Centre de doctrine et d'enseignement du commandement



How do you "transform" an army in two weeks? military-Earth thinking notebook

le Colonel Michel GOYA

Published on 11/08/2018

Histoire & stratégie

At the end of August 1914 during the "Battle of the Frontiers", the five French armies fought their first battles and all of them broke up over German forces better adapted to modern warfare. The losses were immense[1] and the tactical shortcomings that emerged were innumerable: disdain for intelligence and security measures, lack of liaison between units and weapons, absurd direct attacks, misuse of machine guns, poor infantry fire, etc... However, barely two weeks later, from 4 to 10 September, this bruised and so imperfect instrument succeeded in stopping and driving the German army back to the Marne before containing it again during the "race to the sea". To explain this recovery by the courage of the French soldier and the energy of his leaders would be incomplete, as these qualities already existed in August. Another factor played a part and Joffre describes it in his memoirs: "If success met my expectations on the Marne, it is for a very large part that our armies were no longer at the beginning of September those of the first days of the war".

1] 300,000 French dead and missing in 1914.

# The most rapid "transformation" in modern military history

The infantry is the first to suffer from the discovery of modern firepower. It is therefore also the first weapon to transform itself. On 15 August, the 8th Infantry Regiment attacked the castle of Dinant. Too close together, it is hit by German machine guns. The corps commander then ordered to forget the attacks in line at one step interval and had his companies manoeuvre by half autonomous sections [1]. 1] On 25 August, General Fayolle noted in his notebook

At the 70th Division, disaster between 7 and 9 a.m. in the attack on Seville: there were too many people in line. There was no reconnaissance, no preparation by fire. How could this happen? No combat patrols, no scouts, useless masses of men! No preparation. This is

### Centre de doctrine et d'enseignement du commandement

### madness.

The very next day, the spirit and methods changed: "We're doing it again, but this time very carefully, very slowly. The lesson was a good one [...] I walk by leaps and bounds under the protection of all the artillery and after reconnaissance". While the 13th Infantry Division (ID) was retreating in Lorraine, one of its officers recounted how his men had evolved:

They sensed the superiority of the enemy's means and wanted to do everything possible to remedy it. Hence their marvellous ability to stick to fire. Hence their astonishing mastery in these offensive returns which became for all our armies, one of the most effective maneuvers.

It also describes how they learned how to fortify villages, how to coordinate their actions with the batteries of 75s and machine gun sections reinforced with parts recovered from depots. Deployed on the Marne, they developed a firepower per kilometre of front line four times higher than that of the first battles and then launched into the "race to the sea", two battalions improvised a motorised manoeuvre with requisitioned trucks.

In defence, the units quickly understood that the only effective parry against machine guns and artillery was to drive into skirmishers' holes which were then linked together to facilitate connections and then covered with barbed wire. From the Grand Cour couronne de Nancy in August 1914, the front gradually crystallized on the initiative of the infantrymen and without the knowledge of the high command. As soon as the front was secured, men began to infiltrate no-man's-land, first isolated snipers and then small groups that initiated the corps francs. The adaptation of the artillery was also spectacular. Harassed by the German heavy pieces of an upper extension, often out of step with infantrymen with whom the possibilities of transmissions were limited, the field artillery had the greatest difficulty in supporting attacks, the only mission planned for it. To remedy this, they improvise long-range 75 mm shots with stick sinking, a non-regulation mode of action. On 7 August 1914, a battery of the 2nd Corps ravaged a German cavalry regiment 5,000 metres away, well beyond the firing practised on the ranges. At the end of August, at the Battle of La Mortagne, General Gascouin had enemy gatherings fired at 9,500 metres. For this purpose, he used bullet shells equipped with rockets intended for firing against aircraft and had three captive balloons removed from the strongholds to ensure adjustment. At the same time, Joffre authorized the removal of heavy pieces from the strongholds. In the second week of August, the IIIrd Army received six 120mm batteries taken from Verdun. During the night of 27 August, the 1st army is reinforced by three heavy batteries from Epinal. Guided by a balloon and three planes, they opened fire the next day to the great surprise of the Germans.

