within Aman from mere research supervision to intelligence supervision. This could be achieved by setting up an elite team for “alternative thinking.” This team would operate during the year from the Supervision Department in Aman, and would include a core group of senior reserve officers (at the ranks of colonel and lieutenant colonel) with intelligence experience along with experts in different fields from the “civilian” world. The team would regularly be included in the discussions on strategic topics from the research domains, and on issues of force buildup and use in the intelligence context.

77 It should be noted that, in 2016, Members of Knesset Ofer Shelah and Yaakov Peri submitted a proposal for a “Law of Secret Services” that includes a definition of the position, authority, and responsibility of the intelligence affairs minister. Among other things, this proposal favors the formulation in this ministry of a policy of buildup and use of force by the intelligence services, along with the formulation of the national intelligence assessment.

Trendology in the Eyes of Intelligence Is It Possible to Predict the Future in a Disrupted World?

Adi Yoffe, trendologist,
and **David (Dudi) Siman-Tov**

In an interview to *Yediot Aharonot* in March 2017, Gen. (res.) Amos Gilad, former head of the Political and Military Affairs Bureau of the Defense Ministry and before that head of the Research Division of Aman, said: “We did not foresee the Arab Spring. In retrospect I can say that I felt currents and heard difficult things, but I did not arrive at conclusions, just as no one in the intelligence assessment bodies in the world managed to predict the upheavals, the role of the street, the overthrow of the leaders. These are depths that the intelligence bodies—not only ours—cannot plumb. In general, the ability to predict internal processes in the Arab world is very limited.”⁷⁸ In recent years a lively discussion has addressed the question of whether it is possible to predict the future at all. Those with experience in research and prediction stand bewildered in before the events and the processes that have occurred in the world in recent years and were not predicted. Intelligence personnel, economists, political pollsters, and others confront what can be called a “disrupted world.” A world that is “disturbed” in different domains, in which events are not foreseen by the accepted models and methods. Against this backdrop, the question arises of whether we are helpless in the face of this frenetic change, or whether there is indeed a predictive capacity if the intelligence community’s accepted methods are revamped. In other words, can we see the new world if we are wearing “old” spectacles?

This article examines whether there is an added value in the trendologist profession, which has developed in the civilian world and is a new profession compared to the intelligence profession, which has accrued great seniority in the security institutions. Is it “the same lady in different clothes,” or is it a new approach to observation that includes unique methodologies, principles, and viewpoints, the use of which can provide intelligence workers with a new intellectual tool?

Trendology: Open Research

As noted, intelligence is not the only field that deals with prediction. Others make predictions about economics, business, and even trends in design and fashion. The trendology profession engages in consumer predictions, assessing how people will

78 *Yediot Aharonot*, March 3, 2017 (Hebrew).

consume and behave in the coming years. What differentiates all the fields is the purpose for which they make predictions, but another important difference concerns methodology. One can crudely categorize the prediction professions along a methodological axis, on one side of which are the quantitative methodologies, which collect data that can attest to trends or changes in trends, while on the other are qualitative methodologies, which deal with deep human understanding of processes, identifying patterns of human behavior, and discerning connections between phenomena.

Between the quantitative and qualitative extremes are both the intelligence and the trendological methodology, which addresses trends involving people in the foreseeable future as distinct from futurology, which deals with the distant future. In the two fields, professionals draw connections between quantitative data and qualitative phenomena so as to explain anticipated trends and processes.

The trendologist explains the anticipated reality in order to enable businesses to adapt to it and increase their profits. Intelligence workers develop knowledge on behalf of political, strategic, and operative personnel who promote the country's security and diplomatic interests.

Trendology is a multidisciplinary and interdisciplinary methodology. It does not investigate technological, economic, or military trends separately but jointly, including their influence on each other. The working assumption of trendology is that because the influences are reciprocal, it must offer an additional viewpoint, complementary to that of the experts in a particular field. Thus the dialogue between the trendologist, who pursues an "expansive" methodology, and the intelligence personnel who deal with "closed" methodologies, is a complementary dialogue that should provide additional viewpoints, and add processes and trends to the discussion that are not only military or diplomatic.

The trendologist will try to situate the person who is his research object within a set of cycles, contexts, and motivations and thus analyze the changes in his behavior within a particular reality

The Personalization Trend and Its Implications for Intelligence

According to the trendology profession, above the trends in various fields that influence human behavior there are megatrends, whose influence is evident in each of the domains that compose the reality. For example, it can be argued that recent years have seen a megatrend of personalization, in which the individual gets used to consuming contents or products in a way that is personally tailored to him. Personalization, which stems first and foremost from experiences in the world of

technology (involving the social networks and the online shopping sites), augments the on-demand trend that allows us to consume what we enjoy all of the time, whether it is a content, shopping, and so on. Another aspect of this trend is that individuals can express themselves independently in the social networks. In the⁷⁹ intelligence world, this trend entails, for example, different and personally tailored consumption for different intelligence consumers, each according to his preferences and needs. In crafting and disseminating products, intelligence must take this trend into account.

Multidisciplinarity and Global Trends

Another important difference between intelligence work and trendology is that the trendologist describes trends without delimiting them geographically or conceptually, so that he can discern significant connections between social processes and phenomena and global cultures. He does so through pattern recognition that transcends borders, regions, and disciplines. A considerable part of the security intelligence organizations, however, are constructed with reference to an “enemy” (for example, a state or an organization) rather than a phenomenon, and hence have difficulty identifying global and interdisciplinary phenomena and trends that transcend enmities and even make connections between adversaries. For intelligence personnel who focus on phenomena of a strategic security nature, it is especially hard to identify economic, cultural, and social trends that emerge in countries distant from the intelligence spotlight, such as in East Asia and Africa. In addition, whereas intelligence research personnel usually give priority to disciplines in the social sciences, history, and others in the technology domain (with emphasis on technology research for weapons development or collection activities), trendology draws links between professions and various disparate fields of knowledge such as sociology, marketing, psychology, and technology.

