

# ‘Managizing’ the armed forces

Sophie Lefeez,

former French army officer, associate researcher at IRIS (Institut des Relations Internationales et Stratégiques) & CERREV (Centre de Recherche Risques et Vulnérabilités, Caen University)

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Since the introduction at the turn of the century of a managerial rationality in the French armed forces, there have been: a multiplication of regulatory texts, the adoption of tools for counting and measuring, the implementation of just-in-time procedures, and the conduct of many a reorganization in order to reduce the quantity of resources used. To see to the low-cost performance of the armed forces when faced with an adversary, equipment has been designed in modules and kits that can be assembled to suit the situation. Meanwhile, artillery crewmen are invited to stick to prescribed routines and assisted by artificial intelligence. Under this “managizing” ideal, the interchangeability of men and materials is total. However this army is locked in a straitjacket of regulations and standards more and more of which are adopted from the civilian sector. Any deviation from the norm is now frowned upon and has fallen prey to biopolitical requirements. Meanwhile, the specific nature of the military is hardly recognized or accepted; the operational effectiveness of the armed forces is at stake, and their very existence is at stake.

*“You have good control only over what is precisely measured”*,  
Philippe Josse, director of the budget (2006-2011).

Vincent de Gauléjac (2005) has defined management as “organizing how to best use financial, material and human resources” for a firm’s long-term viability. Its goal is a productive optimum, which managers try to reach through an “implication and staffing of the persons at work that reach beyond the requirements of production” (LE GOFF 2000). Management thus does not intend to “pursue a finality chosen by individuals, nor one negotiated within a group, but a finality imposed from the outside” (GRIN 1990).<sup>(1)(2)</sup>

As several studies have shown, managerial rationality has gradually expanded to cover all or nearly all activities, ranging from the commercial sphere of production to associations and services, whether public or private (GORZ 1988, CRAIPEAU & METZGER 2011, ROBERT 2014, LE TEXIER 2016, AVARGUEZ 2018) in both so-called developed countries and the rest of the world (METZGER 2008). Nevertheless, a sector of human activity — the military — has attracted less attention in studies on managerial rationality. Mention should, however, be made of Jean-Pierre Le Goff (2012) in

France along with John Louth (2009) and Gabriela Thompson (2017) in the United Kingdom, whose dissertations he directed. True: during the 20th century, the need to see to territorial integrity and the population’s security in the face of the danger stemming from the Soviet menace and the presence of nuclear missiles meant that victory had to be obtained, literally, at any price. Political decision-makers were less receptive than now to the need to optimize the use of resources.

This article describes the “managization” of the French military and shows how the limits of this rationality in a field of activity that is, by its very essence, unpredictable. Its sources are: official documents from the Ministry of the Armed Forces and the French Parliament; the conferences and seminars attended by the author during which military personnel spoke; and formal as well as informal interviews with personnel (engineers, commissioned and noncommissioned officers, the enlisted ranks) from the French Ministry of Defense (now called the Ministry of the Armed forces) and with several manufacturers between 2010 and 2014. The author thus has a long view of the application of the first managerial reforms, with which subsequent reforms fell in line.

## Managization of the armed forces

In 1996, the minister of Defense appointed Jean-Yves Helmer as *délégué général pour l’armement*. Helmer, who came from the PSA Group (Peugeot Citroën),

<sup>(1)</sup> Statement made on 19 October 2011 during the 4th Parliamentary Meetings of Defense on the revision of the *White Book*. Parliamentary committees on defense have often interrogated Philippe Josse from the Ministry of the Budget because of his knowledge on issues related to the armed forces.

<sup>(2)</sup> This article, including quotations from French, has been translated by Noal Mellott (Omaha Beach, France). All websites were consulted in August 2021; and a few bibliographical references have, with the editor’s approval, been completed.

where he had conducted a cost-cutting policy, set as objective to reduce the costs of weapons programs by 30% from 1997 to 2004. His appointment as head of the Directorate General of Armaments (DGA; Délégation Générale de l'Armement) signaled the introduction in this procurement and technology agency of ideas from “new public management” (NPM).

### Measure and count (everything)

Till into the 1990s, military personnel were seen as being at the beck and call of superiors. Using civilians to do their tasks represented an extra cost. However one department eluded this mentality: procurement. To stem the steeply rising costs of equipment (CORNU & DUSSAUGE 1998), the DGA was, according to an interviewee in 2011, intrigued by the claims that private industry could do the same tasks as the Ministry of the Armed Forces at a lower cost. It launched a program for figuring out what the state paid for weapons procurement.

The advantage that private firms claimed was not just a matter of their vaunting of an improved optimization of costs. In effect, the steering of weapons programs did have a tendency to drift. From WW II till into the 1980s, contracts between the public administration and firms did not formally list technical specifications, which could, therefore, be constantly altered as programs never came to an end and costs climbed. Nonetheless, these quasi-contracts did have one advantage. They allowed for taking into account technical facts (e.g., the impossibility of performing a given task in the allotted time) and feedback from military operations. In short, they allowed for flexibility, the loss of which some manufacturers and operators now regret.

