

# THE LOGIC OF OPERATIONAL PLANNING

This essay takes the last Argentina war experience as example and aims at applying the concept of effects to be achieved and the determination of the necessary forces for the Campaign as a useful method at the planning level which is applicable both in the military environment and others that are part of the conflict scenario.

---

By Patricio Justo del Niño Jesús Trejo

---



## INTRODUCTION

Historically, war is simply a fight to death between two people. Today, the use of violence, significantly extended due to the dimension and magnitude of actors, must be adapted to more evolved and pragmatic concepts in which conditions to achieve cohesion and systematize the use of force are created since absolute victory is costly in human and material terms.

In this context, there is the operational level which attempts to articulate ideas with actions and to combine the different components of the military instrument for the development of the campaign.

World War II and conflicts that took place at the end of the 20th century showed its importance and, for our country, it was the operational level the one that showed the greatest failures during the development of the Malvinas War as it was not able to articulate a plan that integrates the different components in an efficient manner.

During the operational origin of the campaign, as in any military planning in general, the enemy is analyzed in first place. Then, they are linked to the geographical environment and the center of gravity while skills are determined taking into consideration what they can do. Subsequently, modes of action are prepared. Thus, they could follow a method but they must inevitably have logic and the one that best adapts to this level is the logic developed by complex thinking<sup>1</sup> and the general systems theory<sup>2</sup>.

Complex thinking states that the analysis of a phenomenon may be carried out from two perspectives: holistic and reductionist. The first one refers to an analysis of the whole or multiple as a whole and the second one to the parts.

*During the operational origin of the campaign, as in any military planning in general, the enemy is analyzed in first place. Then, they are linked to the geographical environment and the center of gravity while skills are determined taking into consideration what they can do. Subsequently, modes of action are prepared.*

Moreover, the general systems theory allows for a broader and interdisciplinary analysis of the problem<sup>3</sup>.

## ANALYSIS OF THE OPERATIONAL TARGET AND THE CENTER OF GRAVITY

In order to better explain and show the theory described in this essay with facts, we will take the Malvinas War as case study.

The first thing we have to determine during the analysis of the initial situation is the Operational Target that will be agreed upon with the strategic level. Then, the forces that are part of and which support said target are determined and, after this, the critical requirements that allow said forces to operate as a system are also determined. These will, inevitably, have weaknesses that will represent their critical vulnerabilities.

In this work, we aim at giving another perspective of what we understand as center of gravity and, in order to do this, it is important to remember the military origin of the expression which relates to the use

that Clausewitz gave it in the military arena and which was an adaptation from the scientific paradigm of the age.

Clausewitz, who was contemporaneous with Napoleon, was a great observer who could summarize the military ideas of his times. This was determined upon the rapid gathering in the place and the right moment and determination of the Center of Gravity of the enemy (a concept that has had different interpretations since then) to apply forces and to be able to destroy it by means of a decisive battle.

This conception was influenced by innovative mechanical and physical principles spread by Newton principles<sup>4</sup>, since the 18th century, with which there was some consensus as to the way to start and solve battles in the military arena.

However, if we say that the origin of war, from a Judeo-Christian perspective, lies on the single battle between Cain and Abel, then, in order to understand its logic, we must start by analyzing psyche and the forces that are part of the group of each

1. Theory developed by Edgar Morin, French philosopher and sociologist, born in Paris on July 8, 1921.

2. Theory attributed to Ludwig von Bertalanffy, Austrian biologist, who coined the name in the mid 20th century.

3. Cornut, Hernán; "El Pensamiento Sistémico como marco conceptual de la Acción Militar Conjunta", *Journal of the Escuela Superior de Guerra del Ejército*; N° 578; May-Aug 2011; p. 31.

4. Theory expressed by Edgar Morin, French philosopher and sociologist, born in Paris on July 8, 1921.

fighter during a battle in order to get conclusions that may be applied in a general way to modern conflicts.

The purpose of war, considering its origin, is to destroy the intention of fighting of the enemy and to make them subjugate, whether by means of getting their forces exhausted or affecting them psychologically, so that they cannot continue the battle.

In this context, it is necessary to analyze what the Center of Gravity is, where it is located in the human body and how it performs during a battle.

