VISIÓN CONJUNTA AÑOT.



3 ERRONEOUS ANALOGIES
By Evergisto de Vergara and Gustavo Trama

OF THE ARMED FORCES

32 UNKNOWN DIMENSION
By Julio Gerardo Lucero

1 57 TRAINING OF MEDIA at operational level

By Álvaro Bazán





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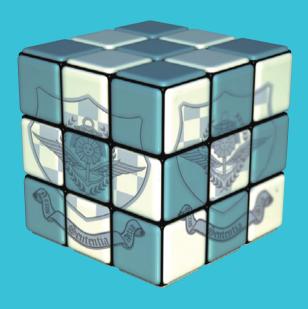
OUR ICON

Our icon is the famous Rubik's cube decorated with the colours of the Argentine flag and the coat of arms that identifies the *Estado Mayor Conjunto de las Fuerzas Armadas Argentinas*. We have elected this ingenious mechanism for our journal as it is the visual representation of the complex joint actions.

The image shows the challenge to combine in a harmonic way the elements that are part of the Armed Forces to achieve an efficient use of military instruments.

The proper use of the forces allows to set, at the same level, the coat of arms of the *Estado Mayor Conjunto* which implies a mental process to combine variables in a very complex setting.

In order to be successful as to the situation raised, it is necessary to have a broad mindset that allows to have a general perception of the target to be achieved; this defines our "joint perspective".



SUMARIO

02 MESSAGE FROM THE DIRECTOR

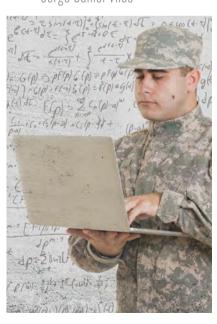
Logistics

By Evergisto de Vergara and Gustavo Trama

COVER ARTICLE

Education

RESTRUCTURATION
OF THE ARMED FORCES
By Daniel Oscar Nuñez and
Jorge Daniel Vilas



Strategy

RATIONAL DECISION
AND INTUITIVE DECISION
By Jorge Paulo Barrales

23 EFFECTS- BASED OPERATIONS AND THEIR COMPARISON WITH OBJECTIVE- BASED OPERATIONS By Luciano René Moscatelo

Cyber Defense

32 UNKNOWN DIMENSION
By Julio Gerardo Lucero

International Relations

39 ISIS AND MANAGEMENT OF SAVAGERY
By Omar Locatelli

Civil Defense

51 TOO LATE
By Humberto Flavio Angelomé

Human Resources

57 TRAINING OF MEDIA AT OPERATIONAL LEVEL By Álvaro Bazán

MESSAGE FROM THE DIRECTOR

General Federico Sidders¹

e started the seventh year of the journal that allows us to spread the knowledge generated in our Institution and to reach the regional and international community through its versions in Spanish and English on the website.

We welcome students from Brazil, United States, Peru and Venezuela. Their participation in the activities carried out by our Institution will offer an opportunity to exchange cultural, professional and personal experiences.

Of course, at the end of the year we will see the results of their contribution together with the results of the exchange with officers from Brazil and the United States graduated in 2014 from the Master's Degree in Leadership and Joint Military Strategy and the Specialization in Joint Staff and Operational Level Planning.

This Institution, as it was recently created, has the characteristic of a growing institution; in this case, with the purpose of acquiring experience and knowledge apart from producing it at national level.

This exchange takes place due to the cooperation agreements signed by the Ministry of Defense under one of which the Joint Staff College took part, at the beginning of the year of the "Coalition Exercise" organized by the French Staff College.

Said exercise which takes place on an annual basis has the purpose of exploring planning and leadership knowledge at strategic and operational levels together with international and diplomatic agencies.

The officer from our Institution was a member of the Staffs of the elements that took part in it and advisor of the armed forces before the diplomatic representatives of the Alliance Council and the UN Council. In this way, he interacted with members of sixty two countries from America, Africa, Europe, Middle East and Asia and had the opportunity to observe the dynamics of the situations and the solutions proposed, an experience that will be taken for exercises carried out by our students in the country.

At regional level, in the area of Defense, cooperation agreements between Argentina and Brazil are seen in the invitation made by the Director of the Staff College from Brazil to make a professional visit with the students of the Master's Degree.

The activity to be carried out in October has the purpose to share experiences, both academic and professional, which is an advantage for the performance of students from both institutions at joint and combined level.

This is a step forward towards joint action as regards knowledge; after three years of efforts and resources,

libraries of the specific staff colleges have created the Biblioteca del Centro Educativo de las Fuerzas Armadas [Library of the Armed Forces Education Centre] as an information unit that offers access to quality documentation and services and innovative resources, contributing to the creation and spread of the knowledge for the training of the armed forces and society in general.

The creation of the institutional repository, CEFADIGITAL, of open access and interoperable will turn the Armed Forces Education Centre into a reference as regards the decision to create a repository of these characteristics.

As regards actions at national level, with the purpose of generating activities for institutional enhancement, teaching and research, collaboration and cooperation agreements were executed with the Universidad Nacional de Tierra del Fuego, Antártida e Islas del Atlántico Sur and with the Universidad de San Luis.

The purpose of making these agreements for cooperation and university interaction is to promote development and institutional capacities with activities such as the participation in research and development projects, participation in conferences, seminars, courses and professional training programs, among others.

In order to continue with teachers training activities, together with the Instituto Nacional de la Administración Pública, we carried out in May a workshop on "Contribution to Thinking and Restatement of Teaching Practices".

Teachers from the Instituto Universitario del Ejército, the Joint Staff College, the Navy Staff College, the Air Force Staff College and the Instituto of Inteligencia de las Fuerzas Armadas took part in the activity, which was open to the education community of the Armed Forces.

The dynamics of problems influenced by globalization require the design of multi-sector integral strategies that can solve them. Therefore, it is necessary to create strategic knowledge in national and regional environments.

In consequence, during April, we presented to the Instituto Universitario del Ejército a proposal for a post-graduate course "Phd in Strategy", to respond to the need to provide in the country high level studies in the area as from the academic development reached by strategy and strategic research at the colleges of the Armed Forces that are today part of the National Defense University.

We thank everyone who has contributed to our search for academic excellence and we encourage everyone to continue deepening knowledge and its transfer.

LOGISTICS VISIÓN CONJUNTA NÚMERO 12



ERRONEOUS ANALOGIES

Corporate logistics v. Military logistics

KEY WORDS: LOGISTICS / CONDUCTION / FIELDS / INTERPOLATION / EXTRAPOLATION

By Evergisto de Vergara y Gustavo Trama

The authors analyze the concept of logistics that exists in the doctrine of Argentine Armed Forces and, after comparing it with that of other countries, they invite to review the concept.

NTRODUCTION

As from some years ago, Argentine Armed Forces have adopted a new way of thought and changed the traditional thinking regarding conduction fields.

According to the dictionary of the Royal Spanish Academy, a "field" is a real or imaginary area of a certain activity or knowledge. When we talk about a field of military conduction, we refer to aspects regarding planning, organization, direction, coordination and supervision of

military actions. These actions that are inherent to military conduction have different relevance according to the level of war. Therefore, the national strategic and military strategic levels direct the use of armed forces, while operational and tactical levels implement such direction.

Traditionally, fields of military conduction are the ones that gather actions that are different due to the fields and that are part of a Staff.

-) Personal (resources and staff), which is universally called 1
- Intelligence (enemy, field and climate conditions), which is universally called 2
- Operations (the use of armed force to fulfill their objectives), which is universally called 3

› Logistics (transport and support of troops), which is universally called 4

According to a new way of thinking in Argentina, fields of conduction are now three: Intelligence, Operations and Logistics¹. As regards the field of Logistics, we include the "areas": Staff, Material and Finance, and there are, therefore, Staff Logistics, Material Logistics and Finance Logistics.

Therefore, rules and publications gather in an only one concept the aspects of Material Logistics, Staff Logistics and Finance Logistics, although in military conduction, these areas have different purposes, are of different nature, activities are carried out by different services and logistic and staff functions are also different.

This work aims at analyzing the origin of this new concept and its pertinence. In order to avoid digression, we will not discuss whether Finance is a field of Conduction due to the differences between peace and war, the differences between belonging to a Staff or not and its pertinence according to the level of war under issue.

We will not refer either to the difference and relation between the Logistics of Use and the Logistics of Planning of the Structure of the Forces which in Argentina has been called Genetic Strategy.

THE ORIGIN OF THIS NEW TAXONOMY 2

When the specialization of officers started not only regarding Operations and Intelligence, but also regarding Staff and Logistics, many of them tried to study logistics, getting degrees at civil colleges.

In the civil environment, logistics that is under study is corporate or administrative logistics. This refers to companies the purpose of which is to make profit by rendering goods and services.

Different authors classify three subsystems within the corporate logistic system that receive different names according to each author. Considering corporate logistics as a system, it is said in general that there are the entrance subsystem, transformation subsystem and exit subsystem. Their ultimate objective is profit (this is shown in Figure 1).

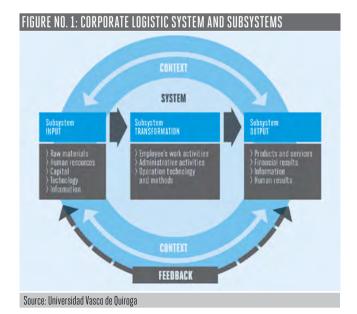
- In the entrance subsystem, human resources, material and financial resources take part in production. According to the product or its dimension, we can add technology and information.
- In the transformation subsystem, the product that will give profits is created. In this step, labour activity of human

Logistics was originally a merely military word defined as the activity to organize movement, equipment and accommodation of troops. It is currently a word of general use defined as the detailed coordination of a broad and complex operation. It is important to know the difference of definitions between the application to military aspects and the ones used in the business sector.

resources takes part -employees- as well as administrative activities and operation methods.

In the exit transformation, products and services that will make profit are rendered, financial results of the value added to raw materials are seen and the result of the work of human resources can be analyzed. Here, information about the results may be obtained and the system gets feedback.

As from analyzing corporate logistics and trying to transfer this to military logistics, the new taxonomy may have been caused. Under this new name of logistics, human, financial and financial of any military organization are being considered.



Armed Forces Staff, Doctrina Básica para la Acción Militar Conjunta P 00- 01, edition 2012, Chapter V, paragraph 5- 04, "Fields and Areas of Conduction", pp. 61 and 62.

^{2.} Taxonomy: action of classifying.



Therefore, we can deduct that the field of conduction of Staff of the traditional Staff has to be eliminated and be under the new corporate concept of logistics with which the definition from the dictionary (in its first meaning) must not be understood: the definition of science applied to transport and maintenance of troops has to be replaced with the third definition: a set of media and methods that are necessary to conduct the organization of a company or services, especially distribution.

Traditional fields of military conduction – Staff, Intelligence, Operations and Logistics, in Argentina are three: Intelligence, Operations and Logistics, the last of which is taken in its broader meaning. This is an innovative perspective in the world.

This new concept results from a false reasoning produced by applying the formal method of thinking known as analogy³. Analogy between corporate analogy and military analogy is erroneous⁴.

Military logistics cannot be assimilated to civil logistics because military logistics aims at placing supplies and transporting staff in proper number, quality, moment and place in order to meet the requirements of war, while civil logistics aims at any movement and storage that allows for the flow of products from the point of purchase of raw materials to the point of consumption as well as the necessary flow of information to provide consumers

with goods and services required at a reasonable cost and, therefore, be able to make profit.

INTERPOLATION AND EXTRAPOLATION

Analogies may be made through two different ways: interpolation and extrapolation.

- Interpolation means to put something among other things. For example, if I have two groups, of which one is complete with subgroups and the other one is not complete, in which the complete parts of each one are equal, interpolation refers to considering that unknown subgroups are equal to the ones already known and efficiently tested in the complete group.
- Extrapolation, wrongly called by some people as "transpolar", means to apply conclusions obtained in a field to another one. It means to take a word or phrase from its real or exact context to a structure in which it has a different meaning from the one it had. The verb "extrapolate" does not only mean to move, but it also has another meaning, as when extrapolating the word or phrase, it gets another dimension providing the concept with the quality or characteristic of the word or phrase chosen. This is what has happened to the concept of logistics.

This extrapolation is erroneous because:

- Corporate logistics aimed at making profit by adding value to raw materials cannot be compared with military logistics aimed at the use of force without making profits. The Armed Forces are not a company and are not conducted in an administrative manner. Administration is only one part of military conduction.
- 2. The word logistics has different meanings according to the

^{3.} Formal reasoning methods: inductive reasoning, deductive reasoning and analogies.

Royal Spanish Academy, analogy: relation of similarity between different things. Reasoning based upon the existence of characteristics that are similar in different beings or things.



Real Academia Española (Royal Spanish Academy)⁵. The first one, "part of the military organization that refers to movement and maintenance of troops in campaign"; the second one, "logic that uses the method and symbolism of mathematics and the third one, "group of means and methods that are necessary to carry out the organization of a company or a service, especially for distribution".

As it is wrongly taken, there is a different definition. We are not talking about the same thing, but the meaning is different. When extrapolating, the word or phrase "logistics" gets another dimension and provides the guide with a quality or characteristic of the word or phrase chosen. In this case, this applies from corporate logistics to military logistics.

3. Each field of traditional conduction includes aspects of staff, material and finance. The field of conduction "intelligence" may not be carried out without intelligence staff or material inherent to intelligence activities or financial resources to carry it out. The same occurs in the field of operations and of traditional logistics because if military logistics aims at transport and support of troops, it is not possible to transport troops without trucks, drivers or resources to pay for fuel and proper maintenance. Moreover, military logistics needs to care for the health of troops, and this cannot be possible without doctors, nurses, ambulances, hospitals,

According to the dictionary of the Royal Spanish Academy, a "field" is a real or imaginary area of a certain activity or knowledge. When we talk about a field of military conduction, we refer to aspects regarding planning, organization, direction, coordination and supervision of military actions. Military logistics aims at placing supplies and transporting staff in proper number, quality, moment and place in order to meet the requirements of war.

medication and health supplies that require economic resources. Therefore, the service of transport and health service, according to the definition, are logistic services rather than staff services.

- 4. Functionality may not be reversed. Corporate logistics has the functionality of production, sale and profit of a product. Military logistics has the functionality of achieving military goals that help to get national interests. The difference is that there are lives at stake.
- 5. In the case of this erroneous extrapolation, those who prefer
- 5. Dictionary of the Real Academia Española. Available at www.rae.es/recursos/diccionarios/drae



to apply concepts of corporate logistics to military logistics, in extremis may even replace the word conduction with the word logistics, as corporate logistics to sell a product also has an area of operations and an area of information.

FIELDS OF MILITARY CONDUCTION IN THE WORLD

There are other fields of traditional conduction in the world, such as Civil Affairs, Strategic Plans, C3126, IInteroperability, among others, which vary depending on the level they deal with. For example, if the military element is of smaller significance, the field of Civil Affairs would be included in the Field of Operations while, in organizations with greater importance and more tasks, it may be a separate field of Conduction.

- According to the North Atlantic Treaty Organization (NATO), logistics is the science of planning and carrying out the movement and maintenance of forces. In a broader sense, the aspects of military operations that deal with:
- a) Design and development, acquisition, storage, movement, distribution, maintenance, evacuation and material disposal
- b) Transport of staff
- Acquisition or construction, maintenance, operation and facilities disposal
- d) Acquisition or service rendering
- e) Sanitation and medical care services. Sanitation is an activity of logistics rather than of staff.

> France 8

For this country, logistics is the science of planning and execution of movement of armed forces and their maintenance. In a broader sense, the word implies aspects of military operations that deal with:

- a) Design and development, acquisition, storage, movement, distribution, maintenance, evacuation and material elimination.
- b) Transport of staff
- Acquisition or construction, maintenance, operation and facilities disposal
- d) Acquisition or service rendering
- e) Support and medical care

> Estados Unidos 9

Logistics is the science of planning and carrying out movement and maintenance of forces. In a broader sense, it implies those aspects of military operations that deal with:

- a) Design and development, acquisition, storage, movement, distribution, maintenance, evacuation and material disposal
- b) Movement, evacuation and hospitalization of staff
- c) Acquisition or construction, maintenance, operation and facilities disposal
- d) Acquisition or service rendering

) United Kingdom 10

Logistics is the science of planning and carrying out movement and maintenance of forces. In a broader sense, it implies aspects of military operations that deal with:

- a) Design and development, acquisition, storage, movement, distribution, maintenance, evacuation and material disposal
- b) Transport of staff
- c) Acquisition or construction, maintenance, operation and facilities disposal
- d) Acquisition or service rendering
- e) Medical support and health care

> Chile 11

According to the translations of Logistics from NATO, United States and France, it refers to the science of planning and carrying out movement and maintenance of forces.

- 6. Command, Control, Communications, Intelligence and Computing.
- AAP- 6- NATO Glossary of Terms and Definitions (English and French), 2008, "listing terms of military significance and their definitions for use in NATO". Available at http://www.amazon.com/GLOSSARY-DEFINITIONS-military-significance-definitions/dp/BOOBUZPKZC, pages 2- L- 5.
- AAP- 6 NATO Glossary of Terms and Definitions (English and French), 2008, "listing terms of military significance and their definitions for use in NATO". Available at http://www.amazon.com/GLOSSARY-DEFINITIONS-military-significance-definitions/dp/BOO8UZPKZC, 2015, pages 2- L 5 and 3- L-4.
- US Joint Staff, JP 4-00 Doctrine for Logistic Support in Joint Operations, 6 April 2000. Available at www.aschq.army.mil/supportingdocs/JP4_0.pdf, page 1-1.
- UK Ministry of Defense, Logistic for Joint Operations, Joint Doctrine Publication 4-00, Third Edition, Edited 2007. Available at http://www.gov.uk/government/uploads/system/uploads/attachment_ data/file43351/jdp400ed3.pdf, "Definitions", p. 1-1.

Civil logistics aims at any movement and storage that allows for the flow of products from the point of purchase of raw materials to the point of consumption as well as the necessary flow of information to provide consumers with goods and services required at a reasonable cost and, therefore, be able to make profit.

In a more strict sense, it refers to the aspects of military operations that deal with:

- a) Development and performance, acquisition, storage, movement, distribution, maintenance, evacuation and material disposal
- b) Transport of staff
- Acquisition or construction, maintenance, operation and facilities disposal
- d) Acquisition or supply services
- e) Medical services and health support

Brazil 12

Logistics is the part of the art of war that deals with planning and execution of activities of support to forces in campaign in order to get and provide means of any type to get and render services of administrative and technical nature.

> Germany 13

Logistics is the doctrine of planning, facilitation and use of resources that are necessary for military purpose and services of support to the armed forces and their application. It includes:

- a) Administration of materials, logistic transport, supply of military post mail and support of sanitation service
- b) Support to missions, basic field of conduction, material administration, military traffic
- c) Transport driving
- d) Medical care

CONCLUSIONS

Translating the concepts of corporate logistics to military logistics is the result of a wrongful extrapolation because of the causes already mentioned. The problem lies in the extrapolation of the meaning of logistics for a company devoted to goods and services to a non-profit organization devoted to the use of force. Ends and means are different.

Considering that we can include Staff, Material and Finance under the word Logistics is a concept inherent to



corporate logistics. The concept of military logistics and corporate logistics is different. However, military men must know the difference of meanings of Logistics between the civil and military environment in order to interact with civil contractors.

This has been noted and written in the British Joint Doctrine Publication, JDP 4-00 Logistics for Joint Operations¹⁴, in its edition 102:

Other definitions: Logistics was originally a merely military word defined as the activity to organize movement, equipment and accommodation of troops. It is currently a word of general use defined as the detailed coordination of a broad and complex operation¹⁵.

It is important to know the difference of definitions between the application to military aspects and the ones used in the business sector. Contractor Support to

- 11. Ministry of Defense of Chile, Diccionario Militar Conjunto, DNC 0-2, 2012, page 210.
- Ministry of Defense of Brazil, Glossario das Forcas Armadas, MD 35-6-01, 22 de Fevereiro 2007. Available at www.defesa.gov.br/.../publicaciones/md35_g_01_glossario_fa4aed20, 2015, p. 149.
- 13. Ministry of Defense of Germany, HDv 100/900 VS- NfD Führungsbegriffe (Conduction Vocabulary), 2003, p. 93. NfD files cannot be downloaded from the Internet. Information provided by the Argentine student at the Staff College in Germany, Lieutenant Colonel Gabriel Camilli.
- 14. UK Ministry of Defense, Logistic for Joint Operations, Joint Doctrine Publication 4- 00 Third Edition, Edited 2007. Available at http://www.gov.uk/government/uploads/system/uploads/attachment_ data/file/43351/jdp400ed3.pdf, 2015, "Definitions", p. 1 - 2. Highlighting belongs to authors.
- 15. Note in the British Joint Publication: All definitions have been taken from the Concise Oxford English Dictionary (11th Edition, 2004).



Operations (CSO) is an increasingly important element in the general logistic support that is given to operations and it is necessary to exactly understand what business providers understand as logistic supply. Contractor Support to Operations is explained in detail in Chapter 4.

As regards facts, grouping in an only concept different aspects of nature, planning and execution and with different staff and logistics functions leads to confusion. This is contrary to the current definition and structure of military Staff in the world.

The practical result of the new taxonomy is undervaluing the field of Staff Conduction. It is sometimes forgotten that in military conduction, the same plan with the same means and at the same time, may lead to failure or defeat according to the

Gustavo Adolfo Trama

Rear Admiral. Argentine Navy Staff Officer. Master in International Relations from Universidad de Belgrano and Master in Arts (Management) from Universidad Salve Regina, Newport, Rhode Island, United States. Author of several publications, among which we can find "Reglas de Empeñamiento" [Rules of Behaviour], Volumes 1, 2 and 3, edited by the Joint Forces Staff College. He is currently working as advisor professor in the area of Games of War at the Joint Forces Staff College.

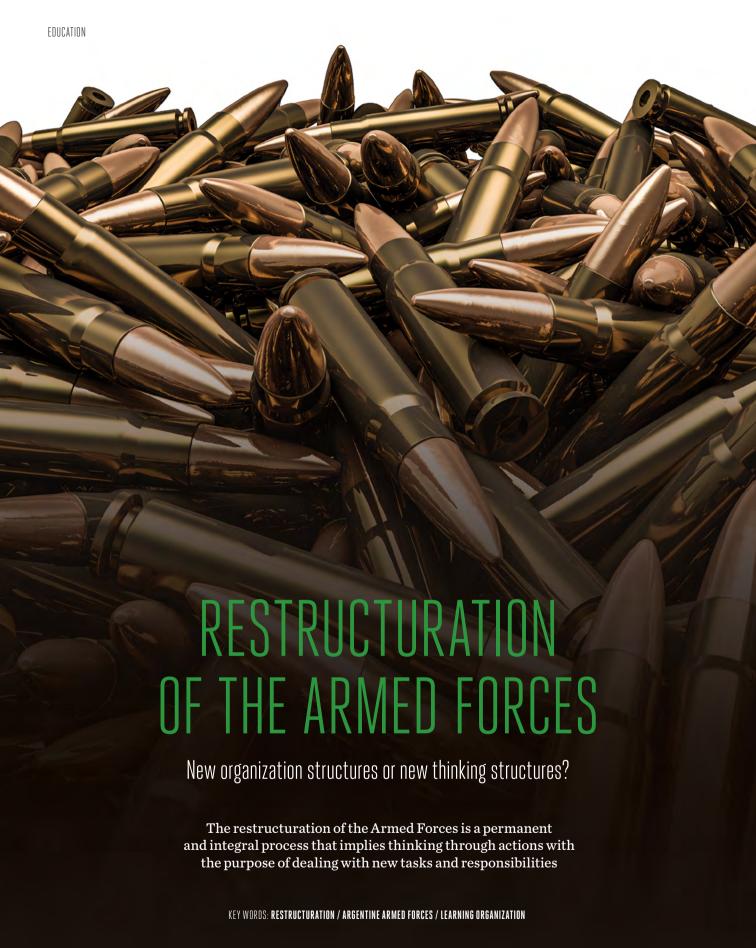
staff that is part of organizations and how their morals, espirit de corps, teamwork and willingness to win.

Support functions that are specific of the Staff field, such as staff administration, discipline, welfare, administration of casualties and a series of specific activities have procedures and restrictions that are different from the ones of Logistics understood as transport and support of troops.

Therefore, we can state that the current concept of logistics in Argentina should be revised.

