



The Conditions for Successful Adoption of Equipment – A Case Study Within the French Army

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Abstract

Equipment only reveals its full effectiveness if it is properly mastered. In a military context, performance is a key objective, which is why it is important to understand the conditions for successful mastery. Through interviews with combatants focusing on a specific piece of equipment, the author highlights three elements: intensive practice leading to the incorporation of the object, believing in one's equipment, and loving it. These conditions also facilitate alternative uses, thereby expanding the range of possibilities for using the artifact. Conversely, shortened training, excessive standardization and an equipment that leaves little room for the user's creativity can restrict mastery. Finally, the culture in which the user is immersed can encourage or hinder diversion of uses, depending on the degree of conformity or passivity required of the combatants.

Keywords: *Appropriation; Diversion of Use; Weapon; Efficiency; Practice; Faith*

INTRODUCTION

At a time when more and more weapons used on the battlefield are autonomous, numerous weapon systems are still designed to be manipulated by humans. These operators must learn to use their equipment and make it their own, in the sense given by Poole and DeSanctis (1990, 1994) in the sociology of uses. These two researchers developed in the 1980s the theory of adaptive structuration, in which the impact of technology adoption on groups and organizations is analyzed. Among other things, they studied how a group uses, reproduces, and, if applicable, adapts the structures of technology; in practice, it may be faithful to what was intended by the designers or it may adapt the object to its need.

Most founding works in the sociology of uses emphasises on user's action aiming at modifying the artifact and on their adaptation efforts (Rice & Rogers, 1980; Ives & Olson, 1984; Orlikowski, 1996). Another line of research insists on the link that unites the object to its user, until it gets perceived as an extension of oneself. In this approach, the artifact expands human potentialities and constitutes an exosomatization (Ernst Kapp, 2007). The weapon could then be analyzed as something that "complements" human and counterbalances the vulnerability of the natural body (Leroi-Gourhan, 2005).

Such a view seems appropriate in the military context for two reasons. First, war precisely consists of exploiting the vulnerabilities of the opposing side to impose one's will. In doing so, except in the case of pure robot warfare, it is human bodies that are fighting. Consequently, the weapon is what provides both assistance in taking the life of the adversary (offensive weapon) and protection against the adversary's attempts to do the same (defensive weapon). War equipment here typically compensates for the inherent weakness of the human body and gives it capabilities that it does not possess "by design". A successful appropriation of a weapon would lead to a perfect exosomatization.

Second, certain military traditions instill in young recruits not to let go of their weapon under no circumstances, not even to relieve themselves. This constant proximity aims at fostering ownership of the weapon while also addressing a utilitarian motivation: being separated from one's weapon makes one vulnerable. But it goes further. They must sleep with it, placing the rifle in their sleeping bag. Upon arrival, French recruits are told that their rifle is their "wife". Frédéric Gros (2005, p. 221) reports that a Sudanese war song also recounts that "*Your rifle is your wife!*". The almost constant contact with one's weapon eventually creates an intimacy and invests the weapon with powerful emotions: to abandon it is to betray it; to lose it or forget it is to commit a very serious mistake (Audoin-Rouzeau, 2008). To the point that the fighters are invited to consider their rifle as their "half", as if they were forming a couple.

Theory shows that a successful appropriation eases the use that will be made of it, included the possibilities of diversion of use. Consequently, the appropriation is a prerequisite to be able to use it when time comes, to ensure the survival of the fighter and his or her comrades, as well as the completion of the mission. Therefore, at a time when the infantry is equipped with a wide range of weapons, and these weapons are becoming increasingly sophisticated, one might wonder how the military manages to achieve this "couple". What are the conditions that favor a weapon appropriation? How is this operation thought of by the hierarchy? Are diversions of use so easily conceivable? To answer these questions, the article is divided into three parts. In the first one, we will see the appropriation rests on an intensive practice as it facilitates the incorporation of the piece of equipment. Then, in a second part, the appropriation will be studied as a reciprocal action between the subject handling it and the handled object. Finally, we will show that a successful appropriation requires love and faith.