The Center of Gravity, in the human body, is a non-material point subject to modifications. It is determined by the convergence of all forces that interact in it; in this sense, it changes its location according to the movements each fighter makes during the battle.

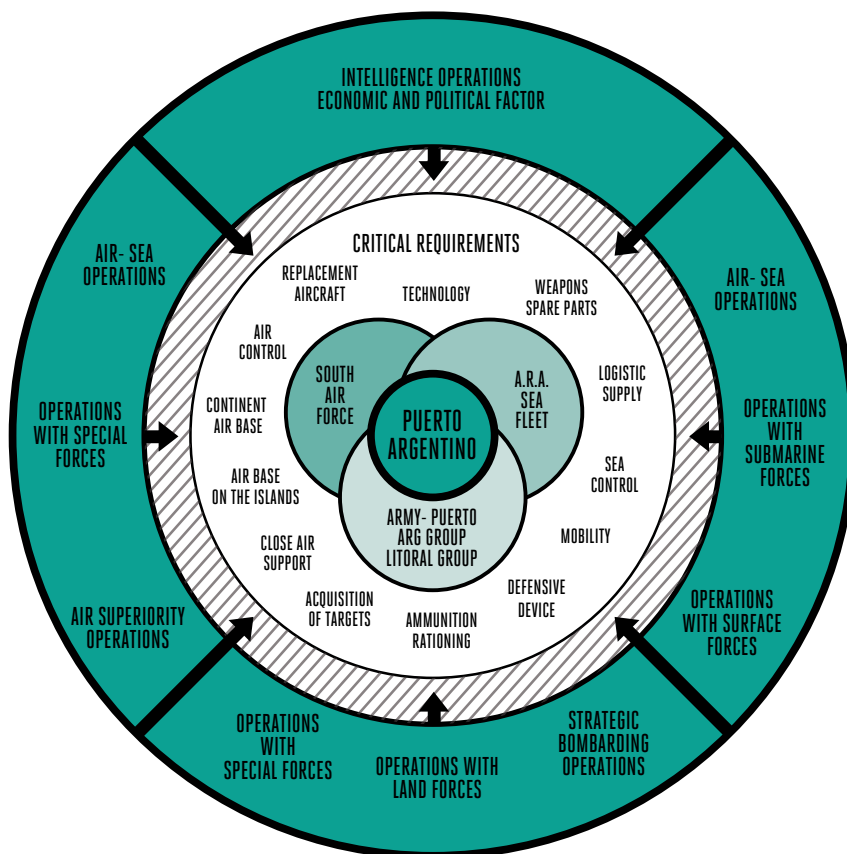
Taking this into account, the purpose must not be to directly attack the Center of Gravity, but the critical needs and requirements that allow the forces that support said Center of Gravity to act as a system.

In war, we must act by analogy to how a battle between two men develops. During the conflict, the Center of Gravity may vary its location and it may sometimes be more supported by one force and, some other times, by another one. It will be the main and key responsibility of the operational commander to determine the key requirements to take in each stage of the campaign in order to be successful.

**DETERMINATION OF THE SKILLS OF THE ENEMY**

When preparing the Skills of the Enemy at the operational level, it is necessary to state what the enemy operational purpose is and, then, determine the main effect to be achieved in the military arena within the Theater of Operations.

**MODEL OF ANALYSIS OF AN OPERATIONAL TARGET APPLIED TO MALVINAS WAR**



Source: Author

Once these two aspects are defined, they will be located within the geographical space included in the Theater of Operations aiming at specifying the contributing effects that allow to achieve the main effect.

Determining the Skills of the Enemy will be a key step during the campaign planning as it will allow to have a general idea of the magnitude of the opposing forces, their deployment and movement times within and without the Theater of Operations.

A way of establishing a comparison

parameter that allows to get closer to the structure of forces necessary to be successful in the campaign is the Power Unit.

**POWER UNIT**

The Power Unit is a planning tool that allows to represent, in a scheme format, the forces that are present with their skills and limitations.

Its use will help to determine the enemy capacity based on the analysis of relative battle power, space and time and it is very useful during

confrontation. This will help to make conclusions that allow to structure the campaign having an idea about the magnitude and type of forces without details of tactical units.

Its creation may vary according to the detail requested and it may be a navy power unit with its amphibious; aircraft and submarine elements, among others, air power unit which may be blocking hunting, bombarding, bombarding- hunting, transport, helicopters, etc. and land power unit with mechanized, armored, mount, mountain, air transported elements, etc.