Indispensable for these indirect firings, the air control, not provided for in the aeronautical regulations, developed at high speed. On 6 September, at Montceau-lès-Provins, Colonel Estienne used the two dismountable planes he had had built when he commanded the Vincennes aviation school, and managed to completely destroy a German artillery group. Several army corps retrieved airplanes from the depots and trained observers. But as the Germans also did air adjustment, they developed defence against aircraft and learned how to camouflage guns. They also organised the permanent occupation of firing positions, night and day, their fortification, coordination with distant supply elements, all things that are not in the 1910 manoeuvre regulations, which only describe highly mobile manoeuvres.

Cooperation with the infantry and remote guidance of the guns were made possible by retrieving telephone equipment from post offices or purchased in Paris and even in

#### Centre de doctrine et d'enseignement du commandement

Switzerland. Artillery officers are detached to the infantry and the commander of the divisional artillery regiment becomes everywhere the advisor of the general, leaving the second in command to organize the shooting. To facilitate orders and intervene faster and stronger, the artillery is often grouped en masse, sometimes with 30 batteries as in the 1st corps.

All these adaptations became widespread very quickly and allowed to take full advantage of the capabilities of the 75 mm gun. On 6 September, on the Marne, the 15th artillery regiment alone stopped a German assault by firing at close range. On 10 September, at Vaux-Marie, a violent attack by the Kronprinz army was stopped by a mass action of all the artillery of the 6th French corps. From 7 September onwards, to escape the French artillery, the Germans attempted massive attacks at night but at their imitation of the 1st Army, which had applied this method from 24 August, the corps generalised the night-time alert roadblocks. In the offensive that followed the victory of the Marne, several divisions advanced the infantrymen behind the first artillery roadblocks, walls of shells that leap 100 metres at regular intervals.

The adaptation of the cavalry was much more difficult, as the horse was unable to move in the face of modern firepower. In Lorraine, the Ardennes and Belgium, each of the three cavalry corps suffered, each in turn, a bloody failure. During the Battle of the Marne, a group of 1,800 cavalrymen were laboriously formed to raid the enemy's rear, but at the end of this battle, the cavalry, exhausted, was unable to exploit the victory. In an attempt to adapt, cavalry corps improvise groups of self-propelled units based on converted civilian vehicles or sometimes incorporate infantry battalions on trucks, the embryo of future motorized units. Above all, they tried to increase their combat capacity on the ground, even if it meant looting warehouses in the rear to find the tools and machine guns they lacked. Foot battalions were also created by dismantling squadrons. However, these innovations remained limited.

On the other hand, the air force very quickly demonstrated its usefulness by providing decisive information such as the discovery of the army's movement.e von Kluck lending the flank in front of Paris to the VIth French Army, then improvising the artillery adjustment as soon as part of the front stabilizes. There were also many spontaneous experiments, such as night flights or photo tests. Agents were transported to the enemy's rear. Each crew also got into the habit of arming themselves, to defend themselves in case of a forced landing, and to take advantage of reconnaissance missions to hit concentrations of troops with a few bombs or dart boxes. On the 14th and 18th August 1914, two French planes bombed the Zeppelin hangars near Metz, and very quickly the pilots were looking for a duel. While Roland Garros and de Rose resumed the experiments they had initiated before the war, Captain Faure of the V24 squadron asked to industrialist Gabriel Voisin to install a Hotchkiss light machine gun on the front of his aircraft (the propeller is at the rear). On October 5, Frantz and Quenault, from this squadron, obtain the first air victory in history.

### The rigidities of the French army in 1914

To understand this spectacular recovery, we must start from the hypothesis of the influence of nearly a thousand years of aristocratic predominance in the officer corps; a predominance barely interrupted by the Revolution and the First Empire, and tacitly renewed by the mimicry of the bourgeoisie.

The first consequence of this aristocratic culture is a very affective relationship with the function. Duty" is the main motor of action, and everyone has a clear awareness of what is noble and what is dishonourable. There are prestigious units, such as the battalions of

#### Centre de doctrine et d'enseignement du commandement

Dismounted Chasseurs, and others that are much less so, such as the reserve units. There are "core trades", such as the 75mm field gun service, and neglected "peripheries", such as the automobile service, which also belongs to the artillery (and which refuses the first tank projects, too far from the real trade). There are noble attitudes such as the duel on horseback with a knife [2] and other dishonourable ones such as burying oneself. This sense of honour is also very important in hierarchical relationships. The leader is highly respected and loyalty to him is a major virtue, but at the same time it is considered offensive to control his subordinates. So every individual, every regiment, every major command is driven by a deep sense of duty but considers itself a sovereign power that is truly accountable only to its conscience. In 1914, this led to a juxtaposition of "fiefdoms" and "baronies" with leaders who were tickled by their prerogatives, which did not facilitate cooperation and led to a preference for internal solutions, resulting in many redundant structures.

