CRITICISM AGAINST THE INTELLIGENCE CYCLE

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Abstract: The cycle of intelligence, as a systematic and permanent process, is meant to reveal the essence, by analysis of data and information, which is subsequently communicated to decision-makers, so that they could make substantiated decisions, of an adaptive action nature, in regard to threats (risks, vulnerabilities) or opportunities.

Nowadays more than ever, intelligence and even more so, intelligence analysis have become the object of study and discourse, both in civil society and in structures that traditionally deal with this field; intelligence is no longer a prerogative of governments and intelligence organizations, but it became a must for successful strategies carried out by all social players, be it multinational corporations, interest groups, etc., whereas the knowledge paradigm is submitted to azimuth shifts, from the need-to-know orientation, to the need-to-share orientation. In this sense, the practicality of the intelligence cycle as work tool and modus operandi must be revalidated and, if necessary, adapted to the new knowledge environment.

Keywords: data, information, intelligence, knowledge, wisdom, intelligence cycle

1. METHODOLOGY OF RESEARCH

This article, starting from the working premise – declaratively stated from the very title of this paper - seeks to discuss the evolution, but particularly the counterarguments and criticism against the actional model currently being used in the intelligence process, both in the theoretical area and in the practical one, implemented in governmental and private organizations.

Any initiative envisaging the launch of a working premise encompassed in a scientific field requires a phase when the research concepts and methods are determined, for which purpose we shall start from the constructivist supposition that the social world can be essentially understood and that the is no unique truth, but several truths more like, and they can be revealed.

In light of this approach, the ontology (which shall provide the answer to the question "what is the nature of reality?") of this study is subjective, characterized by the fact that one's own meanings and perceptions are those filtering reality; starting from the means in which answers can be obtained in regard to the subjects brought up for discussion, the epistemology of research will be interpretative, envisaging not so much to explain the phenomenon being studied, but to understand it in a holistic framework, integrating theories, paradigms, and multiple visions of researchers from this field, to the detriment of critical realism, actional research and positivism.

From this perspective, the methodology is qualitative, the techniques used being those related to the data circulated in the focus-groups targeting the field of intelligence, to the large archives and databases, and subsequently to this initiative, the means of analysis shall insist on inductive tools, i.e. *grounded theory*, thematic and template analysis.

The argumentative content proposed must of course assume a similar interpretative axiology, accepting that it entails the acceptance of a particular set of values (*value-laden*) [2].

2. INTRODUCTION

Intelligence, considered from a polysemous conceptual perspective, even if its relatively recent, exists since ancient times and must be regarded from three perspectives, i.e. knowledge, organization and activity (process and product), as stated by Kent in 1949 – all these being inter-conditional and inter-related since they represent, on a cognitive and syllogistic level, the content, structure and activity, by planning, collecting, processing, analyzing and disseminating a product to a beneficiary, based on which the decision-maker can apply actional measures.

Although this article does not seek to conceptualize the field of intelligence, note should be made that it is mainly regarded from two perspectives, i.e.:

- ✓ traditionalist, starting from the studies carried out by Sherman Kent, clearly defining the fields of intelligence producers and users (beneficiaries); according to this doctrine, the producer's interference in the decision-making process is ill-suited, because it can make it subjective [3];
- ✓ activist, structured according to the theories of Wilmoore Kendall, according to which intelligence must play and assume a dynamic part in influencing the decision-making process [4].

We believe that it is mandatory to briefly clarify the manner in which – so as to obtain the analytic product to be supplied to the decision-maker/beneficiary – the constitutive elements are correlated in terms of the process, i.e. the manner in which, starting from raw data one obtains information which, in their turn, provide the foundation for knowledge, i.e. intelligence, and finally, the refined representation as wisdom.

Practically speaking, in order to be able to reveal said transformation process in the actional melting pot of the intelligence cycle, it was necessary to identify a probable, reliable and viable model allowing the use of reference concepts, and to this effect we propose that the best modus operandi is to use the cognitive hierarchy attributed to Russel Ackoff structuring the content of human cognition by the following concepts: [21]

- ✓ data—represented by symbols, numbers, words;
- ✓ information –data processed so as to be useful and which are filtered by questions such as *who*, *what*, *where*, *when*;
- \checkmark knowledge information structured according to a dynamic determinist structure, in reply to the question how;
- \checkmark intelligence represented by combining the previously mentioned cognitive levels, i.e. opinions in reply to the question *why*;
- ✓ wisdom based on intelligence, conviction, combined and assessed databases.