This point of departure is critical when we map possible futures. In the intelligence approach, presenting a possible future entails focusing on certain data and phenomena from the relevant discipline. In the trendological approach, however, data and phenomena must be examined from different disciplines that are not directly connected to the discipline being researched but may influence it, even if only indirectly. Thus, for example, if we want to know what trends will affect the business of a certain company, then in the “traditional” approach of business intelligence, which is based on the principles of political intelligence, we will include in our considerations the direct competitors of the company; while in the trendological method we will also include trends from other disciplines, even if these disciplines are distant from the business but capable of influencing it.

79 Wigand, R. T., Benjamin, R. I., & Birkland, J. L. (August 2008), “Web 2.0 and beyond: Implications for electronic commerce,” in *Proceedings of the 10th International Conference on Electronic Commerce* (p. 7), ACM.

The Human Being as a Changing Creature

Beyond the fact that trendology helps us view the developing reality as broadly and holistically as possible, the trendologist will try to situate the person who is his research object within a set of cycles, contexts, and motivations and thus analyze the changes in his behavior within a particular reality. The trendologist will expand his observation and try to learn about new behaviors and how they affect future reality. Thus, any work in any domain that can influence people will first consider the social, economic, technological, and other contexts. Only subsequently will the work examine the trends relevant to the particular field being researched. In the third stage the trendologist will attempt to describe the motivations of the relevant target audience. Analyzing the implications of new human behaviors is a dramatic aspect of analyzing trends in any field. It is based on two main questions: the first concerns recognition of the new behavior, and the second concerns analyzing the new behavior and constructing a forecast with regard to it: will it proliferate to the point that it influences large numbers of people in the future?

We will discuss these issues one by one. Methodologically, new behaviors can be identified both by analyzing big data (with new technologies) and by conducting ethnographic studies. At this stage each behavior that is considered “anormal” in the context of the recognized behaviors should capture our attention. We will be able to identify it quantitatively in terms of trends in people’s habits (for example, “decrease in” or “increase in”). If we want to identify new behaviors in the sphere of consumption of products, we can interview the relevant target audience and ask it about the changed behaviors. A trendologist’s ability to identify the behaviors and create relevance for the issue being investigated is one of the important skills involved in analyzing the reality and its influence on the future.⁸⁰ However, identifying the new behavior is not sufficient; one must also analyze the potential for its proliferation. Let us say, for example, that in the civilian world we have identified a new behavior of less drinking of dairy products among consumers. What will be able to say about this change and its influence on future habits of consumption? How will it affect companies that operate along the whole chain of value of the dairy-products industry?

Main Megatrends Recognized Today

The Breakup of the Hierarchies

This megatrend affects a wide variety of areas. It stems, among other things, from the adoption of digital habits, with hierarchies seen as structures of organizations

80 Cantalops, A. S., & Salvi, F. (2014), “New consumer behavior: A review of research on eWOM and hotels,” *International Journal of Hospitality Management*, 36, 41-51.

(or states) that operate in “traditional” configurations and models (pre-Internet Revolution). As those structures weaken, hierarchies of a new kind gain strength. They include, for example, platforms of the sharing economy (such as Airbnb), which provide platforms for sharing assets among people and do not maintain assets themselves as in the traditional model. Furthermore, in recent years people have been able to choose precisely the products that they want to consume without using services of the old hierarchies. Thus, for example, habits of content consumption have changed completely; one can follow anyone who provides content on the social networks without that person belonging to the traditional media. There is no longer any meaning to the hours for broadcasting a program by the traditional means.

Main motivations for adopting the trend: The important advantage of this trend is the lowering of prices, to the point of totally free consumption or consumption through online shopping sites that are personally tailored to the consumer and are of higher availability.

The significance for intelligence: This can involve collection or the domain of perception and psychological warfare; however, there are also important implications for the structure and social fabric that we are investigating.

Minimalism: Minimal Consumerism

The principle that drives the “minimalism” trend is the ability to engage in precise consumption at any time. This precision is enabled by the technology and is one of the ramifications of the megatrend of the breakup of the hierarchies. The concept that things fragment into parts and precise products, and that the individual prefers the part and not whoever stands behind it, is a new concept that alters human habits and behaviors. The Waze application allows the user to get the relevant information only about his own location and travel route instead of listening to the general traffic reports, most of which are irrelevant to him and also are not updated.

Implications for intelligence: This raises the possibility of demands for tailored responses to well-defined intelligence questions, as opposed to attempting to obtain all the information about a general intelligence domain.

The Future Is the Temporary - or Temporariness

The abundance that technology makes possible, and the new standard that the minimalism trend brings with it, are bolstering a new phenomenon, that of temporality. Previous generations sought stability and certainty in all the domains of their lives. An unwritten contract between the people and the old hierarchies determined that in return for loyalty (to organizations, for example), the person would receive stability and a pension until his dying day. As the hierarchies have disintegrated, stability has

left the arena to a culture of increasingly frequent changes. Migration statistics are the highest ever,⁸¹ jobs are changed very frequently (each year up to three on average), the children of Generation Y change relationships at a steadily rising rate,⁸² and the number of those renting apartments exceeds the number of those owning them.⁸³ The general worldview is that everything is changeable, and if there is uncertainty, then it is preferable to live for the moment. As part of this zeitgeist, digital platforms such as Snap allow one to upload statuses that disappear after 24 hours.

Main motivations for adopting the trend: Immediate gratifications and a desire not to be disappointed when the old order collapses.

Implications for intelligence: The temporariness trend has many intelligence implications, as in the issue of migration as a factor that affects the political, social, and demographic spheres. The temporariness trend is also evident in the restlessness in the workplaces of intelligence personnel, and in declining ability to concentrate and delve deeply both among researchers and consumers. A further effect is apparent in intelligence training that emphasizes methodology, learning methods, and knowledge-development methods while placing less emphasis on expertise and in-depth knowledge of a topic.

The Caves Trend: Restoring Control

Some of the major technologies, such as the IOT (Internet of Things), the extension of the Internet from the physical device that we hold in our hand to almost anywhere, the artificial-intelligence technologies in every field, and the uses of VR (virtual reality) will over the years turn us into a kind of human “autopilot.” A situation in which algorithms will run our lives and huge companies will know almost everything about us has surprising trendological implications. Our relationship with technology, which functions for us in return for saving time and effort (and sometimes also money), is indeed a relationship that pays off. But it can also create fears of a new kind and intensify the need to feel safe in a radically alien technological world. Studies show that people have fears about their privacy and about the information on them that gets revealed, and such fears will presumably mount in the coming years.