Evergisto de Vergara

General of Division (retired). He obtained a master in Science with a specialization in National Defense from the National Defense University from the United States and holds a post-degree in Public Policies — Applied Research from the Institutes of State Policies and Public Management. He is currently working as professor at the Escuela de Guerra Conjunta de las Fuerzas Armadas in the courses of General Strategy and Operational Strategy. He is the author of several articles, among which we can mention "El Arte Operacional"; "Quaia Nominor Leo I y II" — acerca del liderazgo en el Ejército"; "Del Planeamiento en el Nivel Técnico al planeamiento en el Nivel Operacional"; "Los Niveles de la Guerra o el Conflicto"; "Los Conflictos en Latinoamérica" y "Clausewitz y el centro de gravedad". Author of the book "Estrategia, Métodos y Rutinas" published in 2013.



By Daniel Oscar Nuñez and Jorge Daniel Vilas

EGAL FRAMEWORK BACKGROUND

After the Malvinas War and after five years of having restored democracy with the enactment of Law No. 23554 of National Defense (in April, 1988) and the subsequent Law No. 24059 of Domestic Security (in January, 1992), a process of change in the military instrument started with the purpose of turning a structure and culture of more than 70 years into an effective tool of the republic.

With the discontinuation of the Mandatory Military Service on August 31, 1994, military staff started their professional career and with Law No. 24948 of Restructuration of Armed Forces passed in February, 1998, grounds for the reorganization and structuring of the armed forces of our country were established. This was implemented since 2004 and its last result was the definition of the military instrument as the closing of the first cycle of strategic planning through Executive Order 1729/2007, "Cycle for Planning National Defense" and Executive Order 1714/2009 "Guidelines for National Defense Policy".

WHAT IS THE PURPOSE OF RESTRUCTURATION?

As we have explained before, the two laws that give essential guidelines for the functioning of the armed forces were enacted during two different administrations: the National Defense Law was enacted during Ricardo Alfonsin's administration and the Domestic Security Law was enacted during Carlos Menem's administration.

At the beginning, both had the purpose of "protecting vital interests of the Argentine nation" and aimed at "consolidating and increasing spiritual and material capacities that turn a deterrent strategy into an efficient one, contributing to peacekeeping and international security, in particular, for our continent".

In this way, we can see how the legal framework prepares the way for the armed forces to work on Peace Missions of the United Nations, especially in our continent and keeps the concept of deterrence mentioned in prior documents.

It also introduces the priority of "joint action and operational integration of forces" giving a greater level of maturity to the military instrument after the lessons learned in the South Atlantic Conflict of 1982.

Moreover, it clearly shows scenarios for the use of the Military Instrument:

- > Conventional operations in defense of vital interests of the Nation
-) Operations within the framework of the United Nations
- > Support operations for the community of the nation or

Do all organizations understand changes in the same manner? What is being dome for organizational change and cultural change in the Argentine Armed Forces?

friendly countries

The Law for National Defense establishes a "likely development of a defense system within the framework of Mercosur for the purposes of considering the requirements that may arise from those agreements when dealing with the restructuration of the Armed Forces", a concept that is currently being developed within the framework of the Union of South American Nations (Unasur, in its Spanish acronym).

As mentioned in prior documents, it states that "rapid deployment capacity" will be a priority and highlights that, as regards joint work, "the formation of groups of combined forces or Task Forces above pure units will be a priority".

Moreover, it aims at rationalization of military expenses in the sense that "the Armed Forces will share facilities for a better use of installed capacity" and as regards staff, it expresses that "quality will prevail over number".

This is precisely the key issue of restructuration as creating new organization guidelines and a new doctrine for the use of armed forces is a mainly intellectual process, but planning how the Nation will carry out this new organization with the incorporation of new technologies, equipment and a new staff policy must be coherent in economic and financial terms so as to be kept throughout the years.

Restructuration, reorganization and change of culture are terms that are common to any organization, but the question is: do all organizations understand changes in the same way? What is being done for organizational change and cultural change in the Argentine armed forces?

Each member of the organization should be able to answer this last question, at least, if it is true that there is an organizational and cultural change.

Theories of change are constantly evolving and Argentine Armed Forces have already made their first actions to update themselves and provide a scientific basis to this change. Military staff is being trained at national universities that are leaders in organizational coaching and cultural change.

Mexican Armed Forces have already started their way to "learning organizations", as it happens in the United States, Great Britain and Europe in general. It seems to be a new concept, but it is not. The purpose is to generate and implement these masterly processes that allowed these military organizations to adapt to their reality and to be effective in the Argentine armed forces.

LEARNING ORGANIZATIONS: NEW THINKING STRUCTURES

Pasteur's phrase "luck only favours trained minds" could not be more telling: both people and organizations that keep "trained minds" that learn constantly are the only ones that can take opportunities when they appear.

With the development of neuroscience, there have been scientific grounds for processes of thinking, feelings and human behavior, being able to understand why people act as they do. This applies to persons and the organizations they form and includes armed forces and the way to conduct them.

As Peter Drucker stated¹: "the centre of a society, economy and modern community is not technology. It is not information. It is not productivity. It is the institution conducted as the part of society that produces results".

The concept of "smart company" or "learning organization" is developed within the administration of organizations, the same occurs with the tools to get this level of operation.

Renewal must be promoted and accepted, that is, acquired by all members of our Armed Forces from the highest level of conduction to levels of implementation. However, keeping individual qualities to successfully use said tools is far from being good. Awareness necessary to keep a high performance organization is key for success and requires values such as ethics, psychological maturity, integral world view².

Being aware implies going through the learning path to become aware of the gap between reality and desire. Also, it is important to state what is necessary in order to get what has been desired and to commit to accomplish that by taking responsibilities, allowing oneself to make mistakes, seeking help and allotting time and resources for that purpose.

In military life, the organizational culture seems to be against volitional learning acts. Saying "I don't know", "I ignore this" or "I am not capable of doing this" immediately discredits someone for any relevant task, which makes it necessary to make changes until we learn what we had not learned yet without anyone realizing or, worse than that, "nobody realizes I don't know that".

When people feel they risk something they value, the instinct for self-preservation is activated to protect them. When referring to learn, we refer to change, to break the balance between our current position; and resistance to change is strengthened by:

-) Being blind to one self's incompetence so "I do not need to learn anything"
-) Fear to expose myself and break my image
-) Embarrassment as fear to being foolish for not knowing something
-) Temptation to blame factors outside my control for difficulties



- Arrogance of the person who knows everything
- \ Laziness to avoid making an effort to learn
-) Impatience and boredom for not getting quick accomplishments
-) Distrust in other people or oneself
-) Anger and confusion of that one who distrusts, "I do not understand and I do not like this".

Whenever a position is at risk with many years of profession, a promotion position, a retirement pension, self- protection mechanisms may take control of actions in an unimaginable manner. If they are overcome, knowledge is an award, and this does not refer to something in particular or specific, but to how to learn to learn and this is the key to effectiveness.

The true change of the armed forces does not lie in its organization or distribution, but to become a learning organization. These are institutions that aim at ongoing learning on a daily basis, excellence as a lifestyle and dedication to service.

This type of organization allows for the integral development of all its members at the highest level a person can reach or desires to reach, promoting cohesion, sense of justice, setting standards and maintaining purposes, boosting and reaching a proper organizational environment with creativity and tolerance at all levels.

WHAT ELSE DO WE NEED?

Although laws have been preparing for change for more than 20 years, this cannot happen without motivation.

Grounds of any organization lie in inner values of the people that form it and shape its organizational culture.

Modifying it implies changing, among other aspects, habits and rituals of the people that are members of the organization.

Theories of organizational change claim that changes start from higher levels and are carried out by lower levels. That is, higher authorities set them as a priority and once the organization is in line and has a common vision, they are carried out mainly from lower levels upwards.

Promoting a renovation of culture does not imply destruction of the old one in order to impose an opposite one. This has to be understood as going back to key principles, eternal values and to give it a new life according to the evolution of all other aspects of the Nation.

HOW CAN WE ACHIEVE THIS?

In his essay about "The Learning Organization", José Guadalupe Vargas Hernández states that the "Learning Organization aims at taking advantage of knowledge in a social organization by means of proper management. This implies structural and behavior changes".

Here we find ourselves again with the concept of restructuration, not in a physical sense but in the sense of

"The centre of a society, economy and modern community is not technology. It is not information. It is not productivity. It is the institution conducted as the part of society that produces results".

getting a conceptual and mental openness that translates into the adoption of new specific behaviour of learning organizations⁴.

According to Sullivan and Harper, "commitment by all members of the organization" is necessary, bearing in mind that "the key issue is always people" and that organizations that reach a successful transition to the new times share the following ideals:

-) "A genuine passion for what they do.
- A sense of evolution rather than being accompanied by a sound sense of emergency.
- Clear vision that allows to take risks -to dare to be successful-supported by values and connected to the future by a strategic construction in which people believe.
- > Learning from everything they do
- A deep and lasting belief in people without which all words and good intentions lack sense"⁵.

In order to make this reform, the main points of this change must be supported by:

) Proper management: This is not only a responsibility of leaders that are at the top of institutions, but of any person who has any task, from the Head of the greatest unit within the organization to the most modern petty officer who is in charge of supervising daily activities. We need to permanently find the reasons why we need to make our efforts giving importance to all activities, even those that seem to be less complex and to communicate those reasons to those around us.

We can imagine an organization in which its leaders rethink the way in which its processes are carried out and state to their subordinates: How would you carry out

- 1. Drucker, Peter, Management Challenges for the 21 century, Harper Business, USA, 1999.
- 2. Kofman, Fredy, Metamanagment, Grito Sagrado, Buenos Aires, 2007.
- 3. Kofman, Fredy, op. cit.
- 4. Vargas Hernández, José G., La Organización Aprendiente. Hitos de Ciencias Económico Administrativas, pp. 19: 33-40, N° 19, September- December, Mexico, 2001. Available at http:// www.publicaciones.ujat.mx/publicaciones/hitos/ediciones/19/organizacion.pdf
- Sullivan, Gordon & Harper, Michael, La Esperanza no es un método, Editorial Norma, Bogotá, Colombia, 1998.

"The Learning Organization aims at taking advantage of knowledge in a social organization by means of proper management. This implies structural and behavior changes".

things if you had the power to decide and why would you change those procedures?"

Then, what these leaders must do is to manage said improvement, use all their knowledge and power within the organization so that it can be implemented, but not carried out. As Stephen Covey stated, they must "prepare for" but not fell trees. This will be done by operators of the systems they want to improve.

-) Commitment of everyone within the organization: when management previously mentioned starts to show results, although they may be little achievements obtained by the change proposed, the motto by Norman Schwarzkopf: "Failure may be caught but success is infectious"⁷.
-) The key issue is always people: these little achievements need to be obtained by actual persons. People who carry out right actions, transfer their knowledge and experience in a broad manner thus enlightening their surroundings and beyond. They are recognized for their contributions allowing to increase enthusiasm for achievements and using this to reach new horizons.

People must do their work in the best possible manner, caring at all levels for those around them (higher authorities and subordinates) so that they work as well as they can, congratulating them on right actions of those which we are responsible of and observing their mistakes privately respecting their feelings and desires.

When activities become repetitive, when we are far from our beloved ones, when the environment is uncomfortable or hostile, it is necessary to make people feel how important their work is, even if it is small tasks.

In more than one opportunity, it was necessary to remind those who cooked and cleaned in the air Unit deployed in Haiti that if they did not carry out their activities consciously, all staff could get sick and, therefore, the mission could not be carried out nor a rescue parachutist or a load assistant or our technicians could do maintenance and allow to put aircraft in flight lines. That is, everything could remain on land if plates were not properly washed.

People are the center of gravity in which not only money must be invested, but also time and dedication, it is necessary for subsequent generations to be better than the previous ones so that organizations can grow on a daily basis. Creativity must be promoted trying to improve and assuring that "punishment for failure is not greater than punishment for doing nothing".

) Joy for learning from everything they do: to listen and encourage proposals of all members of the organization, without disregarding any of them, as there are not improper proposals or questions, but wrong answers and attitudes, for example, not listening to those we think knowless.

Once it is possible to enjoy learning, a virtuous cycle opens at all levels because the one who teaches feels committed to deliver the best of them and, also, to learn from those who deliver their knowledge in those aspects of which they have less knowledge.

In order to give some light to these concepts, a professor from Harvard, David Garvin⁹ provides a broader definition of what a learning organization is: "It is an organization with the capacity to create, acquire and transfer knowledge and to modify their behavior new knowledge and points of view".

In order to structure what has been previously expressed in this type of "learning organization", it is necessary to take into consideration six aspects, according to Garvin¹⁰:

 To deeply understand the context of the task: this does not refer to mere comprehension and distribution of physical space. This action lies in the depth of the activities carried out by the organization and the different relations that exist in the organization and outside.

In order to get this knowledge, three different and additional tasks must be carried out:

- a) Research: to search information about the task that is being carried out on the Internet, books, journals and publications in order to improve them.
- b) Questions: sometimes deep knowledge of the tasks being carried out is found in the minds of the most experienced people. The important thing is to learn

Covey, Stephen R., The Seven Habits of Highly Effective People: restoring the Character ethic, Copyright Stephen Covey, USA, 1990.

Conference recorded on February 23, 1998, in Phoenix, AZ during the meeting of Amerisource Corp.'s Management Meeting. It was known as the "lesson of leadership by General Norman Schwarzkopf". Available at http://www.youtube.com/watch?v=ZgWCdqKyy-k

Thompson, Charles "Chie", La gran idea: guía práctica del pensamiento creativo, Ediciones Granica, España, 1994.

^{9.} Garvin, David A., "Building a Learning Organization", Harvard Business Review, July- August, 1993.



This task is far from being simple, it is actually hard and reflected in small things, small achievements from personal levels to the levels of a Department, then Direction and going upwards in size and complexity within the institutional ladder.

from them and try to leave documents for current and future generations.

c) Observation: it is very important to see what people do in their daily activities because many times for social or psychological reasons, some of them do not like to teach or show how they carry out their tasks.

To learn from best practices of other organizations: benchmarking is not only focused on copying best practices, or the best ways in which other organizations carry out the same tasks as oneself, this is also an intellectual inspiration. "food for thought", in order to

intellectual inspiration, "food for thought", in order to plan new improvement and to develop more current goals to be achieved.

2. To learn from their own experiences and their own history: all organizations have made mistakes as well as right things. It is extremely important to learn from

- both situations in order to strengthen positive attitudes and leave negative attitudes aside. As George Santayana stated: "Those who do not remember the past may tend to repeat it".
- 3. To experience new perspectives: it is not necessary to be in the business of advertising or to be a creative designer of a company in order to develop this aspect.

It is necessary to open our minds to new perspectives; this is an exercise that implies study and commitment. It is necessary to know existing paradigms in order to develop its changes or, why not, to make a revolution towards the opposite situation as circumstances and the use of different concepts change with time.

A guru of quality management, Walter Shewhart, worked for many years for Bell Telephone and the use of quality management in the military field.

During the years he worked at that company, he had to supervise the manufacture of the headphones that crews of bombers used during World War II for communication.

After studying through statistics the average of the cranium sizes of crew members, he realized that the average in the natural processes explain many things, but

^{10.} Garvin, David, Building a More Effective Learning Organization (Longer Version), National Advanced Fire and Resource Institute 2005- Organizational learning in Wild fire featuring Learning in Action, 2005. Available at https://www.youtube.com/watch?v=JoMNq4Tijto.

^{11.} Garvin, David, op. cit.

cannot be determining for individual cases because, as in this case, there are very few people who had an "average head size".

This is why he was able to prove, in the field of the manufacturing of these headphones, that most crew members found them big, or small and he devoted himself to design headphones with an adapting arch so that they could extend or get smaller within a huge amplitude around that cranium size. It was a breakthrough for those times during which everything had to be within average ranks.

Until Shewhart was able to persuade his bosses of that new perspective and to stop production in order to readapt matrices, thousands of headphones were delivered to flight crews that adapted them in the following manner: those to whom headphones were big flew with a cap and those to whom they were small used a small biretta. This can be observed in this picture of the film "Memphis Belle", a popular story about a B-17 Bomber missions in the European front during World War II.

4. To promote resolution of conflicts in a systematic manner: it is necessary to teach and promote the use of statistical methods, at least the most simple ones and the organization of information processes with the purpose of incorporating basic data that will be used to solve problems of our institutions, disregarding, as main method basis, intuition: "I think that we should more or less do this" and traditional habits: "this has always been done like this".

Moreover, it is useful to use the Demming cycle (known as PDCA circle) as it is an ongoing quality improvement tactic in four steps, based on a concept created by Walter A. Shewhart.

PDCA is the acronym for Plan, Do, Check, Act. Also, these four steps of the PDCA cycle were thoroughly developed by Japanese management that named



it "the seven steps of Quality Path" 12 in the implementation of Quality Circles in their companies.

This is a powerful tool used not only to solve problems, but to improve any type of task or administration.

It is divided as follows:

a) Plan

In this stage, it is necessary to:

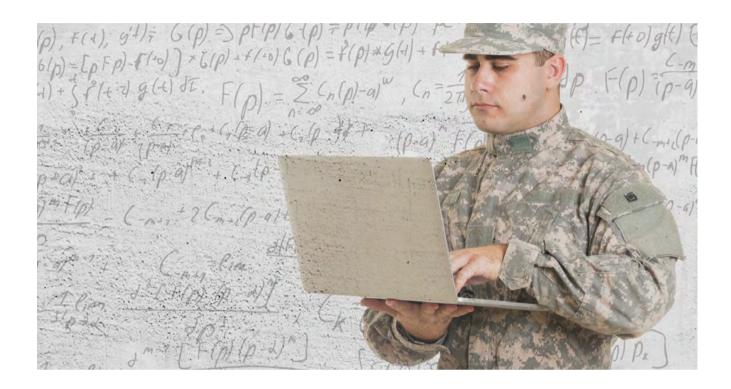
- 1) Select the topic to be dealt with
- 2) Understand the situation status and set a goal
- 3) Set the activities plan
- 4) Analyze causes
- b) Do
 - 5) Previously examine and then implement measures previously determined and that will solve the problem or allow for improvement
- c) Verify
 - 6) Assess effectiveness of what has been implemented and, if goals have not been reached, to try everything again (reexamine from step 1 and onwards).
- d) Act
 - 7) Having verified that goals to solve problems or improve systems have been achieved, it is necessary to set standards for the action and implement it in a permanent manner.
- 5. To transfer knowledge throughout the organization: as an example, in the military aeronautic context, it is usual, within what is known as "meeting prior to flight", the reading and discussion of resolutions of research carried out by boards of aviation accidents in order to spread knowledge of the causes of those accidents for the purposes not to repeat them.

Unfortunately, these events also bring painful lessons for the loss of lives and air materials. However, is it possible to do the same with right actions? How about spreading best practices from one context to another one carrying out an internal benchmarking process to provide the organization with "food for thought"?

Organizations that are similar to ours, such as the US Army, have the concept of AAR (After Action Review), "a method that allows them to grasp lessons from an event or project and apply those lessons to others"¹³, severe manner

Fukui, Ryu et.al., Total Quality Administration Manual and Quality Control Circles, Volume II, Japanese Development Bank, October 2003. Available at: https://www.inacal.org.uy/files/ userfiles/file/VII_%20ManualACTyCCC.pdfDesarrollo, Volume II, Japanese Bank.

Darling, Maryling et.al., "Learning in the Thick of It", Harvard Business Review, The High Performance Organization, July- August, 2005.



that is constant, permanent and used at NTC (National Training Center), where forces are being trained before being deployed to real combat field (known as BLUFOR) with an opponent that can change from conventional to irregular according to the criteria of the actual future opponent (known as OPFOR=US Army Opposing Force).

Lessons learned from those actions are spread all around the organization, without mentioning members as "guilty" of mistakes and it has been seen that when they are shown in public to those who make mistakes, they try to apologize for their mistakes and a very important step of the learning process is missed.

WE SHOULD START TODAY

Culture does not change from one day to the other. In order to create habits, it is necessary to constantly repeat ladder.
We should start today in a slow manner "no hurry and no pause" as tomorrow is waiting for us and we should account for our actions to our future generations.

good practices so as these habits may allow to become the

Also, change cannot be revolutionary; it must be small and

gradual so as not to change institutions that need to acquire

reflected in small things, small achievements from personal levels to the levels of a Department, then Direction and going

This is far from being simple, it is actually hard and

upwards in size and complexity within the institutional

organizational culture of people being promoted in the

institutional ladder until it turns into culture.

these changes in a rapid manner.

> REFEREED ARTICLE

Jorge Daniel Vilas

Vice Commodore of the Argentine Air Force. Staff Officer. Bachelor in Air and Aerospace Systems. He took the Specialization in Total Quality Management at Companies and the Master Core in Finance at Universidad del Salvador. He is currently serving as Head of the Course of Specialization in Operational Strategy and Joint Military Planning at the Joint Staff College.

Daniel Oscar Nuñez

Captain of the Argentine Navy. Staff Officer. Bachelor in Navy Air Systems. Organizational Coach graduated from Universidad del Salvador. Specialist in investment projects for Defense graduated from Aeronautic University Institute. Between 2010 and 2013, he served in Navy Plans taking part of the Military Capacities Project (1st cycle). He is currently serving as Student Coordination Secretary at the Joint Staff College.

RATIONAL DECISION AND INTUITIVE DECISION¹

The author analyzes methods of rational and intuitive decision as intellectual tools that an operational or tactical commandant may use when reaching the culminating point of the offense, making it necessary to make an unavoidable decision of changing his attitude or maintaining it. Moreover, the author points out the advantages of the intuitive method at tactical level and its relation with the "Commandant Intention" and the acquisition and preservation of the OODA loop (Observe- Orient- Decide- Act).

KEY WORDS: COMMANDANT/ CULMINATING POINT OF THE OFFENSE/ DECISION/ RATIONAL/ INTUITIVE

By Jorge Paulo Barrales

NTRODUCTION

When a commandant that conducts an offense (at operational or tactical level) must decide whether they keep it or stop it, there are factors at stake, among which we can highlight the following:

- \rangle The situation in which this commandant is with respect to the purpose pursued and his Culminating Point of the Offense (CPO)²
-) The alternative that doctrine establishes as reasonable (to continue or stop) for the case in question
-) The method for planning and decision used by the commandant
- > The commandant's personality

It is worth mentioning the concept expressed in journal Visión Conjunta in which the relation between the decision of the commandant and his CPO (valid for attack and defense): The importance of the Culminating Point lies in the fact that, when the military leader acknowledges to have reached it, this makes it necessary for him to make a decision, whether to change an attitude in order to avoid a likely failure, or to preserve what was maintained being aware of the risk implied ³.

Moreover, in order to analyze the situation, prepare alternatives, compare them and, finally decide, the commandant has two possible methods: a **rational** one and an **intuitive** one.

The Rational Method⁴ (which we can also call analytical) is based upon the Linear or Mechanic Method. This is the

methodology that is traditionally used in the Argentine Armed Forces and is taught at specific and joint level institutions, where it is used for the resolution of war games that colleges carry out.

The Joint Publication, Manual of Strategy and Planning for Joint Military Action, MC 20-01, describes this method as follows:

At tactical and operational levels, in general, the planning cyclical process is divided into seven stages that vary according to the didactic preciosity:

- 1) Analysis of the mission
- 2) Development of modes of action
- 3) Confrontation
- 4) Comparison of modes of action
- 5) Resolution and concept of operation
- 6) Fulfilling of plans
- 7) Supervision

Moreover, the Intuitive Method⁵ consists in acknowledging the key factors of the situation faced, associate them with similar factors of an equivalent situation in the past and to solve the present situation based on experience (military professional) of the past taken as reference. Also, this professional experience of the one making the decision comes from three possible sources:

- a) War experience (ideal but less frequent)
- b) Military training (war games with great reality and high requirements)



c) Critical studies of Military History⁶ (imposed by the teaching system or self-imposed).

Besides this, we need to take into consideration that the process of intuitive decision-making occurs in the subconscious, where the decision maker may not realize that this is happening and, therefore, leaders (commandants), must get experience so as to have a solid database in their subconscious?

Professional experience is key to make intuitive decisions but it is also necessary for the decision- maker to have some inherent *cup d'oeil*, improved by training in decision- making with this method.

With respect to the *cup d'oeil*, the document mentioned before, *Developing Intuitive Decision-Making in Modern Military Leadership, describes it as: the capacity to view and quickly understand the battlefield, find out "the truth" and from*

there, determine a proper mode of action and have the moral strength to carry it out to the end. Considering time restrictions, uncertainty and chaos of combat situations, the development of the cup d'oeil in commandants becomes an obligation.

RATIONAL DECISION IN THE ATTACK CAMPAIGN

When the Operational Commandant considers that the Attack Culminating Point has been reached⁸, it will be easy for him (from his military psychology) to decide to change his attack operational attitude for a defensive one given that "Clausewitz's theory" supports⁹ this as it considers it a right decision to preserve his declining power of combat and to keep what has been gained up to that moment.