It is interesting to see how specialized literature approaches the intelligence cycle, even if there is the possibility that some readers might deem the migration between the subjects approached as being slightly abrupt: thus, in some researcher's perspective, the cycle is metaphorically perceived as a cyber-system [22] where the core processor "understands" feedback and uses a software to make adjustments.

Intelligence cycle

The origins of the intelligence cycle can be identified in the works of the famous German sociologist Max Weber, the inventor of the concept of "bureaucracy". Starting from Weber's theories we may conclude that any traditional intelligence community is essentially a classical bureaucracy, characterized by a process centralized by planning, routine operations and a hierarchic chain of command.

All these features are present in the traditional intelligence organizations which were not yet submitted to the adaptation to the society of knowledge.

The concept of bureaucracy was one of the key ideas of the 19-century organizational theory. As assembly lines, bureaucracies are efficient because they divide work into controllable units and they facilitate the specialization of individuals by introducing a rigorous division of work. Moreover, they are efficient because they enforce standard operating procedures. When rules are well-defined, everybody knows what they have to do.

In the intelligence community, the bureaucratic model can be found in two key concepts, one of them being the "intelligence cycle". This model includes a few of the characteristics of the intelligence planning process, but it runs over a shorter period of time.

In a minimalist perspective, as a process, the said cycle is meant to reveal an essential value-added product and to communicate it to decision makers, so as to provide the basis for informed decisions with actional-adaptive role in regard to threats, risks, vulnerabilities but also opportunities.

As the approach of the concept of security and its numerous implications, the origin and design of the intelligence process (operative-informative) has military origins; since the time of the Boer Wars, Lord Wolseley provided, in "Pocket-Book for Army Field Service" of 1886, detailed instructions on the means of selecting intelligence officers and establishing an intelligence organization. Three phases of the intelligence work were discussed: collection, analysis and reporting.

A systematic description of the implications of producing and using intelligence was developed by the pioneers of military intelligence before World War One, distinguishing between the implications of the collection phase and that of the classification and dissemination of the product to the field units. During World War One, the intelligence of the British Admiralty introduced analysis as a separate collecting and processing function.[17] Subsequently, US Army Regulations published during World War One identified collection, collating and dissemination as essential obligations of the Military Intelligence Division. In 1926, American military intelligence officers recommended four separate functions of tactical intelligence: formulating requirements, collecting, using (processing and analysis) and dissemination, although the "intelligence cycle" was not yet expressly mentioned [23].

The iconic model for the theorization of the aspects related to the intelligence cycle is, of course, the one proposed by Sherman Kent, in his paper "Strategic Intelligence for American World Policy", where he defined intelligence as "knowledge", "organization", and "activity". Kent saw the intelligence cycle as a part of "activity", being the first author having given a clear wording thereof, listing seven separate phases (Kent, 1949):

- 1. occurrence of a problem requiring the attention of strategic intelligence staff;
- 2. problem analysis, so as to discover which aspects are relevant to USA security;
- 3. collecting relevant data pertaining to the problem:
- a. by researching the available data;
- b. by making efforts to procure new data to fill-in the blanks.
- 4. Critical assessment of the data thus collected, with the intention of finding some "inherent meaning" (a series of premises);
 - 5. Continuing the collection of data in accordance with the most promising premise;
- 6. Selecting one or more premises with a higher degree of truthfulness as compared to the others activity often described as the presentation phase.

Some experts believe that the processing function from the cycle's military version was divided by Kent into several separate phases, to underline the significance of intelligence analysis as an autonomous professional function. This practice, to have analysis as a separate function, is still applied nowadays by American intelligence agencies.[17] From a military perspective, NATO's definition of the intelligence cycle is notable, i.e. a logical thought and action system to ensure the intelligence required by the commander demanding the chief of staff to implement measures so as to collect information, whereas the latter selects the appropriate source for a specific task in order to eliminate doubles. [3]

In the definition given by the Central Intelligence Agency, the intelligence cycle consists in: "a process whereby primary information is obtained, disseminated, assessed, analyzed and made available as final intelligence products for decision makers, so that they could make the appropriate decisions in substantiating actions" [31]. The intelligence cycle is triggered by a set of questions and answers (what we need to know, what we currently know, what we need to know from a certain perspective, when we need to know it, the end use of the obtained intelligence product, the costs it entails, and the costs entailed by the absence of said product, etc.), which, in their turn, will generate other questions and implicitly other answers, thus being compared by some researches with a vast neural network.