The tiering is also social. First of all, there is a clear distinction between the troops and the officers' corps, the latter traditionally believing that they have a monopoly on certain virtues. This is expressed in many ways. The automatic weapon is refused because the infantryman would waste ammunition. Moreover, he can only fire by section block under the orders of an officer. In his two years of service, the 75 mm gunner was considered capable of only four types of fire, compared to twenty-four during the war. The parachute was refused because the pilots would take advantage of it to escape. Snipers were refused to fight as they were considered too independent, etc... Within the pre-war officer corps itself, a clear distinction was also made between direct officers (Saint-Cyrans and Polytechnique, who did not serve in the melee) and indirect officers (Saint-Cyrans and Polytechnique, who did not serve in the melee). Within the pre-war officer corps itself, there is also a very clear distinction between direct officers (Saint-Cyrians and Polytechnicians, who do not serve in the melee and do not salute each other) promised by their title to the highest offices, semi-direct officers, who will rarely exceed the rank of captain, and reserve officers, who will be ostracized even during the war. For the direct reports, there was still the upper floor of the Ecole Supérieure de Guerre (ESG), which alone gave, implicitly, the right to write, but with a predilection for "noble" subjects and not technical or tactical down-to-earth issues.

This apparently extremely rigid system, however, has more or less hidden elements that allow for flexibility. First of all, there are the horizontal solidarities, the school promotions in particular, which make it possible to overcome the barriers of the "fiefdoms". On the other hand, the sense of duty that drives people stimulates initiative, and the weakness of control provides freedom of action for experimentation, tinkering or arrangements, but on condition that forms are respected. There are thus many innovations in bodies but they remain hidden because they are contrary to official ideas or because the energy needed to impose them on the whole system would be too great.

At the level of doctrinal reflection, instead of having a centralised body that would draw inspiration from the reflections of multiple competencies, the French army ofbefore 1914 had many rival chapels (Army General Staff, General Staff, High Council of War, the Ministry's directorates of arms) but all populated by commissioned officers from the same mould. At least until the beginning of the 20th century, it is still possible to associate the tradition of heroic prowess, stemming from the fairy-tale cavalry, with this tradition.odal cavalry and which permeates melee weapons with the other tradition, that of fire and the method of learned weapons (the King's army), carried by the Polytechnicians. But from the André ministry onwards, the latter massively gave up a military career. On the eve of a war where the technical element would be essential, only one tradition dominated, brought to its paroxysm by the spiritualist revival of the time, to give the "offensive to excess" [3]. 3] But it is also true that the French compartmentalization has the advantage

### Centre de doctrine et d'enseignement du commandement

of tempering the most extremist theories. Many high-ranking generals rejected these ideas and many company commanders, who remained in their posts for an average of ten years, did not listen to what came from Paris. Heterogeneity thus continues in the field of ideas as well.

# The principle of "the fatherland in danger"

This system, which undeniably struggles to evolve in peacetime, proves surprisingly effective in times of crisis because when the "Fatherland is in danger", certain attitudes change all at once. Resisting the arbitrariness of the leader thus becomes contrary to honour, since it may call into question the existence of the unit, the army or even the entire nation. From 1911 to 1914, Joffre had the greatest difficulty in changing a corps of generals he considered to be sclerotic [4]. 4] However, in the first five months of the war, he was able to "sack" 162 generals, or 40% of the total, including three army commanders and three-quarters of the generals of the army corps. This policy, which was sometimes unfair, made it possible to bring up competent officers such as Pétain or Fayolle.

Then, and above all, when the barriers are suddenly lowered and cooperation becomes the rule, all the hidden experiments come to light, providing the vast majority of the innovations described above. Inadequate regulations are very quickly overtaken. On August 14th in the morning, the 13th <sup>ID</sup> had its baptism of fire in front of the Lorraine village of Plaine held by the Germans. During four hours, frontal bayonet charges succeeded one another and failed against machine guns and howitzers posted in the village or on the Donon heights, then the division commander ordered two groups of 75 to methodically prepare a new attack, which took place on the flank. The Germans were defeated.