Whatever is necessary to determine in magnitude and type of force may be identified as power units. In this way,

*The purpose of war, considering its origin, is to destroy the intention of fighting of the enemy and to make them subjugate, whether by means of getting their forces exhausted or affecting them psychologically, so that they cannot continue the battle.*

there may be power units for special, logistic or military police forces.

Moreover, each power unit will have a relative value with respect to magnitude, training and technology which will allow it to have the particular effect to be achieved in each stage or phase of the campaign.

Power units do not exactly

represent tactic units although they are so sometimes, taking the example of the Malvinas War we can see how the HMS Conqueror submarine was opposed as British power unit to the Argentine navy power unit, made up of the ARA General Belgrano cruiser and the ARA Comandante Piedrabuena and ARA Comodoro Py destroyers. This British power unit was able to fulfill the contributing purpose of isolation in time and space. This shows how power units can be compared.

Following the example of the Malvinas War, we can understand the enemy's capacity from the English side in this way:

**Capacity attributed to the Argentine Armed Forces during the Malvinas War**

To adopt a defensive operational attitude with up to two land power units and one air power unit on the islands, with up to two navy power units and one air- sea power unit around the archipelago to secure the logistic channel, support their navy and land forces with up to four combat air power units and two medium transport and a capacity to reinforce the island with up to one air- transported land power unit.

**DETERMINATION OF CONCEIVED ACTION MODES**

In a traditional war, the military environment becomes important and it is just there where the commander must make the main effort during its planning.

First, and as starting point for the preparation of action modes at



Source: Author

the operational level, it is necessary to agree and state together with the strategic level what the operational purpose is and to determine the main effect that is sought at this level, which is closely related to the current concepts of end state and war termination criteria.

Once these two aspects have been clarified and taking the geographical environment within the Theater of Operations as basis, we will specify the contributing effects that will allow to achieve the main effect.

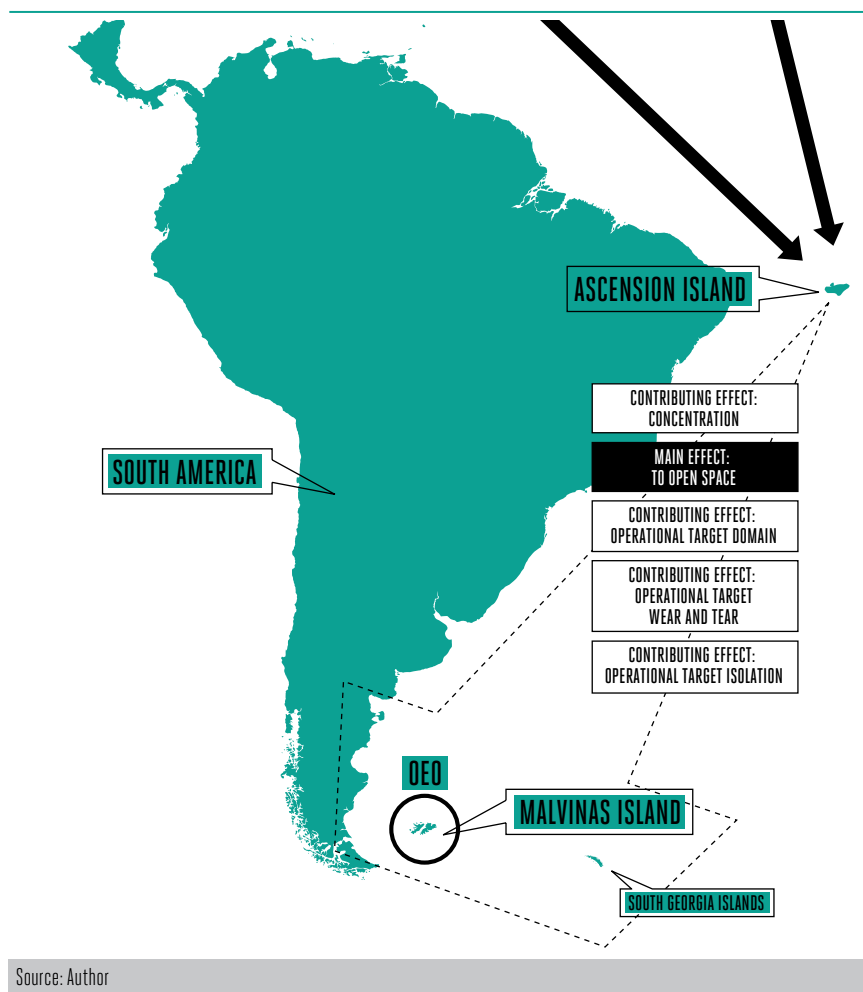
Action modes allow us to express the general idea of the campaign, mainly seen in effects. Therefore, it is important to be able to show it in a graphic that allows for its understanding, which we normally call operational conception and which can be supported by a map<sup>5</sup> or strategic map to have an initial idea of space and time.