METHODOLOGY

To answer these questions, the article is based on a field survey conducted with French army staff around of a specific device: the anti-tanks missile system MILAN. Designed in the 1970s against Soviet forces invading Western Europe, it was never used as planned and its use was diverted time and again: anti-personnel as in the Falklands in 1982, anti-bunker as in Iraq in 1990, anti-helicopters, against light vehicles, or to eliminate snipers like in Lebanon in 1982. In 2008, some French soldiers made the first shot fired in Afghanistan of this missile since the beginning of the NATO operation. The missile was chosen as case study because its history enables to pinpoint the factors explaining its use and diversion of uses.

Most respondents are enlisted, they are the ones handling the weapons. Among them, only one went one year to a university; hence they have no prior training which could have provide them with cognitive ease in the face of the technical complexity of what their system. The other respondents are commissioned and non-commissioned officers.

The investigation was conducted among two military units in 2011 and in 2012, which gave their informed consent to this research. The 27th BCA (Battalion of Alpine Hunters) is an elite unit of the French Army specialized in fight in mountainous and urban areas. Deployed in Afghanistan for six months between November 2008 and June 2009, it inflicted a stinging defeat in the Alasay valley for

which it received a commendation in the Army Order. Semi-structured interviews were carried out among the groups which were in Afghanistan with the Milan anti-tank system, as well as with the section leader and with non-commissioned training officers. The method followed is inductive so as not to close off avenues of investigation.

A second field study was conducted in 2012 to complement the first, at the MILAN training center in Canjuers, South of France, with the aim of observing a training session and engaging in both formal and informal discussions with the instructors.

Finally, the article draws on the account of a non-commissioned officer from the 2nd REI (Foreign Infantry Regiment), as it provided an interesting example of a change of use carried out during the Yugoslav War in 1999 with the same equipment. This military unit is an infantry regiment of the Foreign Legion, engaged in all major operations of the French Army: Lebanon, Chad, the Gulf, Cambodia, the Balkans, Afghanistan, the Sahel, etc.

1. INTENSE PRACTICE: APPROPRIATION AS EMBODIMENT

In martial arts, mastering a weapon requires intensive practice. Knowing how to use a sword, a sabre, a knife or a stick as a weapon requires repeating certain movements and practicing with it, with a view to making it an extension of one's hands, to associate one's body with the tool and the tool with one's body, all within a given environment (Bailey, 2025). By regularly handling an object, one eventually grasps its contours, its texture, its weight, its imperfections; one learns how it rotates in the air (for a stick, for example), how it cuts (for a knife), how it reacts on bumps or in water (for a vehicle). Ultimately, the object should become a part of oneself: there is an incorporation, or body appropriation in the words of Michel Henry (1987) to describe this intimacy forged by the repeated uses of the object. "When new, the tool is not 'made'; harmony must be established between it and the fingers that hold it, a harmony born of gradual ownership, light and combined gestures, mutual habits, and even a certain wear and tear. Then the inert instrument becomes something that lives", wrote Henri Focillon (2015). To reach this state, the French army has developed a two-stage training model.

1.1 TRAINING AND EDUCATION IN THE ARMED FORCES

Within the French army, "*We always have two parts*", explains an officer:

"...the theoretical and practical aspects, and we always try to maintain that balance. In the theoretical part, we show what it's used for and how to use it. And then there's the feedback. Ideally, we try to give feedback in the form of a test, an overview, where we ask participants to define objectives, and then we ask them to perform tests with effort, if possible, to see if they've retained the information, even despite being tired. Afterwards, we check all of that during practical exercises"

In this sense, it can be said that military training takes into account the need to adapt 'usage' – in the sense of simple use – to the specific context and to turn it into a practice, to echo the nuance introduced by the Josiane Jouët (1993), sociologist of uses: "'Usage' (...) refers to simple use, while practice is a more elaborate concept that encompasses not only the use of techniques (usage), but also the behaviors, attitudes, and representations of individuals that relate directly or indirectly to the tool." In line with the French tradition of the anthropology of gestures and techniques, as inherited from Mauss and Leroi-Gourhan, it could be said that this training amounts to a form of bodies training, since it involves the acquisition of automatic responses through a process of subjective and social incorporation. The repetition of gestures and close contact with the equipment eventually transform the recruits into specialist fighters.