Given rising costs and the fixed budget for current operations however, the DGA had to find a way to balance the books. One possibility explored was to rent out facilities in order to raise additional income. This meant answering a question about the priority in assigning facilities. Should priority be given to outsiders in order to raise income or to the armed forces' personnel so that they accomplish their missions on time? To answer this question, the DGA started making financial calculations. As it did so, it came to realize that, although it could quantify how much renting facilities to the private sector would bring in, it was unable to precisely calculate the second option, namely: how much that would cost to the armed forces.

However the DGA was able to quantify the number of experts per program, and this seemed to open the way toward managerial procedures for cost controls. This amounted to a shakeup since the work done by the military would no longer be seen as being “for free”.

As for the personnel, they were wondering whether renting out their facilities was a valid solution for bringing in money. On the other hand however, they thought that quantifying their work might prove to their superiors that they were understaffed, a problem endured for the past dozen years. Once the calculations were in, the directorate, instead of increasing the

staff as the personnel had hoped, opted for subcontracting under workload plans.

Introducing managerial tools (such as recommended production or purchasing schedules), and seeing human beings as a resource to be calculated (whose value thus closely depended on this financial estimate), all this signaled that the reforms at the DGA were part of the NPM managerial trend. Other procedures, such as total absorption costing, would later be used to calculate the predicted use cost of equipment under development.

More generally, from the 1990 onwards and given the reduced menace from abroad, the difference between budgetary allocations, on the one hand, and, on the other, purchase prices or maintenance costs forced the state to be preoccupied with its expenditures. So, we can say that while reforms in the civilian sector arose out of the determination to increase the return on investment and productivity, the state's budgetary problems led to expanding managerial measures to cover the Ministry of Defense so that it would be as productive but with fewer means.

### Just-in-time

Another form of management was widely deployed in the armed forces at the start of the century: just-in-time production methods, which senators in one report slyly called “just unenough” (PASTOR et al. 2012). In the private sector, firms turned toward “lean” management solutions, such as just-in-time, to reduce fixed assets as much as possible. The Ministry of Defense did so to reduce its inventory of spare parts, which it deemed excessive. This was its reason for adopting a lean management policy for equipment.

At the start of the 2010s, the military personnel in charge of maintenance and repairs made a lukewarm appraisal of this new form of organization. They were aware, in one interviewee's words, that the “army has become like a private firm, with just-in-time”. Another interviewee, in 2011, added “except that spare parts do not get here in 24 hours like at a garage”; and he pointed out that he had to sometimes wait for up to two years for replacements. This handicapped long-term support, as General Ract-Madoux, chief of staff of Land Forces, warned as early as 2012 during a hearing before the Committee of National Defense and of the Armed Forces (COMMISSION... 2012). Seven years later, his successor, General Bosser (2019) would tell the same committee, “For nearly thirty years now, we have been below the levels set for the so-called war stockpile.”

The size of fleets of vehicles was also considerably reduced in line with a “lean needs” principle, i.e., the optimization of means as a function of the missions assigned. Interviewees were skeptical about this approach. Redundancy is necessary in the armed forces, since it enables them to deal with the losses inflicted during confrontations. To apply the same principles to the military as to the civilian sector is to deny a defining characteristic of the armed forces: assets are destroyed during warfare.

On 20 May 2011 in a speech to the IHEDN, Admiral Édouard Guillaud, chief of staff of the Armed Forces, expressed his concern about the vulnerability of the armed forces owing to managerial policies and about the consequences of just-in-time procedures, the elimination of redundancy and the priority being given to what is measurable.

### Centralize

Also for the sake of economizing and optimizing means, the Ministry of Defense tried to centralize certain activities so that logistic, financial and human resources would be shared. At the level of regiments in 2006, the army introduced a policy (PEGP) for the maintenance and management of vehicle fleets. Vehicles were pooled; and a fleet of training vehicles was placed at the disposal of all combatants. When applied however, this reorganization forced regiments to undertake daily training with whatever equipment happened to be available.

By the start of the 21st century, services in the various armed forces were being concentrated in joint (umbrella) organizations, such as SIMMAD (Structure Intégrée du Maintien en Condition Opérationnelle des Matériels Aéronautiques) in 2000 for the upkeep of all equipment used for flights or DIRISI (Direction Interarmées des Réseaux d'Infrastructure et des Systèmes d'Informations) in 2003 for the management of telecommunications. In 2015, the Ministry also decided to group all military staffs and several services at Balard in Paris.

Besides these grouped relocations, state authorities made new divisions by distinguishing operational from support (backup) activities. Thus were created 61 “bases of defense” (BdD) in 2011: 51 in France itself and 10 overseas or outside the country. The Joint Staff of the Armed Forces has defined such a base as an “administrative formation of Defense on the local scale with, as mission, the general administration and support of the formations installed in its [geographical] sector of responsibility”. These bases of defense benefit from a shared system of support and administration by one or several “groups of support of bases of defense” (GSBdD). Through “contracts of service with performance objectives and a monitoring of quality”,<sup>(3)</sup> the Ministry hoped to cut operating costs and increase the quality of services. As pointed out by Stéphane Piat (2019), head of the Commissary of the Armed Forces, this policy has, as a counterpart, spawned a “feeling of a distance between support activities and the armed forces [...] jeopardizing the relation and sometimes creating tensions or misunderstandings”. To recreate a feeling of proximity, the Ministry now wants to reform (again) support and backup activities by associating one GSBdD with each base of defense.