This phenomenon, which combines with the effects of the globalization processes, has generated a countertrend that stems from the need to restore security and certainty - or, in other words, to reset the boundaries, return to the familiar things, and indeed

81 <http://www.un.org/sustainabledevelopment/blog/2016/01/244-million-international-migrants-living-abroad-worldwide-new-un-statistics-reveal>

82 G. Harris, “4 Truths You Need to Know About Millennial Job Hopping,” *Entrepreneur*, September 16, 2016, <https://www.entrepreneur.com/article/281663>.

83 Kristin Davis, “The Millennial Generation has Killed Relationships,” *IRIS*, August 4, 2016.

to regain control over our lives. A phenomenon such as Brexit in Britain can be included in this trend. The effect of the trend can be an active and deliberate removal of connectedness in order to regain control and prevent the technology companies from constantly collecting information about us.

Implications for intelligence: The “return to the cave” can have implications for collection because technologies that we thought had already disappeared from the world will return and require a response. However, this trend can also have broader implications, especially if it becomes more pronounced in human culture.

Conclusion and Possible Implications

In January this year, a report was published in the United States by the National Intelligence Council under the heading “Global Trends: Paradox of Progress.” The report, which provides a global forecast for the coming years, is interesting for several reasons. First, its authors note that in the process of writing it they utilized the knowledge of 2,500 people from 35 countries in different fields, in order to obtain a far-reaching overview that includes different scenarios that are relevant to the contemporary world with all its challenges. The turning of the spotlight on this report is significant beyond the trends it points to because the report reflects a different work method than the one practiced in the intelligence community. The resort to experts from various countries and various fields can impel thought processes to which the article calls attention. These processes combine security thinking and civilian thinking in analyzing global cultural phenomena.

Mutual learning between the trendology approach and the intelligence profession can provide substantial added value to the intelligence assessment bodies because it can facilitate the identification of human trends that are not confined to a framework of countries or target entities. It can encourage thinking about the possible significance of these trends from a research standpoint, a collection and technological standpoint, and from a standpoint of intelligence manpower. An added value that can develop from a fusion of trendology and intelligence is identification of the megatrends that trendology points to, and of trends in intelligence thinking with their implications. However, it appears that this is only a first change in approach. A second change in approach can occur only when intelligence researchers alter their viewpoint and identify such trends as part of intelligence work.

Winston Churchill and Secret Intelligence During the Second World War

Andrew Roberts

by Dr Andrew Roberts FRSL, FRHistS - Visiting Professor, King's College, London

An essential feature of Winston's Churchill's war-fighting capacity was his fascination for and enthusiastic use of Secret Intelligence. He always had a special love for what he called 'funny operations', and spent a lifetime fascinated by espionage, decryption, sigint and secrecy. The appeal of unorthodox warfare chimed in well with his general wartime strategic concept for Great Britain, that a direct, full-scale, continental military engagement would cost much more in terms of blood and treasure than taking indirect routes, and therefore deception, disinformation, misinformation and especially discovering the enemy's intentions were of more use than sheer brute force. 'No other British statesman in modern times has equalled Winston Churchill's passion for Secret Intelligence,' writes Britain's foremost historian of Intelligence, Prof Christopher Andrew.

Churchill's connection with the worlds of espionage, both domestic and foreign, long predated World War One. He experienced the value of Secret Intelligence first hand as a young officer in the Cuban civil war in 1895, when the director of British Military Intelligence, Colonel Edward Chapman, asked him to obtain information on a new Spanish bullet. Then again he came across it on the North-West Frontier of India, thereafter in the Sudan and then in the Second Boer War, in the last of which he learnt the importance of linking Intelligence closely to ongoing military operations.⁸⁴ A full five years before the First World War broke out in 1914, Churchill had been instrumental in setting up both the domestic Intelligence agency MI5 (then called the Security Service) and its foreign Intelligence counterpart MI6 (then called the Secret Service Bureau). He was also central to the passing of the Official Secrets Act in 1911 and as Home Secretary over the previous three years had been the first person in that post for over a century to authorise general arrest warrants and the secret interception of communications. Churchill was thus a prime architect of the Secret State.

Britain was swept with spy mania in the opening stages of the Great War. Novelists such as William Le Queux, who wrote *German Spies in England*, Erskine Childers who wrote *The Riddle of the Sands* and John Buchan who wrote *The Thirty-Nine Steps*

84 See Alan Judd's 1997 *Sunday Times* review of David Stafford, *Churchill and Civil Service* (1997).

helped stoke a fever of speculation that legions of German agents would be using secret codes and radio-telegraphy to tell Berlin of the whereabouts of the British Grand Fleet. One single naval defeat in the Channel or North Sea, it was widely feared, would be enough for the German army – which was far larger than the British – to be landed on Britain’s southern and eastern coasts, after which it could have been only a matter of time before London fell. The novelist Saki (H.H. Munro) even wrote a short story, *When William Came*, about a London that had been captured and occupied.

Civilians were therefore asked to be vigilant about anything that smacked of German espionage; all private radio transmitters were ordered to be dismantled; the underwater cables connecting Germany to the rest of the world were cut by the Royal Navy, and, as one eyewitness reported, ‘From the waves slowly rose great snake-like monsters, thick with slime and seaweed growths, responding reluctantly to the grapnels which dragged them to the surface and laid their bulk athwart the deck of a boat, soon to be returned, severed and useless, to the depths.’ Tens of thousands of German, Austrian and Hungarian enemy aliens were interned in safe localities, and over four thousand people were employed by the General Post Office routinely to open letters and packets that were deemed to pose a risk of being of value to the enemy.