1.2 KNOWLEDGE OF THE INNER WORKING OF THE EQUIPMENT

Until the 2010s, the Army expected its personnel not only to know how to use the equipment provided, but also to understand how it worked, even going into technical details. A corporal, trained on the Milan reports: *"We learn about the entire weapon system, how to use it, how to neutralize it, how to react in case of incidents..."* The technical aspect concerns how the object works: identification of its components, arrangement of elements, interactions, potential sources of failure, etc. A non-commissioned officer who has been in post for several years explains:

"We knew how to identify each part of the missile, what it is for, why it is there, what its role is. We knew that a decoder was used for this. We knew that the lantern was used for that. We knew that the warhead weighed so many grams. We knew everything."

This training enables every fighter to carry out basic repairs on their weaponry when necessary. Indeed, proper maintenance is crucial. In particular, soldiers must be able to disassemble and reassemble their rifles at night without visibility, because it is the weapon which provides ultimate individual protection.

The accounts reveal a tangible communion with the components of the weapon system and its effects on the ground. Bodily metaphors emerge that evoke such intimacy:

"We strip the missile down, we know everything about it. We can take it apart, even reassemble it. We go to a firing range, we observe. When we fired with the STAT [Army Technical Section], we went to see the impacts. When we saw the missiles explode, we usually saw the rear end fly off, it's on the ground, we all knew what that was! We pick up a part: aaah, a decoder!" (a non-commissioned officer)

Once familiar with the technical operation, soldiers learn to use it tactically, that is, when and how to employ it. Military personnel also typically distinguish between training and instruction: training involves teaching how to manipulate the artifact, for example learning to move a vehicle, while instruction continues by learning this function in an operational context. Thus, the military driving license comprises two stages: the first focuses on the technical knowledge of driving a car, while the second consists of completing a certain number of hours of driving on various roads in order to confirm the candidate's ability to drive in varied environments.

Once an infantryman knows how to operate his weapon system, he will continue to train in order to acquire the correct reflexes that will allow him or her to carry out his or her mission even under the stress of combat. These reflexes could potentially save his or her life. This is intensive practice, called *drill* – the English word has been incorporated into French soldiers' vocabulary.

1.3 INTIMACY AS A CONDITION TO TAKE FULL ADVANTAGE OF THE EQUIPMENT'S POTENTIAL

The two-stage training and the physical contact with the weapon during field exercises imply that direct users have a much better understanding of the weapon than their superiors, whose knowledge is primarily intellectual – historical and tactical. In interviews, non-commissioned officers who were specialists of a particular piece of equipment, whether in artillery, in missiles or in aircraft, often complained that commissioned officers did not know how to fully exploit all that these men and their equipment had to offer. For their part, the officers saw no inconvenience to shorten the training period on the anti-tank system just after the Javelin was purchased in 2010 as a temporary replacement of the Milan:

"We have a long training course because we really go into the details, into the parts, into the sub-parts of the missile. But when you look closely, it's not... It's useful for us, because that way, we know our weapon system perfectly. But as I was saying, I put you in front of a station, I explain it to you for a minute on a fixed target, and you manage to fire without any problem." (an officer)

As this section leader says, learning how to operate this weapon system is easy and does not require to spend too much time: I could do it in one minute, he assures me. And it's true that firing a Milan missile is a seemingly simple action. A handle allows you to orient the weapon horizontally, while simply raising or lowering the barrel orients it vertically. You look through the optics as if through binoculars, and you'll find a small cross in the center to aid aiming. Simply keep the cross on the target during the missile's flight to guide it. The shot is fired by pulling the trigger; you must immediately be mindful of the recoil.

