



## Counter-insurgency-proof technology

military-Earth thinking notebook

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**While it brings undeniable advantages to forces in counter-insurgency operations, technology can quickly prove counter-productive when misused or mismanaged.**

In his book *The Utility of Force*, British General Sir Rupert Smith<sup>[1]</sup> states that the military structures of the Cold War have been left to us<sup>1]</sup> states that the military structures of the Cold War have been left as a legacy, and that "the organizations and armies we have today were born out of the need to prepare for total war". Conventional armies are constantly modernizing with equipment based on ever more advanced technologies, suggesting that the most likely threat would be conventional. However, since the end of the Cold War, the prospect of symmetrical or asymmetrical warfare has become more distant, while the prospect of asymmetrical counter-insurgency-type wars is increasingly likely. In these wars, the armed forces are fighting an adversary with limited means, who is therefore not very technologically armed, but whose will and methods have no limits.

At first glance, one might think that this relationship of the strong to the weak is a decisive advantage for a state, allowing it to quickly win the strategic victory by crushing its adversary. But the most recent experiences show us that the success of a counter-insurgency operation (COIN) is not directly linked to the degree of development of a state, and in particular to the technological level of its armed force. This raises the question of what role technology should play in COIN operations. What is the impact of the preponderance of new information and communication technologies (NICTs) in the conduct of these operations?

The study of these questions leads us to affirm that, while it brings undeniable advantages to forces in counter-insurgency operations, technology can quickly prove counter-productive when it is misused or poorly mastered.

**Man as the keystone of COIN operations**

According to David Galula, revolutionary war is "an internal conflict...resulting from the action of the insurgent trying to seize power...and the reaction of a loyalist who wants to retain his power" [2].

The loyalist, or counter-insurgent, has power when the insurgent has only ideological power on which to base his fight. This power gap between the two parties is avoided by the insurgent, who avoids direct confrontation by engaging on another terrain than that of force: the population. The population is therefore the center of gravity of this type of war, which is above all a question of conquering by "winning hearts and minds" [3]. 3] In this undertaking, the strength of the relationships that man can establish is irreplaceable.

One of the particularities of the COIN also lies in the fact that there is neither front nor enemy identified. The insurgent blends into the population and makes himself elusive; the battlefield is intrigued. It is through an extensive ground control operation that the forces are able to find their opponent. In this context, they must have the right balance of power: prior to their own involvement in Vietnam, the Americans had estimated that a balance of power of one soldier for every 15 to 20 civilians was necessary. This ratio was confirmed by the study of Operation ATLANTE [4]. In Algeria, Paris had sent 450,000 men for eight million inhabitants, i.e. one soldier for every twenty civilians. We therefore find ourselves in a case where the logic of manpower takes precedence over any other consideration.

If the place of the loyalist fighter is paramount, public opinion also plays a major role and imposes itself in COIN as a fully-fledged actor. According to General Sir Rupert Smith, Clausewitz's concept of the "remarkable trinity" based on the triptych State, army, people, is fundamental in all types of warfare [5]. 5] To achieve strategic success, therefore, states must necessarily be able to gain and maintain public support. Symmetrical or asymmetrical conflicts are subject to easily graspable issues, which is not the case for asymmetrical conflicts, which are often far from our borders and for which the threat is complex and poorly identified. For public opinion, these are often not worth the financial investment and human sacrifice made.

COIN operations can therefore be defined first and foremost as a vast "clash of wills" in which man plays the central role. So what is the role of technology in this context?

## **Technology in support of forces in counter-insurgency operations**

In view of the predominant role played by man in COIN operations, the added value that technology can bring seems minimal. This view is only fragmented in several respects.

Any COIN operation reaches a certain level of violence, necessary to destroy or drive out the insurgents from the territories they occupy. The operation begins with a coercive phase aimed at conquering or reclaiming the ground, justifying the use of force. This therefore implies the use of certain technologies, according to the classic methods of conventional warfare. Later, in the stabilization phase, the counter-insurgent refocuses its action on the conquest of the population, while continuing to hunt down and destroy the enemy. The application of a certain amount of violence is then still valid, even to a lesser extent.