Churchill, too, was caught up in this ‘spy-fever’, as it has since been described. In the early days of the Great War, Churchill took part in what is often portrayed, not least by Churchill himself in an essay entitled *My Spy Story*, as a slightly ludicrous incident in which, armed with a revolver and supported by his officials, he raided a house by the sea which had a searchlight on its roof. It turned out to be perfectly respectable house, but what is often ignored is that no fewer than twenty-one genuine German agents were arrested when the war broke out in August 1914, and during the war eleven German spies were shot by firing squad in the Tower of London.⁸⁵

As First Lord of the Admiralty, the civilian political head of the Royal Navy, from 1911 to 1915, Churchill championed the highly enterprising and unorthodox work of Admiral Sir Reginald ‘Blinker’ Hall, the Director of Naval Intelligence, and in November 1914 he drew up in his own hand the Charter for the Admiralty’s code-breaking operation called Room 40, which blossomed into Britain’s first modern signals Intelligence agency, the first permanent code-breaking operation for seventy years. Churchill ordered that the circulation of Room 40’s decrypts must be limited to only half a dozen of the most senior members of the Naval Staff. It was Room 40 that intercepted the notorious telegram from the German foreign minister Arthur Zimmerman to the President of Mexico promising a German-Mexican alliance if

85 Leonard Sellers, *Shot in the Tower, passim*.

America joined the Allies, which, once judiciously leaked by Admiral Hall, helped to bring the United States into the war on the Allies' side in April 1917.

After the Great War was won, Churchill, as Secretary of State for both the War and Air, took a leading role in the Secret Service Committee which undertook the reorganization of the British Intelligence system that between 1919 and 1921.⁸⁶ Useful though these reforms were, they were incomplete because they did not provide for an inter-departmental basis for bringing intelligence assessments to the attention of political decision-makers, so after 1921 the Foreign Office assumed that in peacetime it was to assess all Intelligence gleaned from everywhere, even on matters more closely concerning the War Office. Insofar as the views of the Foreign Office and service departments were co-ordinated, it was by the Committee for Imperial Defence, which only met irregularly and had a small permanent secretariat. This somewhat ad hoc situation only changed when the rise of Hitler created the crisis necessary for the setting up of the Joint Intelligence Committee of the Chiefs of Staff in 1936.

Back in the 1920s, Churchill had tried to ensure that other departments, including the Treasury over which he presided from 1924 to 1929, were included in Intelligence briefings, and wrote a powerful letter in February 1925 to the prime minister, Stanley Baldwin, to that effect, reporting that in a meeting with Admiralty he learnt that the Japanese, in the event of another naval disarmament conference, were willing to discuss the maximum size of cruisers but certainly not to bind themselves about numbers. 'I concealed my ignorance of these essential matters as well as I could;' Churchill wrote, 'for I thought it hardly becoming that the Chancellor of the Exchequer should show himself at such a disadvantage in secret information with the subordinate representatives of a spending Department. But the unfairness and impropriety of such a situation will, I am sure, appeal to you. ... The words "monstrous" and "intolerable" leap readily to my mind. I prefer to bury them in the cooler word "absurd".⁸⁷ Yet the Foreign Office viewed Churchill's attempt to get on the distribution list as both an unwarranted power-grab and possibly also an unnecessarily increased security risk.

During the period before Irish independence in the early 1920s, Churchill was also deeply involved in the Intelligence operations that were conducted against the Irish Republican Army and its political wing Sinn Fein. During the General Strike of 1926, he was interested in the views of the Intelligence agencies on the extent to which the Soviet government and the Comintern were attempting to foment industrial unrest

86 F.H .Hinsley' ,Churchill and the Use of Special Intelligence 'in eds .Robert Blake and William Roger Louis, *Churchill, 1993 p-407.*

87 Cambridge University Library Baldwin Papers ,249/3/9 ed .Martin Gilbert ,Winston S .Churchill companion volume V Part 1 p.380-

in Britain, and how to circumvent it. Churchill knew that his cousin, Clare Sheridan, was used by MI5 to go to Moscow to sculpt Bolshevik leaders.

Churchill was a committed devotee of the theory that money spent collecting, collating and analysing secret information was rarely wasted, and never believed that wars were won by strict adherence to the rulebook. Prof. David Stafford of Edinburgh University has argued that spying and code-breaking were always central to Churchill's career.⁸⁸ In the interwar period, Churchill made inspired use of the British secret services in the Russian Civil War, actively supporting the work of anti-Bolshevik agents such as Sidney Reilly and Boris Savinkov. Yet in 1927 he took part in the fateful decision to reveal that Britain had broken the Soviet ciphers, which, in return for a short-lived political advantage, led to Moscow adopting an unbreakable cypher system. By revealing that the Comintern was actively pursuing sedition in Britain on orders from Moscow, the British Government alerted the Russians to the fact that their signal security had been fatally breached, a mistake that he was to learn from when it came to the Germans in World War Two.

From his time reporting to the Foreign Office when a subaltern in 1890s India and behind enemy lines in the Boer War, Churchill had nurtured his personal connections with Intelligence operatives. Some of his best friends, such as the Secret Intelligence Service's Sir Desmond Morton, and the British Intelligence liaison with the Deuxième Bureau, Brigadier Edward Louis Spears, were former or serving Intelligence agents: he liked the company of spies. During his 'Wilderness Years' which lasted from 1931, when he resigned from the Conservative shadow cabinet, to when he was finally re-admitted to the British Government on the day war was declared against Nazi Germany on 3 September 1939, Churchill used Intelligence that was leaked to him by patriotic officials – sometimes with the connivance of the Government but usually without it – to warn publicly against the Nazi menace. In his struggle against the appeasement policies of the MacDonald, Baldwin and Chamberlain ministries, Churchill often had better information than the Government ministers who had to try to answer him in Parliament. Churchill's close links with British Intelligence, especially with Morton who ran the shadowy Industrial Intelligence Centre in the 1930s, resulted in his being able to set up what was in effect a private spy network which was to serve him very well during his Wilderness Years.

By the time he became prime minister in May 1940, therefore, Winston Churchill was more naturally comfortable with the collection and employment of secret Intelligence than any other British leader before or since, and certainly more than any of his contemporaries. Using an operative called Captain Alan Hillgarth, to take only

⁸⁸ David Stafford, *Churchill and Secret Service* p-8.

one of many examples of this, Churchill ensured that several of Francisco Franco's senior generals were successfully bribed to ensure all-important Spanish neutrality in 1940. The foreign secretary at the time, Lord Halifax, tended to find it uncongenial for diplomats to, as he put it, 'slip them envelopes on the golf-links', but Churchill saw himself as merely acting in the great bribing tradition of British 18th century diplomacy.