For this officer, as for all the officers interviewed in the early 2010s, the training of marksmen should only aim to teach them how to handle the object – which is quick, as we have just seen. Teaching the technical details is only of interest to them in the event of an incident or equipment malfunction: *"If we have a firing incident, it happens, it's about understanding why: is it the shooter's fault, a missile malfunction, or a malfunction in the station system? That way, we can immediately pinpoint the problem."*

Yet, the long training time and intimate knowledge of the weapon system favor attachment to the weapon system and incorporation, which are essential to get the most out of one's equipment – as will be shown in part three. Applying what has been learned in a real-world situation is, in a way, the practical application of what the server has intellectually grasped and practiced tirelessly during training. It is the result of his or her personal, emotional, and reflective commitment.

1.4 EFFECTS OF SHORTENED TRAINING PROGRAM

Training for Milan operators lasted 6 to 8 weeks and resulted in the issuance of a basic shooting certificate called CTE in French – for *certificat de tir élémentaire*, basic shooting certificate. The more an object is known, used, handled, touched, worn, the more it becomes an extension of oneself. Training was therefore lengthy for *"making the guys realize that now they're going to spend their time carrying it, using it, learning how to operate it, knowing how to maintain it — it's still a very long process"*. Giving them the task of maintaining their weapons, even if the actions are basic, aims to strengthen this bond, this knowledge, and ultimately lead to incorporation. As a sign of complete incorporation, specialists in the Milan system call themselves "Milans" by metonymy. Time spent with the weapon also allows them to observe its behavior. As long as it is not well-known, there is a reluctance to make it an extension of oneself: *"We don't really have enough perspective to be sure,"* confided a young recruit about the temporary replacement for the Milan that he had just received.

To complete their training, it was customary to perform a live shot: the assimilation of technical skills is revealed through a personal creation. Due to the very high cost of the Javelin anti-tank missile, the final shots of the training were reduced to a single one, achieved by the soldier with the highest score. Exams include written and simulator tests. For all the other shooters, this choice leaves a feeling of incompleteness and virtuality, as if painters or sculptors were being trained in techniques and art history without actually painting or sculpting. Added to the fact that training time has been reduced, the most experienced shooters feel a strong sense of unease, as this former Milan team leader expresses:

"Before, we didn't get our CTE Milan until we'd fired our first missile and scored a hit. Now, since there aren't many missiles left and... well, it's done less and less. For us, a guy who's Milan, he

hasn't necessarily launched a rocket. Before, the guys who were Milan, all those who had the Milan wings, they had launched their rockets and they had scored.”

Due to the suppression of this first live shot, the fighters feel some discomfort, as expressed by a young recruit: *"We don't really know the Javelin, we haven't conducted enough firings... Anyway, that's just my opinion. Often, before firing the first shot in a theater of operations, we're quite hesitant.."* It is therefore a relationship of trust that is established over time through experience: time and trust appear inseparable. This last point underscores how aware military personnel are of the influence of the operational framework and their need to connect their theoretical knowledge with observations, to unite intellectual knowledge – awareness of the weapon's potential – with its actual use – the realization of this potential.

2. APPROPRIATION AS A RECIPROCAL ACTION OF SUBJECT AND OBJECT

Appropriation can also be grasped as a reciprocal action of the object onto the subject – what Olivier Brunel and Dominique Roux define by the term ‘recursive logic’, following on from the analysis of Russell Belk (1988). Thus, we will now analyze the feedback of matter on the acting subject.

2.1 THE EFFECT OF EQUIPMENT STANDARDIZATION ON THE STANDARDIZATION OF PERSONNEL

On the historical level, a case in point of this is the Gribeauval system, developed in the 18th century by Jean-Baptiste Vaquette de Gribeauval on the occasion of the artillery reform he realized at the request of the French king Louis XV. With a view to streamlining, Gribeauval reduced the number of different types of cannon, introduced standardization of the guns to make them easier to repair, and also standardized the cannonballs so that they could be used in multiple guns. As a result, the gun crews themselves became interchangeable, rather than being specialized for a particular type of cannon.