Although the bases of defense are supposed to relieve commanding officers, the latter sometimes, at least

initially, experienced this relief as a loss of autonomy. During interviews conducted in 2013, some of them failed to see the validity of this imposed separation between what politicians saw as “operational” activities (on which they were to concentrate) and the rest (which could eventually be farmed out to private firms).

In its assessment of this outsourcing, the Court of Audit in 2011 raised questions about what was meant by the military’s “core job” (COUR DES COMPTES 2011). Is this job, in fact, just combat activities in the strict sense? The Court showed that support and backup activities were essential to the proper conduct of this assigned job, as military history teaches us. It added that the “example of the outsourcing of the guard services for Saint Germain Island, about which the Ministry was forced to reverse its decision in June 2010, illustrates the difficulty of a purely functional approach that does not pay sufficient heed to setting the limits of the ‘core job’”. Subsequent parliamentary reports (CORNUT-GENTILLE 2017, KRATTINGER & LEGGE 2014) have, in turn, questioned this policy by arguing that subcontracting must not negatively affect the armed forces’ strategic autonomy.

### Justify, trace, formalize

Also typical of managization is the determination to set up a system of traceability for control purposes (CRAIPEAU & METZGER 2011). In the military, evidence of this comes from the measures adopted for the security and safety of soldiers and civilians.<sup>(4)</sup> Engineers thus asked the question of how to figure out the cost of this safety and security.

This question flared up in aeronautics following the war in Yugoslavia (1991-2001). Since French pilots were based in Italy, military aircraft flew, for the first time in history, over civilians in peacetime. Till then, warplanes were intended for use during war; and no one had imagined pilots regularly crossing over zones in peace to conduct their missions. Were a damaged warplane, on its way back, to crash on peaceful civilians, the country on the ground might question the reliability or safety of the aircraft and forbid the state in charge of the operations from flying over its territory, thus imposing detours with major costs in terms of fuel and time. It was, therefore, necessary to be able to prove to a third party that the equipment used was reliable.

On the national scale, given the judicialization trend as it affects the French army (WINDECK 2010, BARTHÉLEMY 2012), engineers from the DGA feared lest a fatal accident lead to complaints being filed about the endangerment of life. The most emblematic complaint was the one filed by the families of soldiers killed in the Uzbin Valley ambush in Afghanistan on 18 August 2008. To penally sanction what is an assumed risk (duty in the military) and a symbolic act (soldiers killed in action) would mean a failure that the meaning of the act was not recognized and amount to considering that soldiers’ deaths are mere (occupational) accidents that should be avoided. Since

<sup>(3)</sup> ÉTAT-MAJOR DES ARMÉES (2010) “Les BdD en bref” (Paris: Ministry of Defense) 21 July 2010, available at <https://www.defense.gouv.fr/ema/rubriques-complementaires/bases-de-defense/les-bdd-en-bref>.

<sup>(4)</sup> At the service of “biopolitics” or “biopower” (FOUCAULT 1976).

the filing of this complaint, some commanders request from their hierarchy written agreements for foreign operations and keep them in case they might have to subsequently justify the decisions they make. In the military, confidence has dwindled.

### A proliferation of regulatory texts

The proliferation of regulatory texts provides further evidence of this managerial rationale. Till around the end of the 20th century, only combat units had official written instructions (about what to do if communications broke down). Since then, the armed forces have put much effort into producing literature of this sort, a trend that an interviewee in 2011 explained by the accelerated production of technical, tactical and strategic plans.

As new equipment (e.g., drones, computers and networks) was introduced that did not replace what existed but was added onto it, written instructions became necessary, since the integration of this equipment in a vast system might disrupt parts of the system. For example, armoring the cabin of supply trucks is not just a simple modification of the vehicle's technical characteristics. It affects the organization of convoys, escorts, maintenance, training for drivers, etc.

New operations and new operating procedures cropped up during the 1990s at the tactical and strategic levels. During the Cold War, we knew the enemy, his strengths and weaknesses, his *modus operandi* (POIRIER 1994). In an officer's words, "Things were relatively simple since we had to hold out four days before the president would push the button. There were no constraints to take into account." Strategic and geopolitical analysis was "frozen". Since then, the armed forces have been taking part in operations of a different sort. Given the unpredictability and diversity of current conflicts, plans can no longer be so simple or clear-cut... and regulatory texts have proliferated.

More broadly, the trend to regulate practices tends not only to respond to the need of predictability by prescribing behavior patterns but also to unify these patterns in order to facilitate interoperability, i.e., the capacity for acting together despite differences in culture, language, etc.

### Standardize for the sake of compatibility

As under Taylorism, standardization is claimed to be a method for optimizing performance and containing operating costs. So, the armed forces have made major efforts to move toward a homogeneous standardization in the hope of making gains in availability (of personnel and equipment), time and money.