For the decision makers to be provided with a product encompassing the essence, but also the spirit of certain events, phenomena, processes, situations, state of facts, the mutations appearing in their evolutional structure, etc., a significant part in the intelligence cycle is played by intelligence analysts, those whose role is to know, anticipate and communicate to political and military decision makers the elements of interest in a complete, concise and pertinent manner.

For this purpose, in intelligence activity, there must be a certain "production" management, similar to the one implemented in a high-tech factory/enterprise, whereas analytical activity plays a significant part in the entire endeavor. According to the approach (Anglo-Saxon, French, American) the definition of the process is slightly different, as follows:

✓ According to the French school of thought the cycle consists of four phases: planning and managing (determining the need for information, planning and organizing the collection, making requests to this effect to intelligence services), collecting (seeking and obtaining information), using (complex process of assessing, evaluating, collating, interpreting, analyzing and synthesizing) and dissemination (preparing and transmitting the intelligence product to the clients);[7]

✓ In the American perspective six phases are accepted, as follows: *intelligence* consumers decide and point to the type of information they need, subsequently asking it by formal request, from intelligence experts; the requirements become both reporting and directing agent, whereas the resources to be used by information collectors are assigned in reliance thereon; the collectors obtain the requested information and subsequently they are submitted to a collating, processing, evaluation, and transformation process by analysts; finally, the intelligence product is prepared and presented/disseminated to consumers, who, in their turn, will determine new needs for information, establish new needs for intelligence and introduce the required adaptive measures.[24]

The graphic representation of the intelligence cycle made by the American school of thought and presented in Joint Publication 2-0 (22 October 2013) is illustrative [25]:

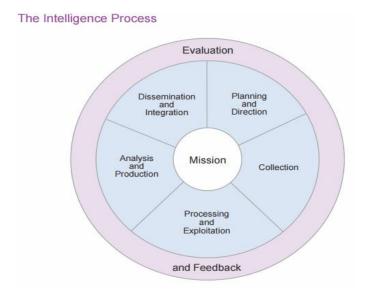


FIG. 1 The Intelligence Process

3. CRITICISM AGAINST THE INTELLIGENCE CYCLE

Today more than ever, intelligence and even more so, intelligence analysis, have become the object of study and discourse, both for the structures that traditionally dealt with the field, and in the private sector, or as suggestively and briefly indicated by Kristian Wheaton, "a piece of information is a useful image for a decision maker", being applicable in any sector which needs to use such information for its own product. [9]

Bruce Berkowitz and Allan Goodman's approach of intelligence transformation outlines the need to reexamine the theory and practice of intelligence, in reply to the challenges that the intelligence community deals with:

- 1. multiplying targets the intelligence community must analyze a huge volume of information with unprecedented variety;
- 2. multiplying intelligence consumers not only the amount of intelligence demands has increased, but also the level of preparation and specialization thereof;
- 3. new challenges in collecting intelligence collecting intelligence became increasingly difficult, thus increasing the complexity of the raw data transformation process in intelligence;
- 4. new challenges in intelligence analysis the complexity of the analytical process by developing the multi-source analysis and using advanced analytical methods;
- 5. the new intelligence policy increasing the number of institutional players involved in the intelligence process, changing the attitude towards secrecy and implicitly increasing the amount of available information on the activity of intelligence services;
- 6. the new role of intelligence publicly appealing to intelligence in support of internal or external affairs decisions.

Intelligence is no longer the prerogative of governments and intelligence agencies, but it became necessary, as a condition for success strategies carried out by all social parties, be they multinational corporations, nongovernmental organizations, interest groups, etc., whereas the paradigm of knowledge is subject to azimuth shifts, from need-to-know orientation to need-to-share orientation, for which purpose intelligence analysis must be adapted to the new knowledge environment. [9]

If so far we have proceeded to briefly review the definitions of the intelligence cycle, we need to review in the same manner the criticism against the operative-informative process.