The systems approach did not gain much ground in France initially, although there were applications in the navy with the standardization of ship masts (Bret, 2002). By contrast, it flourished on the other side of the Atlantic and gradually gave rise to the weapons system (Rosenzweig, 1960). The advantages offered by standardization partly explain its development.

However, by essence, standardization homogenizes and prohibits to know the object in its singularity, in its uniqueness. The testimony of a rider shows that standardization of equipment and systemic design *de facto* lead to a standardization of servants:

“When you have a certain level of standardization, I think it doesn't matter anymore. I think that in the Leclerc tank, it doesn't matter whether you're in your tank or not — I'd have to check, but I get the impression that everything is planned for. I think that in an airplane, you know, everything is planned for. You don't do it, precisely because technology takes so many things into account that, in fact, the human element, is sort of... limited. Not from a quality standpoint, combat experience, etc., but in terms of what the soldier can do and what he's allowed to do. In some ways, this gives him more possibilities. In terms of lethality, he has more buttons, more gadgets, etc. But precisely he has buttons, controls, he can't just take everyone out by putting his binoculars on an episcopo upside down. That kind of thing.” Since he has a small computer screen, he's not going to take out his pen to write down the call signs or whatever he saw in his turret, to make a quick sketch for the guy who'll take over after him. So, I think that if you have standardized ergonomics, it doesn't matter. But in those more rudimentary vehicles, where the ergonomics, even though standardized, didn't offer enough, you know, you were always trying to invent things, to make more, precisely

because you didn't have enough, and in any case you certainly didn't have too much, that's clear, well you... it was your tank.” (a cavalry officer)

In this standardized tank, regardless of who operates it, the designs will be the same because the machine eliminates the need for personal expression. Essentially, it's as if the crew members are standardizing themselves alongside the objects they handle. They leave no trace or imprint of themselves on the equipment, and they themselves become interchangeable, without history or memory.

2.2 THE NEED FOR A HOOK TO "TAKE OWNERSHIP"

This testimony also highlights the need, in order to take ownership, to have a connection specific to the couple formed by the human and the object, a personal interlocking. Similarly, someone borrowing a violinist's instrument would not spontaneously produce the same sound as with his or her violin; they would need time to adapt to it, and even then, there's no guarantee the music would be identical. Mastering an instrument to bring out its full potential requires a unique understanding between the instrument and the player.

The specific connection between the user and the object is based on the object's incompleteness, the *“you certainly didn't have too much,” “it didn't bring you enough.”* In other words, not having planned all the functions to be performed and what the user is allowed or not to do is what allows the user to personalize the equipment and make it his or her own. The cavalry officer continues by giving the example of a computer keyboard where the number of keys is just sufficient: he never bumps into the keyboard, he says, whereas he always used to bump into his old tank. Planning everything down to the last detail leaves no room for the user to make changes, therefore no space to bump into things, or rather, to personalize and invent. Now, Olivier Brunel and Dominique Roux (2006) emphasize that appropriation does not simply proceed from a harmonious matching of a thing to its intended use; it also aims to make something one's own, *“that is, to adapt it to oneself and, thus, to transform this thing into a medium for self-expression.”* But when *“everything is planned”* in the design of the object, when man's place, his manner of use, and the reasons for using the object are predefined, what space remains for that specific connection between the two, for a relationship to be established? For it to become an extension of oneself?

It is always possible to individualize standardized objects. For instance, the legionnaires used to put a piece of black tape on the handle of the Milan station so that each team can easily recognize their station, as they always carry the same one in oversea operations. It is easier to find yours by the location of the tape than to identify the station serial number.

3. APPROPRIATION AS AN ACT OF LOVE AND FAITH

If an intensive practice is undeniably a prerequisite for mastering equipment, it is however not enough to bring out its full potential. This was demonstrated by French mountain troops during the war in Afghanistan.

