

SPECIFIC APPROACHES REGARDING THE APPROPRIATE LOGISTIC SUPPORT OF PHILIP II OF MACEDONIA'S MILITARY CAMPAIGNS

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Throughout history, the army leaders who have realized the overwhelming importance of logistics in military action have been those who have achieved their intended goals. The importance of logistics in relation to the success of military action is highlighted eloquently by the French general Antoine Henri Jomini: "Logistics encompasses the means and arrangements with which tactics and strategies are implemented. The strategy decides where to act; logistics bring troops to that point. "

But what is the beginning of military logistics in history?

All the great conquests were based on a strong logistics component, but who was the first leader to recognize its value?

Keywords: military logistics; supply procurement to the forces; forces sustainability, speed and mobility; pack animals; immediate action logistics area.

Military logistics is a set of operations aimed at providing the best conditions for carrying out the large-scale actions of an army¹. Another definition states that logistics is one of the most important areas of military art in which a large part of the evolution or involution of the army is reflected². Also, according to the terminology of the North Atlantic Alliance, military logistics is the science of planning and assuring the movement and maintenance of forces³.

As it emerges from its very definition, military logistics is an essential component for the success of any military campaign, being considered an important branch of the art of war.

Another peculiarity of the concept of military logistics is that it clearly emerged from the need of the armies to secure supply during the military actions; therefore, logistics has in time experienced a process of transformation in accordance with the other components of military art. Therefore, gradually it passed from Provision of materiel to Military quartermaster, Administration of the army, The Rear of the army, Army services and presently Army logistics⁴.

As a consequence, the importance of logistics gradually increased, coming in the contemporary era, characterized by a high consumption of resources, to include various functional areas. At present, within NATO armies, logistics includes an extensive range of specific functions and responsibilities⁵, such as:

- supply;
- production or acquisition of supplies;
- providing the necessary services for the military effort;
- logistics informatics system;
- maintenance of military equipment;
- movement and transportation of troops and materials (M&T);
- reception, staging and onward movement in the deployment/ redistribution of forces in/from theaters of operations (RSOM);
- infrastructure engineering for logistics (IEL);
- medical support;
- contractor management;
- host nation support (HNS).

The etymology of the word logistics comes from the Greek "logisteuo", which means above all to administer⁶ or "skilled in calculating"⁷, being used for the first time in the ancient Greek and Roman civilizations as an organic part of the armed forces of the ancient kingdoms of Europe – North Africa – Near and Middle East. The Macedonian,

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Roman or Byzantine empires had specialized components in supplying the troops, such as "skoidos"⁸ in Hellenistic civilization or "logista", "logiste" and "logisteo"⁹ in Latin civilization. These were officers in charge of logistics of troops, namely the management of supply flows, the transport of supplies, the distribution of materials, preserving the health of animals, the organization of quartering etc.

After the division and decline of the Eastern Roman Empire, the term logistics disappeared as an expression of history, even though, by its purpose and functionalities, the logistics of the military forces continued to exist in all the conquering campaigns of the Middle Ages, regardless of the geographic area. Consequently, even if it was otherwise defined, military logistics developed gradually but continuously over time.

The expression was re-used, thanks to the impetus of the Industrial Revolution, by the French emperor Napoleon Bonaparte (1769-1821), within the ample measures of reforming "La Grande Armée".

From the etymological point of view, the term reappeared again in 1838 in the "Précis de l'art de la guerre" - the extensive work of Baron Antoine-Henri Jomini¹⁰ (1779-1869), general of the French Army, chief of staff of the Marshal Ney's Army Corps and military counselor of the Imperial House of Russia, one of the main theoreticians of the combat rules of engagement and admirer of Napoleon's military genius. This was exemplified as a new specialty in the French imperial army, "maréchal des logis"¹¹ (assimilated in the time with a quartering non-commissioned officer), with three hierarchical ranks: "maréchal des logis-chef", "maréchal des logis-de carrière" and "maréchal des logis-sous contrat".

Since the expression "logistics" – with its derivations was not used ad litteram for a long time, from Antiquity to the Age of Enlightenment, during the present work, we will mainly use the expression "supplying the troops" to present more coherently the reality of the concept of logistics in the 4th century BC, as well as not to confuse its theorization from the Napoleonic era.

