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# Collaborative combat: rupture or illusion? 1/2

Land Forces Doctrine Review

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"Our soldiers are incapable of resigning themselves to ignorance. When they are given an order that has no explanation in their judgment, they obey, but with a grunt.<sup>®</sup> "With this statement, Maurice Genevoix was putting into words an age-old reality of war: in combat, the soldier is generally plunged in uncertainty, in ignorance of the manoeuvre general. Advances in communications could lift some of this fog and radically change the face of future land combat.

The SCORPION programme, which is largely based on the progress of info-valuation, promises the emergence of collaborative combat. Commonly defined as the expected result of advanced information sharing within communities of interest that reconfigure themselves according to tactical situations, collaborative combat should guarantee greater agility in land manoeuvres. Is this a fad shared by many Western militaries? Is it a promise from the defence industry? Given the stakes involved in the development of these capabilities for the Army, we must question the relevance of the concept of collaborative combat.

Neither a techno-futuristic illusion, nor a total reconsideration of land combat, collaborative combat is a response to a twofold imperative: the need to avoid the risk of technological downgrading on the one hand, and on the other, the need to guarantee the operational effectiveness of land forces by developing modes of action that make it possible to overcome the contemporary tactical blockades.

First of all, it is necessary to better define the tactical purpose to which collaborative combat responds and then to determine the expected tactical benefits. As a counterpoint, it will be necessary to identify the challenges and risks associated with this evolution.

# A tactical renewal imperative

The concept of collaborative combat is driven by a context marked by a changing

operational environment and unprecedented technological opportunities. The intersection of these two dynamics has opened up the way to an evolutionary phase in land tactics for many Western armies<sup>9</sup> the consequences of which should be felt in the decades to come.

## Complexity and unpredictability: adapting to a changing operational environment

The environment in which land forces will operate in the coming decades will be a more interconnected, faster and less predictable world. As General MacCrystal prophesied<sup>10</sup>, the "complex" future environment will succeed today's "complicated" world. Future conflicts will be more complex, less predictable, more varied. Recent conflicts have thus highlighted the increasing diversity of enemies and forms of conflictuality that armies may face. Enemies and types of conflict are hybridizing, paving the way for an ever-widening spectrum of conflictuality.<sup>11</sup>.

Earth space is no exception to this dynamic: today's combat tools are already facing some of their limitations, calling into question their ability to overcome tomorrow's operational challenges. The hierarchical and pyramidal organisations structuring modern land forces are thus struggling to express their potential in the face of . . .enemies organized in networks and moving architecture . . .<sup>12</sup>. The return, if not probable, at least possible, of high-intensity warfare imposes the use of a mass of force that is no longer in line with the model. of the small and sophisticated forces prevailing today. Hybridization of the enemy requires a flexibility and adaptability that has not yet been demonstrated by Western armed forces.

This poses a dilemma that is difficult to resolve for land forces, with seemingly contradictory imperatives: how to conduct a combat combining mass, flexibility and agility. Which model of force will be capable of handling counterinsurgency, high-intensity symmetrical conflicts and hybrid conflicts at the same time? How maintaining the military advantage in an environment where superiority in many areas, including information superiority<sup>13</sup> and air, will be probably questioned? The answer to these challenges lies first and foremost in by a profound change in modes of action.

#### Acting despite the transparency of the battlefield

At the tactical level, the development of detection and observation capabilities<sup>14</sup> and the spread of remote firepower capabilities, make concealment very unlikely and the concentration of dangerous forces15. 15 Certainly, this reality is not new. The evolution, however, lies in the dissemination of these capabilities for the benefit of regional powers or even non-state organisations. As the lessons of the recent Ukrainian conflict demonstrate: any concentration of force can now be detected and struck within a short period of time. This trend calls for a profound change in land combat. Since concealment is impossible, a style of combat must be developed that can preserve the safety of the devices and surprise the enemy. In order to achieve this, the manoeuvre will have to give priority to the dispersion of means, the concealment of intentions and the concentration of effects.