To take an example, all three armed forces have helicopters. Ideally, uniformizing support functions would make it possible for any helicopter to be repaired anywhere by any maintenance operative, independently of the armed force and corps to which it belonged. A single, joint procedure could thus be imposed independently of any *esprit de corps*. For a maintenance operative however, "Since the dawn of time, each of the armed

forces has developed its own training program, has its own approach to support work, and, furthermore, does not necessarily use the same vocabulary." In this respect, uniformity could level identities in the armed forces.<sup>(5)</sup>

This goal of a joint approach has led the civilian and military spheres to penetrate each other (since the managerial rationale excludes, by definition, any dualism) to the point that the personnel are no longer able to explain why the initial differences existed. An air force officer said that the air force adopted regulations on airworthiness similar to those for commercial airlines: "If you are Part-145 [civilian regulations on airworthiness] for a given sort of aircraft, there's next to nothing to do to switch to FRA-145 [military regulations on airworthiness]." He then added, "I'm unable to tell you why the military specifications [in FRA 145] have been kept. I was never steeped in the origins. The choice could've been made to adopt civilian standards in the strict sense." The personnel seem to have been so steeped in the managerial ideology that they can no longer think without using its codes.

### The manager's ideal army

These managerial reforms reflect the ideas that decision-making managers have about what is to be demanded of the armed forces: the armed forces are to be effective over time while dealing with any adversary but while protecting to the maximum the lives of its personnel and of civilians. For this purpose, technical, organizational and cognitive solutions are being carried out.

### Predictability and adaptability

Managerial procedures tend to freeze organizations and practices (GAULÉJAC 2005). The world's unpredictability thus becomes a deadly serious problem, especially when preparing for the next armed conflict. As engineers and officers are fond of saying, "The world's moving at top speed", "The threat is no longer the same", "The development time [of military equipment] is not in phase with geopolitical trends". Personnel seem to have fallen into a state of "future shock" (TOFFLER 1970). Given their feelings that changes are occurring too fast, it wants the world to evolve in stages — in phase with the development of new equipment. The 2018-2019 organizational reforms for making it easier to regularly integrate new techniques in the equipment already in service or under development evoke the dreamy idea of a timeless weapons system, which would be in advance when invented and never be obsolescent. In fact however, the processors in Leclerc tanks were already outdated when the tank came into service in 1993.

<sup>(5)</sup> There are several identities, nested like Russian dolls: the identity related to the military environment (the biggest doll) stands in contrast with civilian life; but each of the armed forces (land, sea, air) has its own identity, as does each specialty or corps within each of these forces.

To boost incremental innovations and thus satisfy this fantasy of homogeneity and of control over time in a world where surprising the enemy is part of the game, designers have opted for modular, scalable equipment and have granted heavy weapon crewmen (servants in French) automated (computer) assistance.

### Modularity

Standardized equipment can turn out to be a factor of rigidity in a changing world. To be able to cope regardless of what happens, Alvin Toffler (1970) proposed modularity as a solution. Thanks to design standards, modules can be used as components in a system or subsystem. “Kits” can thus be imagined for responding to a wide range of situations — “bricks” will be replaced with other bricks or added onto the system as a function of advances in techniques (scalability) and/or the needs reported from the field. Optimizing the performance of these bricks leads us to think that the system is operationally effective all the time (or nearly so).

Modularity was first required in the 1970s/1980s for the Rafale, a multirole fighter jet, a single one of which would replace seven aircraft. Since then, this requirement is a constant in military procurement. Modularity figured in the FELIN program (Fantassin à équipement et Liaisons Intégrées: Integrated Infantryman Equipment and Communications).<sup>(6)</sup> The program was launched in the 1990s; and the equipment entered operation in 2010. The FELIN system has a “common core” (attire, weapons, means of communication) with which all infantrymen are to be equipped, and specific components as a function of the missions to which combatants are assigned. More recently, modularity is a requirement in the Scorpion Program for armored carriers (such as the Griffon).<sup>(7)</sup>

Nonetheless, designing a single system creates the risk of oversizing it so much that it comes uncoupled from human operatives.

### “Augmented” humans

When a single system replaces several, as in the case of the Rafale, artillery crews have to be proficient in all sets of instructions for using the equipment. Doing this when there are many, different sets takes time. A single system can have a higher performance than what a human being can attain. Rafale pilots are not proficient enough to use 100% of the aircraft’s possibilities. They are familiar with but a fraction thereof, which corresponds, in a way, to a common core of knowledge about the system (DUBEY & MORICOT 2006). At the operational level, a specialization takes place among pilots that reinforces the illusion that aircraft and pilots are fully interchangeable. During interviews in 2011, some users were skeptical about the worth of “merging” all sorts of equipment, since the stock of equipment was not, in their opinion, a set of duplicates (the quantitative dimension) but a sign of polishing the work to be done (the qualitative dimension).

<sup>(6)</sup> For an overview of the FELIN, see: <http://www.defense.gouv.fr/dga/equipement/terrestre/le-felin-fantassin-a-equipement-et-liaisons-integrees>.

<sup>(7)</sup> About the Griffon, see: <http://www.defense.gouv.fr/dga/equipement/terrestre/le-programme-scorpion>.