Historic sources credit the ancient king Philip II, the father of Alexander the Great, as the one who introduced the concept of supplying the troops in history, investing for the first time in specific capabilities meant to give the forces the necessary means to obtain military success.

The added value of logistics in the art of war, along with the cohesion successfully implemented by Philip in his army and the charisma of Alexander, were sufficient conditions for the Macedonian Armed Forces to cross over 25,000 kilometers in less than 13 years, so that the supremacy of Macedonia might stretch over three continents and include the territories of today's modern states: Greece, Turkey, Syria, Lebanon, Israel, Egypt, Iraq, Iran, Afghanistan, Uzbekistan, Tajikistan, Pakistan and India¹².

Nevertheless, the ambition inspired by Philip to Alexander, both dying in their prime, did not stop there. As a climax of his conquests, even before his death, Alexander prepared ample expeditions in the Arabian Peninsula, to Carthage, to Rome, and to the entire Mediterranean basin. Only their premature and surprising death, at just 46, respectively 33 years of age, prevented the realization of a vast "Universal Empire"¹³ even during their life time – their true hybris.

If Alexander the Great remained in the history known as the first truly visionary military, who unambiguously promoted the generous ideal of unity of the human race and who adopted globalization by military conquest as a state policy, Philip II was unjustly, quasi-forgotten, although he himself laid the cornerstone in the Macedonian conquests, through the fundamental reformation of the armed forces and the adoption of progress in the military field, at an unprecedented level.

The echo in time of the victories of these ancient kings opened the way to other great military conquerors of the world: Caesar, Attila, Justinian I, Umar I, Genghis Khan, Mahomet II, Peter I, Napoleon Bonaparte and many others whose life was guided after the challenge of the Macedonians addressed to the divinity, inscribed in stone: "The earth is under my dominion; you, Zeus, stay with Olympus"¹⁴.

Macedonia was a small state in the north of the Peloponnese Peninsula, dominated by mountainous relief, with isolated tribal formations. They controlled the mountain passes through which the barbarian invaders attacked the wealthy city-states of the Ancient Greece from Illyria in two directions: north and northwest¹⁵. Although Macedonians were related to the Greeks through Perdiccas I – the first king of Macedonia, the Greeks had always despised the Macedonians, considering them savages and barbarians.

Faced with the possibility of total extinction, Macedonians were forced to become powerful in order to survive because they were in the way of all the expeditions to Greece and their fellow countrymen were unwilling to help them.

Before the reformation of supplying the troops, implemented by the Macedonian king, during the classical period of ancient Greece, the wars between the city-states were, as a rule, followed by certain conventions. The combatants' armies met in a previously established place that met the conditions for combat and was accepted by all the belligerents. The confrontation never took a long time, and after its completion, the troops returned to their own city-states¹⁶.

Because the soldiers wore on them only the weapons used in the battle, besides the actual combatants, the army consisted of many servants, women and slaves who were marching with the fighters to the chosen place without actually participating in the armed confrontation. Therefore, the proportion of non-combatants was much higher than that of combatants. The effects of this were the decrease of the speed and mobility of the forces, as well as the increase of the number of necessary rations, because by adding them, the number of those needed to be fed increased as well.

In the Dacian space, inclusively, the feeding of contingents in war time was ensured by the supplies that the fighters brought with themselves from home and which were generally carried by the servants. They met the army's needs for only a few days¹⁷. In exceptional cases, if battles lasted for more than a few days, food could be received from peacetime constituted reserves and kept safe in hidden or hardly accessible places.

Similarly, the Greek armies used wagons pulled by oxen to transport the supplies, which led to an even more dramatic decrease in the speed and mobility of the forces, and the crossing of the rough terrain areas was taking a very long time. All these causes made a long-time campaign impossible; the wars were taking place in a short period of time and at a short distance from the city-states.

Philip II (382 BC - 336 BC), the king of Macedonia in 359 BC, realized that all of this had to change rapidly. Thus, he understood that he must create a new system of supplying the troops within his army, based on sustainability, mobility and speed.