This concept is also supported by the fact that in the Culminating Point of the Attack, the power of combat of the

- Author's note: For extension purposes, this will be developed only from the side of the attacker limited to operational and tactical level.
- Ministry of Defense; Joint Staff of the Armed Forces; Argentine Republic, Manual de Estrategia
 y Planeamiento para la Acción Militar Conjunta, Nivel Operacional La Campaña, MC 20- 01, 2013
 revision, Chapter III, section 3.004.3
- Barrales, Jorge, "Culminating Point and End Desired State", Visión Conjunta, year 5, No. 9, Joint Staff College, Buenos Aires, 2013.
- Ministry of Defense; Joint Staff of the Armed Forces; Argentine Republic, op. cit., Chapter VI, sections 4.02 and 4.03
- Mc Cown, Neil R.: Developing Intuitive Decision-Making In Modern Military Leadership, Naval War College, 2010.
- Gen Charles C. Kulak (USMC): "Mere reading of history is not enough to form a basis of experience to support the intuitive decision- making method, leaders must critically examine relevant decisions that were made in fact".
- 7. Mc Cown, Neil R.: op. cit.
- 8. Barrales, Jorge, op.cit. The Attack Culminating Point is the time and space situation in which the actor/s that had an attack operational attitude within the theater of operations must, at least, adopt an "operational pause" or change to a defense operational attitude in order to maintain the capacity to comply with end criteria corresponding to the Operational Desired End State.
- 9. Clausewitz, Carl Von, On War, Book VII, Chapter 1, "The Attack", Editorial Labor, Barcelona.

attacker, even if it is greater than the opponent, it is not so in the extent necessary so as to achieve the Operational Desired End State with some reasonable expectation of success ¹⁰.

Before making this decision, the Joint Staff would have advised the Commandant regarding the situation of his remaining power of combat considering the concurrent effect of the enemy action, the characteristics of the theater and "friction" of their own system. Also, the balance between power of combat to be recovered by means of an operational pause 2 and the tempo3 to be given up because of it would have considered, as well as the implications this has on the initiative, which should be in the hands of the one who is on the attack side. Moreover, the Intelligence area of his Joint Staff would have considered the likely situation of the defender with respect to his Culminating Point of the Defense, trying to reduce the "fog" surrounding this aspect.

Apart from this, when the Operational Commandant considers that he has not reached his Culminating Point of the Attack, it will be easier for him to keep an attack operational attitude because whatever theory has prescribed as correct for this case is happening.

Last, it is also possible to consider that the decision of the attacker to keep their attack operational attitude when they went through their Culminating Point of the Attack without noticing it is rational, regardless of the fact that subsequent events show the mistake.

This possibility is supported by this concept given by Milan Vego: At Operational Strategic level, it is extremely difficult to determine in advance when the Culminating Point is going to be reached as there are many factors that determine them. At this level, which is different from the tactical one, this is only perceived in retrospect, that is, after it has occurred ¹⁵.

RATIONAL DECISION IN THE TACTICAL ATTACK

For tactical commandants that, in the context of an offensive operational campaign, conduct battles and combats, it is simpler to know how they are located with respect to their Culminating Point of the Attack given that indicators to determine this situation are more concrete and evident than at operational level, and it is, therefore, more difficult for these commandants to go through their Culminating Point of the Attack without noticing it.

To analyze the situation, prepare alternatives, compare them and, finally decide, the commandant has two possible methods: a rational one and an intuitive one.

It is worth mentioning that battles are given within campaigns and combats within battles. Moreover, the difference between both of these is seen in the definitions of the Argentine Army doctrine and the Glossary of Joint Terminology¹⁶:

-) Battle: tactical act consisting in the violent confrontation between two enemies of great magnitude, through which at least one of them will aim at substantially modifying the operational situation. Normally, this will be the most important episode of a campaign which may be solved.
- > Combat: violent tactical action between two forces of relative importance, the results of which may or may not be decisive for the resolution of the battle.

Moreover, as from the comparison between "operational pauses" that take place between battles with "combat pauses" that occur within battles and combats, we can deduct that:

-) Logistical nature is a priority in operational pause and tactical nature is a priority in combat.
-) Operational pause affect "operational tempo" and combat pauses affect "tactical tempo".
- > Combat pauses within combats are shorter than operational pauses within a campaign.
-) Combat pauses within combats are shorter than those that occur within battles (between two subsequent combats) and may result in the irreversible loss of tactical initiative in said combat.

When the Tactical Commandant that conducts a battle (or a combat within a battle) has reached their Culminating Point of the Attack after having used the "combat pause", the doctrine will support their decision to adopt a defense tactical device in any possible way (mobile defense, area or mixed)¹⁷, given the low chances of success that theory assigns in case the attack continues.

- 10. Ministry of Defense, Joint Staff of the Armed Forces, Argentine Republic, op.cit., Chapter III; section 3.03.1. Operational Desired End State: "Situation of events desired at the end of military actions in the theater of operations".
- Pertusio, Roberto, Operational Strategy, Navy Staff College, third edition, Chapter 9, 2005. Friction: negative effects over one's own manoeuvre produced by mistakes caused in one's own system.
- Ministry of Defense, Joint Staff of the Armed Forces, Argentine Republic, op.cit., MC 20-01, Chapter III. Operational pause: temporary pause of certain activities during a Campaign or in one of the Lines of Operations of its operational design.
- 13. Ministry of Defense, Joint Staff of the Armed Forces, Argentine Republic, op.cit., MC 20-01. Tempo: Pace of one's own operation with respect to the adversary which, when favourable, it contributes
- to the keeping of the initiative, Chapter III.
- 14. Pertusio, Roberto, op.cit., Fog: Uncertainty caused as from what is unknown about the enemy.
- 15. Pertusio, Roberto, op.cit., Quoting Milan Vego.
- Argentine Army, Rules of Conduction for Land Military Instrument, ROB -00-01, Chapter I, Section IV and Chapter V, Section II. Joint Staff of the Armed Forces; Glossary of Terms of Military Use for Joint Military Action; PC-00-02; Project (2010).
- Argentine Army, op.cit., ROB-00-01, Chapter VI, Section II, "Defense Operations- Defense Dynamic", counter- attack, dismantling attack, limited-target attack, delay action and other attack procedures (such as ambush, coup de force, incursion, 1992).

As regards the Staff, they will follow the guidelines mentioned for the operational level and their advice is of particular relevance as regards the use of means that are part of the defense dynamics¹⁸ once the decision to go to defense has been made.

Moreover, when the Tactical Commandant considers that they did not go through their Culminating Point of the Attack, as in the case of the Operational Commandant, the doctrine decision will be to continue their tactical attack in light of the possibility of "exploitation" and willing to make a "pursuit" if there are no restrictions for that imposed by Operational level (possibly caused at Military Strategic level).

INTUITIVE DECISION IN BATTLE AND COMBAT

Given that at tactical level, events occur faster than at operational level (and combat pauses are shorter than operational pauses), there will be more occasions for "intuitive decision" (*Coup d'oeil*) to replace the detailed analysis that takes place before a rational decision.

Intuitive decision-makers are those capable of "seeing through war mist", which can never totally disappear in spite of good means available to attempt to do so. Outstanding characteristics of these decision-makers are:

- > High self-confidence (including confidence in their luck)
- > Confidence in their subordinates
-) Capacity to recognize essential elements of a problem
-) Capacity to decide intuitively under stress and high uncertainty developed with practice (among others, exercises, simulation, war games) and supported by experience, doctrine and procedures.
- Capacity to recognize when conditions to apply doctrine stopped existing and decide to leave them aside being aware of their implications.

Moreover, the intuitive decision- maker will be willing to solve when they find their opponent lacks some or all of these characteristics.

On the other hand, this decision-maker must be aware of the fact that: The mode of action selected intuitively may not be the best as they will have to be willing to adjust it when necessary²⁰.

The three following cases may be examples of situations in which the tactical commandant involved must decide intuitively:

Cup d'oeil, is described as the capacity to view and quickly understand the battlefield, find out "the truth" and from there, determine a proper mode of action and have the moral strength to carry it out to the end.

) The Commandant recognized to have gone through their Culminating Point of the Attack but they know that if they stop their attack, the impact on the troops morale will be negative and they will have to choose between preserving the material or moral component of their power (which is encouraged by both of them in a proportion the commandant knows or presumes)²¹.

As a result of prior combat actions, the attacker and defender reached their respective Culminating Points, and there is a simultaneous combat pause (which would leave initiative in their hands), and which may be broken by the attacker resuming attack with some limitations; or the defender may do the same through defense dynamics with the likely exception of counter- attack force which, in this situation, may be reconstructed. If both of them apply the Intuitive Decision method, the one with greater experience will need less time to find in their professional memory the proper mode of action, winning the OODA loop against their opponent²².

In the context of a Decisive Point²³, a minor group of the attacking force must choose to immediately attack a greater group of the enemy defense system and surprise it or wait for a great part of the force and change the principle of surprise for the mass principle. Although the Commandant of this group is not at the beginning of a Culminating Point of the Attack, the fact that they must decide "within a Decisive Point" makes its resolution be relevant and difficult as they have to choose between two principles of war which, in this case, are mutually excluding each other.

^{18.} Argentine Army, op.cit., ROB-00-01, Chapter VI, section II.

^{19.} Argentine Army, op.cit., ROB-00-01, Chapter VI, section I, Attack Operations. Exploitation: Attack Operation aimed at fully using a favorable situation (as a result of a successful combat or a vulnerability found in the enemy device) and change local success into one of greater proportions/// Pursuit: attack operation the purpose of which is to destroy an enemy force that aims at withdrawing.

^{20.} Mc Cown, Neil R., op. cit.

^{21.} Barrales, Jorge, op.cit., Despite the fact that "disobeying" the Culminating Point usually leads to failure, circumstances such as good fortune, a brilliant feeling, physical or mental impossibility to

change or simply not realizing that this point has been reached may lead a conductor to go through it and get success illegally.

Ministry of Defense, Joint Staff of the Armed Forces; Argentine Republic, op.cit., MC 20-01, Annex 5, article 2, 00DA loop: Observe- Orient- Decide- Act.

^{23.} Ministry of Defense, Joint Staff of the Armed Forces; Argentine Republic, op.cit., MC 20-01, Chapter III, Decisive Point: Condition that, once reached, allows to get a significant advantage against the opponent and strongly influence on the result of an operational maneuver or the Campaign. Each Decisive Point is a milestone in the way to the enemy's Center of Gravity.

CONCLUSIONS

With reference to the rational method

- 1) This is the most proper one to develop the design of the campaign, allowing for the correct distribution in it of the elements of the operational design that support it²⁴. The reason for this is that it is the one that best fits the structure of military thinking despite the fact that two other more recent methods challenge its supremacy (Effectbased Operations and Systemic Operational Design) at operational level.
- 2) The main weakness of the Rational Method, particularly at tactical level, lies in its rigidity and slowness to face unforeseen situations of this level during the development of battles and combats²⁵. This will be shown when the tactical commandant has to solve "in the surroundings" of their Culminating Point. Additionally, and given the importance that analysis of information has in this method, when there is a huge amount in little time, it is difficult to distinguish what is important from what it is not²⁶.
- 3) The Culminating Point of the Attack is a very important part of the operational design of the campaign which imposes the making of a decision for the (undesired) case of being reached in advance before reaching the objective. Moreover, the operational design has other points called "Decision Points" which represent a timespace circumstance which appeared during stage 3 Confrontation and which show that only the need to make a decision (without determining its characteristics)²⁷.

On the other hand, "Decision Points" marked with a star must not be confused with "Decisive Points" marked with a triangle defined as stated by doctrine²⁸.

With reference to the Intuitive Method

- 4) At tactical level, according to what has been stated in 2), where uncertainty is high and times to decide are short, the Intuitive Method fits better than the rational one. If both methods are confronted in the context of a battle or combat, the "intuitive decision-maker" will normally lead the OODA loop.
- 5) For the making of decisions by tactical commandants, whether near the Culminating Point or in similar situations, the ideal combination will probably be: decide intuitively within the "Intention of the operational Commandant" which designed the campaign that involves

them. The "Intention of the Commandant" was formally included in our doctrine as a link between the Mission and the Concept of Operation.

With reference to the training of Officers

- 6) Military History: studies should be extended to have critical sense (situation, decisions and their consequences) in order to give officers a proper professional database which to resort to when they decide intuitively.
- 7) **Intention of the Commandant:** this concept is already part of the planning guidelines that are given to student officers at training schools and of contributing guidelines they also give. However, there is still the need to train early in the use of resources given by the Commandant.
- 8) Intuitive decision: the capacity to decide soon with little information and high stress as to important aspects for the success of operations, must be developed, especially, at tactical level.
- 9) Tactical training: tactical exercises (at office and on the field) to be carried out at specific colleges and operational units are the most proper tool to cover aspects mentioned in conclusions 7) and 8). For the case of intuitive decision "counterpart" exercises are particularly useful. Additionally, this will represent a benefit for Higher Officers that conduct these exercises at the units, giving rise to a professional culture which, in light of the lack of resources, has suffered a "withdrawal under pressure", which trainers of officers must not allow to become a withdrawal.

Jorge Paulo Barrales

Captain (retired). Malvinas War Veteran. Bachelor in Navy Systems. He took part in combined exercises "Unitas", "Fraterno Anfibio" and "Fleetex 96", in the latter he prepared specific and joint doctrine. He took part, within the framework of the United Nations, of missions in Angola and Haiti. At the Navy Officers College he served as Head of the Marine Corps Division and, later, he served as Academic Secretary while serving as professor in both positions.

Since 2008, he serves as professor of Planning at the Navy Staff College.

Ministerio de Defensa, Estado Mayor Conjunto de las Fuerzas Armadas, República Argentina, op. cit. MC 20-01. capítulo IV. artículo 4.02..

Ministerio de Defensa, Estado Mayor Conjunto de las Fuerzas Armadas, República Argentina, op. cit. MC 20-01, capítulo IV, artículo 4.02.

^{26.} Mc Cown, Neil R.: op. cit.

^{27.} ADP 5-0 "The Operations Process- Army Doctrine Publication", Headquarters -Department of the Army, Section II, Terms "Decision Point": "A point in space or time the commander or staff anticipate making a key decision concerning a specific course of action", JP 5-0 Joint Operation Planning, 2011.

^{28.} Ejército Argentino, op. cit., ROB-00-01, capítulo VI, sección I.

Ministerio de Defensa, Estado Mayor Conjunto de las Fuerzas Armadas, República Argentina, op. cit. MC 20-01, capítulo III, artículo 3.03.1.

STRATEGY VISIÓN CONJUNTA NÚMERO 1;



Though effects- based operations started to be used as a method for planning at the beginning of the 90's, its conceptual application has been used by great military commandants during History. However, after the Persian Gulf War, 1991, some authors presented this type of operations as an alternative to the traditional way of doing war, the main method of which was based on objectives. This article tries to establish differences, similarities, advantages and disadvantages of both concepts in order to go deeper in a topic that is an essential part of planning and, in particular, at operational level.

By Luciano René Moscatelo

KEY WORDS: OPERATIONS / OBJECTIVES / EFFECTS / COMPARISON / ADVANTAGES / DISADVANTAGES / MALVINAS

NTRODUCTION

In the History of War, victory has been sought in two ways.

The first of them and the one that General Deptula mentions in his work¹ is annihilation through the destruction of the enemy. The second one is to exhaust the enemy before they do that with us, a concept called war of attrition. With relation

to the traditional manners to think war, the initial idea of the operations method based on effects or effects-based operations (EBO) proposes a new perspective of the topic, based on the fact that the main purpose of a war is to change the behavior of the enemy and the way to do this is not destruction or physical damage of the target, but the effect of the action on it.

During the 90's and the first decade of the 21st century, effects- based operations were implemented in an ongoing and systematic manner, not only in Western air forces, but they also started to take part in joint and combined operations and were implemented in an integral manner in the Armed Forces of the United States and military forces of the North Atlantic Treaty Organization (NATO). In this way, the planning, conduction and execution system for them was tested in several conflicts which took place during said period.

After the Kosovo War, during which EBO were used in planning operations, new questions as to this concept appeared. First, there were doubts as to their effectiveness in the application for joint operations in which land forces take part and, also, as to the fact whether they are an alternative or supplement of objectives- based operations (OBO).

Said facts led to a strong debate at doctrine centers in the United States as to the convenience to continue with the concept of EBO in joint operations.

In 2008, General Mattis from the Joint Forces Command stated: My opinion is that EBO have been wrongly applied and have extended too much to the extent that, actually, they are an obstacle instead of helping joint operations². On the contrary, the United State Air Force (USAF) continues their research and has deepened the implementation and teaching at all levels.

Because of this, there are clear problems that have been caused after the use of effects- based operations. This leads to wonder what effects- based operations and objectives-based operations are and what differences they have.

ORIGIN AND EVOLUTION OF EFFECTS-BASED OPERATIONS

According to different authors, such as Edward Smith, the work of whom is analyzed in this article, we cannot state that effects-based operations appeared in the 21st century, in fact, they were systematized as from the Persian Gulf War but they have been applied throughout history.

We can mention Sun Tzu as the first one who expressed a principle based on effects when he stated:

Therefore, the ones who are truly skillful at war subdue the enemy army without a battle, they seize enemy cities without attacking them and they take the enemy state without long campaigns³.

Many years later, the British Colonel Basil Liddell Hart in his work The Strategy of Indirect Approach proposes maneuver aimed at getting the best conditions to defeat the enemy without producing a decisive battle, a concept related to an Eastern philosophy of understanding war.

It is true that as regards the appearance of EBO as applied and developed methodology with the purpose of being used in military operations, Brigadier General According to Smith, the effect needs to be created so that the observer may get involved in the decision-making process and to react according to what has been expected. This reaction of the enemy is subject to a series of factors such as culture, mental model and experience and training of the observer.

David Deptula is one of the pioneers in the concept of this type of operations.

After having served as part of the Staff of the Air Component of the Military Coalition during the Persian Gulf War, he published Firing for Effects, edited in the year 1995, in which he presents part of this theory.

Deptula's concepts are based upon three main elements:

- 1. Development of technology applied to war, such as furtive aircraft and precision weapons
- The concept of war in parallel developed by USAF Colonel John Warden⁴
- 3. Planning of effects to be obtained

The result of these three statements results in the concept of EBO, in which the effect to be obtained over the objective is more important than its destruction.

The progress of new technologies applied to war produced a series of changes in its development. Furtive aircraft, the increase in efficiency of electronic war aircraft and the appearance of command and control aircraft in real time of combat meant, for Deptula, an evolution in the nature of war⁵.

Deptula gives an example of real planning during the Persian Gulf War, 1991, in which a certain amount of planes was necessary to destroy Iraqi bunkers, anti- air defense and their missiles. This author stated that with furtive aircraft, it was possible to carry out the same operation though with less aircrafts and in a more efficient manner. Therefore, it was concluded that in an air journey, it was possible to obtain

Deptula, David A., Effects- Based Operations: Change in the Nature of Warfare, Arlington, Virginia, 2001, p. 1.

^{2.} Mattis, James N.: USJFCOM Commander's Guidance for Effects- based Operations, 2008, p. 21.

^{3.} Galvany, A. Sun Tzu. The Art of War, 8th edition, Madrid, Spain.

^{4.} USAF Colonel John Warden created the model of "five rings" and applied it in Instan Thunder, the air operations plan of Desert Storm. Subsequently, he expressed his ideas in the essay "The enemy as a system".

^{5.} Deptula, David A., op.cit.

the same effect with a smaller number of planes and without destroying the whole system.

With respect to war in parallel, Deptula describes two types of related military operations according to time and which may be summarized by means of an analogy with the operation of an electrical circuit.

While series operations need to affect an objective in order to reach the following, operations in parallel tend to affect all circuits at the same time (Figure No. 1). This allows to obtain immediate effects over different systems of the enemy.

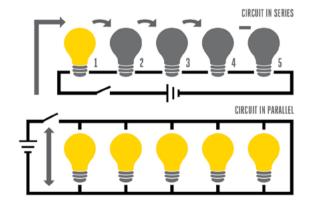
These operations in parallel must be carried out through a simultaneous attack to the enemy's defense system and they must even be carried out, according to his opinion, simultaneously over all the enemy's power centers or the so-called Warden's five rings, resulting in a simultaneous-parallel attack to cause the strategic paralysis of the enemy.

As any theory that evolves with time, Deptula took the two concepts described before by other authors. Operations in parallel were described by Colonel Warden and strategic paralysis by Basil Liddel Hart. Deptula related these concepts with the effects in order to get an objective.

This led him to infer that by means of tools described, it was better to plan pursuant to exit data of military actions (results to be obtained), that is, according to the effects this action produced or would produce on objectives rather than the simple search for its destruction. This is where the third element of his theory appears: planning based on effects.

According to Deptula, effects- based operations are based upon the concept of enemy control, in which success is not measured by the application of force on the objective, but the effect that this application produces and to the extent this effect allows to get control of it.

FIGURE NO. 1: CIRCUIT IN SERIES AND PARALLEL'



Source: Deptula, David, Effects- Based Operations: Changes in the Nature of Warfare

Last and to sum up his ideas, Deptula sees destruction as one more resource to get control of an enemy. *Destruction should have the purpose of getting effects over enemy systems, not necessarily destroying the system, foreseeing its use according to the enemy's desires*⁶.

This theory was applied, first, by the United States Air Force (USAF) for the selection and assignment of targets in air operations and, later on, due to its effectiveness, it was modified and reached other armed forces.

EVOLUTION AND INTEGRATION OF EFFECTS- BASED OPERATIONS

According to different authors, the concept of these operations evolved with time and led to the confusion that exists nowadays.

Colonel Guillem Colom Piella states:

Effects- based Operations, which had started as a new way of selecting targets to be attacked and evolved to an original operational philosophy were then consolidated as a new approach to operations that was part of the different tools at the state's disposal with the purpose of offering a coherent and satisfactory response to any international crisis.

This led to frame these operations as a new tool in the so-called Revolution in Military Affairs developed in the United States and to group them in the defense policies that appeared in the 90's, such as the Network Centric Warfare, Rapid and Decisive Operations or Rapid Domination⁸.

The inclusion of EBO in other concepts used as a tool for defense policies and concepts which are even more global or general and at national strategic level, gives rise to confusion as to effects- based operations.

Having analyzed the historical and conceptual framework in which confusion of EBO appears, we will try to analyze them from the point of view of the author Edward Smith. This author, in his book EBO: Applying Network centric warfare in peace, crisis and war, explains and applies them, in theory, to a systemic process for their use in any type of operations and conflict situations against a certain actor.

Smith tries to reach the concept in an inductive manner, from the definition of terms and he first defines EBO as: a coordinated group of actions aimed at determining the behavior of allies, enemies and neutral persons in times of peace, crisis or war⁹.

- 6. Galvany, A. op.cit.
- Guillem Colom Piella, "The evolution of the operational concept based on effects", Política y Estrategia Journal, Chile, 2012.
- According to authors Harlan K. Ullman and James P. Wade, rapid domination is the attempt to
 affect will, perception and understanding of the enemy to fight or respond to our strategic
 political purposes through the imposition of the Schock and Pavor regime.
- Smith, Edward A., Effects-based Operations: Applying Network Centric Warfare in Peace, Crisis and War, Washington, DC, Command and Control Research Program, 2006.

Different commandants applied the general concept that leads them knowing the importance of understanding causal relations of war and considering that destruction of the enemy is not the only way to reach the objective.

This concept is based upon three general elements:

- General theory of systems: it was included in the concept of effects, which is clearly represented in the so-called cascade effect, a series of events (whether foreseen or unforeseen) because of an event that affects one component of the system.
- 2. Effects- based operations may be applied at all levels of war and in all contexts of national power. According to Smith¹⁰, these levels are not measured by weapons used or targets attacked, but by desired effects.
- 3. Effects may not only be applied to the physical context (selection of targets), but to the behavioral-cognitive context (psychological). According to Smith¹¹, human behavior is the result of a stimulus-response which is not necessarily focused on the destruction of or damage to the enemy. This behavior occurs in the cognitive rather than physical area as when a person reacts to stimulus because understanding the situation and making a decision are processes that are developed in this area of human understanding, the control of the enemy and obtaining effects must occur in the psychological context.

This author analyzes the cognitive cycle, he relates it to effects and proposes a cycle and actions that help understand this concept, a cycle that is implemented in any situation in which EBO need to be applied.

According to Smith, the effect needs to be created so that the observer may get involved in the decision-making process and to react according to what has been expected. This reaction of the enemy is subject to a series of factors such as culture, mental model and experience and training of the observer.