If Spain had entered the war on the Nazis' side – for Hitler had after all greatly aided Franco to win the Spanish Civil War – it would have severely threatened the movement of Allied shipping across the Mediterranean. In late May 1940 Churchill therefore told Hillgarth, the British naval attaché in Madrid but in fact a SIS operative, that he had ordered the Treasury to deposit £2.5 million in an account of the Swiss Banking Corporation in New York. Hillgarth then recruited a Majorcan millionaire, Juan March, to contact the most influential Spanish generals and offer them the money. Churchill meanwhile overrode the objections of Treasury officials about March, whom they distrusted. The opportunity was too important to be lost because of the qualms of civil servants, Churchill believed. 'The fact that he made money by devious means,' he told them, 'in no way affects his value to us at present.'⁸⁹ At least £500,000 was paid to General Antonio Aranda Mata, the commander of the Spanish War College and a possible successor to Franco, and he was only one of several.

On coming to power, Churchill ordered the Chiefs of Staff to review the use of Intelligence in the light of the disaster in Norway and Denmark and the evolving catastrophe in France and the Low Countries. The British system of Intelligence assessment, which centred on the Joint Intelligence Committee after 1936, but which was still 'only moderately efficient' in the view of the foremost historian on the role of Intelligence in World War Two, Prof. Harry Hinsley, owed much to Churchill's support of its structure once he became prime minister.⁹⁰ Indeed, as Hinsley points out, Churchill's greatest contribution to Intelligence in the Second World War was that 'But for his interest, the development of an effective system for co-ordinating the assessment of Intelligence and giving general direction to its use would have taken ever longer'. Modern Intelligence officials will recognize the reasons that nothing much had been done earlier, which Hinsley cites as 'organizational resistance, ministerial ignorance of Intelligence work at its technical levels, and also, perhaps, the dearth of reliable Intelligence data.' All this was to change radically under Churchill's premiership.

The apotheosis of Churchill's love for Secret Intelligence came as soon as he

⁸⁹ Stafford, *ibid* p-203.

⁹⁰ F.H. Hinsley, 'Churchill and the Use of Special Intelligence' in eds. Robert Blake and William Roger Louis, Churchill (1993) p-408.

entered Number Ten Downing Street, when Ultra, easily the best Intelligence source in British history, began to come on steam, coincidentally in the very same month that he became both Prime Minister and Minister of Defence. From May 1940 the Government Code and Cypher School (GC & CS) at Bletchley Park in Buckinghamshire began reading and deciphering in real time and daily the messages enciphered by the German Air Force, as a result of the cracking of the codes used by the Enigma encrypting machines. Eventually, Ultra decrypts were to show almost precisely what the enemy was thinking and doing, in almost every theatre of war. By September 1940 Churchill was ordering the Chief of the Secret Service, known as 'C', to send him 'daily all Enigma messages.'⁹¹ He worked on the raw data he received at all times of the day and night.

Prof. Andrew calls Ultra 'probably the best-kept secret in British history.' Churchill ensured that the secret went to only thirty-one people in the Second World War, codenaming it Boniface to decoy the enemy into thinking that it all came from a single high-level source in Berlin. In October he complained that the list of people authorized to have access to 'the special material' – what he called 'this vast congregation who are invited to study these matters' – was far too large.⁹² Such was its sensitivity that one of those not informed about Ultra was Hugh Dalton, the director of the Special Operations Executive (SOE), who Churchill had famously ordered to '**Set Europe Alaze!**' Churchill nonetheless used SOE to put Ultra information to direct use on many occasions. The most important and successful of these was Operation Gunnerside, the destruction of the German heavy water production plant at Peenemunde in Norway in February 1943, which helped to deny Adolf Hitler getting the atomic bomb. The alternative was about as terrifying a prospect as any in world history. There are some historians today who question the efficacy of the SOE and whether it represented value for money, but that single operation, Gunnerside, alone justified the entire organization.⁹³

Although the resistance that SOE fostered across Europe cost a great deal to the local populations in terms of Nazi reprisals, the flame was kept alight in a world that was to be increasingly dominated by the two superpowers. Giles Milton, author of *Churchill's Ministry of Ungentlemanly Warfare: The Mavericks Who Plotted Hitler's Defeat*, states of Churchill that 'Throughout his career, he'd always supported the

91 Hinsley, *British Intelligence in the Second World War* (1979) I p160 and Appendix 6.

92 F.H. Hinsley, 'Churchill and the Use of Special Intelligence' in eds. Robert Blake and William Roger Louis, *Churchill* (1993) p-410.

93 For criticisms of SOE see John Keegan, *Intelligence in War*, *passim*, Richard J. Aldrich in *Contemporary British History Autumn 1997 pp159-60*, Roger Fontaine in *World Historical Review 1 August 2012* <http://www.tandfonline.com/doi/abs/10.1080/03612759.1998.10528264>

maverick, the eccentric, the unusual.⁹⁴ Churchill similarly had no qualms about setting up organizations such as the Political Warfare Executive that had departments that would assiduously spread black propaganda, such as Sefton Delmer's imaginative Political Intelligence Department in the Foreign Office. Inventors who came up with new ways to damage the German war-fighting ability always found a willing ear in Churchill, and the decrypters at Bletchley Park were at the top of his list to be given support, nicknaming them 'the geese who laid the golden eggs – and who never cackled.' The truth about the cracking of Enigma was not revealed until 1974, nearly thirty years after the war had ended. A former intelligence operative told me that the reason for this was that some countries – including allies - continued to use the Enigma machines or variants of it in the 1950s and 1960s, and Britain saw no reason to disabuse them of the notion that it was uncrackable.

Churchill had spotted the importance of Ultra very early on, and in the words of Harry Hinsley, he 'turned himself into a one-man intelligence service.'⁹⁵ Yet as the sheer amount of decrypts rose from about fifty a day to several hundred, especially once Germany had invaded the Balkans and North Africa in 1941, a large team was needed at Bletchley to decode the codenames, technical terms and references to enemy formations. Getting into the nerve-centre of the German High Command took months of dedicated study by highly skilled codebreakers, so by the summer of 1941 Churchill was receiving a box at least once a day containing not all the decrypts but a digest of all of them with a short summary, plus around twenty of the most important actual German Air Force and Army ones, as well as SIS reports and memoranda. The box they came in was brown, and Churchill kept the key that opened it on his person and never let even his most trusted private secretaries know what was inside.