If we admit that the personnel cannot assimilate all the knowledge necessary for proficiency in the use of an overarching single system — whether because the system itself has a high level of performance or because it is necessary to learn how to use it in context — the introduction of artificial intelligence (AI) can then be presented as making up for human limitations. The interest shown by the French Ministry of the Armed Forces in AI has been evinced in a recently adopted roadmap, which the minister presented on 5 April 2019. Florence Parly’s speech started by recalling the defeats of two human experts by machines (Gary Kasparov, the chess player, and Gene Lee, an American air force colonel specialized in flight simulators) as if to better emphasize the inferiority of human beings to their inventions (a presentiment of the philosopher Günther Anders in 1956).

### The ideal user

#### “Functional” users

In general, combatants are receptive to “automated” assistance. Overburdened with the quantity of information now arriving via computers, most of them simply want to concentrate on what seems essential to them and delegate the rest to devices. The choices made by engineers in matters of design reinforce this tendency.

Caroline Moricot and Gérard Dubey (2006), sociologists who have studied techniques, have observed, in the case of Rafale pilots, that combatants tend to become “system managers”. The image of the pilot is, in a way, an ideal-type.<sup>(8)</sup> A crewman referred to it to describe the changes he experienced when entering a Leclerc tank: “*the switch from a system of men who served the tank to... pilot of a weapon system. All at once, I had the feeling that an airplane or helicopter pilot must have.*” In his words, everything was “*calibrated, made to measure*”, “*optimized*” so he would perform the function assigned as the designers of the tank had planned: “*Everything’s planned. The technology takes so many things into account that the part left to ‘people’ is limited — not from the viewpoint of quality, combat experience, etc. but in terms of what a person can and may do.*” The room for freedom — for “*poaching*” in the words of Pierre Bouvier (1989) — is very restricted, since human actions are to fit into the system’s very operation.

Human action is also limited in maintenance operations. The first level of maintenance, done by combatants, increasingly amounts to running a self-diagnosis device. At the second level, crewmen are asked to replace a defective component (or brick) with another. An air force NCO in maintenance said, during an interview in 2012, that he no longer had the impression of doing his job as a mechanic and that his work had lost interest. The third and last level of maintenance is a matter for the manufacturer who sold the equipment. The more deeply the person doing maintenance delves

<sup>(8)</sup> Those who designed the Leclerc tank also referred to the fighter aircraft. In both cases, the reference included mention of a duel, and even similar components were mentioned: the Leclerc tank uses the Mirage 2000’s data bus. Besides, some of the first Rafale pilots were recruited from tank crews.

into matters, the more skills he has to have; the less the mechanic (or user) goes into the details of how the system works, the more power is left in the hands of manufacturers (CROZIER & FRIEDBERG 1977).

These choices in design have turned soldiers from being autonomous crewmen into technicians who execute prescribed technical gestures — an evolution typical of the managerial approach to labor. The staff is thus led to think that automation, by making it easier to perform these gestures, will make the work of subordinates easier too (LEFEEZ 2014, 2015). As André-Georges Haudricourt has shown however, performing a technique is more than just a manipulation in compliance with prescriptions; it is a “*human action that works*” (HAUDRICOURT & DIBIE 1987). In the military environment, this requires global knowledge of equipment and a global vision of how a technique fits into the environment and into group actions (maneuvers).

### **Interchangeable crewmen for interchangeable components**

The same tank crewman explained how standardized equipment led, in fact, to standardizing the crewmen’s roles: “I think, in the Leclerc, it doesn’t matter whether you’re in ‘your’ tank or not. [...] it doesn’t matter when the ergonomics has been standardized. In contrast, in less sophisticated equipment, where ergonomics, despite standardization, did not go far enough, you were all the time trying to invent something or other, to do more, because you didn’t have enough. In any case, for sure, you didn’t have too much. That’s clear... It was your tank.” People have room for creativity when not everything has been thought through and planned, when they can make modifications. They can then try something new, “to do more”, precisely because the device or machine does not have an answer for everything. What is lacking is the very grounds for advancing, for making the person look for something else. The specific way a person becomes “hooked” to “his” machine depends, in fact, on the latter being incomplete. In other words, not having planned all the functions to be performed and everything that users may or may not do is what enables users to personalize the equipment and make it their own. Tight planning does not leave room free for users, for personalization and invention. Referring to Perla Serfaty-Garzon (2003), Olivier Brunel and Dominique Roux (2006) have emphasized that “appropriation” does not just mean harmoniously matching something with the use to which it will be put. Appropriation is the action of making the thing one’s own: “adapting it to oneself and thus turning it into a means of self-expression”.

Standardization, by its very nature, tends toward uniformity. It forbids the user to become familiar with the object as something singular, unique. A machine restricts what is personal to the point that it makes no difference which crewmen are using it. We might say interchangeable crewmen for interchangeable equipment.

For managers, when all is said and done, the ideal user is the one who goes unnoticed. By default, this user limits his actions to the function that he has to fill in the system, which has been designed for him (the why), and to the action that he has been ordered to perform (the how). As the philosopher Frédéric Gros (2006) has said, martial qualities vanish to the benefit of technical skills; and with them, the meaning of their work disappears in the eyes of the military.