Prediction and analysis of how physical actions cause effects in behavior (that is, results of actions) is the main challenge of the system proposed by Smith and this is the origin of the concept confusion in which effects- based operations are based.

The concept of effects- based operations has evolved and what Colonel Guillem Colom Piela expressed has been shown by different authors who have dealt with the subject.

EBO went from a context that is merely tactical and the material field (represented by the selection of targets), to a national strategic level and, also, the psychological field represented in the fact of inducing behavior (to create the effect) to the enemy strategic conduction.

This method, applied to all power factors, leads to think that operational level becomes less important in decision-making and that planning the solution of conflicts is defined at the highest national level.

We could say that operational level is the mere doer of operations. From a different perspective, execution shall be in charge of a fight for operations between the operational and tactical level.

HISTORICAL EXAMPLES FOR APPLICATION

From what has been said, we could state that effects-based operations were applied by different commandants throughout history. Although planning was not subject to a process such as EBO are today, different commandants applied the general concept that leads them to know the importance of understanding causal relations of war¹² and considering that destruction of the enemy is not the only way to reach the objective.

This is the reason why we will try to describe, by means of military operations that have taken place throughout history, the use of some concepts of effects-based operations, without them being systematized and showing their natural existence as an operational concept.

Battle of Marathon (490 BC). This is a clear application of the strategy of effects- based operations.

In times which may be considered the origin of strategy, King Dario I from Persia, who at that time had domain over all Asia Minor, in order to punish Athens due to the riot that took place in the region, took his troops to Marathon, located 40 kilometres away from Athens, thus preventing a direct attack to this city.

The strategy consisted in attracting people from Athens to Marathon so that they first leave the city empty. Persians, protected by a security force, would take their vessels again to the army and would then land on the rearguard of the city of Athens.

The plan was more complete, Persians, apart from this movement, had spies in the city and had had negotiations

^{10.} Smith, Edward A., op. cit.

^{11.} Smith, Edward A., op. cit.

Hunerwadel, J. P., "El Método de Operaciones Basadas en Efectos (OBE) Preguntas y Respuestas". Air & Space Power Journal, 2006.

with the Athens ultra- democratic followers, who opposed the government of those times that would cause a riot, thus leading to general chaos and, also, they would give the signal to disembark Dario's army.

In spite of the fact that the maneuver was not successful for different reasons, we can see a perfect demonstration of an indirect approach strategy so that they adopt an attack attitude to later attack on the smaller expectation and less resistance line, supported by a deceitful maneuver.

We can see how the indirect approach explained by Liddell Hart¹³, finds an example in a battle of ancient times and, also, relates this concept to one of the main principles of EBO which is to try to prevent direct confrontation and produce effects without the decisive battle.

Malvinas War. The sinking of the ARA Grl Belgrano vessel is the example with which we try to show the concept of cascade of effects (from the first to third order) which occurred when this war started.

We analyze by means of a chart how this action may have been planned by political-military conduction of the United Kingdom of Great Britain based on effects to be achieved.

On May 2, 1982, the ARA Grl Belgrano vessel was sunk, the order to do this was issued by the highest political level of the United Kingdom according to different sources¹⁴. Although the reason is not to analyze events that took place or the degree of acceptance of the mission, only and as an example, we express what could the planning by the United Kingdom of navy actions by the Command of the Theater of Operations of the South Atlantic have been.

It is true that in spite of having some imbalance of power of relative combat, Argentina tried direct confrontation with the fleet. The United Kingdom surprisingly, although they had more personnel, did not do that. According to the assumption made in this work, they decided to search for a navy action in the tactical field which not only led to victory on the navy component, but also produced effects at all levels of war conduction.

In Chart No.1, we can see the operations plan of the navy component which included a war of attrition aiming at direct confrontation with the fleet.

However, if we analyze Chart No. 2 which represents an alleged planning based on effects by the United Kingdom, the

It is true that in spite of having some imbalance of power of relative combat, Argentina tried direct confrontation with the fleet. The United Kingdom surprisingly, although they had more personnel, did not do that. According the assumption made in this work, they decided to search for a navy action in the tactical field which not only led to victory on the navy component, but also produced effects at all levels of war conduction.

same desired effect was obtained by sinking only one vessel.

The difference between both actions lies in the concept that:

A method based on effects starts with desired results, the end state, objectives and then determines the necessary resources to achieve them. It does not start with capacities or particular means and then decides what they can achieve with them¹⁵.

If we change the order of effects of Chart No. 2 and we start with planning at national strategic level with the search for effects described therein and we keep on planning effects in a decreasing manner at conduction levels according to assumptions adopted and planning based on effects to be obtained, we can conclude that the sinking of a vessel causes all effects expressed.

CHART NO. 1 OPERATIONS PLAN NO. 02 "S" "TASKS FORCE 79"

Capacities of the ENEMY:

- Isolate the Islands by means of submarines, blocking with surface and air units
- 2) Try recovery
- 3) Exhaust one's own forces

Mission: Dexhaust, neutralize or destroy, in a favorable situation, units of the enemy in order to consolidate the island area, prevent recovery by the opponent and support Military Government actions.

Navy means: exhaust, neutralize or destroy, in a favorable situation, surface means of the enemy.

Air means: attack surface and air units with conventional weapons and air-surface missiles.

Source: Commission for Analysis and Assessment of Political and Military Strategic Responsibilities in the South Atlantic Conflict.

^{13.} The example was taken from the analysis of the Battle of Marathon that Liddell Hart states in his book The Strategy of Indirect Approach.

^{14.} The government of the United Kingdom revealed more than 3500 internal documents in which they see the strategy of the Prime Minister Margaret Thatcher during the conflict of Malvinas Islands and the details of the decision to sink the General Belgrano vessel. Available at http:// www.telam.com.ar/notas/201212/2755

Carey, Steven and Read, Bobyn, Five Proposals referring to Effects- based Operations, 2006. Available at www.airpower.maxwell.af.mil/apjinternational/apj-s/2006

Although this action would be difficult to be imagined, we cannot avoid identifying the fact that if it had happened in that manner, it is clearly an operation planned based on effects that become effects of first, second and third order, whether direct or indirect, desired and undesired, tactical and strategic and, most importantly, at all levels of war, we are clearly talking about effects- based operations.

The sinking of the ARA Grl Belgrano vessel caused a cascade of effects which have been partially described in Chart No. 2. The most important thing to highlight is the manner in which it was done complying with almost all maxims or principles of what effects- based operations are nowadays.

We only need to ask: could this operation have been planned with any planning method based on effects?

PLANNING METHODS BASED ON EFFECTS

Planning methods based on effects are, nowadays, the result of ongoing and complex research in the most different fields of science, such as Mathematics and Psychology.

There is not much information or bibliography available about methods, mainly because they are secret as stated by the states that have them or because they have been developed by companies that do research on defense issues, the knowledge and publishing of which is prohibited for different reasons. In spite of this, some authors have developed the general analysis of how a planning model based on effects has to be implemented in a structured manner and how it has to be applied in

CHART NO.2 "CASCADE OF EFFECTS"			
	1 st Order Effect Tactical Level	2 nd Order Effect Operational Level	3 rd Order Effect Political Level
EFFECT	Sinking of ARA Grl Belgrano vessel	Loss of Tasks Force 70.3	Induce Argentina to enter this armed conflict
		Loss of Navy Initiative	
		Delivery of Sea Domain	Stop diplomatic means
		Logistical Isolation of Island by maritime means	
		Withdrawal of the greatest part of the navy component of the conflict	Induce to make wrong decisions due to the desire of reprisal
		Morale decline	
		Distrust among components	Disorganize national conduction by means of distrust
		Loss of strategic exploration capacity	

Source: prepared by the author based on the concept of cascade of effects by Edward Smith.

complex situations for the resolution of operational military problems.

The first thing to be taken into account is that effects-based operations are not, on their own, a planning method. They are a concept or philosophy of operation that must be included or designed so as to work "within" a method.

We can make an analogy with operational art and planning method (in which it may be included).

The method proposed by Edward Mann and Gary Endersby, in their publication Thinking Effects Effects-Based Methodology for Joint Operations is a process to carry out planning, execution and assessment of effects-based operations at operational level.

Without trying to explain the whole sequence of the method, the first step focuses on the identification of national targets and relates to the next one, the identification of what factors or national power have the capacity to reach or contribute to the achievement of those objectives, which the main part of the planning process.

Other methods are based on predictive mathematical models and tools to predict the enemy's behavior which in spite of not being free access software, it is possible to have an idea of how they work in general, such as in the case of the model proposed by Maris McCrabb¹6 which is shown in figure No. 2.

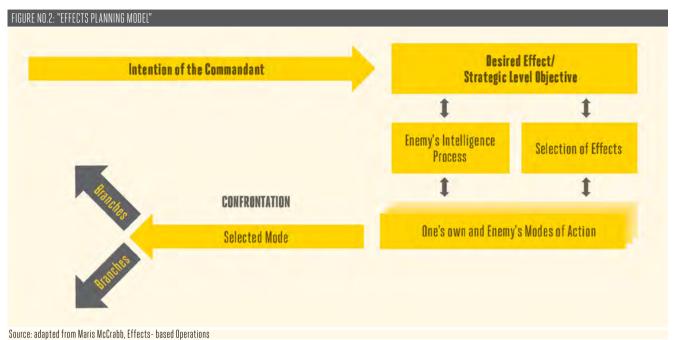
The model basically works with an intelligence process of the enemy (IPB). This is a systematic and continuous process for the analysis of threat and environment in a certain geographical area which has the result of determining possible Modes of Action of the enemy.

This Mode of Action of the enemy is subject to confrontation with one's own Mode of Action, done with the technique of Wars of Game with predictive and statistical models together with the enemy's behavior models. As a result, we get different parts of actions that may be taken by one's own force or the enemy's forces.

Moreover, we have to state that the implementation of this type of planning is of high complexity and requires tools, methods and complex and difficult analysis means.

Despite all of this, we have to say that these methods, tools and means exist nowadays and are used to produce

EBO in their highest degree of evolution include effects in the psychological domain of the opponent, which extends the context of operations to another level, and other types of operations, such as psychological war, appear.



effects at all levels of war and to achieve, in this manner, a change in the behavior of the enemy imposing our will.

COMPARISON, ADVANTAGES AND DISADVANTAGES

In order to make a comparison between effects-based operations and objectives-based operations, we need to first state the differences and similarities between both concepts and define them within a planning context at all levels and, in particular, at operational level.

In order to summarize the concept and to make the first concept comparison with the objectives- based operations, we can see in Figure No. 3 that once desired effects that get the objective have been described, it is possible to identify the tasks that have a close relationship with the desired effects. It is necessary to consider that tasks have a causal link to more than one effect, in fact, tasks may have several causal links to other desired or undesired effects.

On the contrary, objectives-based operations respond to the structure presented in Figure No. 4, in which action directly affects the objective. The approach based on objectives tends to be in line and sequence, the fulfillment of the task contributes to the achievement of the objective subsequently until it is possible to fulfill the objective of the campaign.

The difference is very subtle and requires an integral understanding of the concept of effects. Instead of starting with the planning of the sequence of actions that will move the situation from the current state to the desired future state, planning based on effects starts with the future state and identifies the effects or conditions that define the objective¹⁷.

This is not done in terms of what tasks must be carried out, but in terms of desired effects. As it was expressed, effects are the results of actions rather than mere actions.

Once identified, it is possible to understand the second difference, which lies in the manner in which desired effects are reproduced at all levels of conflict, thus facilitating the integration of different services and non-military agencies in a common operational context.

This is due to the operation environment in which military and non-military actions occur nowadays, which is complex, changing, and full of uncertainty, in which operations that are carried out in a lineal manner, such as objectives-based operations tend not to solve the problem or to address it in part and sequence.

This is related to the degree of complexity, interrelation and change to which the conflict has reached nowadays. While war is seen as a line and objectives- based operations are ruled by complex systems, focusing on the complexity of parts, effects- based operations are supported by Complex Adaptive Systems¹⁸ (CAS) and focused (apart from recognizing complexity) in the interrelation and power of change of the system components.

McCrabb Maris, Effects- based Operations: Belief, Framing and Mechanism. Available at: www.aiai.ed.ac.uk/project/ksco

^{17.} Harris, John T., Effects-based Operations: Tactical Utility, Fort Leavenworth, Kansas, 2004.

This cause results (example of the sinking of the ARA Grl Belgrano vessel) in the fact that only one action of tactical level affects and has effects at all levels. In the case of objectives-based operations, the task of one level affects only the following level as one task contributes to the other.

In sum, in objectives- based operations, tasks are specific of one objective, in effects- based operations, several tasks are planned and they may have different effects. An only one task may have several effects that lead to more than one objective¹⁹.

From this comparison, we have the first advantage and disadvantage of EBO.

As an advantage and understanding the concept expressed, we can see the capacity of EBO to be applied to current war, featured by complex and changing systems, in which there is a better possibility to perform due to the number of factors that a planning system has and interagency relations, an aspect that is very well developed in this methodology.

As a disadvantage and conclusion to this first difference between these two methodologies, we can say that EBO require a highly efficient information processing system as analyzing a context of these characteristics is not an easy task that all states can put into practice.

Another difference focuses on the idea that EBO have an approach to ends rather than forms or means. Effects are important rather than the way of doing it or means used.

From the beginning of the discussion about this topic, EBO have always been seen as an alternative as they include objectives- based operations. OBO are included within effects- based operations as destruction is one more way of reaching objectives, although it is not the only or most efficient one.

From this comparison, we can see other advantages and disadvantages that are related to the degree of efficiency and effectiveness of operations and, also, to the options that each method has for the resolution of a problem.





EBO are not a planning method in themselves, but a process of reflection, a group of concepts and a way of thinking.

Military operations need to fulfill the requirement of efficiency. This is not a word that has been very well defined in the military context. EBO have brought this concept to the planning of military operations as stated by Smith in his work "They must try to achieve their objectives in a more effective manner and then in a more efficient way" 20.

The appearance of the word "efficiency" is related to what Deptula expressed when he said that the effect, as it may be graded in several levels of effect and areas of application (Physical and Behavioral-figure No. 5), and be achieved with different modes and means, it creates a variety of actions to be able to reach the desired effect.

All of this leads to the fourth and last difference, which is basically that EBO in their highest degree of evolution include effects in the psychological domain of the opponent, which extends the context of operations to another level, and other types of operations, such as psychological war, appear.

Psychological war operations that are little developed in objectives-based operations have been very well defined and systematized in EBO and they are also an important part of their thinking process as well as included in the different effects-planning methods.

From this difference, we may have the last advantage and disadvantage which is the fact that when extending the context of operations to psychological domain, planning methods based on effects find a better application to wars in which this factor is dominant, as irregular, non-conventional and anti-terrorism wars. In sum, there is a greater field of action in fourth generation or asymmetrical wars.

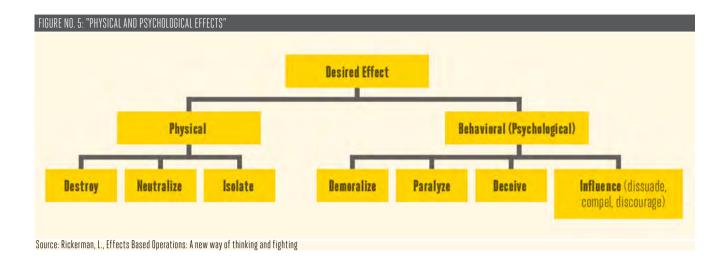
As a partial conclusion, we can say that there are differences between effects-based operations and objectives-based operations, although the most important differences are between effects-based operations.

For this reason, it is important to define how deep or complex effects- based operations system will be implemented in order not to have confusion as it happened in countries that have implemented this in their joint planning methods.

^{18.} Hunerwadel, J. P., op.cit.

^{19.} Kyle, Charles. The Saga of an Effects-based Operation, Kansas, 2008.

^{20.} Smith, Edward A., op.cit., p.25.



CONCLUSIONS

Effects- based operations have been implemented by different commandants throughout history.

As from the 90's, a deeper research and systematization process started regarding this type of operations in the context of specific and joint operations.

We can state that there is a great difference within EBO between the position that tries to test the psychological field and the creation of effects and the position that focuses effects-based operations as a way to think and design a campaign at operational level according to effects on physical objects.

EBO are not a planning method in themselves, but a process of reflection, a group of concepts and a way of thinking²¹ to carry out a campaign. This process of reflection may be implemented by means of planning methods, which are difficult to be implemented and understood due to the causes expressed in this article.

As regards advantages and disadvantages of both concepts under analysis, we can state the following conclusions:

The possibility of interaction that EBO presents at all levels of conduction, especially with different state power factors, such as economic, diplomatic, psychological and social power. The result is the search of fulfillment of our objectives in a more systematic and integrated manner, but it also has a more proper field of development in the area of national strategy. The possibility to implement EBO in a broader field or context of operations due to the systemic and conclusive analysis of the enemy and the inclusion of a psychological field of action, which makes it become a more proper method for operations in asymmetrical wars.

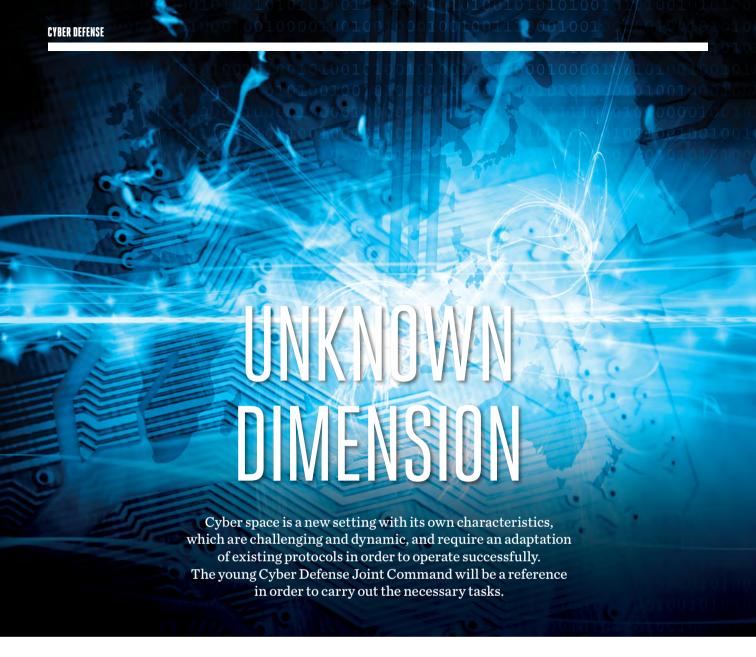
In spite of the benefits in the implementation of EBO with respect to objectives- based operations, we need to consider that they also have problems when they are executed, which are mainly based upon their complexity, the need to have an intelligence system and a highly complex and efficient information process.

Last, it is important to state that the application of EBO may improve military operations developed nowadays. To do so, they need to be further analyzed and the process to give them meaning needs to continue so as to take advantage of their advantages and to get the maximum objective of war that is to impose our will to the enemy.

> REFEREED ARTICLE

Luciano Rene Moscatelo

Major of the Argentine Air Force. Staff Officer. Bachelor in Air and Aerospace Systems. Graduated from the Joint Forces Staff College in 2014 with the Specialization in Operational Strategy and Joint Military Planning. He is currently serving as Head of the Staff Department at the General Direction of Airlines of the Staff and military aviator in the Air Group of the Executive Power in the Boeing 757 Weapons System.



KEY WORDS: CYBER SECURITY / NATIONAL EXECUTIVE POWER / MINISTRY OF DEFENSE / MEASURES / TECHNOLOGY / STRATEGIES

By Julio Gerardo Lucero

YBER SPACE AS A NEW OPERATIONAL SETTING

"A cyber attack will be considered a declaration of war", expressed the North Atlantic Treaty Organization (NATO). Israel was threatened by "Anonymous" 1 with a cyber attack to its security; a virus affected US networks and caused losses for 3.5 billion of dollars; the Iran electrical station of nuclear fuel was attacked by a virus that destroyed the control system of the centrifugal reactor and left it out of service; United States of America created a Cyber Command (USCYBERCOM2).

All of these are news that appeared in the media, creating in many distracted observers some skepticism, sarcastic

smiles and even tabloid press ideas to fill space in the newspaper and have an impact on public opinion.

If we observe the current situation of the context related to events expressed, in the Argentine Republic, we can highlight the intensive use of digital technology in everyday situations and at everyone's disposal, for example, purchasing a container of products from Shanghai by means of an etransfer of thousands of Euros from a bank in Switzerland to another one in Hong Kong using a mobile phone from an office located in the ski center in Las Leñas (province of Mendoza, Argentina) is not impossible.

The National Program of Information and Cyber security Critical Infrastructure (ICIC, in its Spanish acronym) in Argentina is a project which has the purpose of promoting the creation and adoption of a specific regulatory.

Moreover, it is worth mentioning that international trade transactions, exports and imports from our country which in 2013 amounted to 157.028.000,00 dollars³, were mostly made by using e-banking, internet and virtual networks.

Also, the security of the thousands of persons that commute in public transport in our country (air, sea and land) is controlled, in a significant percentage, by digital technology.

To have a reference, in 2012, in the Argentine Republic only by air, 9.557.129 passengers were transported. We can also add that every year around 14 billion electronic transactions are made in the national banking system, mainly, through private or virtual networks or the Internet⁴.

The creation, in 2011, of the National Program of Information and Cyber security Critical Infrastructure (ICIC, in its Spanish acronym) in Argentina is a project which has the purpose of promoting the creation and adoption of a specific regulatory framework that aims at protecting strategic and critical infrastructure of the National Public Sector, interjurisdiction entities and civil organization or the private sector that may require it.

As regards the national defense section, we can highlight the Third Edition of the National Exercise of Response to Cyber Events in the destroyer ARA Almirante Brown, when the vice- admiral Marcelo Eduardo Hipólito Srur, commandant of Training and Enlistment of the Navy, declared that collaboration with the ICI is one of the strategic pillars of the Ministry of Defense⁵.

Argentina and the Brazil extend strategies of cyber defense; represented by their respective ministers of Defense, engineer Agustín Rossi and Ambassador Celso Amorim. Both states, main actors of Mercosur, signed a joint declaration as to that.

In light of this situation, there may be questions, such as: what is the possible evolution of the great trends in this new geopolitical space? Do armed forces have a role in this virtual setting?

Finding answers to these questions encourage the effort to overcome the natural trend of working over the immediate situation and to think in the uncomfortable long term so as to go beyond the current situation and be ready for the uncertain tomorrow.

CYBER SPACE

In order to have a definition of cyber space, it is convenient to start discussing the Internet. We could define it as a "net of networks" and it is also known by users as the web or the cloud. It was created as an additional response to communications in US defense plans in case of a nuclear attack and consisted in a net and sub networks that allowed for decentralized interconnection of computers through a set of protocols called Transmission Control Protocol/ Internet Protocol.

At first, it was for military use and then, with scientists and intellectual people, it became a space for exchange of opinions and knowledge among the thousands of users that were incorporated on a daily basis.

These dynamics turned it and in the mid 80's, it called itself a "space of freedom, Independence and democracy" out of reach for the powerful. This primary community thought there was some shelter from the millenary game of social, economic and political forces that were in the center of the world.

Several NGO's⁶ of different nationalities and ideologies promote this freedom.

However, such ideal situation has never been so pure if we think of the origin of the web, especially in these moments when governments and international organizations, which see the perspective and magnitude of irregular events such as the ones described before, consider the need to build some order for virtual activities.

Its infrastructure had a rapid evolution; the inclusion of networks and computers on the cloud was huge. Resulting statistics are surprising: 2.9 billion people (40% of the world

- Anonymous: This is an informal organization with a decentralized structure without a leader
 that allows for any computer attack in the name of an Internet freedom cause. Its tools and
 methods are a common feature in each of the actions of the movement: service denial attacks
 that leave websites out of line and, in some cases, the inclusion and setting online of personal
 information.
- 2. USCYBERCOM plans, coordinates, integrates, synchronizes and conducts activities to direct operations and defend information networks as specified by the Department of Defense and prepare to carry out a series of military operations in cyberspace in order carry out actions in all domains; assure freedom of actions to the United States and allies in cyberspace and
- prevent opponents from this.
- INDEC (National Institute of Statistics and Census, Argentina), Argentine Business Exchange, temporary date for the year 2012 and figures estimated for the year 2013, Buenos Aires, 2013.
- De Nigris, A. La bancarización en la Argentina [Banking in Argentina], Development Study Unit-Division of Economic Development, Santiago de Chile, 2008.
- 5. Ministry of Defense, MD 343, May 14, 2014, Buenos Aires, Argentina.
- 6. NGO is the acronym for Non- government organization. These are social initiative entities that have humanitarian purposes which are independent from public administration and are non- profit.