It should also be borne in mind that one of the main objectives of the insurgents is to cause maximum losses among the loyalists, losses which have an impact on human potential, on the morale of the troops, but also on public opinion and, in an induced way, on the freedom of action of the politician. Protective equipment is part of the fight against

this intention and thus contributes fully to the success of the force. The investment of several tens of millions of euros made by the French Army since 2008 to safeguard the forces deployed in Afghanistan reflects the importance of this aspect in this conflict:

- over-shielding of vehicles and technologies to limit the effects of ammunition: GBC armoured cabins, RPG-NET nets[6],
- implementation of remote controlled systems in machines: TOP[7],
- FDI control systems [8]: SOUVIM[9], RC jammers - FDI [10]

The technology also offers the means to detect, monitor and track the enemy, particularly through its ability to carry out ISTAR[11] missions in support of ground forces. Moreover, it can in some cases replace the latter, thus contributing to the economy of means. Unmanned systems, in particular UAVs, armed or unarmed, perform this type of mission brilliantly and have become an indispensable tool in COIN. In view of the absence of any enemy anti-aircraft defence, they also have the advantage of being able to penetrate far into rebel territory where it is difficult to get ground forces into without risk of losses. Robots or UGVs[12], even if they are not yet very sophisticated, also play a significant role. In Afghanistan, they allow the neutralization of explosives and ammunition with a success rate of 90%[13].

13] The usefulness of helicopters is no longer to be demonstrated in NOC. On the one hand, they enable forces to be extremely mobile, being able to reach remote areas easily and quickly to drop troops as close as possible to an objective or to extract them if necessary, including for medical evacuation. In addition, they make it possible to apply fire in direct support of the ground troops with whom they are in direct contact and to locally reverse the balance of power.

In short, although technology cannot replace manpower, it is essential in NORAD as an indispensable support to gain an advantage over the insurgents. In a current context marked by a strong impact of the media and budgetary constraints, it would be impossible to ignore the gain it brings.

## **When technology serves the insurgent cause**

Insurgents constantly seek imbalances in all areas to exploit even the slightest weakness in the force. In this context, technology becomes a factor of disorder.

In the area of safeguarding, the level of protection obtained leads to a decrease in the mobility of forces. For example, an upgraded vehicle offering increased protection to the combatant sees its mass increase when the power of its engine does not change; its mobility is then reduced. The problem is the same for the combatant. The protection of the combatant is therefore to the detriment of his mobility, whereas he is opposed to a light insurgent, manoeuvring more quickly in an environment that he masters perfectly.

In 2003, during Operation Iraqi Freedom, the "ultra-technologized" American army defeated the Iraqi army in just three weeks. Technology is expensive, but should make it possible to wage short and therefore economical wars, thanks to the rapid victory achieved by crushing the opponent. This is not true of COIN operations, which are long: since 1945, they have lasted an average of 14 years[14]. 14] The Iraqi example once again illustrates this state of affairs perfectly, since the lightning victory obtained by the

American army against the Iraqi army was followed by nine years of counter-insurgency combat. Highly technologically advanced armed forces engaged in COIN operations actually achieve limited objectives because the technological whole is thwarted by the insurgents who circumvent it. COIN operations are therefore expensive, and the higher the technological level of the assets involved, the more expensive they are. The financial resources of a State being counted, this time-technology combination is ultimately a factor of wear and tear.

The importance of NICTs in our societies is also fully exploited by the insurgent camp. It uses these means (Internet, media) to influence public opinion in the loyalist camp, which it knows to be fragile, but also individuals, whom it seeks to indoctrinate in order to strengthen its network. Second, the NICTs are proving to be an important source of information and therefore intelligence about the action of the force. Indeed, the military easily tend to deliver information relating to their professional life over civilian networks, without realising the consequences that this can have in terms of individual security and above all on ongoing operations.

## **Draft solutions**

Technology plays a fundamental role in counter-insurgency, but it has major vulnerabilities. It is legitimate to ask how to overcome this impasse.

The adoption of a policy of acquiring equipment strictly adapted to the needs of deployed forces must be the basis for any action. General (2S) Desportes speaks of technological "sufficiency" [15]. The all-technology resulting from transformation or RMA[16] is not suitable for COIN operations because, while it makes it possible to achieve tactical objectives, it does not produce the expected strategic effects.