### **A homogeneous, “civilianized” army**

Other evidence of the managization of the armed forces comes from the proliferation of regulations, which makes it ever harder to accept deviations from the “norm”. The resulting homogeneity is taken so far as to align the military on civilian society. In effect, the latter is at the origin of an ever growing number of standards and regulations, most of them related to the environment and the world of work. The armed forces are being “civilianized”.

### **Judicialization**

The power of “norms” is now so strong that the personnel force themselves to not deviate, even when a norm barely makes military sense. The DGA can be used to illustrate this, since it is the technical, contracting authority legally liable for the security and safety of goods and persons in relation to the equipment it has ordered. A technician explained that the equipment “*has to be reliable, in compliance with regulations*”. His words draw an equivalence between “*reliable*” and “*compliance with regulations*”. An object is, therefore, deemed reliable not in reference to itself, to a close examination and testing of it, but by complying with a text imposed by an outside authority, even a text drafted for uses in a different situation.

Let us take the example of the transport aircraft, Airbus A400M Atlas, which entered in operation in 2013. Civilian certification of its airworthiness was requested to justify its reliability in case of an accident during flights over civilian areas. To obtain it, the prime contracting firm, Airbus, submitted to the competent authorities a civilian version of the aircraft, since the procedure foreseen had been designed for commercial airplanes and did not (of course not) include the carrying of weapons. Nonetheless, what would be flying was the military version.

Military equipment may, however, be exempted from some usual rules and regulations. For their vehicles to circulate on roads in France, military authorities used to request exemptions from the Service des Mines. They now request from DREAL the approval of their vehicles in order to be sure they comply with civilian regulations. Designers endeavor to hold to civilian standards and request exemptions only as a last resort, even if

the standards make no sense in a military context.<sup>(9)</sup> A weapons engineer heaved a sigh: *“We can no longer sign the exemptions ourselves.”*

Self-exemptions have become impossible because of a change not in the legislation but in mentalities. While telling me about an EU directive drafted for the civilian sector, a weapons engineer admitted, *“In theory, we can make an exemption; but the question that crops up for me, since I’m the one who signs (therefore I’m the one who will be going to see the judge later on) is whether it is normal to make an exemption?”*

#### **“Civilianization”: Deviations from civilian norms**

At first sight, the question *“Is it normal to make exemptions?”* comes as a surprise. Justifying deviations from a norm would be understandable when a regulation or standard for actions not having to do with warfare is deemed unsuitable for application in the armed forces. But this is precisely what has come under question: why tolerate deviations? This is apparently the meaning of the question about whether it is normal to make exemptions.

An engineer from the DGA recalled that, in the past, survival overrode safety; and military vehicles were exempted from having safety belts installed. In his words: *“Since it was thought that, when you’re on a mission, if you have to evacuate a vehicle fast, if you have a safety belt, even if it’s not very complicated to unbuckle it, that’s still an additional action to perform; and that action might be the cause why you will die before getting out of the vehicle. Today, we are in this logic, both weird and right, that says: it’s not because equipment is for the military that it should be allowed to ignore the progress made in safety in civilian life. Besides, most of the time, the equipment will be used in training. Is it tolerable to make people take risks during training? Training’s a time when we should see to it that they are permanently protected.”* He concluded that it is no longer “acceptable” to place the military in a “world apart”.

A warrant officer in the land forces explained how deviations from the norm became intolerable. Standards and regulations *“always existed in civilian life, and I think someone must’ve, at one point, decided there was no reason why military personnel in France should not be protected like wage-earners in the case of known and identified nuisances.”* This interviewee made a parallel between an awareness about protecting “wage-earners” in the military (who were seen as covered by labor

<sup>(9)</sup> Civilian regulations forbid using gasoline motors on boats that convey more than 12 passengers, but opponents of this regulation have asked to raise the threshold to 24. The army has a program for about 20 boats for transporting up to 36 “passengers”. Since there is no outboard motor that does not use diesel fuel, the motor must be inside the vessel, thus tripling the boat’s cost in a situation where the state’s budget is under constraint. The DGA has argued that only sailors (and not the untrained public) will use these boats. As this example shows, the DGA dare not request an exemption from the regulations. Instead, it is counting on civilians to have the standard modified. As we see, the state issues rules and regulations that might run counter to its interests (Conference “L’innovation permanente”, Centre d’Étude Supérieure de la Marine, 27 June 2013, Paris, France).

law) with an awareness, just as sudden, of environmental problems (related to the disposal of wastes). This “awareness” assimilates military personnel to wage-earners, or any other sort of workers. The military no longer has its own specific attributes that are recognized as inherent in the job — duty — but are seen as being a deviation from the norm set by the civilian sector. Therefore, the need for any deviation has to be justified.

The application of standards and regulations designed for the civilian sector and the internalization of the need to follow them is aligning the military on this sector to the point of turning it into an “anomaly” in relation to civilian life, which is seen as being the “norm”. If military equipment is designed in view of training alone, is there not the risk that it will be peacetime equipment? Likewise, questions crop up about designing boats (such as the ships with landing helicopter docks) in line with civilian safety standards for fires. In civilian life, the instruction to follow in case of a fire is to evacuate whereas, in the navy, the fire has to be contained. All passengers on these ships are trained; the ship has to be designed to stay afloat for an hour; and the fire is usually not an accident. Does it make sense to apply the same reasoning in terms of standards and regulations whenever the context differs so much?

