



# ERRONEOUS ANALOGIES

## Corporate logistics v. Military logistics

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

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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.

### INTRODUCTION

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 Logistics<sup>1</sup>. 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 <sup>2</sup>

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

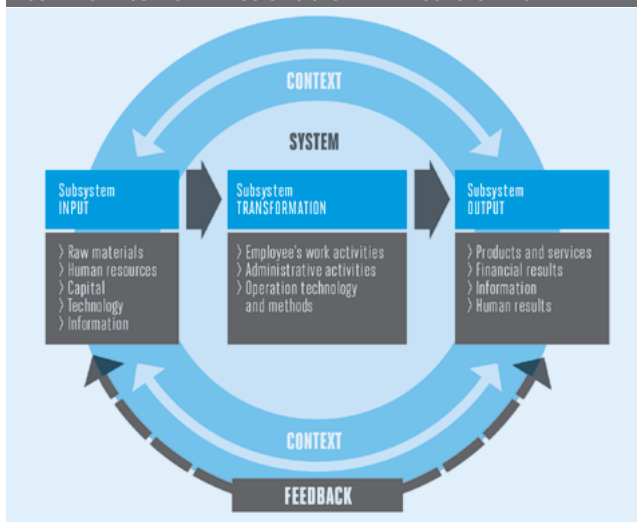
*Logistics was originally a merely military word defined as the activity to organize movement, equipment and accommodation of troops. It is currently a word of general use defined as the detailed coordination of a broad and complex operation. It is important to know the difference of definitions between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

FIGURE NO. 1: CORPORATE LOGISTIC SYSTEM AND SUBSYSTEMS



Source: Universidad Vasco de Quiroga

1. 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 deduce 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 analogy<sup>3</sup>. Analogy between corporate analogy and military analogy is erroneous<sup>4</sup>.

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:

1. 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.

4. 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)<sup>5</sup>. 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,

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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. Dictionary of the Real Academia Española. Available at [www.rae.es/recursos/diccionarios/drae](http://www.rae.es/recursos/diccionarios/drae)

5. In the case of this erroneous extrapolation, those who prefer



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, C3I2<sup>6</sup>, 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)<sup>7</sup>, 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:
- Design and development, acquisition, storage, movement, distribution, maintenance, evacuation and material disposal*
  - Transport of staff*
  - Acquisition or construction, maintenance, operation and facilities disposal*
  - Acquisition or service rendering*
  - Sanitation and medical care services. Sanitation is an activity of logistics rather than of staff.*

#### › France<sup>8</sup>

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:

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

#### › Estados Unidos<sup>9</sup>

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:

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

#### › United Kingdom<sup>10</sup>

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:

- Design and development, acquisition, storage, movement, distribution, maintenance, evacuation and material disposal*
- Transport of staff*
- Acquisition or construction, maintenance, operation and facilities disposal*
- Acquisition or service rendering*
- Medical support and health care*

#### › Chile<sup>11</sup>

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.  
 7. 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/B008UZPKZC>, pages 2- L- 5.  
 8. 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/B008UZPKZC>, 2015, pages 2- L- 5 and 3- L- 4.  
 9. US Joint Staff, JP 4- 00 Doctrine for Logistic Support in Joint Operations, 6 April 2000. Available at [www.aschq.army.mil/supportingdocs/JPA\\_0.pdf](http://www.aschq.army.mil/supportingdocs/JPA_0.pdf), page 1- 1.  
 10. 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](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/43351/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*
- c) *Acquisition or construction, maintenance, operation and facilities disposal*
- d) *Acquisition or supply services*
- e) *Medical services and health support*

#### › **Brazil**<sup>12</sup>

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**<sup>13</sup>

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 Operations<sup>14</sup>, 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 operation<sup>15</sup>.*

*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.

12. Ministry of Defense of Brazil, Glossario das Forças Armadas, MD 35- G- 01, 22 de Fevereiro 2007. Available at [www.defesa.gov.br/.../publicacoes/md35\\_g\\_01\\_glossario\\_fa4aed20](http://www.defesa.gov.br/.../publicacoes/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](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

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staff that is part of organizations and how their morals, esprit 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.

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