The precedent was set by the action of the Athenian military leader Xenophon (431 BC - 354 BC), who during the 10,000 Greek mercenaries'

retreat to their home lands after the Battle of Cunaxa (401 BC) in the heart of Persia, through Babylonia, Assyria, and Armenia to Trebizond (now Trabzon – Turkey) where the Greek fleet was waiting, ordered the abandonment of all the army's baggage, except for those strictly needed for the battle and food¹⁸. This decision ensured the success of the march over 1,500 kilometers¹⁹, because it brought the necessary speed and mobility to the Greeks in hostile territory, permanently harassed by the Persian army, left without supplies, decimated by diseases and demoralized, as Xenophon himself described it in his memoirs.

More than certainly inspired by Xenophon's decision, Philip II prohibited the use of wagons pulled by oxen in the Macedonian army, using instead the horse and the donkey as pack animals²⁰ for all the tasks where the ox was used. It was for the first time in the known history when a military commander in Europe had adopted such a measure designed to give his army the necessary mobility and the possibility of division of forces during the movement.

An enviable comparison²¹: even if a wagon pulled by an ox can carry 452 kilograms per day and a suitably equipped horse only 113 kilograms, the crucial difference is that five horses can easily carry the same amount 51 kilometers daily – a double distance compared to using oxen for transportation – and only half of the required amount of feed is used.

As an estimate, every horse consumes about 4.5 kilograms of fodder and an equal amount of grain per day. The animal feed was assured as follows: the fodder was collected from the transited areas and each animal was carrying 104 kilograms of grains, sufficient for their own food during 23 days²².

Moreover, in order to reduce the cargo carried by the animals, Philip II increased the amount of materials that the fighter would carry with him at all times. Each Macedonian soldier would carry the necessary weapons, the equipment and food ration²³. Thus, in addition to the sword, helmet, shield, armor, sarisa (a 6-meter-long spear, which in order to be easily transportable was disassembled in two parts), in its backpack there were also tools for digging, a blanket, personal clothing, medication, eating utensils, food and 18 kilograms of flour, necessary to feed for a period of 30 days²⁴.

All of the materials listed above weighed together about 37 kilograms, and this really

represents the optimal weight that a soldier can carry on long distances without affecting his health. In comparison, the Roman soldier was carrying 27 kilograms without weapons (about 34 kg in total), as much as a French soldier participant in Waterloo (1815) and an English soldier from the Battle of Bunker Hill (1775) was carrying 36 kilograms, while in the modern age an American soldier in the Normandy Landing (1944) carried 37 kilograms²⁵.

This parallel over time best reveals the visionary spirit of the Macedonian king.

Even though people took up much of the cargo carried by the animals, there were materials and equipment that could only be transported with the animals, such as bulky objects like: the parts of the siege weapons, the tents, the wood, the stone grinders for the preparation of food, surplus food that was not carried by soldiers, food supplies, animal feed, etc. It was estimated that the weight of non-edible materials transported by a pack animal relative to the number of fighters to whom it was intended, was 1 to 50 (an animal carried objects required for 50 people)²⁶.

Therefore, in his first large-scale military campaign, in Illyria (358-357) against his father-in-law Bardilis, king of the Dardans, the Macedonian king used only 200 pack animals for an expeditionary force of 10,000 people²⁷.

Moreover, women, wives and other civilians were forbidden to accompany the troops. Servants were also limited to one for each horseman and one for every ten pedestrians²⁸. They were carrying tools for preparing food, ropes, etc., along with their own equipment and food rations. They also accomplished other tasks such as road maintenance, procurement of food for humans or animals and guarding the camp. Only sometimes did they take part in the fight, in distinct corps of light infantry.

These measures determined the drastic reduction of the non-combatant personnel who traditionally accompanied the armed forces. For the first time in the history, the Macedonian army, consisting of 10,000 infantrymen and 600 horsemen²⁹ was accompanied by only 1,600 auxiliary personnel³⁰, which gave Philip II the capability to move troops faster and farther as well as the possibility of sustaining them on the battlefield for a few weeks only with the food they were carrying on their own.

The vast reforms in the field of supplying the troops implemented by Philip II had substantially increased the immediate range of action of the

Macedonian Army, making it highly superior to any contemporary army. To point out, during one day, his armed forces could travel 24 kilometers in a normal foot march, and 32 kilometers in a forced foot march³¹, absolute figures for that time period.