What is the possible evolution of the great trends in this new geopolitical space? Do armed forces have a role in this virtual setting?

population) and 6.8 billion devices (some PCs, smart phones, servers, among others) are linked to the web⁷, 204 million mails are sent every minute, in Argentina there are 22 million users that spend an average of 5 hours a day online⁸.

All elements implied in the figures described are within a greater context that contains them, Cyberspace.

PhD Roberto Uzal, in a simple manner, defines it as "Internet plus all networks which in some way or another, are linked to it".

The existence of this environment created by men has an influence, changes and new perspectives in different areas of thought.

In a more specific orientation to the area of defense, we state the idea expressed by Colonel Flores:

Cyber space is an operational domain whose distinctive and only feature is framed by the use of electronics and the electromagnetic context to create, store, modify, exchange and exploit information through systems based on Information and Communication Technologies (TIC's) and their related infrastructure 10 .

As regards morphology, the different modes of intercommunication among devices, protocols follow the standard set by the OSI- ISO Model. This helps to create the Web as it allows intercommunication among networks and devices. The standard model describes 7 layers in communication: application, presentation, session, transport, net, data and physics.

In line with this, when recognizing the existence of cyberspace, there is a question of order, care or administration of the virtual world. In fact, the government of the United States has some privileges as to the governance of cyber community as the National Administration of Telecommunications and Information has the assignment/coordination at world level of IP addresses 11 to be developed in

- International Telecommunications Union. Available at http://www.itu.int/net/pressoffice/ press_releases/2013/41-es-aspx#U7WkClcU8cA
- Diario Clarín. Available at http://www.ieco.clarin.com/tecnologia/estadisticas-Internet-millonesenviados-minuto_=_1167483520.html, June 25, 2014.
- 9. Uzal, Roberto, May 21, 2014. Buenos Aires, Argentina..
- Flores, H. Non-terrestrial environments in future war: Cyberspace, Military Strategy Cabinet, Modrid 2011
- This number is the Access to Cyber space, it gives identity to the device that operates in it without which access and operation are not possible.

the virtual environment, a function carried out through the organization Internet Assigned Numbers Authority (IANA).

Surprisingly, the United States recently declared their intention to terminate, on their own, these privileges without saying who will they leave it to 12. This possible change was the cause of different meetings, the most recent one was organized by the government of Brazil, Netmundial 13, which was attended by representatives of the Argentine Ministry of Foreign Affairs and during which they defined two trends for the future governance of the internet: cooperation and consensus.

Moreover, they discussed about conflicts and their possible solution. As regards the legal framework to respond to actions against states, in this new setting, the position of broader consent is section 51 of the UN Charter, "Legitimate Defense".

As regards conflict resolution, it had acceptance of the participation scheme which was used in the case of the attack to Iran's oil platforms with the Flame virus (in May 2012): The nation attacked report the event to the UNO/ International Telecommunications Union and it sent inspectors to analyze this and issue a statement.

At this point, it is possible to seriously consider a new context of possible friction, strongly asymmetrical and anthropotechnic that may be reached by actions of state and non state actors¹⁴.

From the perspective of Critical Geopolitics¹⁵, and in a general manner, we can have the freedom to consider Cyber space as a geopolitical space subject to the game of power, interests and influence of individuals, organizations and states¹⁶.

STRATEGY

The new context under analysis hides complexity in which according to the perspective from which it is observed, there are national interests that may be promoted or limited by the positions adopted.

Today, in the virtual area of the Argentine Republic, we could say that there is a *status quo* as regards great irregular actions.

This situation, however, must not cause inaction as the international events lead to think the balance will be affected in the medium and long term. Evolution expected by great

From the perspective of Critical Geopolitics, and in a general manner, we can have the freedom to consider Cyber space as a geopolitical space subject to the game of power, interests and influence of individuals, organizations and states.

international actors foresees a catastrophic event called "Great Meteor" (a cyber September 11). This "attack" will mark a time before and after for cyber space power relations.

Such expectations and possible evolution lead to the preparation and implementation of a defense strategy for the national heritage in the new context that allows for the alignment of resources towards the purposes determined in the area, supporting as a decreasing strategic reasoning, the protection of national interests.

The National Executive Power is taking defense measures in the virtual environment. The germ is located in the Information Technology National Office through the ICIC.

The current situation turns economic factors into limits for the modification/adaptation processes of infrastructure and, if we add the voluntary condition of recommendations by the Private Circumscription Program, these give rise to a series of situations that affect the integrity of a protective general strategy in case of possible threats.

The Ministry of Defense has the guideline of development of specific information systems security of the armed forces and, therefore, on July 14, 2014, the Cyber defense Joint Command was created.

In sum, we can describe the evolution of a hypothetical event in the current framework: in case of an irregular cyber action that aims at affecting or destroying elements of a vital system (electric power stations, oil and chemical companies, nuclear stations, air transit control), these entities will individually have the great responsibility to detect, identify and neutralize, in a primary situation, the threats posed to their systems and networks.

Avni, B., Newsweek. Available at: htt://www.newsweek.com/2014/04/04/obama-wants-globalcommunity-run-internet-it-could-end-hands-china-or-putin-248037.html

^{13.} Held in So Paulo, Brazil between April 23 and 24, 2014. It was attended by minister representatives of 12 countries (Argentina, Brazil, France, Ghana, Germany, India, Indonesia, South Africa, South Korea, Tunisia, Turkey and the United States) and 12 members of the international community of different interested parties. This committee has representatives of the International Telecommunications Union, the Department of Economic and Social Affairs of the United Nations and the European Commission.

Ballesteros Martín, M.A., "The evolution of conflicts2, Panorama geopolítico de los conflictos 2013- Instituto Español de Estudios Estratégicos, 12, Madrid, January 2014.

^{15.} Rodriguez Garoz, R., "Scripta Nova", Revista Electrónica de Geografía y Ciencias Sociales. Available at http://www.ub.edu/geocrit/sn/sn-198.htm. An adaptation of the idea of space from a perspective of Critical Geopolitics. Critical Geopolitics studies planetarium space and its modes of production and reproduction, for which it will be necessary to see the interconnection of economic, political, symbolic, institutional or legal elements in the concrete historical human practice accepting the space aspect of social events. It faces a historical analysis of speech and practice of States.

^{16.} Koutoudjian, A., interview by J. Lucero, May 14, 2014.

RETHINKING STRATEGY: ROLE AND CAPACITIES OF THE ARMED FORCES

As a geopolitical environment, cyber space may give rise to theories and concepts of geopolitical science. Based on this, we can apply by analogy the arguments of Juan Recce as to "Scientific Occupation of Space" and relate the Argentine space-strategic projection in the idea of national interest to technological development.

In order to do so, the advance on this new setting could be a dual- entity (for example, CONICET¹8 and Ministry of Defense) which starts a technological innovation process that articulates the capacities of the Science and Technology Complex in the country with the logistical structure of the armed forces.

If this change is chosen, it is convenient for the executor to be capable of keeping and sustaining a strategic alert condition in light of the evolution of threats that require greater control with a defense model and a clear rejection of policies, attitudes and capacities of attack with the impact of power to third states.

Today, in case of a potential escalation of conflict, the different "layers" of state protection would respond according

to its origin analyzing whether it lies in defense or security jurisdiction in the naturally complex framework of the issue with key reaction time which is not totally defined yet due to the new characteristics that cyberspace has.

The Defense White Book defines the domain of cyber space as a strategic interest, not only for the exercise of command and control and the operation in networks of defense systems, but also to prevent external state military threats that may take place using it as a way of execution or having it as a purpose 19. There is no doubt that this would allow Defense to be capable of contributing to a better achievement.

The likely evolution towards participation of armed forces in a strategic alert national service of cyber threats would necessarily link the need to particularly consider the possible task with the Planning Cycle of National Defense through the Political Guidelines for National Defense. This document includes an analysis of the defense and security setting that identifies trends, risks and threats to national interests for the medium and long term²⁰.

The current analysis of Political Guidelines for National Defense available to the public and of researchers does not



- 17. Recce, Juan, Fundación Argentina Ase. Available at http://argentinaase.org/atlantium
- 18. National Council of Scientific and Technical Research (CONICET, in its Spanish acronym) is the main entity devoted to the promotion of science and technology in Argentina. Its activity is carried out in four great areas: Agro Science, Engineering and Materials Sciences; Biological and Health Science; Exact and Natural Science; Social and Human Science.
- 19. Ministry of Defense, Argentina, Defense White Book, 2010, p. 48.
- National Executive Power, Argentina, Executive Order 1729/07. Political Guidelines for National Defense, City of Buenos Aires, November 11, 2007.

In case of a potential escalation of conflict, the different "layers" of state protection would respond according to its origin analyzing whether it lies in defense or security jurisdiction.

expressly include the setting under analysis, a situation that is considered to have been under changes upon the creation of the Cyber defense Joint Command.

Beyond formal considerations, the complexity of the situation presented requires special attention in the construction of knowledge that is certain as regards cyber space, which requires human resources specifically trained, informed as well as time.

The potential role of the armed forces may be analyzed in three levels that may be related to the short, medium and long term.

In the short term, the armed forces may carry out an activity of presence in cyberspace according to the scope defined by the Ministry of Defense.

That is, collaborating or participating in a Strategic Alert Service, focusing on the identification of possible attacks and their origin (attribution problem²¹) with the technology of "Analysis of Networks Flow"; a procedure that respects the legal mandate of protecting privacy of web users²².

Moreover, making presence effective would imply delivering to cyber community a message of commitment to the protection of Argentine interests in this aspect.

In the medium term, the purpose would be to go towards a formal cooperation agreement in the regional context to formalize joint activities to respond to cyber events that are already being carried out with friendly nations, such as Brazil. The creation of a common regional front increases dissuasion of each member from irregular actions²³.

In the long term, considering growth in number and importance of critical systems, it is recommendable to have a protocol for the armed forces in case of potential threats of other states that try to affect the normal development of virtual activity of national and regional relevance, comparing it to the response expected in classical operational dimensions.

Including a new capacity implies to obtain means, develop doctrine and procedures for use, apart from the important training.

CONCLUSIONS

When analyzing virtual environments, we cannot be deceived by symbolic elements and forget that most of this

relates to appearance²⁴. Cyber space is a new setting that has its own and distinctive characteristics that require adaptation of existing protocols to successfully operate in it.

Security in this dimension depends not only on the existence of defensive means, but also on the capacity to know what happens within it, so as not to be surprised by irregular incidents. The setting of a cyber conflict is featured by its challenging and dynamic originality which takes a continuous and patient process of learning to achieve efficiency. The young Cyber Joint Command is a reference in these areas.

It is possible to go through the path of Scientific Appropriation of Cyber space in a dual work under the control of the Argentine State supported by a change of paradigm which, by means of Scientific Occupation of Space, has a position relatively favorable to the region, both for discussion of cyber space governance and the entrance to a world of possible opportunities for future generations that have the only limit of imagination.

The promotion of Science and Technology started by the National Plan of Science, "Argentina Innovadora 2020" gives a strategic, political and social framework proper to go further in the relation of Science, Technology, Defense and Economic Development 25 .

There are opinions against any type of state participation as a control entity in virtual world, assigning responsibility of individual defense/security to the individual or legal person that operates in that context.

Said position, in practice, leads to defense of a cyber attack that may render an oil distillery (critical system) useless as it happened in the case Bushehr-Iran to be required to the company itself. We could suppose that defense of an air attack against the same distillery and with the same purpose, making it useless, would also be the responsibility of the company.

A defense structure in cyber space does not imply an obliged attack to individual freedoms, as in terms of technology, it is possible to exercise an effective protection and pursuant to legal regulations if works are limited to the

^{21.} Garau Pérez- Crespo, C. "Sun Tzu's twitter", Revista General de Marina, 631, 2014. The problem of attribution: it is the difficulty to identify in a positive manner the author of attacks, it represents 85% of possible threats and its most important aspect is the inconvenience that represents for legal and jurisdictional treatment of cyber attacks, as well as the possible consideration of attack action under the prism of law of war.

^{22.} Uzal, Roberto, May 21, 2014. Buenos Aires, Argentina.

^{23.} Uzal, Roberto, May 21, 2014. Buenos Aires, Argentina.

^{24.} Anta, J. L. and Palacios, J., Revista Investigaciones Sociales, year IX, No. 15. UNMSN/IHS, Ed., Jul- Dec 2005. Available at: http://scholar.google.com/scholar_url?hl=es&q=http://revistainvestigacion.unmsm.edu.pe/index.php/sociales/article/download/7007/6201&sa=X&sci sig=AAGBfm1wg0ICZL50sUcyyt4noTl0u6bdFw&oi=scholaraIrt

Ministry of Science, Technology and Productive Innovation, National Plan of Science, Technology and Innovation: Argentina Innovadora 2020. Available at: htt://www.argentinainnovadora2020. mincyt.gob.ar/?page_id=312

Julio Gerardo Lucero

Commodore of the Argentine Air Force. Staff Officer. Systems Engineer. Bachelor in Aerospace Systems and Master in Information Systems Administration. He graduated from the Joint Forces Staff College in 2014 from the Master's Degree in Leadership and Joint Military Strategy. He is currently serving as Head of the Professional Technical Training Group of the Petty Officers School of the Air Force.

"Cloud" which does not involve private information, that is, if different layers are dealt with: Physics, Data and Model Net OSI- ISO²⁶.

From the perspective of concept and operation, we could consider cyber space as a frame system in which, by means of different technologies, states should control and supervise actions carried out so as to know if they are pursuant to law, social and/or trade agreements and, also, to check that they do not threat national interests.

If we take the premise that cyber space environment is of national interest, this has to be taken as an integral unit.

26. Uzal, Roberto, May 21, 2014, Buenos Aires, Argentina.

Therefore, it is recommendable to promote the creation of an executive cyber space authority at national level which protects Argentine interests and gathers state and private efforts against actions of interested parties.

In this sense, coordination entities created which are operating, as well as actions carried out by ministries and secretaries contribute to achieve that purpose.

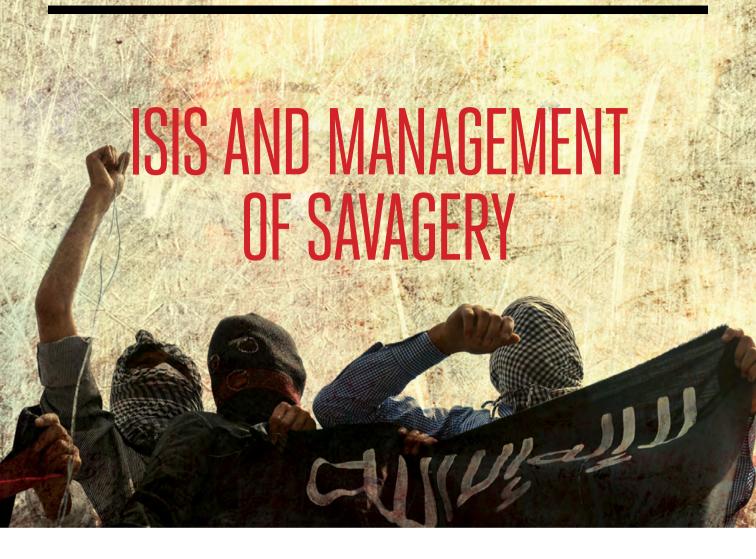
Armed forces, because of the power they manage, are commanded by the Chief of state. They are the last tool to assume defense of a nation against an external military enemy. They are instruments the state has at its disposal to exercise defense of vital interests. As part of the Argentine state and subordinated to the legitimate authorities, they take the role defined by it in the topics dealt with.

However, the task already assigned of giving security to its own information systems may be complemented with a Strategic Alert state, within the framework of a Strategic Attitude merely defensive for the purposes of collaborating to take a minimum reaction time against attacks to critical systems.

Only a creative and integral strategy will allow to neutralize the harmful effects of irregular actions in cyber space. Inaction or mere reaction to strategic incentive caused by other actors are not enough, they engage our initiative and compromise the possibility of future generations to have the necessary freedom of action for their development and happiness.







The author explains what the origin of the current tactics of the Islamic of Iraq and Syria (ISIS) may be. Management of "savagery", as analyzed in this article, is a very clear description of the strategy used by the Islamic State in their military campaign to extend "caliphate" in the Middle East.

By Omar Locatelli

KEY WORDS: ISLAMIC STATE OF IRAQ AND SYRIA (ISIS) / SHIA / SUNNI / UNO / OIL / UNITED STATES

EED OF A CATALYST¹

The siege and expulsion of Yazidis minority in the Shingal Mount (in the north of Iraq) and the decapitation of the US journalist James Foley showed the world a new and extensive threat. This cruel action has been the best propaganda of the most recent emergence of the Sunni group Islamic State of Iraq and Syria (ISIS) at international level.

The fact that they present themselves as a State rather than as an armed group and the atrocities they commit have allowed to catch the attention of the region and the world as well as of religion. The burning of the Jordanian pilot, Moath al-Kassabeth, was a turning point that united Muslims and non-Muslims and marked the need for joint action to, at least, reduce the power² showed until that moment.

^{1.} Friedler, Egon, Strategy for Chaos, 2004.

Cordesman, Anthony, The need for an adequacy of resources. Available at http://csis.org/files/ publication/141024_Imploding_US_Strategy_in_Islamic_State_War.pdf.

The international community started to know the intentions of ISIS as from September 2014 when in the Syrian newspaper Daily Star, a review of the book titled "Management of Savagery" appeared. The author, Abu Bakr Naji, describes the strategy of the ISIS military campaign for the formation of an old wilayah³.

In his development, he mentions three stages for the achievement of a strategy for chaos:

- Humiliation of the enemy by means of a small-scale guerrilla
- > Spread of savagery to separate regions to be attacked, from guerrilla to large-scale terrorism
- Administration of savagery, establishing a combatant society with self- defense objectives

These actions would be aimed at the creation of a settlement under control of the movement, from which a rudimentary state would be established. Moreover, he establishes the need for a political-social program that deepens military and administrative actions with great economic capacity of different origins and permanent flow. In spite of the mentioned structure for their operation, the author describes that fight does not have a political, economic or social characteristic, but it is a fight "for Allah and against the unfaithful".

Upon the advance of this cruel reality, the first question is: can an international coalition find the necessary catalyst for such a threat without knowing yet whether the solution must come from politics, economics or religion?

ORIGINAL CONFESSIONS4

Islam, which means submission to God through Monotheism and renouncing worship, started with the birth of its prophet Mahoma (Abul Kasim ibn Add-Allah) in the year 570.

His mother, Aminah, while pregnant, heard some angelical voices that told her that his son would be born with light. His father, Abdullah Ibn 'Abd Al- Muttalib, died before his child was born. His mother died when he was six years old. As an orphan, he was left to be looked after by his grandfather, leader of the clan Hashim, who left him to his uncle Abu Tayed when he died.

Until he was 25 years old, he was supported by Khadija, a rich widow for whom he worked as a commercial agent and to whom he later got married. He had the habit to spend one meditation month in the Hira mount and used to feed the poor when he received Allah's revelation.

In the year 610, he received the first visit of Angel Gabriel and during this visit, he discovered himself following his instructions and saying verses as if he were sleeping which he then gathered in writing in his sacred book: the Quran (understood as reading or recitation). He was scared by the experience until a Christian calmed him by saying that he would be the "prophet of his people". His

Islam means submission to God through Monotheism and renouncing worship

relatives and friends believed him and followed Allah's instructions.

In the year 613, when he started his preaching to the Mecca, he attacked the validity of the group of worshipped gods and he confronted hostility of fellow citizens. A year later, he sought protection in Ethiopia and then in Yatrib oasis (today, Medina, which means "the city"), where he promoted a constitution that called for tolerance to the Jewish and this caused differences as they declared themselves unable to worship the Muslim God.

In 623, he fled from the Mecca causing the Hijrah (Hegira) and ordered fasting for 24 hours to honor this escape 5 .

On June 8, 632, Mahoma died because of intestines problems and left ten wives and two concubines, who had given him 24 daughters and one son who died as a child. His successor, the Caliph (Guardian of Faith) had to be elected within the family.

His mentor and father in law, Abu Bakr, a generous and merciful man who took care of the orphans and of freeing slaves, succeeded him but he only survived for two years. His son-in-law, Ali ibn Talib, husband of his youngest daughter Fatima, was not considered for succession.

Two years later, in 634, Omar succeeded him, he was the founder of Umayyad dynasty, relative of Mahoma, who organized the community or Ummah and highlighted the role of the Arabs. Moreover, he took Islam to Palestina, Persia and the north of Africa. He appointed Damascus as the capital.

In 638, he conquered Jerusalem protecting the Holy Sepulcher and changing its name to El-Quds (Holy) turning it into the third holy city, after the Mecca and Medina. Omar died in 644 in the hands of a Palestine slave in Medina and was succeeded by Uthman, member of the Umayyad dynasty.

Uthman was elected by the members of the Quraysh tribe, which Mahoma belonged to, causing unrest in the sons of the prophet's fellows and his third wife, Aisha.

With his virtuous spirit, he gathered intellectual men to make an updated version of Quran: 114 chapters or suras in prose with rhyme, with 6666 verses. Also, the oral tradition –Sunna- appeared as an interpretation of written norms.

^{3.} Part of a caliphate equivalent to a province of a state-nation.

^{4.} Rogan, Eugene, The Arabs: a History, Basic Books, USA, 2011.

^{5.} This is considered the first year of the Muslim calendar.



Uthman died in 656, as a victim of a riot and, consequently, Ali proclaimed himself as leader in opposition to Aisha, Mahoma's third wife.

On December 4 of the same year, the Battle of the Camel took place. During this battle, 30000 soldiers ruled by Aisha who occupied Basora (nowadays, Iraq), fought against Ali who, with 20000 followers camped in Rabbaza, near Khuraiba.

Ali, in light of the land domain and the capacity of enemy command ordered to cut Aisha's camel's legs to reduce their capacity to conduct the battle. As a result of this battle, Ali lost only 1000 men, while Aisha, only half of his forces.

In spite of his victory, Ali was murdered in 661, in the Mosque of Kufa (Mesopotamia) by Muawiya's followers who became caliph and returned the capital to Damascus extending the empire from Morocco, in the Atlantic, to the Oxus valley and made Umayyad to rule again until 750.

The first four caliphs are considered "Well-guided Caliphs" due to evolution they made in their faith.

On October 10, 680, the Karbala battle was fought, because Husayn, Ali's son and Mahoma's grandson, intended to be caliph because of the right of succession after his elder brother Hasan abdicated when their father died.

This is how Shiat Ali began (Ali's party) and their followers were known as Shia. Their origin would later be remembered as a main figure in the Taziyas or Shia passion, turning Karbala into an official pilgrimage site. For this confession, the two first caliphs prepared a coup to frustrate Ali's aspirations.

On the contrary, there was a group that followed a calmer and more submissive tradition, based on Sunna's customs: the

Sunni. They realized that the era of caliphs had ended and that it was impossible to unify Muslims. The Mathloumiya 6 had started.

HIERARCHICAL RECOGNITION

The main hierarchical recognition of Islam is the Caliph, successor of the prophet and, therefore, guardian of faith. He is the political and spiritual leader, equivalent to the Pope within Christianism. As comparison, Adan, after David and Salomon, were considered as caliphs of God on Earth? Hierarchical title may also be recognized as Malik that means king or monarch, as it happens today in Bahrein, Jordan, Morocco and Saudi Arabia.

Every Caliph needs someone to implement their decisions and to collaborate with the government. Therefore, Visir hierarchy appeared. They exercise conduction in a similar way as a prime minister does today. They are the natural assistants of the Caliph.

As it happens in the different forms of government, they also recognize the one who exercises power in fact in the name of the Caliph: the Sultan. They are under the Caliph, but in many cases, they are replaced by the former. This is found in Oman and Brunei.

The territory governed by the Caliph is called caliphate and its territorial divisions (equivalent to provinces)

Speech that proclaimed the historical injustice mutually caused by the Sunni and the Shia, in which each confession blames the other one for being the cause of their exclusion and differences in the core of Islam.

^{7.} Stourton, Edward, "Why is the idea of caliphate coming once and again?" BBC, October 27, 2015.



Can an international coalition find the necessary catalyst for such a threat without knowing yet whether the solution must come from politics, economics or religion?

are called wilayah⁸, understood as an administrative subdivision of some Muslim countries. Government is conducted by the Emir. Within a caliphate, this word refers to each of the states almost sovereign.

There are wilayahs in many countries, such as Algeria, Morocco, Tunisia, Sudan, Oman and Western Sahara (nowadays under Morocco rule). The best example of the union of position and territory of a sovereign state is the United Arab Emirates.