#### **The “biopoliticized” army**

If, in the words of an engineer from the DGA, a firefighter dies, *“people are going to file a complaint saying he’s dead and it’s not normal.”* By doing so, they forget that a soldier’s death is not an occupational accident, since soldiers who kill and risk their lives symbolize the nation under arms. As General Jean-Pierre Bosser (2019) declared, *“Our dead and our wounded are not victims but heroes, whose sacrifice obligates us.”* In our biopolitical society however (FOUCAULT 1976), the norm is to live. This norm, destined to be timeless and universal, has to be applied, even in circumstances where one person is led to risk his life to save someone else. Any deviation from the norm is likely to result in a judicial inquiry into the reasons for the deviation.

If the state exercises its power to kill only as a possibility that is taken away from all others — since one finality of the state is to keep people from killing or being killed and the state assigns itself this finality — the essence of the state’s power culminates in the *“suspension of the power to kill”*, according to the philosopher Jean-Jacques Delfour (2005). This “annihilation” of the armed forces, in which soldiers who kill and risk their lives symbolize the nation under arms, is the very reason why the death of military personnel cannot be reduced to a workplace accident.

## **Conclusion: Limits of managization applied to the military**

For about two decades now, the armed forces have been subject to a bookkeeping rationale that copies reforms from private firms: statistics (especially in support functions), the division and grouping of activities and services, the formalization of practices in

writing, control by the top hierarchy, etc. The ideal of this managization would culminate in an army of technicians — proficient in executing prescribed gestures, interchangeable, assisted by artificial intelligence, and equipped with standardized equipment that is effectual in all circumstances thanks to kits. This fantasy of control and power but in an ontologically dialectical and unpredictable world of warriors shed a stark light on the limits of this managerial ideology. Let us recall the limits previous pointed out.

Seeing human beings only as a calculable resource whose value depends on calculated estimates overlooks their qualitative dimension and the associated aptitudes, such as adaptability or creativity. Adopting just-in-time and “lean” managerial procedures leads to forgetting that warfare destroys assets and requires redundancy in order for the armed forces to hold out over time. Distinguishing the support function from so-called “core” activities amounts to disregarding the fact that effectiveness in the armed forces depends on the right combination of both, as we learn from military history. Having to frequently justify actions undermines confidence within a group. Wanting to standardize and level everything in accordance with civilian standards and regulations leads, among other things, to certifying equipment that will never be in service while procuring a comfortable illusion of security. Finally, wanting predictability in an activity that, by its very nature, is unpredictable leads decision-makers to draw up lists of possible future outcomes and make plans for a kit adapted to each possibility. The crewmen who use weapons are then invited to play the score already written for them and are given artificial intelligence to “palliate” their shortcomings. All this is to guarantee the superiority of the French army under all circumstances and victory, itself inevitable, of course...

As the military knows however, it drafts many plans, but nothing ever happens as planned. It knows that enemy forces are crafty, will refuse to play by the plans and will fight on the field where they are strongest. Rather than trying to control everything, preparedness means developing the human aptitudes of adaptation and reactivity. This points to a fundamental contradiction between the military and managers — the latter might learn from the former how to accept and take advantage of the unpredicted instead of trying to control it.

## References

ANDERS G. (2011) L'Obsolescence de l'homme. Sur la destruction de la vie à l'époque de la troisième révolution industrielle, volume 2 (Paris: Fario) translated by C. David from the German (1956) *Die Antiquiertheit des Menschen. Über die Seele im Zeitalter der zweiten industriellen Revolution.*

AVARGUEZ S. (2011) “Les enjeux du management par projet dans le secteur associatif”, *Mana*, 17-18, pp. 165-180.

BARTHÉLEMY C. (2012) *La judiciarisation des opérations militaires.* Thémis et Athéna (Paris: L'Harmattan).

BOSSER J.P. (2019) Audition devant la commission de la défense de l'Assemblée Nationale, 5 June, <http://www.assemblee-nationale.fr/15/cr-cdef/18-19/c1819041.asp>

BOUVIER P. (1989) *Le travail au quotidien. Une démarche socio-anthropologique* (Paris: Presses Universitaires de France).

BRUNEL O. & ROUX D. (2006) “L'appropriation des produits par le consommateur: proposition d'une grille d'analyse” in A. GRIMAND (editor), *L'appropriation des outils de gestion. Vers de nouvelles perspectives théoriques?* (Saint-Étienne: Publications de l'Université de Saint-Etienne) pp. 83-104.

COMMISSION DE LA DEFENSE NATIONALE ET DES FORCES ARMEES (2012) Audition du général Bertrand Ract-Madoux, chef d'état-major de l'armée de terre, sur le projet de loi de finances pour 2013, le 17 octobre 2012, Séance de 11 heures 15, compte rendu n°12, National Assembly.

CORNU C. & DUSSAUGE P. (1998) *L'industrie française de l'armement* (Paris: Economica).