Churchill's access to Ultra decrypts often caused a problem for the Chiefs of Staff because the prime minister, in Hinsley's words, 'was liable to surprise them with questions prompted by decrypts of which they had not heard, and with conclusions which, based on selected decrypts, did not accord with the wider assessments of their Intelligence advisors.' As a result the Chiefs 'were forced by his assertiveness to insist on an improvement in the machinery for central assessment.' By May 1941 the Chiefs gave the JIC a much larger assessment staff and from July they were getting Intelligence bulletins sometimes three or four times a day to ensure that they were not caught out by Churchill.

On 2 April 1941 Churchill did something that he was to do regularly for the rest of the war when he sent General Archibald Wavell in North Africa a decrypt from Bletchley

94 <http://www.wbur.org/hereandnow/2017/02/27/giles-milton-churchill-ungentlemanly-warfare>

95 F.H. Hinsley 'Churchill and the Use of Special Intelligence' in eds .Robert Blake and William Roger Louis, *Churchill* (1993) p409

that indicated that Berlin had refused General Erwin Rommel, the commander of the Africa Korps, further air support, due to the needs of other theatres of the war. It showed that Rommel had not been ordered to move further into Egypt than he had already got, and Churchill sent the entire telegram to Wavell, with the added – but hardly necessary – hope that he would take the opportunity of Rommel’s weakness to drive him out of Egypt.⁹⁶ A month later, on 7 May, Churchill urged Wavell to attack Rommel on the basis of another decrypt, this time from General Paulus who was with Rommel in North Africa, to Berlin reporting on the exhaustion of Rommel’s army, and decrypting any new German offensive until the arrival of the 15th Panzer Division.

Wavell did indeed attack in mid-May, but failed to defeat Rommel. Some historians have argued that this was because he was under too much pressure from Churchill to take the offensive on the basis of a single decrypt. Christopher Andrew, for example, has argued that ‘In North Africa Churchill was initially misled by Ultra decrypts reporting Rommel’s endless appeals for more tanks, aircraft, men and supplies into believing that the Desert Fox was much weaker than in fact he was.’⁹⁷ Prof Andrew argues that this ultimately led to the sacking of Generals Wavell and Claud Auchinleck, largely for not taking advantage of a weakness that never was. Hinsley disagrees, arguing that Wavell had needed no special prompting from Churchill to attack, but that he launched his first assault, Operation Brevity, without waiting for a convoy of reinforcements to arrive, and his second, Operation Battleaxe, before the reinforcements were battle-ready, adding that the attack was more likely to have been prompted by the knowledge that the 15th Panzer Division was on its way to Rommel.⁹⁸

On 3 April 1941, Churchill passed on to Stalin the information – which he said was received ‘from a trusted agent’ rather than from Ultra – that three German armoured divisions had been ordered from the Balkans to Krakow, but that the order had been countermanded after the pro-Allied coup in Belgrade that prompted the German invasion of Yugoslavia. Unlike the Chiefs of Staff and most of the British Intelligence community, Churchill rightly spotted that this possibly meant that Hitler was planning to invade Russia as soon as his southern flank in Yugoslavia was rendered safe. Stalin ignored the warning, believing it to be mere ‘English provocation’, just as he had ignored Churchill’s similar warning of June 1940 that Germany would turn east.

An area where the analysis of Ultra material signally failed was in Crete, which German decrypts were mentioning as a target for attack from 26 April 1941, and with

96 Hinsley, *British Intelligence in the Second World War* I p.395-

97 Prof Christopher Andrew’s 1997 *Sunday Telegraph* review of David Stafford, *Churchill and Civil Service*.

98 F.H. Hinsley, ‘Churchill and the Use of Special Intelligence’ in eds Robert Blake and William Roger Louis, *Churchill (1993)* p-418.

certainty after 1 May. Yet Churchill and the Chiefs of Staff continued to believe that Crete was merely a deception to mask an attack on Syria or Cyprus, with Churchill even stating on 3 May that Germany might be ‘only feinting at Crete.’⁹⁹ So although the Allied commander on Crete, the New Zealander General Freyberg, had superb intelligence from Bletchley Park about where and when the Germans would be attacking, nonetheless the Wehrmacht paratroopers’ attack on the inland airfields won the day, because London had assured him that the invasion would probably not take place, despite the decrypt traffic suggesting otherwise. Although Ultra was superb at stating where troops were moving and when, it necessarily was less good at predicting German intentions once battle was joined.

In June 1941 Bletchley, having broken into the German Air Force codes in May 1940, also broke into to the codes of the Enigma machines used by every ship in the German Navy. From July 1941 Bletchley was also reading Italian cyphers concerning Axis shipping in the Mediterranean.¹⁰⁰ In September 1941 the boffins in Buckinghamshire broke into the Wehrmacht codes as well. This meant that by mid-1942, Bletchley was reading between 3,000 and 4,000 German decrypts per day, as well as Japanese and Italian decrypts too. Churchill sent digests of them to the Russians, and saw to it that Auchinleck received them during the First Battle of El Alamein.

On 18 Oct 1941, General Auchinleck postponed his great assault in the Western Desert (Operation Crusader) to 11 November, much to WSC’s chagrin. And then he postponed it twice again, to 18 November. In that period, Churchill sent him the Ultra decrypts of 2, 22 and 25 October showing Rommel’s relative unpreparedness, with the instruction: ‘The Minister of Defence directs that General Auchinleck should see.’¹⁰¹ Yet Churchill’s use of Ultra was by no means foolproof. In both March and April 1942 he used decrypts to try to show Auchinleck that Rommel had far fewer tanks than the Cairo planners were assuming, but he misread them on technical grounds – the numbers only referred to Rommel’s tanks in certain geographical areas, not overall – and by the end of April he had to write to Auchinleck to admit as much.¹⁰² Yet this did not prevent him replacing Auchinleck with General Bernard Montgomery that August.