Secondly, the situational awareness and qualities of the soldier engaged in COIN are far more decisive than the degree of technological advancement available to him. According to American General David Petraeus, the fundamental qualities of the soldier in COIN are his adaptability to the situation and his capacity for initiative. Troops must be able to understand the situation and react quickly and appropriately. In 2008, he defined 25 articles that correspond to the main ideas that should guide the action of unit commanders in Iraq [17]. 17) Here is an excerpt from one of them:

"Learn and adapt. This is the daily task of the counter-insurgent. One must continually take the measure of the situation and adjust tactics, policy and programs. [...]. In counter-insurgency, the side that learns and adapts the most gains a decisive advantage.

Moreover, engagement in COIN requires conducting stabilization and coercion operations simultaneously, i.e. within the same space-time framework. This interweaving requires military personnel to have an excellent reversibility capability.

The soldier engaged in COIN must therefore possess specific behavioural skills, inculcated through a long training process, based on an adapted doctrine.

But how can we control our environment?

The media factor can be controlled by including the media right from the conception of the manoeuvre. The media must be guided in such a way that they are convinced of the

usefulness and legitimacy of the action of our forces and of the adaptation of our action to the situation, in order to deliver the right messages. This aspect was perfectly taken into account by the American army during the second battle of Fallujah, which helped transform its tactical success into a strategic success.

Propaganda and indoctrination actions can hardly be countered, especially if they are carried out via the Internet, which still suffers from a lack of global governance. On the other hand, it is possible to correct behaviour. Forbidding military personnel deployed in theatres of operation to have access to communication media (GSM, Internet, etc.) would be harmful insofar as they help to preserve the morale of troops, which is essential in any military action. It is therefore necessary to focus on a training process that would make it possible to provide the combatant with "reflex actions" in the area of secrecy preservation.

Ultimately, in counter-insurgency operations, technology is as much our strength as our weakness. The solution must not be to do without it, but to use it in an appropriate way, considering it as a help: the key to success is not the means, but the way in which they are used. Thus, the real challenge for a modern army today is to become a learning institution by making each member of the army a soldier capable of learning, constantly adapting to the adversary and imposing his own pace of manoeuvre.

1] "The Usefulness of Force", "The art of warfare today", Ed.2007, Chapter 5, p192 - 193.

[2] «Counterinsurgency, theory and practice», David Galula. 2008 edition. Chapter I, p 9 and 10.

3] David Kilcullen, an Australian counterinsurgency theorist, defined this principle as follows: "Winning minds means that people are confident that they are protected; winning hearts, that the fulfillment of their expectations lies in the very success of the counter-insurgents". CDEF - doctrine 2007, stabilisation, strategic function, decisive phase.

4] Indochina, January to July 1954; CDEF - doctrine 2007, stabilisation, strategic function, decisive phase.

5] "The Usefulness of Force", "...The art of war today", 2007 edition, Chapter 1, p 56.

6] In particular, the RPG-NET nets have been adapted on the VBCI through a reactive adaptation operation and were deployed in Afghanistan in 2010.

7] Remote operated turret.

[8] Improvised Explosive Device.

9] Mined route opening system.

10] Radio Controlled - Improvised Explosive Device (IED - RC).

11] ISTAR: intelligence, surveillance, target acquisition and reconnaissance.

[12] Unmanned Ground Vehicles.

13] NATO Commission Report 2011, annual session. "Countering the insurgency in Afghanistan: low-tech threats, high-tech solutions.

[14] Article "The counter-insurgency, Afghanistan's other victim", published by Le Figaro on 26 March 2012.

15] Interview of General (2S) Desportes published in the magazine DSI, Defence and International Security in January 2008.

16] RMA: Revolution in Military Affairs. Concepts of Transformation and RMA according to Joseph Henrotin, "[17] RMA: Revolution in Military Affairs. The military technology in question - the American case».

17] As commander-in-chief of the coalition forces in Iraq, General Petraeus was tasked with implementing the doctrine which he himself helped to formulate. Cahiers de la recherche doctrinale: "De Galula à Petraeus, l'héritage français dans la pensée américaine de la contre-insurrection".

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