CORNUT-GENTILLE F. (2017) *Rapport d'information de l'Assemblée nationale relatif au transport stratégique* (Paris: La Documentation Française).

COUR DES COMPTES (2011) *Communication à la commission des finances, de l'économie générale et du contrôle budgétaire de l'Assemblée nationale* (Paris: La Documentation Française).

CRAIPEAU S. & METZGER J.L. (2011) “La gestionnarisation de la société: de la volonté de maîtrise à la déréalisation”, *Mana*, 17-18, pp. 23-40.

CROZIER M. & FRIEDBERG E. (1977) *L'acteur et le système* (Paris: Seuil).

DE GAULÉJAC V. (2005) *La société malade de la gestion* (Paris: Seuil).

DELFOUR J.J. (2005) “Pouvoir de vie et pouvoir de mort. À propos du ‘jugement de Salomon’”, *Esprit*, March-April, pp. 191-205.

DUBEY G. & MORICOT C. (2006) *La polyvalence du Rafale ou l'objet total. La relation entre une technologie nouvelle et ses utilisateurs* (Paris: Centre d'Études en Sciences Sociales de la Défense), Documents du C2SD, 81.

FOUCAULT M. (1976) *Histoire de la sexualité. La Volonté de savoir* (Paris: Gallimard). Translated into English (1979) *The History of Sexuality: An Introduction* (London: Allen Lane).

GORZ A. (1988) *Métamorphoses du travail. Critique de la raison économique* (Paris: Galilée).

GRIN J. (1990) “L'analyse empirique des situations de gestion” in A.C. MARTINET (editor), *Epistémologies et science de gestion* (Paris: Economica).

GROS F. (2006) *États de violence. Essai sur la fin de la guerre* (Paris: Gallimard).

HAUDRICOURT A.G. & DIBIE P. (1987) *Les Pieds sur terre* (Paris: Métallié).

KRATTINGER Y. & DE LEGGE D. (2014) *Rapport d'information du Sénat: Les externalisations en opérations extérieures. Un outil à manier avec précaution* (Paris: La Documentation Française).

LE GOFF J.P. (2000) *Les illusions du management. Pour le retour du bon sens* (Paris: La Découverte).

LE GOFF J.P. (2012) “Du management postmoderniste et de ses avatars”, *Inflexions – La réforme perpétuelle*, 21, pp. 65-77.

LE TEXIER T. (2016) *Le Maniement des hommes, Essai sur la rationalité managériale* (Paris: La Découverte).

LEFEEZ S. (2014) *Représentations et usages des armements contemporains: pour une socio-anthropologie de la complexité technique*, PhD dissertation, Paris 1 Panthéon-Sorbonne University, 545p.

LEFEEZ S. (2015) “Versatility and technology: Case study of the Milan and the Javelin Antitank Missile Systems”, *RUSI Journal*, 160(3), pp. 48-56.

LOUTH J. (2009) *A Low Dishonest Decade...Smart Acquisition and Defence Procurement into the New Millennium*, PhD dissertation, University of Wales Institute (Cardiff), 375p.

METZGER J.L. (2008) “L'institution-travail au risque des transformations incessantes. Le cas des économies chinoises et indiennes” in D.G. TREMBLAY (editor), *Flexibilité, sécurité d'emploi et flexicurité*, (Quebec: Presses de l'Université du Québec) pp. 195-238



- PARLY F. (2019) "Discours de Florence Parly, ministre des Armées - Intelligence artificielle et défense", Ministère de la défense, 5 April 2019, [https://www.defense.gouv.fr/salle-de-presse/discours/discours-de-florence-parly/discours-de-florence-parly-ministre-des-armees\\_intelligence-artificielle-et-defense](https://www.defense.gouv.fr/salle-de-presse/discours/discours-de-florence-parly/discours-de-florence-parly-ministre-des-armees_intelligence-artificielle-et-defense)
- PASTOR J.M., DULAIT A., BERTHOU J., DEMESSINE M., GAUTIER J., GOURNAC A., NAMY C. & NERI A. (2012) "Forces armées. Peut-on encore réduire un format 'juste insuffisant'?", Rapport d'information du Sénat, n°680.
- PIAT S. (2019) "Audition devant la commission défense de l'Assemblée nationale", Compte rendu n° 25, 6 February, <http://www.assemblee-nationale.fr/15/cr-cdef/18-19/c1819025.asp>.
- POIRIER L. (1994) *La crise des fondements* (Paris: Economica).
- ROBERT P. (2014) "La logique de la 'gestionnarisation' de la société", paper presented at the congress of the Société Française des Sciences de l'Information et de la Communication, June, Toulon, France, available via [https://sfsic2014.sciences-conf.org/30703/30\\_703.pdf](https://sfsic2014.sciences-conf.org/30703/30_703.pdf).
- SERFATY-GARZON P. (2003) *Chez soi, les territoires de l'intimité* (Paris: Amrand Colin).
- THOMPSON G. (2017) *For Effect or Affect? UK Defence Change: Management*, PhD dissertation, University of Roehampton.
- TOFFLER A. (1970) *Future Shock* (New York: Random House).
- WINDECK A. (2010) "La judiciarisation des conflits", *Inflexions*, 15, pp.23-27.