In the non- traditional military environment and the conflicts caused by fourth generation wars<sup>6</sup>, it will be the sociogram<sup>7</sup> the one that will play that role.

As an example and following the understanding proposed for this work, we can understand the Conceived Action Mode by the English in the following way:

#### Action Mode Conceived by the British during the Malvinas War:

To open the space towards Puerto Argentino (OO) through a concentration near the South Atlantic, a progressive isolation around the islands deteriorating its combat power to facilitate our subsequent control and domain of the archipelago



Source: Author

#### APPROACH TO CONFRONTATION BECAUSE OF EFFECTS AT THE OPERATIONAL LEVEL

What identifies the operational level is the general and particular analysis carried out simultaneously, trying to have a look at the whole and the parts at the same time. For this reason, the battle must be carried out supported by the geographical space included in the theater of operations, but it will also be necessary to have enough geographical details in the particular

events to be analyzed that may be the decisive points of the campaign or not.

The first step during a battle will be the responsibility of C-2 (intelligence officer). In this sense, they will deploy the forces proposed in the strategic map as enemy capacities using power units to get a specific analysis that shows the contributing effect in each stage of the campaign.

The second step will be the responsibility of C-3 (operations officer) and will consist in setting the operational target on the map, determining the main effect that reflects its contributing effects.

Then, the enemy power units will confront, the own power units that allow to reach the particular effects

5. Campos, Guillermo, A.; "Inteligencia Estratégica, aproximación conceptual y metodológica", Summary of the Intelligence course at the Escuela Superior de Guerra del Ejército; Buenos Aires, Argentina; 2011; page 135.

6. The term was originated in 1989 when William Lind and four officers of the Army and the Marine Infantry of the United States titled the document: "The changing face of war: to the fourth generation". This year, the document was published simultaneously in the October edition of Military Review and the Marine Corps Gazette. It is related to Asymmetric Warfare and Counterterrorism Warfare.

7. Campos, Guillermo, A.; op. cit.; p. 135.

specified in the Conceived Action Mode.

This analysis carried out in effects will favor the creative freedom of each component (air, land, sea) in the determination of the necessary and efficient operations to reach their targets.

In this sense, if we take the example of the Malvinas War, we can see that the operational target was Puerto Argentino and the main effect to be reached by the English was to open the space to get its control. Moreover, the contributing effects were: isolation, wear and tear and domain of the operational target.

As from these contributing effects, the components will constitute their efficient and necessary operations, among which we can identify the following: from interdiction to navy traffic, air and sea control, a second stage with wear and tear operations including air- sea bombing, shore recognition and operations with special forces and, finally, a stage with amphibious operations and main land operations over the operational target.

Based on the contributing effect that is sought in each stage, it will be necessary to determine time and

*During the Malvinas War, we can see that the operational target was Puerto Argentino and the main effect to be reached by the English was to open the space to get its control. Moreover, the contributing effects were: isolation, wear and tear and domain of the operational target.*

space, by means of confrontation and relative combat power that is necessary to reach it, taking into account the resulting wear and tear.

A way to reach this will be to establish the power units table with its corresponding coefficient so an aircraft carrier group power unit may have a value of 5, a hunting air squadron may have a value of 3 and a submarine may also have a value of 3.