From mid-November 1942, soon after Montgomery’s victory at the Second Battle of El Alamein, Churchill began to use Ultra decrypts again, for the first time since he had admitted misreading them to Auchinleck at the end of April. Expressing

99 Ibid p.419-

100 Ibid p.422-

101 Ibid p-423.

102 Ibid p.424-

displeasure at the tardiness of Montgomery's pursuit of Rommel westwards, between late November 1942 and early January 1943 he quoted to the Commander-in-Chief in the Middle East, General Harold Alexander, the serial numbers of the decrypts which together, he argued, showed 'a condition of weakness and counter-order among the enemy of a very remarkable character.'¹ Nonetheless, Alexander and Montgomery did not allow Churchill's intervention to alter the pace of their methodical and successful advance, and Prof Hinsley records that it was the last significant intervention in which Churchill 'used his extraordinary interest in special Intelligence to support his arguments in operational decisions.'¹⁰³

This was because of the emergence of the Combined Chiefs of Staff Committee, with its increased machinery and ability to digest and assess the thousands of decrypts being produced per day, and also because after Operation Torch, the Allied amphibious assault on north-west Africa in November 1942, General Dwight Eisenhower was on the spot in the theatre, and was not subject to the direct control from Churchill that Wavell, Auchinleck and Montgomery had been.

Although it weakened him vis a vis Eisenhower and the Americans in terms of grand strategy, Churchill was nonetheless a great and early champion of the closest possible Intelligence contacts with the United States, especially bringing them in to the Ultra secret as quickly as was practicable. Intelligence sharing has been a cornerstone of Britain's 'special relationship' with America ever since, still existing today on a level and to an extent otherwise hardly known between two sovereign powers.

Churchill of course made sure he was kept abreast of all the major secret Intelligence operations of the war, especially the immensely complex Operations Fortitude North and Fortitude South, which successfully bamboozled German Intelligence (the Abwehr) as to where the Normandy landings were going to take place in 1944. 'In wartime,' said Churchill when Stalin approved the issuing of fake invasion plans for Operation Overlord, 'Truth is so precious that she should always be attended by a bodyguard of lies'.¹⁰⁴

For the rest of the war, Churchill evinced the same love of reading the German decrypts, but with there being quite so much of them he had to trust to the JIC to choose the most apposite ones for him, and very often the decrypts simply didn't tell him what he wanted to hear. There was precious little support from them, for example, for his belief in 1943 that Italy and the Balkans represented the 'soft underbelly' of the Axis. His proposed expedition to capture Rhodes was called off when decrypts showed Germany heavily reinforcing the Aegean in 1943, for example, and his use of

103 F.H. Hinsley, 'Churchill and the Use of Special Intelligence' in eds. Robert Blake and William Roger Louis, Churchill (1993) p-424.

104 Winston Churchill, The Second World War vol V p.338-

decrypts to show that Germany would reinforce the Pisa-Rimini Line in 1944 did not persuade President Franklin Roosevelt and General George C. Marshall from taking American forces away from Italy for the Operation Anvil landings in the south of France that August. What had been almost his private secret weapon in 1940 was by 1944-45 so accessible to the highest echelons of the Anglo-American high command, and so well digested and analyzed, that it robbed him of the comparative advantage that he had once enjoyed through its deployment during the decision-making process.

That said, the penultimate word should go to Prof. Hinsley, who has rightly stated that: 'For all his mistakes, however, Churchill outclassed every other war leader both in his management of the Intelligence community and in his determination to apply Intelligence to the war effort.'¹⁰⁵ Overall, Churchill's use of special Intelligence mirrored everything else we have come to expect about his performance in the Second World War; he wanted to take the war unrelentingly to the enemy; he used every marginal advantage he had over his generals to get his strategy adopted; he gloried in new inventions and technological breakthroughs; he supported innovators, however eccentric and unconventional; he made a few mistakes occasionally, as does everyone, but overall he was a shrewd as well as inspirational war leader who used Ultra intelligently to read the mind of the enemy.

If ever one needs proof that modern miracles exist, then it is surely provided by the fact that the one statesman who had for so long properly appreciated the power of code-breaking became prime minister and minister of defense of Great Britain in precisely the same month that the Ultra decrypts of the Enigma machine came online in actionable timing and quantities. History is full of remarkable coincidences, but they don't get much more remarkable than that.

105 Christopher Andrew's 1997 *Sunday Telegraph* review of *Stafford, Churchill and Secret Service*.

Readers comments

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Supporting Jointness in Intelligence An Organizational-Cooperational Dimension

Present Situation

In today's modern firms and organizations one can witness constant change taking place since adapting to newly arising challenges, new technologies, changes in the business environments or other non-foreseeable events is vital to survival and prosperity in the highly competitive markets. This leads myriads of practitioners of Organizational research to studying on how to best cope with these new dimensions of change, challenge and diversity. Many of the implemented change management programmes were not able to present the expected results and improvements. This is mostly due to the human dimension that is very often not considered appropriately. Since Organizations grow and develop during their life cycle, similar to organic characters, adaption to growth and development is essential in order to cope with present and future challenges.

The Organizational Dimension

In organizations that are structured as a Matrix organization there are two equally entitled departments working together in order to produce a certain asset, solve a defined problem or work on a specific task. Usually in the various departments there are differences in understanding the other entity, which again results in a delayed decision making process. This naturally arising conflict must be worked on and should be guided or moderated, resulting in faster decision making processes and better qualities of decision, providing better overall results.

Instead of centrally structuring organizations, it seems adequate to maintain their departmentalization in order to create a specific spirit or corps definition within the various departments, which in return provides an atmosphere that enables excellent working results. Furthermore, there is often a specific working language to be found that makes it easier for specialists to communicate with each other. An example therefore is the aviation sector where one can find himself lost when not common with the language used. This is also true for the security and intelligence services. Within these services there needs to be a certain degree of compartmentalization in

order to keep the knowledge about specific scenarios to a limited number of people in order to provide a maximum of safety and secrecy. The similarity to the corporate world is obvious. There, the results of research and development are kept within a limited circle of trusted employees until a product is ready to be launched into the market. Nevertheless, it is important that even here jointness, or a cooperative working environment is implemented in order to create the best possible product for the market. Even there, as well as in the intelligence sector, creating the basis for the processes regarding the gathering and processing of intelligence and information is of great importance.