The information rises to the top through multiple reports and liaison officers of the Grand Quartier Général (GQG). It enabled the latter to publish, from the middle of August 1914, particularly lucid notes on the deficiencies observed and the means of dealing with them. Information also circulated horizontally between units. On its way up to Belgium, the 10th Corps thus received directly a "feedback" note from the 1st Corps, which had just fought four days earlier at Dinant. But above all, the cooperation takes place internally, within the divisions themselves, with people who now live together. Heroic and technical traditions are once again coming together and the cooperation between artillery and infantry, even the air force, so deficient before the war, suddenly becomes the key to success.

# The three phases of the evolution of the French army during the war

The process leading to the victory of the Marne is remarkable, but it is only a mechanism for correcting the most obvious defects [5]. There is no question then of changing the conduct of operations. But as the units at the front are under permanent pressure, this adaptation process is continuous. Demands and proposals rise up the hierarchy and eventually form a body of new ideas that challenge the existing paradigm inherited from the pre-war period. The year 1915 was a year of tension between the HQG, guardian of the doctrine, and the men at the front until the failure of the Champagne offensive in October 1915 consecrated the victory of the latter.

From that point on, it was understood that it was the combat units that had the relevant information to change things and not, as before 1914, those that had access to the facts of experience of foreign wars, past or simulated [6]. At the beginning of 1916, a new paradigm appeared, that of the "scientific conduct of the battle", revenge of the "methodical" over the "heroic". This doctrine failed on the Somme causing its replacement by another model, the "Verdun School", and by new men like Nivelle. The disaster of May

#### Centre de doctrine et d'enseignement du commandement

1917 provoked a third phase in the evolutionary process.

With the arrival of Pétain, the idea of a "formula" that would allow the decisive battle to be won was abandoned. This is the birth of operative art and change is then conceived as a normal and permanent phenomenon of war. The French army is thus organized accordingly and thus passes without serious internal crisis, if not without tensions, from the methodical battles of the second half of 1917 to the mobile defensive then offensive battles of 1918 until the final victory [7].

- 1] The one-step interval line attack was not officially abolished until 1916.
- 2] With the arrival of many cavalrymen in the air force, hunting became the core of the profession to the detriment of observation.
- 3] In 1939, it is rather the methodical and scientific tradition that predominates, with the results that we know.
- 4] To obtain the Minister's signature required for early retirement, he was even obliged to place "targets" at the head of the troops of great manoeuvre to prove their unfitness.
- 5] The same phenomenon was noted in June 1940, when the French fought much better on the Somme than a few weeks earlier, but this time the initial losses were such that there could be no "miracle".
- 6] War games, great manoeuvres, study trips.

7] Note the similarity of these evolutions with those of the Philosophy of Science, going from positivism (theory is eternal), to Popper's ideas (one theory drives out the other), then to Kuhn and Lakatos' ideas (one theory goes beyond and encompasses the previous one).

Colonel Michel GOYA chose the marine troops when he left the EMIA in 1990. He is a graduate of higher military education (EMSST, then 11th Promotion of the CID). On the operational level, he has notably participated in operations Noroit (platoon leader), UNPROFOR (Sarajevo), IFOR (Sarajevo), CIGOGNE (CAR, unit commander). He holds a doctorate in Modern and Contemporary History from the University of Paris IV. He has served at the CDEF, and in the Office of the Chief of Staff of the Armed Forces. He holds the chair devoted to "land action" at the Centre de recherche des Écoles de Coëtquidan (CREC). He is currently serving at IRSEM as director of studies in the field of "New Conflicts". Author of numerous publications, notably in the RETEX notebooks, he is a regular contributor to the CESAT notebooks. He has published three noteworthy works: "La chair et l'acier" (Tallandier, 2004), "Irak, les armées du chaos (2003-2008)" (Economica, September 2008) and "Res militaris, de l'emploi des forces armées auXXIème siècles Economica, February 2010).

Title: le Colonel Michel GOYA

Author (s): le Colonel Michel GOYA

**Release date** 12/02/2021