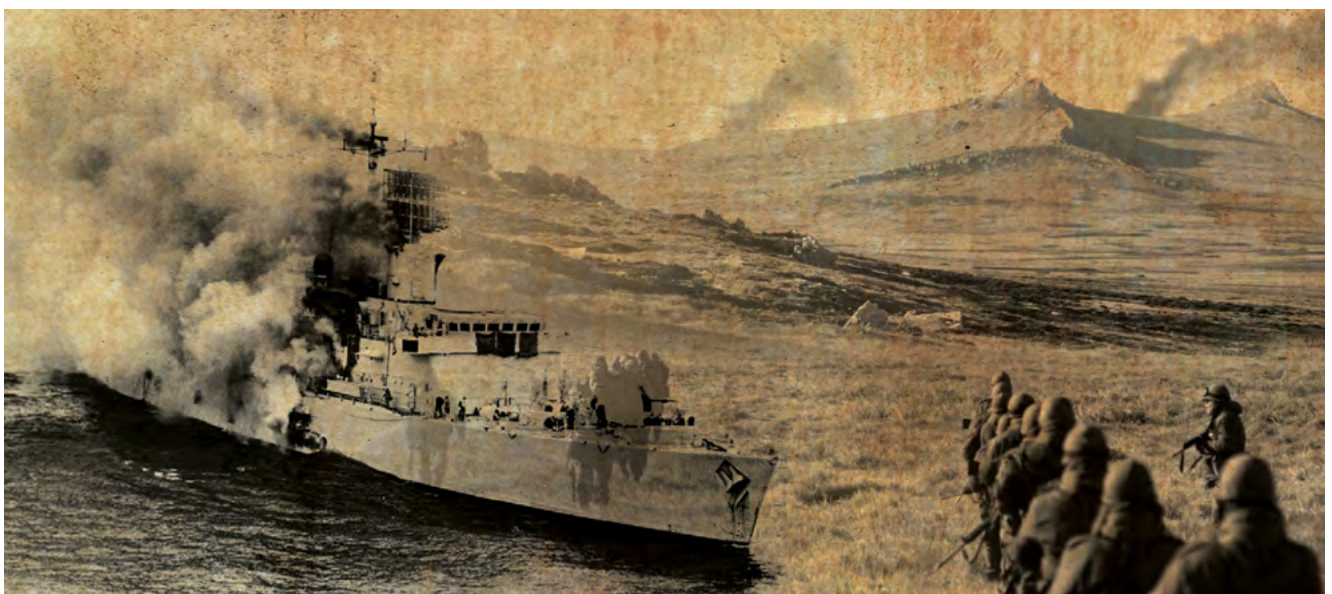
It will be important to take into account the magnitude, type, training and technology in the grade of the power unit, this will allow us to assess the necessary force for the campaign.

In the case in which the main effect is isolation and the main necessary operation is an interdiction to navy traffic, the combat relationship will be,

at least, 1/1 which will determine the type, quantity and quality of the power units necessary to reach said effect in each sector.

Where the main effect is to *wear and tear* and the necessary operations are air- sea bombing, recognition and operations with special forces, the combat power relation to reach said effect will be lower than 3/1 favorable to the red ones (*colorados*). With this estimation, it will be possible to determine how many blue (*azules*) power units are necessary to reach the effect desired.

To these cold calculations, we need to add the deterioration resulting from the days when the effect desired was sought in each area. These studies will allow to have an idea of the final



status quo to be reached by the force in each sector when each phase or operation concludes.

This analysis will allow to have an initial approach of what deep, intelligence, special forces and strategic bombarding operations, among others, will be. Moreover, it will determine what logistic and intelligence operations will be in the rear; and it will require the contributing effects in the other power factors that allow to reach the operational target.

The design of efficient and necessary operations will start during confrontation in light of the main effect and taking into consideration what operations will be necessary to reach the contributing effect in each sector of the theater of operations.

It is necessary to be able to make a graphic and carry out the confrontation in the geographical space within the Theater of Operations. In this sense, and following the example of the Malvinas War, the following graphic methodology is proposed:

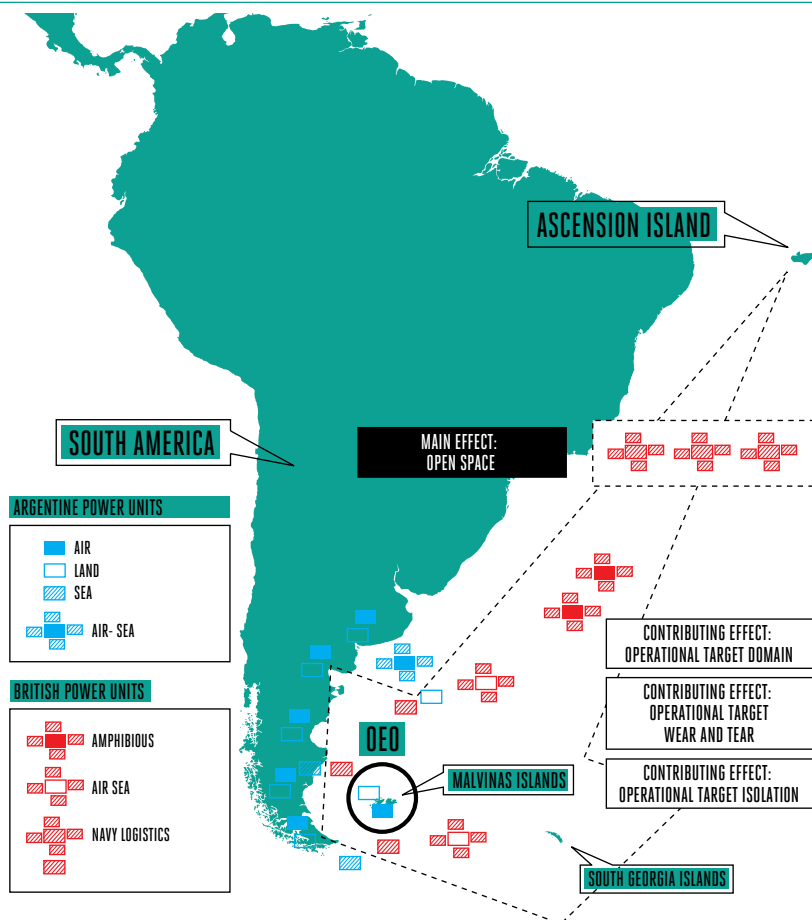
### POWER FACTORS AND THEIR INFLUENCE ON OPERATIONAL LEVEL PLANNING

Evolution of conflicts has caused other power factors to acquire relevance during planning which makes the complex military situation even more critical.

It is just during the study and analysis of war as a great system when the necessary effects will arise in the other factors. In this sense, for example, war in the field of communication needs to be dealt with efficiently as the psychosocial factor in the population is key to maintain the war effort.

In recent history, there are examples of how a combat action was more aimed at the psychosocial factor than at the enemy. In that way, the Darwin combat could be framed taking into account that the British has previously suffered

### MODELO GRÁFICO DE LA CONFRONTACIÓN POR EFECTOS EN EL NIVEL OPERACIONAL



Source: Author

after the sinking of the Sheffield and Coventry type 42 destructors, Ardent and Antelope type 21 frigates and the Atlantic Conveyor container ship apart from planes and helicopters that represented unaccountable losses in the eyes of society, the government of which was about to collapse due to the opposing party.

This shows what Clausewitz stated when he pointed out that war is the continuation of politics by other means as it was a war action that responded to political targets more than to strictly military targets<sup>8</sup>.

Infrastructure also acquires importance as a system and is closely related to operations under

development. Affecting port, energy, manufacturing or transport capacities will undoubtedly affect combat capacity in the Theater of Operations.

In this sense, the sinking of the ARA General Belgrano cruiser related to the strategic thought of reaching effects, which seems to be a tactical action, had a key relevance for land forces that operated on the Island, when transport by sea was effectively interrupted reaching, in this way, the logistic isolation effect desired by England.

Another example of the complex

8. Hastings Max. and Jenkins Simon. "La Batalla por las Malvinas". Editorial Emecé; Buenos Aires; Argentina; 1984, p. 253

group of systems that are part of war reality were the British attacks with Vulcan aircrafts<sup>9</sup> using Shrike missiles<sup>10</sup> over the surveillance and early warning radars of Puerto Argentino that counteracted a sensitive part of the defense system.

The operation "Mikado"<sup>11</sup> carried out by the British in the island of Tierra del Fuego was another evidence of effects required by the operational strategy and that exceeded the Theater of Operations.

The economic factor must not be set aside by planners as its incidence is always significant and, in war, it is the operational commander the one who should suggest the effects to be reached taking into consideration their concept or operational design.