Since information technology is used in the most extensive way in all intelligence sectors, it must be ensured that the correct conclusions are drawn from the gained intelligence. That is, in order to enable the best tactical decisions by bringing all relevant departments together before potential incidents occur, or in order to react to violent actions from adversaries. Since in the past the enemy presumably was able to quickly adapt to new strategies and tactics, it is of utmost importance that there is a common understanding of the necessary actions to be taken and what implications these bring for the troops on the ground. The essential and consensually agreed intel needs to be fed to the troops as quickly as possible in order to achieve the expected outcome. Therefore, it must be assessed how a process of moderated conflict or decision making can function not only in times of preparing for potential missions, but also during combat. This regards the live feed intelligence, as well as the issue of how the gained intelligence can be handled for the best possible outcome in the field.

Conflict Management as Cooperation Management

In order to improve the decision making processes over the dimensions of quality, time and place, it is necessary to bring together members of the diverse units and organizations in a structured way. This may be considered as part of the jointness in intelligence. In return this helps the mutual understanding of each other's interests, ideas and values. A structured Cooperation Management System or Conflict Management System can be established as a permanent system or even as a standby system that comes into action whenever needed on a short time basis. In the corporate context these systems are established within the organization, as internal Cooperation Management Systems or as external systems, that profit from providers of these services from outside the organization. If such a system will be rooted within or outside the company depends on several factors, such as e.g. the size of the organization, the number of employees and whether the organization is run centrally or decentral. Due to the sensitivity of the subject in the case of the intelligence and security services, an outsourcing of a service of this kind does not seem to be appropriate. Nevertheless,

could the idea of a Joint Cooperation Management System, including all relevant security organizations, be the foundation of an expedited obtaining of high quality decisions, taking into account every aspect that is necessary for the solving of a specific problem. Even in the case of false or counterfeit intel can a collaborative decision making process, supported by an established Cooperation Management System, facilitated by a trained mediator or facilitator, help detect the source of the intel or the faked content that more efficiently. As an additional benefit this can also be seen as an additional layer of protection against decisions that are made due to wrong assumptions or due to lack of information.

As a first step to establishing a Cooperation Management System it would be necessary to bring all the stakeholders together in order to introduce such a system and to create an understanding about what it represents and how it works. Further steps would consist in the cultural and normative aspects of such systems, which need to be tailored to the specific requirements of the organizations. These aspects comprise communication, potential contact points within the organization, standards of the method used and the selection of the internal mediators and facilitators. Furthermore, a basic controlling system, a quality assurance system and a documentation system can be implemented, if necessary. Nevertheless, it is vital for such a system that it is supported by the top executives in the organizations and that even in times of internal conflict the communication lines stay open in order to being able to cope with the arising situations. Also, it is obvious that there will be a learning process for making maximum use of the system, which will require openness as to bringing jointness also to the decision making process during times of high stress and work load.

Added Value for Organizations – Outlook

Problems and conflicts in the daily life are normal and inevitable, affecting the personal as well as the business life. Organizations need to understand these problems and conflicts as opportunities to develop trust by an outstanding way of problem solving. The goal of a Cooperation Management System is to establish a structure of collaboration in order to work out the best suitable solution in the often very short time available. An important aspect is the integration of a Cooperation Management System into the Organizations, as well as the intra-organizational or intra-departmental implementation in order to provide the maximum outcome. The value of having several organizations and their respective departments working together trans-organizationally, enables these organizations to add value to their operations through different core values and cultures within the organizations, hence profiting from the different perspectives these different organizations provide. In return this could produce a holistic intelligence picture, which in return can be seen

as a simplified supply chain, meaning the gathering, processing and disseminating of pieces of intel.

It should be absolutely clear that the proposed decision making process, supported by moderation, can and will be only one part of the many pieces that need to be put together to solve the puzzles in order to fulfil the missions. Certainly there are also limitations to such a system resulting from the general fear of employees regarding changes happening in their working environment. Therefore, the system needs to be supported top down, although it might be necessary to build it bottom-up in order to gain the maximum of acceptance among the stakeholders involved.

A future aspect of the system could be an IT-based approach to the management of the collaborated decision making processes, taking into account all relevant factors and hence being able to avoid common misunderstandings or to implement changes in the organizational structure where the most conflicts arise.

As an outlook for future research it might be of high value to explore how members of the intelligence sector will react, when in the light of advancing artificial intelligence, obtained information will contradict and will not be easily assessed.

We will be happy to receive additional comments and proposals for articles at:
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The world around us is changing at accelerating rates. The change is likewise evident in the phenomenon of war. The Internet has brought with it the information explosion and cyberspace. In the military domain of fire, new capabilities of precision and lethality have burgeoned. In addition, capabilities of electronic warfare and innovations in the world of command and control have changed the nature of war beyond recognition. With the technology, the enemies have also changed—from a single-digit number of states to a changing and unending assortment of organizations and individuals. These organizations are working to prepare a campaign against Israel that is fraught with surprises, making use of innovative technology such as UAVs, fire capabilities, commando capabilities, and more. These changes make precise and relevant intelligence more crucial than ever. Today intelligence constitutes an essential compass for initiative in battle, one that can direct the fire and maneuver efforts. The ability to bring intelligence to the field and link it with operational activity, both defensive and offensive, is the real test of the modern army.

Hence, in today's world an intelligence organization that aspires to relevance and influence must face new challenges, such as dealing with big data, with maneuver in cyberspace, and with perception as part of every campaign, and going forward, with the incorporation of more and more instruments from the field of artificial intelligence. In grappling each day with the new challenges, we confront again and again the same dilemma: how to achieve rapid change and relevance without sacrificing professionalism and professional identity.

I would like to congratulate the Intelligence Heritage and Commemoration Center, and the editors and authors, for putting together the second issue of the journal. It is an important forum to promote the methodological conversation in the intelligence community. And I wish the readers valuable and thought-provoking reading.

Gen. Herzi Halevi
Director of Military Intelligence



Israel Intelligence Community Commemoration and Heritage Center
The Institute For Intelligence Methodology Research