Furthermore, throughout the march, the rest halts to maintain animal health were well defined. After every hour, there were 10-minute rest halts, and after every three hours of march, there was a half-hour rest halt, when the animals' packs were removed³². Even the cavalrymen were marching alongside their mounts, along with the rest of the army.

A simple calculation reveals that at an average of 24 kilometers per day foot march, wearing supplies for 25 days, Philip's army could easily travel 480 kilometers without being supplied and still have a five-day food supply.

Under these circumstances, Philip II could instantly hit any rival between the Adriatic Sea, the Aegean Sea and the Danube River, in an area with a radius of 240 kilometers or ten days of march³³ from Pella, the royal capital.

The immediate action logistic area of the Macedonian Army is shown in Figure 1.



Figure 1. The immediate action logistic area of the Macedonian Army

Source: "Map. 2, Logistical Range of Philip's Army", Gabriel A. Richard, Potomac Books, "Philip II of Macedonia Greater than Alexander", 2010, p. 89.

Another advantage was that once the Macedonian army arrived in the desired location it could stay for other two weeks without having

to resupply (consuming its own supplies that were transported) or, if required, it could opt for the continuation of the march³⁴.

As the sphere of Macedonian influence grew, Philip II would establish key points in all directions – forts and reinforcements with a preponderant role in resupplying troops, where he would store reserve supplies for his future campaigns.

At the time, particular attention was paid to the forces that defended themselves inside the fortresses; they were supplied from food depots organized in the fortresses³⁵.

Also, because the southern Balkan Peninsula is an important river basin, crossed by major rivers such as Nestus, Struma, Vardar, Haliacmon, Pineios, Erigon, Apsus, etc., surely some of these forts were built near fixed or floating bridges to ensure the guarding of these crossing points³⁶.

Another innovative idea implemented by Philip II in the field of supplying the troops was the staging of the army between marching stages in fortified areas – one of the lessons learned by the Macedonian king in his early campaigns, when the attacks of the mountain tribes took place predominantly during the rest of the troops, surprising him³⁷.

In order to avoid ambushes and to ensure the necessary conditions for restoring the combat capabilities of his soldiers³⁸, Philip II ordered every night the construction of camps surrounded by deep ditches and palisades, made of sharpened wooden fences. In the areas with no vegetation that could be used for this purpose, the wood was transported with the pack animals. Due to the obvious advantage brought to the protection of forces during military campaigns, the Romans adopted from the Macedonians the innovative measure of fortifications during the night-time staging.

The lethal combination of speed, mobility, supplying the troops, and the fighting spirit of the Macedonian army was clearly demonstrated in the Balkan campaign carried out by Alexander the Great, half a year after his father's assassination in the spring of 335 BC³⁹.

After leaving Amfipolis (today in northern Greece), the Macedonian army led by Alexander crossed the Stara Planina Mountains and obtained two victories south of the Danube river: first against the Thracians on Mount Haemus and the

second against the tribes near the Lyginis River (a tributary of the Danube river). After a three-day march, they crossed the Danube river during the night and surprised the Getae, forcing them to withdraw after a first clash of the cavalry. Because he received news of the uprising of King Cleitus of Illiria and King Gaucias of the Taulans, Alexander headed for them and defeated them in the battle of Pelion (located in the south of Lake Prespa, today in Albania). Consequently, the entire northern border of Macedonia was pacified.

Later he received news of the rebellion of some Greek city-states, led by Teba and Athens. Alexander left immediately, and the surprisingly rapid presence of the Macedonian army discouraged the rebellion. Only Teba chose to fight and was defeated, and Alexander's revenge was cruel: the whole city – once the dominant power in Greece – was destroyed, all the inhabitants sold in slavery, and its territories were divided among the other cities in Boetia. Thus, Greece was pacified too.

The march of the Macedonian army and, implicitly, the effort to supply the troops, covered two thousand kilometers, of which the last five hundred were made in just 13 days – incredible figures for that period. At the same time, the Balkan campaign in the spring of 335 BC revealed to Alexander the true qualities of his army and gave him confidence in his power.

By introducing his visionary reforms in military logistics, for the first time in the known history, Philip II succeeded in raising the art of war far beyond its contemporaries, creating the premises for his son's great conquests.

NOTES:

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