Again, Malvinas shows us the importance of this field as economic embargoes made it impossible to get more Exocet missiles which would have been extremely important at the end of war<sup>12</sup>.

Science and technology also have a key importance in the development of conflict and it is the operational design the one that sets the guidelines. As an example, we can remember the Exocet missile launching system prepared to be used as defense on the shores of Puerto Argentino and that had a successful verification seriously damaging the HMS Glamorgan frigate in the morning of June 12, 1982 in the final stages of the war.

Civil population of the island was consciously used to collaborate with the British war effort from the manager of the Falkland Company in Darwin who served as guide for the Parachutist Regiment 2 to the support given by the radio- electric network of the kelpers and vehicles and facilities

*Science and technology also have a key importance in the development of conflict and it is the operational design the one that sets the guidelines.*

in Puerto San Carlos and Caleta Teal, their logistic centers.

Foreign policy was not only used in international fora, but also in the habeas corpus submitted in Chile<sup>13</sup> to get the rapid extradition of the pilots of the helicopter abandoned in Punta Arenas after a SAS patrol was sent to Isla Grande in Tierra del Fuego; here we can see how a tactical action is connected to the psychosocial, economic and foreign policy factors.

Our experience allows us to see how power factors that have an influence on national strategy have a specific influence on concrete facts of the operational design or operational concept of the commander of the theater; this is the reason why they have to be taken into consideration during the analysis in order to enhance action modes and operations lines.

## CONCLUSIONS

War is complex by nature. At tactical level, it needs to be reductionist and understand that each battle has to be fought as if it were the last one and victory will depend on this. At operational level, it is necessary to be more holistic in order to understand all the systems that interact among them and to act accordingly and adjust the intensity of violence.

The planning method of the tactical level is different depending on the specific area of each Armed Force. While the Navy and the Air Force plan based on effects, the Army plans according to objectives. However, the planning method of the operational level, which is joint by nature, is carried out by operations based on effects.

It is necessary for the three Armed Forces to understand this planning system due to the necessary joint action.

In this sense, the general theory of systems is a favorable tool for the analysis to be carried out by the operational commander as it allows them to stand one step further and see the whole and, at the same time, analyze every part while looking at the implications of each action in the rest of the system or area in which the conflict develops.

The operational level is featured by its complexity. It has a lot to do with art and science but it is difficult to transfer the experience of previous successful campaigns as it has more to do with personality and character of the one who led it and the particular circumstances in which the facts occurred.

Therefore, it is not possible to set rules as to how to win or conduct a campaign because campaigns cannot be repeated. This is different from tactical procedures in which they can be reused in similar circumstances.

**Patricio Justo del Niño Jesús Trejo**  
Major. Officer of the Argentine Army Joint Board. Bachelor in Strategy and Organization and full member of the 3rd International Congress on Military History. Currently taking a Masters course in Military History. He has completed the specialization in Joint Direction, Level I. He is currently acting as Head of 602 Commando Company.