In general, it consists in the contrast perceived by theoreticians and practitioners, each in the other's activity.

To this effect, the discrepancy raised by the Church Committee between the theoretical/doctrine areas and the practical one is relevant, in the sense that one of the key aspects of the operative-informative process, i.e. the one related to requirements, reflects merely the manager's acceptance as regards what they think consumers might need, and what the managers think they can provide (through the organizations they are managing) to the beneficiaries.

In other words, the Commission drew attention to the fact that intelligence structures and organizations establish their own priorities in supplying information, and they are not necessarily the object of the political-military decision maker's requests.

As a counterargument, practitioners claim that this situation is caused by a lack of efficient communication between intelligence producers and the beneficiaries of the product and to an unsatisfactory knowledge of intelligence by beneficiaries. Against the background of this hiatus, practitioners are facing the impossibility to clearly define the actional field, and to develop the related doctrine and strategy. In this sense, Michael Herman pointed out that discrepancies may occur from the early stages of the intelligence cycle (the planning phase, the phase when requirements are set forth, to be precise), between intelligence requirements and the manner in which they are applied in practical activity (processual and managerial elements and the bureaucratic nature of intelligence systems). [26]

In French specialized literature, the intelligence cycle (cycle du renseignement) is construed differently as compared to the Anglo-Saxon one. According to Par Francis Beau, the intelligence cycle is a process consisting from a series of elementary cycles described by all components of the decision-making/command chain, each acting as a source for the next, and as a client for the previous. [8]

The main role in the intelligence cycle is played by the human factor, and in the most recent analyses performed on intelligence activities in the theatres of operations have demonstrated the limits of the technical models in collecting, processing and analyzing information.

Beau proposes the reconfiguration of the intelligence cycle based on the theory of knowledge and on the mechanism of memory. The new model entails a representation of the memory's functions as a knowledge pyramid varying from the "object" to its representation, organized by 6 main layers (phrasing, positioning, operation, dynamics, qualification, measuring).

The closeness of this field of study epistemology and the theory of knowledge is obvious, but the specificity of the intelligence production process, which is entirely conjectural, entails a much more reactive use thereof, as compared to other fields.

Taking into account the fact that the first true information system used by people was language, a privileged tool meant for giving use to collective memory, allowing for the capitalization, interpretation and dissemination of information, the author crated a theory according to which organizing common memory into a network-like system could be conceived as part of a knowledge preparation model.

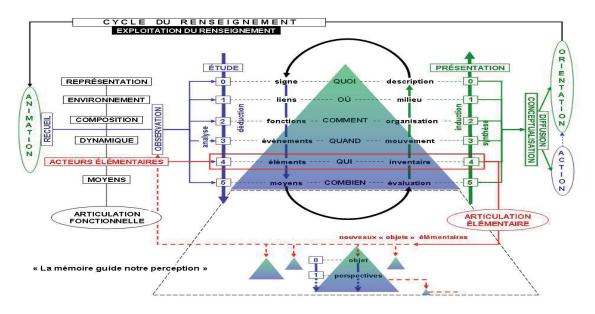


FIG. 2 Intelligence cycle (individual function)

Theoreticians coming from the American school of intelligence draw attention to the fact that in the USE intelligence community there is a lack of consistency (at least at the level of the most representative elements of the national security community), of a common grasp of the intelligence cycle, which also impacts upon the related specific subjects. The chart below is eloquent and illustrative to this effect; according to this chart, of all the phases attributed to the intelligence cycle, only the phase of information collection is common to all 10 analyzed agencies:

	Intelligence.gov (old)	FBI.gov	CIA.gov	WMD.gov	Brown Rudman	DTIC.mil	rdl.train.amy.mil	JP 2.0	Classic Cl Model	IALEIA.org
Requirements		X	and the		7.70-10.00	20000000		21.00		772391 13947
Needs	0.00				X	- 0		()		-
Direction						X	X			X
Planning, Direction, Needs, Requirements	S To and S	P		X			- 28%			
Planning and Direction	X	X	X		Ca - 1	15-1		X	X	
Collection	X	X	X	X	X	X	X	X	X	X
Processing			X	X		X	X			
Evaluation	ti.									X
Collation	-g E		4					-		X
Processing And Exploitation	X	X		X				X		
Analysis				X			//		X	X
Production										
Analysis and Production	X	Х	X		X			X		
Dissemination	X	X	X	X	X	X		81 10 8	X	X
Disseminating and Using	1		1		_		X			
Dissemination and Integration								X		
Feedback	-				X				X	
Evaluation	1		1		7112			7	1000	
Evaluation and Feedback	S 3							X		

FIG. 3 Process-wise comparison between 10 American intelligence agencies [23]

Another argumentative construct entailing the transposition of the intelligence cycle modeling, uses as an explanation the fact that the intelligence cycle modeling is deemed to be, in this context, to be obsolete: by reference to the time when the modeling process was initiated and until the present, numerous mutations of a structural, formal and contextual nature have occurred. [27]

Given that the intelligence cycle was defined more than half a century ago, and in the meantime technology and communications have largely developed, undergoing not only mutations, but actual revolutions, the temporal argument is all the more viable.

In this light, we must consider, as a functional alternative, the cyclic model proposed by Treverton which is more responsively reported to the classical model and involved a constant interrelating of the constitutive parts, although in its turn it is criticized for not paying enough attention to the analytical phase and it does not take into account an extremely important aspect, that of tacit knowledge.[11]

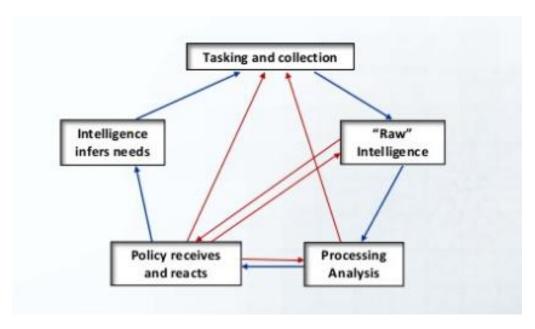


FIG. 4 The "true intelligence cycle" (G. Treverton)

Furthermore, from the perspective of the coherence by reference to the temporal aspect, we need to take into account a change related to the applicability of the cycle, as a model, in numerous secondary disciplines (national security intelligence, business intelligence, law enforcement intelligence), which aspects were inexistent at the time when the initial intelligence cycle was designed; in the current context, it would be impossible for the researcher to study and eventually improve the process. By way of consequence, the reforms proposed in regard to an ill-suited and incomplete model will also be insufficient and they will not be able to fix systemic problems.

On the same note, establishing and assigning a budget for such a model will actually suppose additional consumption and effort in finding adaptive ad-hoc solutions; questions will be raised as to the contracting of employees to cover positions which do not comply with the criteria related to the required skills and competences (necessary skills and competences versus acquired skills and competences). In the same line of reasoning, training and instructing students starting from an obsolete or incomplete model is meant to become, from their perspective, an endeavor with no ethical or functional value, which is deeply demotivating and counterproductive.

In their work "Best Truth - Intelligence in the Information Age", Berkowitz and Goodman criticize the traditional model of the intelligence cycle, making an analogy to a production line. [15] Thus, in their opinion, the intelligence process, as it is traditionally designed, is similar to an assembly line. Work specialization and division improve efficiency. Intelligence products go further on the production belt, inserting the collected data and adding the analysis thereof. At the end of the line, there is a quality control inspector who checks the products to make sure they are compliant with the organization standards, and an administrative assistant adds the finishing touches, and the report is ready to be sent.

Although obviously the intelligence cycle models are an idealization of the processes occurring in practice, which are much subtler and more complex. According to Berkowitz and Goodman the problem is not the idealization per se (the manner in which the process would look like if all went according to plan), whereas they believe that even if the traditional intelligence process functioned according to plan, it would still not generate the intelligence that the consumers need.

Robert Clark argued, in 2004, that a restructuring of the image and manner in which intelligence works is necessary, and he claimed that an alternative to the traditional intelligence cycle is that the beneficiaries/interested parties become part of the intelligence process.[20] Clark describes the interested parties of the intelligence community as the intelligence collectors, processing agents and analysts as well as the persons having planned and built the systems supporting these activities.