Under Emir, and almost as a local leader, there is the Sheikh, a local religious and/or political leader. This is the equivalent to the old wise man in a society that respects their lineage to the patriarchal authority of the clan and that remains loyal to him rather than the government. In general, he is a person respected because of his age or knowledge.

Same as the Sheikh, there is the Sharif who has almost the same social recognition as the Sheikh but no privileges. He may also be called Sayyid.

Once again, caliphs lead Muslim hierarchies and it is the position which almost any leader has tried to achieve.

ECCLESIASTICAL HIERARCHIES

The maximum ecclesiastical hierarchies are called Mufti by Islam. Within the Sunni confession, he is considered as a legal specialist speaker of the Muslim Law (Sharia). He is the messenger of religious legal orders (fetuas or fatwa) that solve interpretation problems of Sunna. In general, it is called Gran Mufti.

- Normally translated as province and sometimes as government. The word comes from Arab w-land "to govern": unvali (wali), "governor", governs a wilayah, "what is governed".
- Figh means "deep knowledge, it determines how the Muslim relate to God and their fellows respecting Quran and Sunna. This is, in legal terms, the discipline of Islam jurisprudence that studies Sharia (Islam legal rules).
- 10. Cordesman, Anthony, "Syria and the Least Bad Option: Dealing with Governance, Economics and the Human Dimension", Center for Strategic and International Studies (CSIS), February 24, 2014 and Bhalla, Reva, "The Geopolitics of the Syrian Civil War", Geopolitical Weekly, Stratford, January 21, 2014. See also: Locatelli, Omar, "Small wars lead to big wars", Visión Conjunta N°9,
- Joint Forces Staff College, 2013.
- 11. Branch of Shia Islam, followers of the twelve imams of Ahlul Bait, descendants from the prophet Mahoma. His jurisprudence school in Islam was the one founded by the sixth imam, Yafar As-Sádiq.
- 12. Religious Islamic combatant for the Jihad which is the holy war of Islam.
- Hubbard, Ben & Schmitt, Eric, "Military Skill and Terrorist Technique fuel success of ISIS", New York Times. August 27, 2014.
- 14. Muyahidines: religious person who fights for the permanence of Muslim faith that makes Jihad. The difference with fedayines lies in the fact that these are not religious, but they still fight for the Jihad
- 15. Stourton, Edward, op.cit.

Western interests sought to support the Sunni rebels through Turkish and Jordan borders, while the Shia received religious and material support from Iran (through Iraq) and from the Lebanon, managed by Hezbollah.

For the Shia confession, it is called Mullah, which implies the same but under a different name. In both cases, it is the person stated in Quran, in the hadith and Muslim jurisprudence or fiqh 9 . In more general terms, and always within Sunni Islam, it can refer to any person who is more into religious matters than the rest of the members of the community.

The use of the word Mullah (honor title equivalent to Ulema) is frequent, especially in Central Asia. Among the Shia, Mullah is a member of the clergy, whose leaders are the Ayatolás.

A Shia Mullah usually takes a cape and turban, which is black if he is the Sharif (descendant from Mahoma) and white if he is not.

The Mullah exercise power in Iran and exercised it in Afghanistan under the Taliban regime (such as in the case of Mullah Omar).

Last, the one who directs prayers within mosques is Imam, who for the Shia is also the political director of the religious community.

REGIONAL ORIGIN¹⁰

The crisis in Syria gave origin to several Sunni insurgent groups which, currently, keep fighting against the Alawite¹¹ government (aristocracy within the Shia).

In its origin, the Syrian president Bashar al-Assad tried to stop a young rebellion which led to general popular unrest in the same way his father did years ago sending military forces to repress.

Many members of the armed forces rejected said action and quit to form the Free Syrian Army, which opposed to carrying out said actions against their own people.

As the ones who left, many civilians of Sunni confession started to form groups of combatants to fight against the government but without subordinating to a centralized military conduction. Among the main insurgent groups, there was the Al- Nusra (which means Support of the Front for Victory of the People of Syria) in Aleppo, under the order of Hossam Abu Mohammed al Golani who initially had between 6000 and 8000 soldiers.

The Syrian conflict, at the beginning of 2012, started to be an ideal space for the meeting of Sunni jihadists¹² of all regions to oppose the Alawite government.

In turn, Western interests sought to support the Sunni rebels through Turkish and Jordan borders, while the Shia received religious and material support from Iran (through Iraq) and from the Lebanon, managed by Hezbollah.

The front Al- Nusra, around 2012, attacked the Syrian Ministry of Defense, its main advisor (president's brother in law) and the president's brother, Nader, military man in charge of the $4^{\rm th}$ armored Division.

On July 19, the Mother of all Battles in Aleppo –main economic city in Syria-started, where Al-Nusra clearly showed his power taking the city and expelling government troops. The insurgent started to domain the north of Syria.

A year later, an insurgent group called the Islamic Front (ISIL) with the intention to fight against Al-Nusra for domain in the north of Syria. Its leader, Ibrahim Awwad Ibrahim Ali al-Badri al-Samarrai, from Iraq, born in Samarra in 1971, started to be known as Abu Bakr al Baghdadi. There is also the continuation of Al Qaeda in Syria causing an epistolary dispute with the leader of Al Nusra which had to be solved by the leader of Al Qaeda, Ayman al Zawahri.

On June 10, 2013, the TV channel Al- Jazeera revealed a letter from Al- Zawahri, in which he urged the leaders of Al Qaeda in Iraq and Al- Nusra in Syria to stop any oral or formal attack among them.

The question of preponderance was presented.

EVOLUTION OF RELATIONS¹³

The ISIS leader, Al-Baghdadi, started his actions relating to Ahmud Fadil al Khalayilah, known as Al-Zarqawi, a famous Jordan extremist in the 80's. Both of them present themselves, between 1989 and 1992, as Afghan Mujahideen¹⁴, and then founded in Afghanistan the Arab group Jund al-Sham (Syrian Army).

With the appearance of the United States, they fled, after the September 11, 2001 attack, to Iraq to create the Sunni group Islamic State of Iraq related to Al-Qaeda.

After the death of Al- Zarqawi in 2006, Al- Baghdadi becomes the leader and starts to represent Al- Qaeda in Syria.

In August 2013, the group started to be called Islamic State of Iraq and Syria (ISIS) or, under its Arab acronym, DAESH and then proclaimed, on July 5, 2014, caliph of the Islamic State in the Mosul Mosque after seizing the city.

ISIS adopts a uniform and black flags as a deliberate attempt to remember the black tunic that the 8th century court Abbasid wore, in the golden age of Islam¹⁵. Its members, apart from the Iraqi and Syrian Mujahideen, are foreign combatants, estimated to be 3000 citizens from Western countries, believed to be from different western countries, among which there is the United Kingdom (400 members), Belgium, the Netherlands, Germany, France and Nordic countries.

Moreover, according to the report dated June 2014, from the United Nations Organization (UNO), prepared by the Soufan Group, ISIS is formed by members of at least 81 countries, including Australia, the United States, Canada, Ireland and Spain.

These combatants may be exceeded in number by dissatisfied volunteers from Arab minorities from Tunisia, Morocco and Saudi Arabia. Currently, they are estimated to be around 31000 combatants.

The command of the organization has been selected by Al-Baghdadi among the men he met when he was a prisoner of the United States in the detention center of Bucca (Iraq), a decade ago. He preferred the military men; this is why his leadership team includes many officers of the broken up Army of Saddam Hussein. It also has former officers from Iraq, such as Abu Muslim al-Turkmani, his tenant in Iraq, who once served for Hussein as Lieutenant Colonel and Adnan al-Sweidawi, a former Lieutenant Colonel who now directs the military council of the group.

It is currently organized with two tenants: Abu Muslim al-Turkmani in Iraq and Abu Ali al-Ambari in Syria, who is in charge of 12 governors. Apart from his personal council, Al Baghdadi has eight advisors: Finance, Leadership, Legal, Military, and Assistance to the Combatant, Security, Intelligence and Media.

The broad scope of combat forms allows to use terrorist tactics, war of guerrillas and Conventional War operations.

It is organized in teams of 8 and 10 men prepared for:

- > Night attacks with thermal sight
- > Ambush with improvised explosive designs
- Combat on a building basis, on a block basis

After they started air attacks of the coalition, transport of the members by vehicles were reduced to columns of 2 or 3 vehicles with 8 to 10 men in total, with brief executive orders, and being the executor responsible for the manner to do it.

Combatants are the typical supporters, who have a winwin position that assures them that killing in the Jihad is a blessing and if they are tormented, they will go to heaven.

For this reason, they are fighters with a high level of adrenaline who can kill and be killed without any doubt becoming fundamentalists in their combat actions.

The typical operation is carried out by a armored unit of tanks or mobile unit of 8 to 12 combatants with 2 or 3 vehicles that receive orders by WhatsApp, Facebook, Twitter or text messages on their mobile phones and if this is not possible,

 "ISIS shows power in Libya: parade of tropos in Benghazi with an eye on Europe"; INFOBAE, February 19, 2015. The international community faces a new low intensity conflict of indefinite extension which may be considered the first Hybrid War.

through their own radio net, they arrange meeting points.

After gathering in a meeting point, within two or three hours after the call, and after one hour and a half of discussion and logistical coordination, the operation is started.

Before the attack, there is propaganda to affect the morale of the enemies and civilians in the area. They attack the weakest point of the enemy, preferably after morning operations with light and heavy vehicles in the first stage of attacks, followed by infantry according to the magnitude and nature of the enemy opposition. The high combat pace is habitual for an ISIS combatant which, in general, is too much for those who fight against them.

Their leaders, also, increased their traditional military capacity with terrorist techniques prepared throughout years of fight against the US troops having, at the same time, local knowledge and contacts within the people.

With a radical ideology and tactics, such as kidnapping, decapitation and great execution, the group has showed their identity in the communities in which it is present.

Together with the emergence of ISIS, other groups have appeared with the intention to get the conduction of Al-Qaeda. This is the case of Khorasan, whose name refers to a geographical area mentioned in the first Muslim texts, located



Aguirre, Mariano, "How is the Islamic State financed?" BBC World, August 25, 2014 and "Why has ISIS not shaken the price of oil?", BBC, September 16, 2014.

Estimation by Theodore Karaski, from the INEGMAS center (Dubai) and Mills, Robin, The Myth of he Oil Crisis, Praeger Publishers, 2008.

in the east of Iran, which covers Uzbekistan, Tajikistan and Turkmenistan. Their members are foreigners coming from Iran, Afghanistan and Yemen who have been fighting for two years in Syria and who are part of the logistical structure of Al-Qaeda from Afghanistan to the north of Syria.

Their intentions are to extend armed actions in Europe and, eventually, in the rest of the West. Among their leaders, we find Fadhli, from Kuwait born in 1981 who would initially be the communication link between Al- Zawahiri and the rebel Syrian group Jabhat al- Nusra. Their need to influence on the Syrian conflict, beyond their eventual interest to defeat the Shia- Alawites is the significant central position of Syrian territory with their borders with Turkey, Israel, Iraq, Jordan and Lebanon, giving Al- Qaeda some balance in the central part of the Middle East.

Another group with great influence in the North of Africa is Ansar al-Sharia (Sharia troops), originally called Jund al-Khilafah (Caliph troops) with a self-named Emir in Libya, Ali Al Qarqaa.

The decapitation of 21 Coptic Christians, of Egyptian nationality, formally made it enter a battle front that has Europe a few kilometers away and that, beyond consolidating their domain in the area, appeared with the purpose of bother vessels and oil ships "crossed" throughout the whole Mediterranean Sea 16 .

Moreover, it declares that it still has under its power around 35 Egyptian hostages and threats to decapitate them if Egypt continues its reprisal (bombing in the area of the violent execution).

Its young branch, called Young Council of Shura, has been in charge of propaganda under the ISIS format. Although all

decapitation of 21 Christians have caused fear around the world, from August 2014 until now, they have killed hundreds of persons including an Egyptian soldier -Muftah el Nazihiwho had publicly declared his loyalty to the government forces of Tripoli under the command of General Khalifa Haftar.

In February 2015, the young Libya Emirate became stronger also in Sirte, another oil city in the coast in the north of Africa seeking to control the most important populated centers of the country and trying to make its power be felt in Tripoli, where they attacked a luxury hotel in January 2015.

ECONOMIC SOURCES OF POWER¹⁷

With territorial advance, ISIS has silently created an efficient management structure through Iraq people, most of whom are of middle age and control finance councils, local governments, military operations and enlistment.

According to the Secretary of Defense of the United States, Chuck Hagel, this is not a terrorist group, but a project of State with sophisticated weapons, a totalitarian ideology and huge financing which comes from external support and that takes resources to continue their attack and set the grounds for their caliphate.

The beginning of external monetary support started when oil monarchies of Saudi Arabia, Qatar and the Emirates started to support the Sunni rebels who fought against the Syrian government Shia.

ISIS, as from their conquest in Iraqi territory, discovered oil as an endless source of money. As Iraq is the second biggest producer of oil in the world after Saudi Arabia, refineries became military targets. After the rapid conquest of the area of Mosul in the north of Iraq (seven fields and two refineries



With a radical ideology and tactics, such as kidnapping, decapitation and great execution, the group has showed their identity in the communities in which it is present.

in Shaar and Baiji), together with the ones conquered in Syria (six fields and two refineries in the area of Omar), their extraction are estimated between 30000 and 80000 barrels of oil per day.

As it is heavier than the oil in the sea in the North of Europe (Brent oil), this oil was originally one dollar more expensive. At the beginning of their conquest, it was two dollars more expensive and its price went from 98 to 108 dollars. Therefore, their daily earnings for sales in the black market were initially around two million dollars per day¹⁸. However, the Oil Exporting Countries Organization (OECO) has increased its production in order to reduce the costs so as to decrease earnings in the black market, being able to reduce the price of the barrel to less than 50 dollars.

An important piece of information referring to black gold is the attempt to control the limit of the Iraqi oil area (as the most important region is still under Kurdish control) with the intention to threat the control of the oil pipeline that supplies crude oil to Turkey and, therefore, the Euro zone¹⁹.

Another source of financing is the collection of funds coming from extortion to religious minorities, weapons smuggling, border and controlled routes toll fees, kidnapping money requests, sale of dismantled materials and of archeological pieces. As a last source of financing, we have found the sale of organs of killed hostages.

Moreover, in case this list is not sufficient, in each city that has been conquered, ISIS gets into central banks. This was the case when they took the city of Mosul, where they looted the central bank to get around 400 million dollars, which allows them to currently manage a figure of almost 2000 million dollars.

The need to consolidate their territorial expansion and recognition as a proto-state has led them to coin their own currency²⁰. The new currency replaces the Iraqi dinar and the Syrian pound. Apart from the golden dinar, the silver one was also coined and became legal on November 13, 2014, both used at the beginning of Islam.

Their funds have given them a discretional power that is translated in the evolution of shares.

THE IMPORTANCE OF PROPAGANDA²¹

Beyond their collection capacity, ISIS also shows a proper use



of all message contemporary means to recruit combatants, intimidate enemies and promote their caliphate.

If their fanaticism and decapitation seem to come from a century ago, the use of media is updated to this moment. Their printed and online production through their website SITE Intelligence Group²² shows that their propaganda surprisingly has few calls for attacks against the West.

However, as from their initial video (decpitation of the American journalist James Foley, August 19, 2014), the following ones ended with a warning that any attack to ISIS would translate into blood spill".

Moreover, all subsequent videos, with the same style, had made reference to the fact that each attempt to attack by any country against ISIS would be responded with the decapitation of one of their citizens. As an affirmation of their threats, they have showed the killing of hostages of countries that are members of the coalition, both from those who carry out armed actions (United States, United Kingdom, France and Syria) and those who support them (Japan).

Even more, the capture of a Jordanian pilot in December 2014 and burning to death have led to the rejection of Jordan and most Arab states causing a negative reaction to their attempt face the advance of a great coalition of new results.

The last picture of their bloody propaganda, when the ISIS African group showed the killing of 10 Coptic Christians in Libya, led to a special request by the Pope for the UNO to make a determined intervention to stop the bloody demonstration of a special way to spread a religious confession.

However, in spite of the fact that their initial image was

Barack Obama announced the stages of the attack allied to ISIS, which consists in an air campaign to protect ethnic and religious minorities and diplomats and military men from the United States.

built upon blood spill, their subsequent publications seem to try to show the bureaucratic insight of the State they intend to build. Their two annual reports are until now full of some Jihadist style accounting in which there is tracking of statistics of all their actions, from occupied cities and murders to control points and regretful apostate.

The impact of their reports causes an efficient call that allows them to receive almost 1000 daily requests from remote places in the world. Their main journalist achievements lie in the preparation of a as front attack against divisions and national borders in the Middle East showing that they have been planned by western powers after World War I.

In the journal in English language DABIQ, they point out, when referring to borders, that "these crossed partitions" and their modern Arab leaders were a strategy to "divide and rule", aimed at preventing the unification of Muslims under one magnet that has the flag of truth". This historical damage sentiment is an old issue of Al-Qaeda and of more modern Muslim groups.

However, the difference lies in the fact that when taking territory and heavy weapons, apart from the earnings provided by kidnapping, oil piracy, bank stealing and extortion, ISIS claims to have made a very important first step to correct what they consider an old evil in favor of the creation of a unified Islamic state that gathers the existing nations.

All of this varied propaganda production of ISIS promotes their main objective: to assure and extend the Islamic state. Experts say that this could change but, for now, we can distinguish it from Al-Qaeda, which had made attacks to the West their main priority.

THE RAPID SPREAD OF THE THREAT²³

After having assured border paths of Bukamal in Syria (and the

city) and of Qaim in Iraq (apart from municipal control), in June 2013, the main route that joins Aleppo (Syria) and Baghdad (Iraq) was taken. It continued its administrative strengthening when in October 2013, it declared that Raqqa (old capital of the caliphate in Syria) would be the capital, formalizing their administrative act by establishing a tax of up to 20 dollars every two months, saying that they charge half what Assad's government charges and would give twice those benefits.

Once it could control the paths that connect the center of Syria and Iraq, it tried to do the same with northern paths (Yarubia and Rabia), controlled by the Kurdish who, since October, reinforced their control preventing it to be taken by ISIS. In spite of this, this group entered through the north trying to be stronger on the Tigris river basin in the north of Iraq as from the beginning of 2014 in direction to the city of Mosul.

Their attempt to advance on Erbil (former Arbela, from the times of Alexander the Great), capital of the Kurdish area, was stopped by the Kurdish pesh merga combatants who were considered by the United States evaluation teams as the only ones capable of making Sunni military men to move back if they were provided with aid.

In this same line of advance towards Mosul, ISIS dismantled four of the main divisions of the Iraqi army: in Tal Afar, in mid June, the second division (Brigades 6, 9, 10 and 11); near Mosul, between June 9 and 11, the third Division (Brigades 5, 7, 12 and 26); in Salah al-Din, on June 12, the fourth Division (Brigades 14, 15, 16 and 17); and in Al Ambar, from December 2013 to July 2014, the first Division (Brigades 1, 2, 3 and 4).

If we consider that each division has 10000 troops, ISIS dismantled more than 40000 troops in their advance towards Baghdad in less than one month.

In their decision to become stronger over Iraqi territory, ISIS came to the Sinjar mount displacing a yazidi Shia minority. This place marked, in August 2014, the first air action of the United States to supply the community that had to isolate itself in the mount before being prisoners of Sunni combatants.

The first important combats started on August 18, when Iraqi and Kurdish land troops fought against ISIS and released the biggest dam of Iraq in Mosul with the support of US aircrafts in an extension of limited objectives set by their president.

Branen, Kate, "Pentagon: oil no longer the ISIS's main source of revenue", Foreign Policy, February 3 2015

^{20.} Ámbito Financiero, "Jihadist Caliphate: a virtual state: it already coins currency", printed edition, November 13, 2014.

Shane, Scott & Hubbard, Ben, "ISIS Displaying a Deft Command of Varied Media"; New York Times, August 30, 2014.

Callimachi, Rukmini, ISIS video shows Jordanian pilot being burned to death, New York Times, printed edition, February 3, 2015.

^{23.} Cordesman, Anthony, "The Campaign against the Islamic State: Key Issues and Demands for Action from the Administration and Congress", Center for Strategic & International Studies, September 16, 2014.



All of this varied propaganda production of ISIS promotes their main objective: to assure and extend the Islamic state.

Authorization was part of the Second Directive (called "protection of Americans") which justifies the intense air campaign aimed at breaking the fence of Yazidis stranded in Sinjar mount and at protecting US personnel, citizens and facilities in Iraq. Moreover, it authorized the deployment of 1100 troops to defend the embassy and airport in Baghdad and the consulate in Erbil, as well as the training of Kurdish troops and Iraq Security Forces (ISF)²⁴.

As an important fact during the first days of September, 2014, Moscow requested during a special meeting of the UNO Human Rights Council the adoption of a resolution to condemn ISIS crimes stating a difference referred to their attitude towards Syrian rebels²⁵.

Moreover, on September 5, Iraqi and Kurdish land troops with the support of United States aircraft recovered the control of Ameril, a city of Shia Turkish, after four months of ISIS blocking.

On the same day, during a meeting of countries members of the North Atlantic Treaty Organization (NATO) in Wales, they formed a coalition to destroy and defeat ISIS. The first signatory countries of the agreement were the United States,

Great Britain, Germany, France, Italy, Australia, Denmark, Poland, Canada and Turkey with the support of Arab countries.

During that meeting, it was established that said forces, called Spearhead, would have a battalion of 800 troops which could be deployed in two days. Then, they would have a brigade of between five and seven thousand troops to be deployed in seven days together with a greater state integrated in Great Britain, France and/or Poland. Their logistical support would gather in Romania and Poland, of which we can infer their use in regions outside the Middle East.

Moreover, NATO agreed to train Iraqi troops and give information about citizens recruited by ISIS. On September 7, with air support of the United States, Iraq Special Forces, allied tribes and local policemen, ISIS combatants sought to take control of their hydro electrical dam on the Euphrates River and the city of Barwana.

The importance of this action lies in the fact that, apart from assuring an obligatory step from Syria, as a main route for the supply of explosives and people, this is the recognition of a massacre of 24 people killed in the place by US marines in 2003.

Barack Obama, in his speech to the nation in 2014, before the September 11 anniversary, announced the stages of the attack allied to ISIS, which consists in an air campaign to protect ethnic and religious minorities and diplomats and military men from the United States. Later, there would be a training campaign to train, advice or equip Iraq Armed Forces, Kurdish combatants and Sunni tribes. As a third stage, there would be a military campaign for final destruction to kill combatants within Syria (of at least 36 months) and, last, a humanitarian campaign to stabilize the region.

Difficulties in armed actions led 40 countries to become part of the coalition on September 15 in Paris, including ten Arab states: Egypt, Iraq, Jordan, Lebanon, Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates.

A THREAT COMMON TO EVERYONE²⁶

The Arab League, concerned about the advance of a Sunni group with extreme Jihadist fanaticism, started to search, at least, a commitment solution that shows their interest in controlling rebel combatants.

On September 7, 2014, the ministers of Foreign Relations of the Arab League gathered to create an early warning system which organized the coalition of Arab forces (such as the NATO peacekeeping) to help Arab regimes in the fight against supporters of Muslim groups.

In spite of the clear intention to solve eventual rebel uprisings, the first question is the strength of Arab countries to establish a long lasting collective security system.

There is then the question whether this system will allow, in the long term, non- Arab countries in the region (Israel and Turkey) to be part of it. As to its eventual use in the region, the question is whether it will be possible to displace it to other countries, such as Libya, Somalia or Yemen. It is also necessary to know whether Syria could be added, as it is the current theater of operations for the Arab group against the Jihadist.

Last, the League must analyze the possibility for Russia to enter in order to analyze their use in case of eventual Muslim rebellion in their territory.

As from September 19, the coalition intensified their air attacks including many European countries and the support of the Arab Emirates, Qatar and Kuwait, as Eastern basis for the support of coalition aircraft instead of United States aircraft carriers of the Persian Gulf.

By the end of September, Tomahawk missiles started to be launched from American vessels located in the Red Sea and the Persian Gulf.

At the beginning of October, the battle for the Kobane enclave, in the north of Syria, main border connection with Turkey where ISIS aimed at assuring the flow of material and human reinforcement and preventing the reinforcement of Kurdish troops, the only force that could resist ISIS attacks.

Kurdish troops, at the beginning of November, launched successful attacks against ISIS in three fronts in the north of Iraq: Rabia, in the Syrian border; Zummar, in the north of Mosul and in Daquq, in the south of the key oil point of Kirkuk.

The Arab League, concerned about the advance of a Sunni group with extreme Jihadist fanaticism, started to search, at least, a commitment solution that shows their interest in controlling rebel combatants.