9. British bomber for nuclear strategic bombarding during the Cold War.

10. Anti- radar missile used by the British during the Malvinas War.

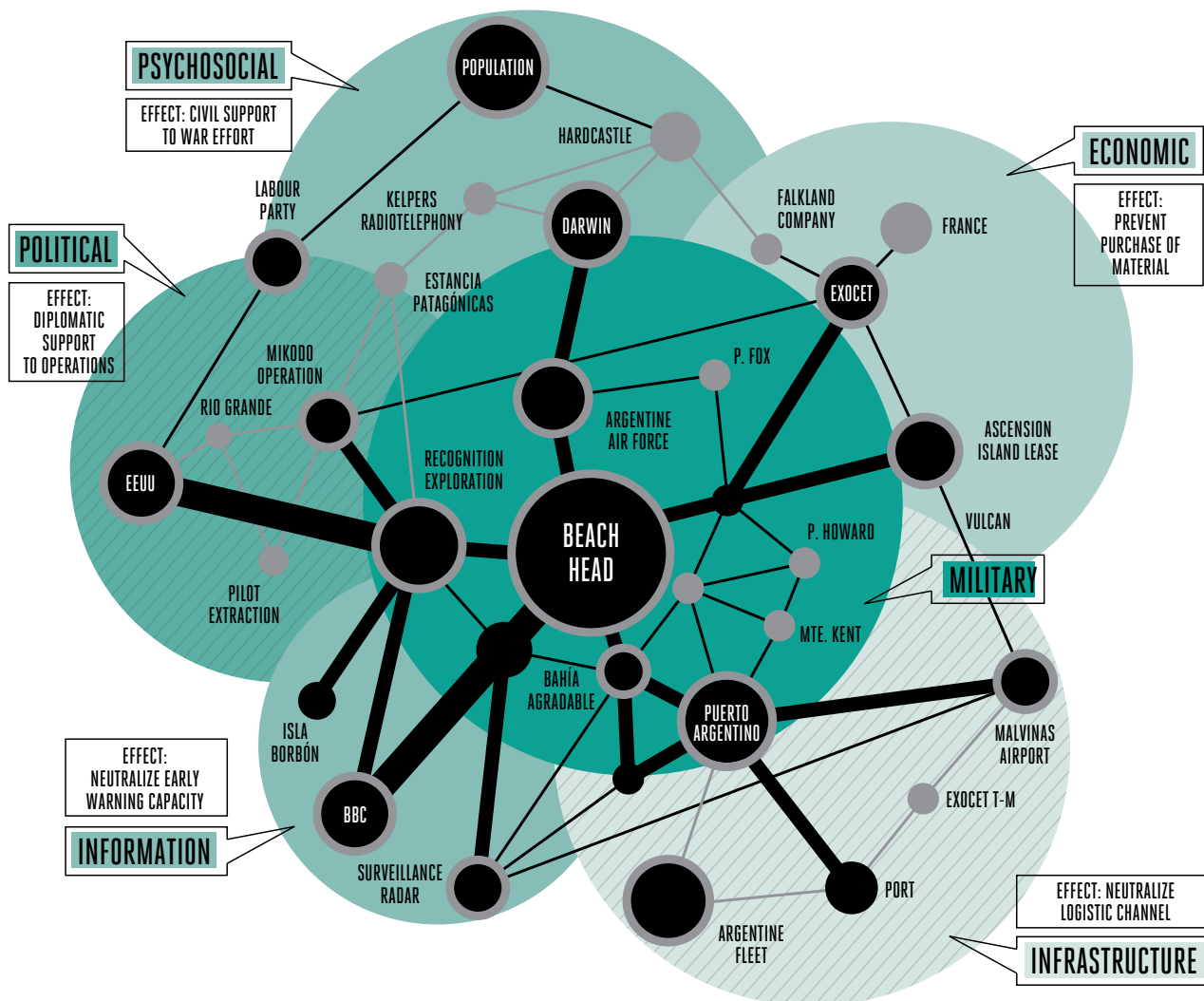
11. Operation planned by British special forces over the naval station from which the Super Étendard operated.

12. Woodward, Sandy, admiral; "One Hundred Days"; Editorial Sudamericana, Buenos Aires; Argentina; 1992, p. 236.

13. West, Nigel; "La Guerra Secreta". Editorial Sudamericana, Buenos Aires; Argentina; 1997; p.148.



SYSTEMIC MODEL OF THE BRITISH OPERATIONAL AREA DURING THE MALVINAS WAR



Source: Author

Military history, studied in a critical way, is one of the most useful tools at this level. It allows to analyze the performance of commanders in past campaigns and it gives us an insight on what the resolutions and consequences were.

War is chaos<sup>14</sup>. Initial planning must try to include all possible variations; intelligence in opposition will prevent our plan from being carried out.

Therefore, said planning must be as flexible and proactive as possible and interpreted as a cycle and not as a static and rigid timeline. Understanding this will allow to win the initiative once operations are launched.

The study of conflicts, origins, evolution, resolution and likely consequences must be approached by military leaders in order to arrive to proper conclusions. This must be only a tool and not a purpose in itself. It is necessary to prevent a particular analysis or planning methodology

from becoming a linear obstacle that hampers intellectual activity.

The method is tactical by nature and is tied to stereotypes. Planning, at this level, must be more logic than methodical and use the tools mentioned but it prominently depends on innovation and creativity of the military genius because the operational art appears there and this is what will, ultimately, lead to the success of the campaign.

> REFEREED ARTICLE

14. de Vergara, Evergisto; "La semántica del caos"; Visión Conjunta Journal, Volume 6; Buenos Aires, Argentina; 2012.