To include them in the intelligence process, the author claimed that the intelligence cycle needs to be redefined so as to benefit from the evolution of information technology and to be able to handle complex problems.

The author proposed an approached focused on the intelligence analysis target, where the goal is to build a shared image of the target, of which all participants may draw the elements they need, and to which they can contribute with their own resources and knowledge so as to have a clearer image of the target. In this case, we cannot speak of a linear process, but rather a network process, a social process where all participants are focused on the goal.

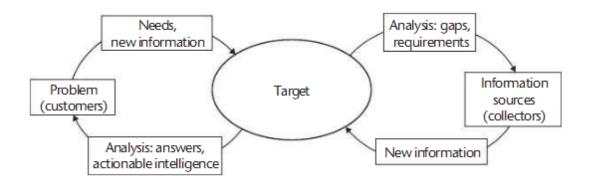


FIG. 5 Intelligence cycle (Source: Clark, 2010:14)

Other approaches blame the lack of unity in the organizational representation of the intelligence cycle: only three out of then such institutions bestow importance on a feedback mechanism as a subset of the dissemination phase, leaving the impression that this major evaluative process must be left at the discretion/choice of the beneficiaries (decision maker).[12]

From another perspective, researchers raise, as regards causality and conditional factors of the intelligence product, the aspects pertaining to creativity and originality; from this perspective, there is an interesting study of Michael Polanyi, who, starting from the ideas of David Hume and John Locke (according to whom knowledge must be experimented, and that it is subjective rather than objective) and promotes the concept of tacit knowledge (with five distinctive features: *tacitness* - understandable without requiring explanation; *individuality*, *situationality*, *stability*, *cultural and practicality*), according to whom we have more knowledge than we express. [13]

We have also identified opinions according to which the intelligence cycle is incomplete and fallible if it does not include in its functional algorithm the counterintelligence aspects [9], just as there are researchers claiming the insufficient representation of the technological impact on the intelligence process, organization and product.[16]

4. CONCLUSIONS

We believe that such discussions and interpretations shall continue to come up, notwithstanding the manner in which the intelligence cycle is accepted or represented at present, for a very simple reason: intelligence producers and requesters are different entities, with different points of view, conceptual definitions and intrinsic knowledge of the intelligence cycle.

We must not lose sight however of the following aspect: no matter the approach of the intelligence process (seen not necessarily as a Holy Grail, but as a skeleton playing an imperative and guiding role, which may undergo upgrades), it seeks to obtain a viable, tested, accurate and precise intelligence product (as a result of a well-defined and properly implemented mechanism for planning, obtaining information, comparing, defining, interpreting, authenticating, analyzing and synthesizing) which must be disseminated to the decision makers objectively, in a pertinent and swift manner, to provide the basis for the necessary decisional adaptive approaches.

The researchers' activity in the field seeks to increase the efficiency of the actional and procedural model, the purpose of such endeavors consisting in adapting the intelligence cycle to the new realities.

An aspect that cannot be neglected is the impact of the new technologies on all the daily or scientific aspects, by introducing tools allowing for the occurrence of new ideas, solving problems, making decisions and implementing the replies thus obtained. [1] Technology is constantly providing us with new tools facilitating for us to obtain quick and qualitative intelligence products, and therefore determining an increase of the situation awareness, respectively of the perception and understanding of the elements constituting the social environment by reference to time, space and causality indices - a sine qua non condition of the proper operation of the decision making structures acting in a dynamic, interactive and inter-dependent environment.

In order to be able to redefine the intelligence cycle, we need to understand how it handles *intelligence requirements*, respectively the general or specific topics, in relation to which information needs to be collected, or an intelligence product needs to be generated. [29]

Customarily, the intelligence cycle can be successfully applied to what is called a *standing requirement* which may supply information and substantiate the generation of an intelligence product for medium or long term, but current needs refer to spot requirement, i.e. short-term information and deliverables.

The researchers' efforts as regards the intelligence cycle are designed to optimize the manner in which information is obtained, processed and supplied as a product to decision makers, in an objective and pertinent way, so that in reliance upon same the appropriate decisions are made and implemented.

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