Kurdish Mergapesh were resisting in Kobane, showing that ISIS was not invincible. The United States saw that air actions were not sufficient, when the president authorizes the deployment of 1500 troops in Iraq, as instructors, apart from requesting the Congress 5000 million dollars to support combats.

The original strategy of the coalition started to be revised by the Pentagon²⁷. Apart from a panel of experts, the UN Secretary, Ban Ki-moon, was requested to require the Security Council to order all countries to control oil trucks entering and going out of the territory of the Jihadist and impose a global moratorium on the sale of antiques by both countries.

Combats made Baghdad and Kurdish minorities to agree on a resolution of old disputes regarding oil royalties in Kurdish territory. It is also known that several leaders of Shia Hezbollah from Lebanon train Iraqi Troops to stop the advance of ISIS in the surroundings of Baghdad, alleging to know the way of combat that was used.

In order to supervise the military effort of the coalition, the American Lieutenant General, James L. Terry was appointed. He supervises US forces in the Middle East and operated from that moment in a Kuwait base.

In second position, General Paul F. Funk II was appointed. He serves as subordinate in Baghdad to supervise advisors and trainers from the United States with Iraqi forces and then with the Kurdish in Erbil and possibly in Taji, 20 kilometers north of Baghdad.

The defeat in Kobane and the attempt to re-conquer Mosul by Kurdish troops show a territorial setback of ISIS.

Anyway, the capture of the Jordanian pilot (December 24, 2014) and burning to death showed an important event

^{24.} Reuters, "US Prepares Military Options in Syria against Islamic State", August 25, 2014.

Naumkim. Vitaly, "Russia focuses on eliminating Middle East Terrorist Threat", Al Monitor, September 8, 2014.

Sanderson, Thomas, M. "The challenge of deterring ISIS", Global Forecast, 2015 CSIS, December, 2014.

Branen, Kate, "The fight against ISIS is forcing the Pentagon to rethink its plan for the future warfare", Foreign Policy, November 14, 2014.

Omar Alberto Locatelli

Colonel (R). He was Defense Attaché, Military, Naval and Aeronautical before the States of Israel and Cyprus, 2005/2006. Dean of Military Attachés during the 2nd Lebanon War. Degree in Strategy and Organization with a specialization in Geopolitics from the Escuela Superior de Guerra del Ejército. He is also adhering member of the Instituto de Historia Militar from Argentina and researcher of the Argentine Ministry of Education.

Professor of Operational Strategy at the Escuela Superior de Guerra Conjunta and of Organizational matters at the Escuela Superior de Guerra del Ejército. Author of numerous publications, among which are Cyprus, the mission Hope. Sovereignty and Terrorism and the 2nd Lebanon War- Causes and consequences and the Evolution of the Tactical targets in the war", The Asymmetric Warfare: A new war equation" (1st and 2nd part). He has also written the book Chronicle of the Second Lebanon War: Survival of Hezbollah".

in combats. Arab states acknowledged that ISIS is also a common enemy.

RESHAPING THE MIDDLE EAST²⁸

ISIS, at the time of writing this article (March 2015), is not only a problem for Sunni, Shia and Kurdish, but particularly for the West, to the extent that the president of the United States has requested the Congress to approve the use of troops (except in land actions) in any place affected by the Middle East and the north of Africa, apart from those places where interests and/or citizens of the country and their allies are affected²⁹.

The international community faces a new low intensity conflict of indefinite extension which may be considered the first Hybrid War³⁰.

In the initial analysis, to fight ISIS, it is necessary to consider combat in a host country (Iraq) of uncertain hospitality and that military actions must remain in the unstable Syria. At the same time, the new alliance must assure air power with aircraft, unmanned air vehicles and cruise missiles that allow them to carefully select the necessary targets, as countries intervening in the coalition avoid authorizing land operations of their troops³¹.

Moreover, they need to have the number of necessary land forces to cover huge areas in Iraq and continue actions in Syria with the danger of including non-Arab forces in the middle of a sector civil war.

It is necessary to consider that, although Iraqi land forces may have an important role to complement air power, for tactical victory, it is necessary to achieve political union between Shia Arabs, Sunni, Kurdish and the rest of the minorities in Iraq and the government.

To do this, it is necessary to get Sunni Arab support in the areas under influence of ISIS, reduce gaps between Arabs and Kurdish, get the support of Arab neighbors and build stronger new relations with Turkey.

ISIS has become a substantial force in the northern and western area of Baghdad which threatens the Kurdish production of oil and the Iraqi government. Probably the need will lead for one of the solutions to be in the attitude to be adopted by Turkey, the main Muslim hegemonic country that may decisively contribute to defeat ISIS (set as a target by the coalition 32).

However, their economic interests in Syria are contrary to those of the coalition; one aims at the defeat of Assad in opposition to the creation of a possible jihadist sanctuary with open borders to the Mediterranean and the world.

The coalition requires to keep a delicate balance between their relation with Iran, to keep their nuclear plan under control in exchange for the reduction of economic problems and relation with Saudi Arabia, main Sunni support of the Arab League.

Warning signs in the West are very clear. Stages mentioned in the book Management of Savagery begin to become true both in the Syrian- Iraqi territory and the north of Africa. The Syrian uprising starts to join the Libyan sunset. No military success will be sufficient if jihadism and violent Muslim extremism cannot be totally defeated, for which it is necessary to know both.

Old Holy places had to be released (although temporarily) by different Crusades. The last great Ottoman Muslim Empire could only be dismantled after a world war. It may be the time to rethink the agreement Skyes-Picot or we will have to remember the success of the coalition in the siege of Vienna on September 11, 1683.

Inshallah (May God want, in Arab language), a new Council of Clermont or the bravery Godfrey of Bouillon are not necessary to put an end to this new form of war in the name of God.

^{28.} Friedman, George, "The Islamic State reshapes the Middle East", Geopolitical Weekly, November 25, 2014

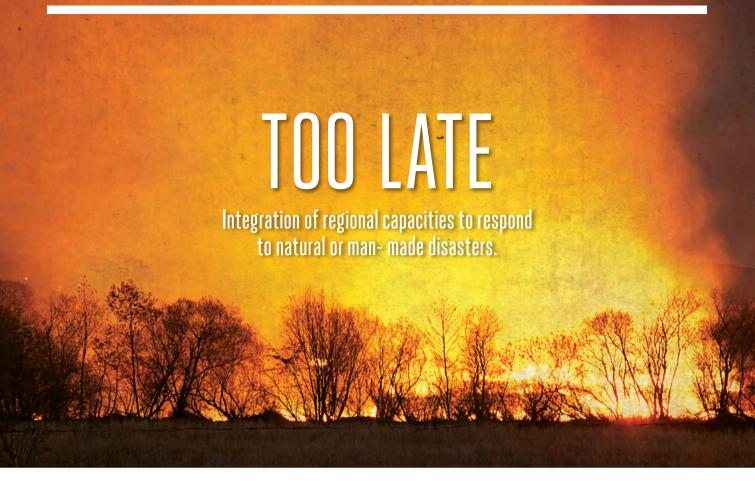
Peters, Jeremy W., "Obama to seek War Power Bill from Congress to fight ISIS", New York Times, February 10, 2015.

Bowers, Christopher, "How to identify emerging hybrid opponents", Military Review, January-February, 2014.

^{31.} Baker, Peter, "Obama Sends Letter for an adequacy of resources". New York Times, February 11,

^{32.} Cordesman, Anthony, The need for an adequacy of resources. Available at http://csis.org/files/publication/141024_Imploding_US_Strategy28in_Islamic_State_War.pdf

CIVIL DEFENSE VISIÓN CONJUNTA NÚMERO 12



Natural disasters permanently affect a great part of society and are a worldwide concern. Little has been made as to prediction and implementation and, therefore, as stated by the author, there is much improvisation which makes aid arrive too late.

KEY WORDS: DISASTERS / STATE / MITIGATION / AGREEMENTS / IMPLEMENTATION

By Humberto Flavio Angelomé

NTRODUCTION

Every day, images of fire, toxic leaks, floods, earthquakes, droughts and other natural or man-made disasters show different feelings and vulnerabilities of society. These disasters affect several social sectors, especially in urban areas causing a flow of refugees and displaced persons that will live for periods of time that are relatively long in critical health and education conditions apart from losing industrial and productive activities.

During the last years, the number of natural 1 and manmade 2 disasters has increased and, thus, the number of victims and material losses has also increased. This trend represents a serious threat to worldwide sustainable

development. In light of this, the international community has decided to apply multiple initiatives with different results.

Natural disasters do not respect borders and, regionally, they may cause the collapse of sanitary, housing and food facilities of neighbor countries due to uncontrolled mass migration of people fleeing and, therefore, it is necessary to work on international cooperation.

- Currently called "socio- natural disasters". This expression is the result of the relationship between natural disasters and social vulnerability.
- 2. These are called "social" as threat has human and social nature.

A state that cannot meet the minimum welfare and governance conditions may become a failed or anarchic state. International cooperation is a clear case of cooperative security: the more capacity each country has to face the aftermath of a disaster, the more secure neighbor countries will be.

Mitigation of natural and man-made disasters is key at national level. This article questions that regional agreements make special reference of structures and legal frameworks instead of focusing on concrete measures for implementation in response and recovery. It is, in fact, a poor regional management of risks.

NATIONAL AND REGIONAL RESPONSIBILITIES

Management of disasters is analyzed and studied in a systematic manner, as a cyclical sequence of three stages that are related to each other.

These are the following:

- > "Before- Mitigation" (which includes prevention and preparation)
- > "During-Response"
-) "After-Recovery" (which includes rehabilitation and rebuilding")

Mitigation phase is clearly a national responsibility. It has the purpose of reducing the impact of disasters. Prevention and preparation, composed of short and long term measures aims at saving lives and limiting damage caused by the adverse event (DNPC, 2010). This is achieved by reducing vulnerability with warning systems, risk monitoring, promotion, training, education and a legal framework that supports and organizes these elements³. During this stage, strategies related to the organization of public (national, provincial and municipal) sectors must be prepared and implemented.

It is also necessary to train and coordinate with other community bodies involved in this process to properly prepare population so that it can react in a coordinated and cooperative manner in case of disaster⁴. Most disasters may be prevented by means of prevention and mitigation activities previously planned at national level⁵: Damage after a disaster is due to the fact that the system and its elements

As the 21st century started, demographic growth, environmental degradation, rapid industrialization and socioeconomic instability have led to an increase in the risk of huge disasters.

are not capable of protecting themselves against the threat or to recover from their effects⁶.

Response and recovery stages imply the activation and articulation of actions planned for each case which may include, among others, the evacuation of the community affected, aid, search and rescue. Although these stages do not lie within each state's sovereign responsibility, international aid is aimed at saving lives, reducing pain and protecting property. This period is normally the most visible one for the community and the media, except in cases of droughts and hunger, among others⁷.

Recovery state includes different measures. It may imply a short term recovery of structures stopped due to the disaster and a long term recovery to restore or improve original conditions thus preventing future repetition⁸.

In this sequence of stages, there is a close relationship among activities implied in each of them and it is difficult to precisely determine the beginning and end of each of them and the responsibilities of those who work on more than two.

It is important to bear in mind that risk management is an ongoing process as we will always be in one of these stages.

EXTRA REGIONAL CONTEXT

According to international data, as from 1960 to these days, there has been a significant increase in the number, seriousness and intensity of disasters.

This trend is a serious threat to sustainable development⁹ as while natural disasters still happen, human actions may increase or reduce vulnerability of society against them considering socio- economic factors that determine such vulnerability.

- National Executive Power, "Federal Emergency System (SIFEM, in its Spanish acronym). Executive Order 1250/99 on Federal Emergency System, creation within the Cabinet of Ministers, Purposes, Emergency Department (GADE, in its Spanish acronym). Integration. Base Entities, October 28, 1999 as published on the Official Gazette on November 4, 1999, No. 29265, p.3.
- Zagalsky, Ruth, "Five years as from the creation of the Federal Emergency System-SIFEM. A
 critical assessment of its institutional development". Cuadernos del CEPAS. Available at http://
 www.asociacionag.org.ar/pdfaportes/22/09, p. 4.
- 5. UNO/ ECLAC, "Conceptual Elements for the Prevention and Reduction of damage caused by
- socio- natural threats", UNO, ECLAC Flagships No. 91, 2005. Available at http://www.eclac.org/publicaciones/xml/1/23711/lcg2722e.pdf, p. 9.
- Lavell, A., et. al. From the concept of risk and its management to the meaning and manners of social intervention, Arequipa, COPASA- GTZ/ Project for Natural Disaster Risk Management, 2003.
- 7. Zagalsky, Ruth, op. cit., p. 6.
- 8. Zagalsky, Ruth, op. cit., p. 7.
- Sustainable development: development that satisfies the needs of present times without engaging the capacity of future generations to satisfy their own needs. This definition was created in 1987 by the Brundtland Commission.



For example, population growth, changes in demography and economy (uncontrolled urbanization) and poverty have forced millions of people to live in areas prone to disaster and in improper houses thus increasing their vulnerability.

Between 2002 and 2011, there have been 4130 disasters resulting from socio- natural phenomena and 1.117.527 people died. There have been losses for 1195 million dollars. People and resources are located in high risk areas.

Worldwide proportion of inhabitants of areas prone to floods has increased by 114% while population that lives in seaside areas exposed to cyclones has increased by 192% in the last 30 years.

Half of the cities of between 2 and 15 million inhabitants are located in areas prone to earthquakes. Quick urbanization will continue growing and, therefore, exposure to risk of disaster will also grow (ISDR/UNO, 2011).

Among the most important international events, we can highlight the International Conference of United Nations (Stockholm, 1972) under the title "Man and Biosphere". There, there was a first international warning as to ecological crisis and eco-development¹⁰ was supported as a way to prevent social and environmental damage caused by a development model that wastes resources and pollutes land, sea and air.

Natural disasters do not respect borders and, regionally, they may cause the collapse of sanitary, housing and food facilities of neighbor countries.

As president of the World Commission on Environment and Development, Gro Harlem Brundtland, former Prime Minister of Norway, in a report submitted to the United Nations titled "Our Common Future" (1987) introduced the concept of sustainable development, presenting an international objective and a common perspective and purpose to work for.

As the 21st century started, demographic growth, environmental degradation, rapid industrialization and socio- economic instability have led to an increase in the risk of huge disasters. For humankind to become aware of how much it is possible to be done in order to foresee natural disasters, the United Nations have implemented the International Decade for Natural Disaster Reduction from 1990 to 1999¹¹.

Reduction through Resolution 44/236 dated December 22, 1989. All countries were urged to found National Committees and a small international framework was established to give support by means of a Scientific- Technical Committee, an Inter- Agency Committee and a Secretariat based in Geneva and then a Unit for Latin America and the Caribbean based in Costa Rica.

^{10.} Some time later, the United Nations would leave the expression eco-development as it is politically incorrect as stated by Henry Kissinger, United States Ambassador. It was replaced by "sustainable development".

^{11.} The General Assembly of the United States established the International Decade for Natural Disaster

In Yokohama (1994) the World Conference on Natural Disaster Reduction was held. During this conference, a document known as "Yokohama Strategy and Plan of Action for a Safer World: guidelines for natural disaster¹² prevention, preparedness and mitigation (UNO/IDNDR, 1994).

Within the context of the United Nations, experience acquired during the IDNDR from 1990 to 1999 helped to promote the application of a change of concepts from a simple response to disasters to their reduction highlighting the key role of human action. This has led to the creation of the International Strategy for Disaster Reduction¹³ in the year 1999.

The World Conference of the United Nations on Disaster Reduction (UNO/WCDR, 2005) held in Hyogo, Japan, between January 18 and 22, 2005, is a landmark based on the findings of the revision process of the Yokohama Strategy. There, two documents were negotiated: increase of resilience of nations and communities against disasters: Hyogo Framework for Action (HFA) 2005-2015" in which it was resolved to achieve a significant reduction of losses caused by disasters for the year 2015 and the Hyogo Declaration which acknowledges the close relationship

The region must be prepared with immediate response teams to get involved in "Response" and "Recovery" stages in other countries.

between disaster reduction, sustainable development and poverty eradication as well as the importance of getting all society sectors involved (UNO/WCDR, 2005).

Nowadays, disaster risk management is strongly present in the international political agenda, for example, in the G20, Rio+20¹⁴, the Summit of the Americas¹⁵ and the Inter-Governmental Panel on Climate Change¹⁶ (IPCC, 2012). These stages recognize practical relations among disaster risk management, adaptation to climate change, sustainable development, poverty and weak governance in order to reduce vulnerability of communities.

In the same manner, both disaster risk reduction and adaptation to climate change consider prospective measures to help governments and communities to know and be able to foresee climate events and adverse potential effects to have enough time to take the necessary measures.

The Hyogo Framework for Action contributed to extend disaster risk reduction, but objectives and priorities for action are still far from being achieved ¹⁷. All these agreements and documents mentioned are taken into good international intentions, agreements about expressions and the creation of direction super structures. This is not enough to face concrete cases. It may be seen that even the most powerful nation in the world, the United States, required concrete assistance from the European Union resources after Katrina hurricane in New Orleans, in 2005.

REGIONAL CONTEXT

The expression regional context is ambiguous as it may mean, in Argentina, both the so-called Southern Cone and



It would be necessary for each country to be prepared to prevent and mitigate disasters preparing risk maps that may be predictable due to its cyclical condition.

Latin America. There is more confusion as to the fact that there is also the expression sub regional. In this article, we will understand the expression regional context as Latin America.

Latin America is exposed to many natural threats due to its geological, climate, hydrological and geomorphological characteristics. One of the most dramatic representations that affect the region is the El Niño Southern Oscillation phenomenon.

Floods are very frequent in this continent due to climate problems related to unplanned urban expansion, erosion and sustainable use of land. Moreover, extreme temperatures and droughts are increasingly frequent and serious in some areas in the region, in particular in Peru, the Bolivian Altiplano and the Great Chaco (Bolivia, Paraguay and Argentine North East).

Areas such as the Pacific Coast and the south of the continent have earthquakes and tsunamis of great magnitude. All of these disasters are cyclical and, therefore, quite predictable.

In the countries of the region, disaster aid systems started in the 70's with the creation of Civil Defense entities. These institutions have a hierarchical structure and a response focus, excessive centralism and lack of coordination among governmental and private entities and communities, as well as among response entities and aid in case of disaster, research and training.

There are still nowadays in many countries of the region some efficient mechanisms for response but which do not have prevention capacity, which should be a main national concern. Losses caused by disasters as well as the clear evidence of the relation among vulnerabilities, natural and man-made threat and disaster risk, promoted a new way to face the problem which includes prevention, an effort for territory planning and development.

In spite of cultural, economic, population and territorial differences in the countries of the region, there are aspects that are common to all of them: exposure to a great variety of natural and man-made threats, high social vulnerability levels, great urban concentration, basic infrastructure deficit and environmental degradation processes caused by deforestation and soil erosion¹⁸.

We may highlight as background, within regional legal framework, the Final Statement of the VI Ibero-American Summit of Heads of State and Government (Viña del Mar, November 11, 1996) which refers to the creation of the Ibero-American Association of Protection and Civil Defense Bodies during the same year¹⁹.

Argentina executed an agreement with the Republic of Chile on cooperation on catastrophes, Law 25240/2000 and, therefore, in the context of the Armed Forces, regulations were drafted and passed and a series of combined exercises called "Solidarity" started in the year 2001.

In Peru, Law 26128 (August 2006) was promulgated and the agreement on cooperation on disasters was promulgated and was executed in Buenos Aires on June 11, 2004.

Bolivia and Argentina, as regards cooperation on disasters, frequently carry out combined exercises called "MASI".

The Andean Community promoted risk management initiatives through the Andean Committee for the Prevention and Assistance in case of Disaster (CAPRADE, in its Spanish acronym), created in 2002 to contribute to the reduction of risk and impact of disasters on the Andean subregion territory.

Moreover, there are Bilateral Agreements in the region, based on which the Armed Forces prepared rules on cooperation procedures, for example, between Peru and

- 12. The document prepared by the International Strategy for Risk Disaster stated, among other concepts, the main responsibility of each country to protect their population against the effects of natural disasters and that regional cooperation is essential for the promotion of "worldwide prevention culture".
- 13. The experience of the International Decade for Natural Disaster Reduction, the Yokohama Strategy (1994) and the Strategy called "A safer world in the 21st century: Reduction of Disasters and Risks" (adopted during the IDNDR Program Forum in July, 1999) served as basis for the creation of ISDR which has a Secretariat based in Geneva and offices in Africa, North America, South America, Asia, the Pacific and Europe as well as liaison office in New York, but the system of the ISDR comprises United Nations organizations, governments, civil society entities, private sector media and other participants all over the world.
- United Nations Conference on Sustainable Development (UNCED) held in Rio de Janeiro, Brazil, June, 2012

- 15. On April 14 and 15, 2012, Cartagena de Indias, Colombia, the 6th OAS Summit "Connecting Americas: Partners for Prosperity" was held. It focused on the role of physical integration and regional cooperation in several key areas including disasters.
- 16. The relation between climate change and extreme climate events that are considered threats in particular as to Management of Extreme Events Risk and IPCC based on information of the year 1950 to this date concludes that climate change, far from being a future scenario has already affected the magnitude and frequency of some climate events.
- Khamis, Marion and Osorio, Claudio, South America: A regional vision of the situation of disaster risk: UNSDR- ECHO, 2013, p. 26.
- 18. UNO/ ECLAC, op.cit., p. 69.
- Organization of Ibero- American States, VI Ibero- American Summit of Heads of State and Government, Statement of Viña del Mar, Chile, 1996.

Ecuador, Peru and Bolivia, Chile and Peru and this would be extended to Brazil, Paraguay and Uruguay.

In the year 2001, in the context of Mercosur, the Framework Agreement on Environment, was signed in Asunción, where the importance of environment is considered as crucial in the consolidation and strengthening of Mercosur and the obligation to timely provide information on disasters and environmental emergencies that may affect other Member States and, whenever possible, technical and operational support was established. The main tasks related to the reduction of disaster risk came from the Specialized Meeting on Socio- Natural Disaster Risk Reduction, Civil Defense, Civil Protection and Humanitarian Aid in 2009.

In the Statement of Santiago de Chile²⁰ made by the South American Defense Council of UNASUR, the first cooperation initiatives as to defense were presented by means of the execution of the 2009-2010 Action Plan and, later, the annual Action Plans were prepared²¹.

These plans develop four guidelines with a series of specific initiatives. In Guideline No. 2, Military Cooperation, Humanitarian Actions and Peace Operations, the following initiatives were established:

- > Plan and execute a combined exercise for aid in case of natural catastrophes or disasters.
- > Prepare a list of defense capacities that countries offer to support humanitarian actions.
-) Propose mechanisms to be implemented in case of natural disasters.
- > Exchange experiences in the field of humanitarian actions in order to establish immediate response mechanisms in case of natural disasters.
-) Propose cooperation mechanisms among Ministers of Defense of member countries to immediately respond to natural and man-made disasters of great magnitude within the framework of responsibilities stated in the domestic regulations of each State, including operational aspects.
- > Prepare risk maps of natural disasters for early mitigation within the framework of responsibilities

Humberto Flavio Angelomé

Captain of the Argentine Navy. Staff Officer. Bachelor in Propulsion Navy Systems. Engineer in Environmental Security. He graduated from the Joint Forces Staff College in 2013 from the Course on Leadership and Joint Military Strategy at the Strategic Level. He is currently working as Director of Navy Maintenance at the General Direction of Navy Materials.

stated in the domestic regulations of each State, including operational aspects.

However, the purposes of the South American Defense Council were reached in a very varied manner because, in many cases, due to the complexity stated, they go beyond the calendar. Moreover, in Action Plans, countries responsible and countries that are jointly responsible are stated, thus, progress depends on the promotion by those responsible and the level of agreement/acceptance of the rest of the countries.

CONCLUSIONS

In this short list of regulatory and intentional frameworks that are laudable at international and regional level, it is clear that there are many super structures but few concrete manners to implement aid.

It would be necessary for each country to be prepared to prevent and mitigate disasters preparing risk maps that may be predictable due to its cyclical condition and, thus, carry out an urban development in line with likely risks, for example, by not authorizing urbanization on landfills or near water courses or educating people as to resilience capacity to face disasters.

Adhesion to global warming treaties, evacuation plans, and hydric works and reforestation campaigns must also be dealt with early.

The region must be prepared with immediate response teams to get involved in "Response" and "Recovery" stages in other countries, organized according to different foreseeable disasters: earthquakes, volcano eruption, floods and fire.