#### Seizing technological opportunities

The boom in digitisation-related technologies creates opportunities that must be seized or risk being decommissioned. It is true that the "new" information and communication technologies are now an old reality for the army, dating back to the 1990s, but it must be said that their potential has not yet been fully exploited. The development of capabilities linked to networking, the Internet of Things, intelligence, etc., is a major challenge. Artificial intelligence and big data technologies offer revolutionary perspectives, the effects of which should initially be expressed at the tactical level. In particular, areas related to force coordination, information sharing, decision-making and combat will be affected.

The aim of collaborative combat is clear: to ensure tactical superiority on the battlefield of the future against a high-spectrum enemy, in a complex strategic environment, by making the most of today's technological tools. With this aim in mind, it is necessary to to question its concrete characteristics.

# A major evolution in land combat

Collaborative combat is above all an ambition that holds the seeds of a potentially major evolution in tactics. It is an "ambition" because it would be risky to exhaustively imagine what technologies related to this type of combat will allow in a real environment and, above all, it would be impossible to anticipate the circumvention strategies that tomorrow's enemies will inevitably adopt.

#### What realities?

At first glance, the notion of collaboration in combat does not seem new, even surrounded by a certain semantic vagueness. Indeed, it could be argued that the battle has always been a collective one and that digitization of the digital world is a major factor in the development of the fight against terrorism. of the battle space has been a reality for almost 20 years. So what will be innovative about this form of combat?

Mainly considered at the tactical level, collaborative combat is based on on the implementation of two guiding principles: "collaborative knowledge" and "collaborative action".

First of all, the generation of shared tactical situational awareness, in near real time and down to the lowest echelons, will be at the heart of collaborative combat. It will result from the horizontal and vertical sharing of information, obtained by networking detection and situation monitoring capabilities. This will lead to the creation of a "digital bubble" within which combat information and intelligence will be shared.<sup>16</sup> will be distributed in real time to all players on the battlefield.

At the same time, this common knowledge will be combined with a pooling of capabilities for aggression, optimised by the implementation of decision support systems. This networked combat capability will deepen the degree of collaboration between the various operational functions. The tactical commander, faced with a given situation, will thus have at his disposal a range of options proposed by decision-support systems. systems, enabling him to call for the full range of effects to his advantage. of neighbouring units. A first expression of this networked combat will probably be the ability to fire beyond the direct views<sup>17</sup>. See you later. Eventually, the tactical devices will be able to implement a form of of "collaborative protection". This will result in the transformation of tactical acts that until now have required intervention by the leader (coordination, order, etc.) into reflex acts thanks to digital technologies (vetronics, artificial intelligence).<sup>18</sup>.

8 Those of 14, Maurice Genevoix, Flammarion, 1949.

**9** Action terrestre future for the French Army, Operational environment and the changing character of future war for the US Army in particular.

10 General Stanley**Mc** Chrystal, Team of Teams, New rules of engagement for a complex world, Portfolio Penguin, 2015, p. 74: "Complexity produces a fundamentally different situation from the complicated challenges of the past; complicated problems required great effort, but ultimately yielded to prediction. Complexity means that, in spite of our increased ability to track and measure, the world has become, in many ways, less predictable."

11 To illustrate this diversity and to cite only the case of the French Army's engagement, the Army is thus engaged simultaneouslyTo illustrate this diversity, and to cite only the case of the French armed forces' engagement, the army is simultaneously engaged in 2018 in a conflict in the Sahel that can be likened to counter-insurgency, in Iraq and Syria in a coalition war against a hybrid enemy, in Eastern Europe in a context of symmetrical threats and on national territory.

12 As in the case of the US military's difficulties in Iraq from 2003 onwards.

13 Vincent Desportes, Deciding in Uncertainty, Economica, 2004, p. 253: "The elements of information collected are only useful if they are correctly sorted and analysed in order to be transformed, step by step, into useful knowledge for decision-making".

14 Radar, satellites, ROÉM detection, cyber-intelligence...

15 Guy Hubin approaches this observation under the concept of "battlefield readability". Guy Hubin, Perspectives tactiques, 3rd edition, Economica, 2009.

**16** Positions of friendly and enemy forces, logistical situation, dissemination of orders, ... 17**Ability to** fire on a target not observed live by the shooter. For example: firing of a missile by an attack helicopter at a target designated by a unit in contact.

**18** For example: automated orientation of the turrets of a tank platoon towards the origin of a laser designation, then proposal of a firing solution to the vehicle commanders, creation of a smoke screen.

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