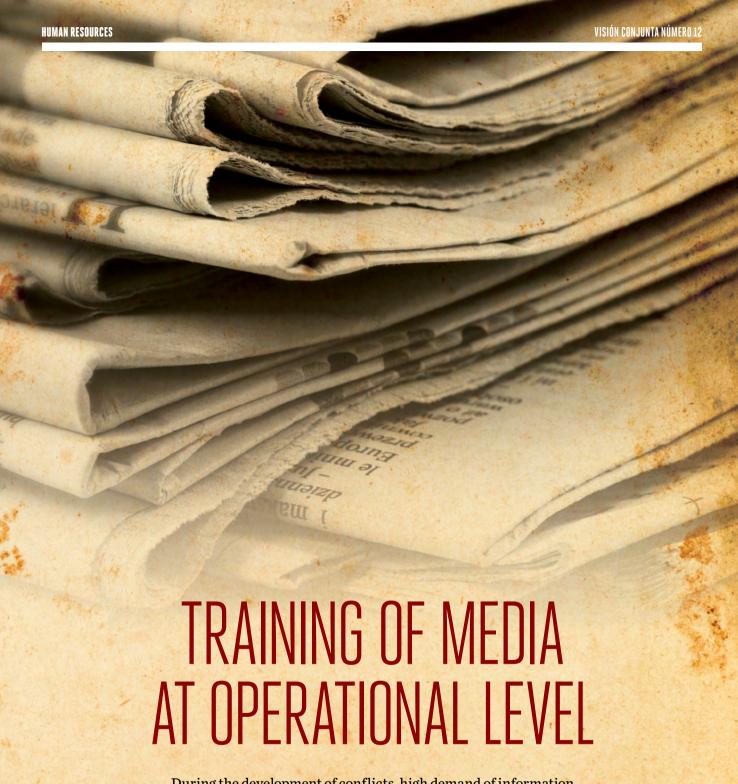
These immediate response teams must have some logistic autonomy days, go to neighbor countries in urgent period of time and after the national self- sufficiency period has expired, they have to stay in the country affected or leave it pursuant to their government requirements. This has not been implemented at regional level, although it has been implemented in Central America.

Effects of natural disasters are increasingly greater and all specialized entities agree on the need to face these problems with an integral perspective of the cycle of disasters, promoting prevention and mitigation activities and getting ready for regional cooperation in response and recovery.

Contents of summits, conferences, strategies, reports and initiatives show worldwide concern as to these issues but advance in implementation is little and it is necessary to work on this. As regards this issue, improvisation leads aid to arrive late or not to arrive.

^{20.} Statement of Santiago de Chile-Santiago, Chile, March 9 and 10, 2009.

^{21.} South American Council, 2009-2010, 2010-2011 and 2012-2013 Action Plan.



During the development of conflicts, high demand of information by the media requires immediate response and the media need to satisfy the need of knowledge of international audience that many times does not believe in strictly official announcements and statements.

Training of media at operational level will ease their performance.

KEY WORDS: PUBLIC OPINION / JOURNALISM / MEDIA / COMMANDANT / INTERVIEW / SPOKESPERSON

By Álvaro Bazán

NTRODUCTION

After the Vietnam experience, US military conduction realized that current wars are won or lost with public opinion, an opinion that General Schwarzkopf had especially considered during the Gulf War.

Being a major in Vietnam, he understood that there is no military commandant or governor that may deal with an adverse worldwide public opinion,

Schwarzkopf learned this from his family. One of his sisters, Sally, was a leader of the most important anti-war demonstrations.

Moreover, he understood that management of public opinion is the most important aspect of political conduction of war. If political conduction of war is poor, war will be lost before it starts.

The set of videos with press conferences and presentations by General Schwarzkopf produced during the Desert Storm Operation became a great Manual of Communication Techniques that was used as reference by different organizations at international level.

As we go up in the level of conduction of forces, the more difficult it is to deal with different issues that are inherent to war. In this way, the role of the organization that will be in contact with the media at operational level becomes more different. The same occurs with the information to be given, which is clearly sensitive.

The conduction body at operational level needs to be aware of the importance of this issue to the extent that the Commandant of the Theater of Operations must have some organization that advises them in a convenient manner and that is as efficient as them when interacting with journalists so as to try to satisfy their demand and, thus, favor conduction of operations.

As from digitalization of data and the possibility to access the Internet from anywhere in the world, a person may have access to a piece of news, an image or video broadcasted in real time or pre- recorded, which may be consulted as frequently as necessary so as to be able to analyze their content in detail.

Therefore, this "easy" access to information has influenced on the way to make war as the public opinion has become a highly decisive factor for acceptance and legitimacy of current wars.

As an example, we may mention the Vietnam War in which it was clear how the media played a role in such a manner that they affected not only the US public opinion, but also the conduction of operations and management of war at strategic level.

This was enough to give importance to the training of media at operational level and their correct organization, at moments in which television became the favorite media. Moreover, progress in communication technology gave more speed to activities to search news.

Therefore, this "easy" access to information has influenced on the way to make war as the public opinion has become a highly decisive factor for acceptance and legitimacy of current wars.

At the beginning of said war, a reduced and simple group of media followed the conflict both from Saigon and the Pentagon and, after some months, the media started to complain that authorities were deceiving them. It was then when they could prove once again the famous expression "the first victim of war is truth" and the relation mediamilitary men weakened during the rest of the conflict causing emptiness in their relationship.

Journalists, who try to give news that are not those given from the military context, started to try to get information from other places. Just to mention one case in particular, the coverage of the Tet Offensive, organized by military men, was particularly negative and deceitful, and we may say that as from that moment, this became a turning point in the US people's support to war.

The publication of a picture showing the killing of a member of the Viet Cong by the South Vietnam Police Chief, together with the high cost in terms of lives implied by military operations for Americans, led the public opinion to be against the involvement of their armed forces in this war.

This case shows that a cooperation relationship between the media and conduction body at operational level of war is key for both of them to do their work.

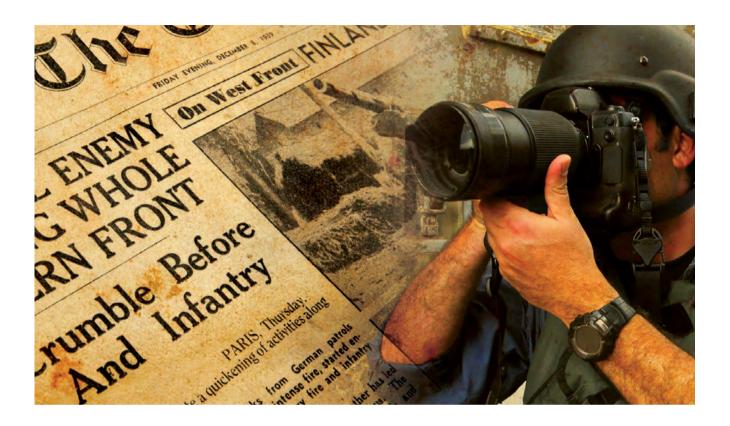
In this sense and as regards military operations, this will be possible if military staff that will be in contact with the media is conveniently trained and an organization that works properly is formed, which will help them adapt to different situations.

Based on this, we may state this question: how should training and the media organization be at operational level to contribute to the conduction of operations in the best possible manner?

In order to answer this research topic, this article focuses on making a proposal that includes training of the media body at operational level and its organization.

As an initial hypothesis, we may state that *the detailed* training and organization of the media body at operational level will contribute to optimize conduction of operations.

The intention is to make a contribution that helps to mitigate the lack of doctrine allowing for the deepening of concepts mentioned to contribute to improve the status of the question.



TRAINING OF THE MEDIA BODY AT OPERATIONAL LEVEL The complex world of war

War is a complex social phenomenon and, based on the different perspectives with which it may be dealt with, there is the need for news to be properly given so that there are no effects contrary to what has been expected without being far from truth.

Inappropriate or badly-timed information or information which is subject to different interpretations will have highly negative consequences both for the future development of operations and public opinion.

Based on this, we can identify two groups with interests that are normally opposite. On the one hand, military men whose main interest is to attract public opinion favorable to the development of operations as it is necessary to support the war effort and its consequences.

On the other hand, there are the media, the interests of which are focused on keeping the audience informed, being the economic and professional ethics the most relevant ones.

These different perspectives to approach the issue of relationship between the media and military men are a difficult scenario.

 Shanker, Tom and Hertling, Mark, "The Military- Media Relationship. A Dysfunctional Marriage?", Military Review, January- February, 2010, p. 15. How should training and the media organization be at operational level to contribute to the conduction of operations in the best possible manner?

With respect to his, journalist Tom Shanker states the following:

I have always had the impression that the relation between the Army and the media is like a marriage relation. It is sometimes a dysfunctional marriage – just to say something- but we are together for the kids. For you (a military man), soldiers are your "children" and you serve them as commandant. In my case, I serve readers, citizens of this Nation who support to a great extent the national and most valuable treasure, they support your children, siblings and spouses. They need to know what is happening in the Army and the statement of security policy!

TRAINING OF THE COMMANDANT AT OPERATIONAL LEVEL

It is very important for the highest authority of the Theater of Operations to have some abilities to communicate and satisfy information demands of citizens from their country It is necessary to train them with postgraduate courses in civil matters that allow for an interaction with press media and management of information that is relevant to be published.

and the whole world. In some cases, the commandant will have to be able to inform the audience about the progress of operations, while in some other cases, they may use their second-in-command or a spokesperson trained for such purpose.

Therefore, as they are not communication professionals, the commandant needs to be advised and trained by their press team. In order to do this, many aspects must be taken into account, the most relevant of which are the following:

- The main thing to be considered is that preparation for an interview is crucial². Making a detailed analysis of different variables found in a meeting of this nature helps to considerably reduce the possibility for the interview to have a negative result for the interviewee. It is important to get as much information as possible about the journalist who will carry out the interview, analyzing prior audience, even that which does not have any relation with the topic to be dealt with but that allow to get closer to the approach of the interviewer, questions style and comments about the answers of the interviewee³.
-) It is important to try to prepare questions in advance: the press body of the commandant has to prepare a series of polite questions, uncomfortable questions and some difficult questions. Having these questions will allow the interviewee to have more appropriate and right answers.
- With the purpose of preventing an excessive amount of information in memory and, also, taking into consideration that the commandant has many concerns that prevent them from taking the necessary time to prepare in an efficient manner, it is useful to show charts, maps, official documents or even graphics to support their explanations or responses. If they have this type of support material, it is advisable to have a copy in case the interviewer requires one.
- It will be appropriate to practice for the interview, record it and then analyze it in order to discuss with the press team or other advisors as to how to improve the general performance or any other issue in particular.
- It is essential to develop the message. The commandant needs to know clearly the message to be delivered orally

or in writing. The question to be made is: if I had to write the title of the article, what would it be? Among other things, this may be achieved by keeping in mind what the message to be delivered is, which allows to guide and control the interview. It may be useful to have them in writing and develop them during the interview so that when it finishes, the commandant may have had said everything they planned before. Even when they are not asked about them in particular, they must have the ability to take their answers to the issues they are interested in.

) Last, two very important rules need to be taken into account: they do not have to say anything they do not want to be published and they must think their answers by preventing to answer in a hurried manner.

TRAINING OF THE PRESS BODY AT OPERATIONAL LEVEL

As stated before, it is important to have a media organization that allows the commandant to have a conveniently trained organization to properly interact with the media.

Moreover, the officer in charge of media has to be able to act as spokesman of the operational commandant as well as to control and supervise responsibilities of their body.

Therefore, staff must be trained as:

-) Head of Department and Spokesman for the Commandant
-) Specialist in graphic and printed media
- > Specialist in television and radio
- > Specialist in social networks
- > Specialist in management of correspondents on the field

Head of Department and spokesman of the commandant

The spokesman of the commandant has great importance and it is necessary for him to be a person considered as reliable by the commandant of the Theater of Operations⁴, they must have great communication power and they cannot leave aside the vision and intention of the commandant, both in military and political terms in order to spread the necessary information to different members of the media.

There are some articles that discuss whether a spokesman must be a professional journalist or a skillful expert in the area in which they need to carry out their activities or if it is necessary to be a military man properly trained to do that advised by journalists.

Shea, David, J. & Gullick, John F., Media isn't a four letter Word. Electronic Industries Association. United States of America, 1994, p. 1.

Boylan, Steven, "The relation that exists between the Armed Forces and the social media. An
exercise of strategic pacience", Military Review, Hispanic version, 2001, p. 39.

Joint Staff of the Armed Forces, Manual of Strategy and Planning for Joint Military Action, MC 20-01, "Operational Level. The Campaign, Buenos Aires, 2013 revision, p. 23.

It is necessary to organize an office whose members are the responsible for establishing the relationship with graphic media.

The main advantage for the spokesperson to be a journalist is that they have knowledge in communication and its different techniques. In that case, their training has to be focused on learning military vocabulary, knowing what is happening in the Theater of Operations and what the military world is like. Therefore, they will make an effort to stand in military's shoes to give a precise message.

Many times civil population wants to listen to news from the military, for which case the officer acting as spokesman has to be especially trained on how to perform their responsibilities with the media.

Moreover, those who want to be spokesmen of the commandant have to be fully aware of the activities being carried out in the campaign and they need to be aware of the fact that information delivered will be taken by the audience as the commandant's own voice⁵.

Specialists in graphic or printed media

It is necessary to organize an office whose members are the responsible for establishing the relationship with graphic media.

With relation to knowledge and training to be received as to the media with which they need to interact, it is essential to know that it is necessary to be updated as to publications that are covering military operations in order to monitor what the perception of the conflict is and what messages to focus on.

When giving an interview to a graphic media, the press team must be trained to talk with the commandant or the spokesperson and advise them as to the techniques to successfully carry out the interview.

The key is to wonder: what title would we like to see published in the graphic media?

In order to communicate what we want, the message to be delivered must be defined beforehand.

It is convenient to record the conversation to assure that concepts expressed are then transcribed 6 .

To do so, the press team must establish a series of rules to put some framework to the interview and to state how it will be conducted and then how information will be published:

> Record the interview: this gives some relief to the journalist as they will be able to use all information given at the time the commandant or spokesman may rely on such information for their own relief.

- Not to record the name of the interviewee (optional): the interviewee gives information but it is not possible to mention their name or position. An expression that may be used in this case would be: "a higher authority source from military conduction of the conflict stated that (...)".
- Off the record: this expression refers to the fact that some things that were discussed will not be edited. This cannot be a reason to make a parallel interview before or after starting the interview as the message to be delivered may be affected. Moreover, it is necessary to take into account that many journalists consider that the interview starts at the moment the interviewee welcomes them: image, body language, mood and appearance of the commandant or spokesperson is a key element for what will later be written.
- Once the interview started, there is no space for comments such as "actually, this is off the record (...). This is a huge mistake and we cannot make this type of comments.
- We cannot lie because, once something has happened, it will not be possible to change it although there may be some control over how the audience will get to know about that⁷. Truth is the basis for the relationtrust there must be between the media and military conduction of the conflict.
-) Do not express anything that we do not want to be published: we cannot give answers that are precisely the ones we tried to avoid before. The commandant and the spokesperson are not obliged to answer to certain aspects about which they do not want to talk. For that, it is necessary to take the answer of a likely undesired question to the message intended to be delivered.
-) Main issues at the beginning: those things with which we would like to close a presentation may be addressed at the beginning and the rest of the ideas about which we talk may support that and give coherence to those main things. Expressions like "the main issue here is (...)", "the key for success is (...)" or "we cannot forget that (...)", may be useful tools or expressions to answer to an uncomfortable question with the message desired to be delivered.
-) We cannot repeat negative expressions from journalists: any negative comment may be turned into a positive expression and it must be done in such manner. The commandant has to be careful not to address topics with a negative expression, but a positive one.

Smith, Rupert, The Utility of force, The art of war in the modern world, Vintage Books, New York, 2007, p. 401. Author's translation.

^{3.} Shea, David J. & Gullick, John F., op.cit., p. 13. Author's translation.

^{7.} Shanker, Tom & Hertling, Mark, op.cit., p. 20.

^{8.} Shea, David, J. & Gullick, John F., op.cit., p. 20. Author's translation.

-) It is important to be careful not to talk about potential or hypothetical situations: anything that may happen or that is likely must be replaced with facts unless they are part of the communication plan previously established. Expressions like "I'd prefer not to speculate with the possibility (...)" or "facts show that (...) may be helpful to avoid this type of questions.
- Avoid the use of abbreviations or acronyms when talking: journalists do not know their meaning and they are frequent for a member of the force.
- Short answers to questions: unless it is a topic that has been previously planned as essential in order to deliver a message, we cannot add information to the scope of the question as it may get confusing.
- It is frequent that at the end of the interview, a journalist asks if there is any aspect that should have been dealt with, and at this moment, it is advisable to develop some key and important ideas for the commandant in case they have not been previously mentioned and he desires to do so.
- > Last: the interview ends with the journalist or team that is with him goes out of the place. The press officer must tell the commandant so that they are not relaxed just because the recorder is turned off9.

Specialists in television and radio media

Specialists in this type of media need to address some of these rules for the media but there are some new aspects to be especially observed:

-) Preparation is key for all interviews although, in this case, it becomes very important as the first rule to be taken into account is that live broadcast is short unless it is a report or a press conference during which times may be extended. If the interview will take place at one's own facilities, the place must be properly selected and has to be part of the message to be delivered.
-) It is convenient for the interview to be first recorded and then broadcasted, although this is not used any more. With satellite advantages, the rule is live broadcast which makes it necessary for proper preparation to reduce the number of mistakes as much as possible.
-) Television is media that involves vision so presentation is essential. Some experts state that of the total message presented on television, 7% is composed of the content of what is said, 38% is the way in which it is transmitted and 55% is what is called non-verbal communication¹⁰.
-) During the interview, the commandant must address the journalist and avoid looking at the camera, upwards or downwards as this will show him as undecided or evasive. With respect to position, they must not show themselves as uncomfortable or nervous, for example by crossing arms or move legs unnecessarily. Body language is crucial.
- Answers must be previously practiced for the most difficult questions, a positive message must be established and it is necessary to be focused on controlling the interview, which is essential.
- At some times, when ending the interview with an



The use of social networks before, during and after conflicts is a very powerful tool in the hands of the commandant for the dissemination of information to the public.

answer, it may happen that the journalist makes a pause causing a feeling of dissatisfaction with the answer in the interviewee. They have to try not to be weak and be confident as to what they said without adding any other information.

Specialists in social networks

New communication technologies and Internet boost have changed the manner in which institutions or whoever desires to communicate with their context¹¹ changing one-way communication to two-way communication in which in most opportunities the addressee has the last word.

This is why the use of social networks before, during and after conflicts is a very powerful tool in the hands of the commandant for the dissemination of information to the public.

Specialists in social networks must be especially trained in giving advice as to the scope and power that social networks have nowadays, taking into account

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that information given through that media is a direct channel by the person producing it as it will not be published by journalists who may add some bias to information.

Currently there are many courses given by universities with respect to this topic and it is necessary to train staff at the best institutes to be able to take advantage of knowledge during the development of operations.

Specialists in management of correspondents on the field must feel the need to be close to media body of the Theater of Operations in order to get important and timely information for the public. For this reason, it is important to have an area for such purpose.

With respect to the manner through which correspondents have access to information, there are several positions: there is the option to involve them in combat groups, sharing tents, food, action moments and rest. This has very positive results for both parts and, also, allows to mutually understand needs¹². Another option is to train one's own staff as correspondent on the field integrating combat groups so that they can later issue news releases about the different events in which they took part.

In one way or another, the Press Body must allow war correspondents to enter to authorized places and give them the necessary aid to have the minimum work conditions.

Training and expertise of military staff will allow to properly coordinate this group and to have the knowledge and experience to apply to rules for their conduction that are contained in the guidelines and orders given by higher authorities.

This work relation will promote reliability among the military and journalists which will be favored due to the permanence of the latter for long periods in the Theater of Operations.

It is particularly difficult to get confidence from the members of the military press body when journalists constantly go in or out from units to which they are assigned. Not staying enough time among combatants does not allow journalists to appreciate their work or share reality in which they are involved¹³.

- 9. Shea, Davidm J. & Gullick, John F., op.cit., p. 25. Author's translation.
- 10. Shea, David J. & Gullick, John F., op.cit., p. 32. Author's translation.
- Ministry of Defense of Spain, "Conflicts, public opinion and the Media. Analysis of a complex interaction", Cuaderno de Estrategia N| 148, Spanish Institute of Strategic Studies. Mixed Center of the Universidad de Granada-Training and Doctrine Command of the Land Army. Granada, 2011, p. 135.
- 12. Shanker, Tom & Hertling, Mark, op.cit., p. 17.
- 13. Shanker, Tom & Hertling, Mark, op.cit., p. 17.
- 14. Aukofer, Frank & Lawrence, William, America's Team. The odd couple, The Freedom Forum First Amendment Center, United States of America, 1995, p. 101.

For this reason, it is necessary to permanently train them to make them adapt to combatants' lives. This is essential to understand difficulties of the case and to deliver this to the public in a precise and exact manner. This work relation will start to promote trust among the military and journalists, which will be favored by their permanence for long periods of time in the Theater of Operations.

In fact, the former US Secretary of Defense, Richard Cheney, highlights prior work with the media as something very important at the beginning of the conflict which allowed the armed forces to get experience and know the different journalists' profiles, thus leading to an acceptable mutual confidence level¹⁴.

CONCLUSIONS

Training of the organization has to do with essential aspects that are inherent to it although there are no doubts as to the fact that training of staff and structure are essential.

It is possible to see the weakness of military staff training in the context of graphic media, television and radio, social networks and management of war correspondents and it is necessary to train them with postgraduate courses in civil matters that allow for an interaction with press media and management of information that is relevant to be published.

With respect to the inclusion of civil advisors or journalists in specific issues of communication, this has limited acceptance as those journalists who want to take information to the public as regards military activities need to be informed by those who are considered experts in the subject: the military.

The commandant has a great responsibility in this sense, thus, their training in terms of relation with the media and attitude to successfully interact with journalists who have a great influence to get a favorable public opinion and, consequently, allow for better management of the conflict.

As regards the press officer who may also be the spokesperson, they have to be with the commandant in most activities he carries out for the purposes of meeting information requirements from the media.

Complexity of the problem that is part of the context of war and facts as well as the need to give a clear message to

Carlos Álvaro Bazán

Argentine Army Major. Staff Officer. Bachelor in Strategy and Organization and in International Relations. He holds a Specialization in Operational Strategy and Joint Military Planning. He is currently Head of the 11 Cavalry Armored Exploration Squadron "Coronel Juan Pascual Pringles".

national and international people require staff trained in this subject to deal with the issue in an efficient manner. These features help to deeply know the context in which they are involved and, also, to have tools to foresee problems and try to be one step ahead.

Moreover, it is worth mentioning that regardless of the conflict in question, the military must understand that they do not have monopoly over control of information on the field where operations are being carried out.

New technology has come into privacy that existed decades ago. This is a reality and a true challenge as to how to manage different tools available to prevent proliferation of information without control, especially the one affecting staff security, development of operations and perception that the enemy has of their own conduction.

Apart from this, journalists must be willing to acknowledge that in many opportunities, it will be necessary to respect certain rules as to the release of certain information. It is essential that this is understood in terms of staff security, development of operations and the surprise to be given with the adversary. The military also have to understand that it will not be possible to build a trust relation if the information they give is not relevant or does not describe the main events that are taking place.

For these reasons, it is very likely that rules to be implemented in this relation between both of them have certain degree of flexibility and some need to allow the possibility to negotiate among parties. This implies the need for the staff to be trained in negotiation techniques in order to get acceptable results for the parties.

This trust relation that must exist between the military and journalists is strengthened to the extent both can promote their advantages. In this way, troops must also be ready to interact with this reality and can see journalists as an opportunity to show citizens the sacrifices they are making for national interests.

Military success properly communicated by the media may cause a multiplier effect on the results.

Another aspect that is equally important is coherence of the message. Due to the different nature and great diversity of manners to give information through different media (graphic, television, internet), it is important that there is no inequality or incoherence as to what is shown in the different media. On the contrary, there must be a sense and analogy in the vision of the problem. This is not easily achieved and a great part of the press body effort must be focused on that.

The press body must have great training and knowledge of the different dynamics of the complex world of media. This will make it possible to conduct an efficient organization to carry out their functions.

> REFEREED ARTICLE

RULES FOR COLLABORATION WITH THE VISIÓN CONJUNTA JOURNAL

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DESCRIPTION OF THE DISTINCTIVE COAT OF ARMS AND HERALDIC MEANING

In the center, there is the emblem of the Estado Mayor Conjunto de las Fuerzas Armadas.

The background has a chess that shows the Military Art in white and light blue, the colours of the Argentine flag. Blue means justice, enthusiasm, loyalty and truth; and white means purity, integrity, obedience, firmness, surveillance and eloquence.



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