3.1 THE IMPORTANCE OF BELIEVING IN IT

Elements of the 27th Alpine Hunters Battalion were deployed there in the winter of 2008. Among them, there were two specialist teams for the Milan man-portable anti-tank missile system. The operators are enlisted personnel, generally holding the rank of Lance Corporal. One of the two groups, let's call it Group A, did not believe that this weapon system would be of any use there: designed during the Cold War to halt the advance of Soviet tanks on the plains, they could scarcely imagine how it could be of any use against the Taliban, who had no armored vehicles and were operating in mountainous terrain. Moreover, the soldiers they were replacing had not fired a single Milan missile during their entire tour of

duty, and held little hope of using it themselves. The leader of the other group, let's call him B, was, on the contrary, convinced that his weapon was useful.

After six months on deployment, Group A had carried out four patrols out of a total of eighty, had fired the Milan twice and experienced two firing incidents – meaning no successful hits. By comparison, Group B had carried out the remaining seventy-six patrols and was the first French group to fire the Milan in Afghanistan. They had waited three months for the opportunity to arise. A gunner from Group B recounts:

"We were practically the only group to take up the station with the [carrying] basket. Because afterwards, the others stopped using it. They were doing patrols, and at first, they were saying, 'Yeah, it's pointless.' Then, when we fired, everyone started taking up the station again. When you believe in your weapon system, you believe in it all the way. You don't do three years, three years of service, only to arrive in an operation that is fully operational and then leave the Milan missile there because it's too heavy, because... Well, no."

With his words, he emphasizes the importance of believing. His boss is even more explicit:

"If you don't practice, it's like anything else: you lose it. You have to practice, you have to drill, you have to work, you have to believe in it. And if you don't believe in it... if you don't believe in it, you'll just... screw up. It's simple, it's straightforward. Either you don't do it, or when you do it, you do it... badly."

3.2 THE ROLE OF LOVE

The head of the group B goes further: *"You have to love it, otherwise it doesn't work. It works with good actors and guys who believe in it."* That was the lesson he learnt from his experience in Afghanistan, where his unit was the first to seize the opportunity to fire a missile, unlike all the others who did not believe in it and did not have the same emotional attachment to their weapon. Being good, well-trained and well-drilled soldiers is not enough to achieve the desired objective: far from the engineering or marketing rhetoric praising the intrinsic performance of a technical product, he asserts that, in addition to an intimate knowledge of the object, one must have faith and, as surprising as it may seem at first glance, love.

This account tells us that we can only handle things properly if we love them. It is not just a question of knowing how to use them, but of being able to do so. Because when we love an object, opportunities to use it present themselves, and we enjoy using it even in difficult conditions, adds the group's shooter. Appropriation has a praxeological dimension: it takes time to come to know and make good use of an object's potential. Conversely, the other group did not believe in this weapon to the same extent, did not defend its usefulness during the mandate, even stopped carrying it, and on the rare occasions when they did fire it, they experienced two firing incidents. One can see in this group's double failure a self-fulfilling prophecy: by not believing in their system, the system in a sense 'proved them right' by malfunctioning. This lack of enthusiasm is thought to be the root cause of their inability to make effective use of their tool.

The emotional bond between the instrument and its user, which these fighters emphasize, might at first glance seem surprising, even paradoxical. Yet Bruno Latour had already highlighted this need for love if a project is to be carried through to completion in *Aramis or the Love of Technology* (1992). A perhaps more appropriate parallel here would be music. It is highly likely that a musician who did not love his or her instrument would not elicit the same sound, the same vibration, as a musician for whom the bond of affinity with their instrument is strong. Nor would it be at all surprising to hear a musician express his or her love for his or her instrument.

The sense of contradiction one might feel regarding weaponry seems to stem from the mental equation made between a weapon and its lethal purpose; to love a weapon would be tantamount to loving an instrument of death. However, the mental representation of the weapon that underpins this reasoning is not necessarily shared by the protagonists — or by other observers. For a combatant, a weapon can symbolize a multitude of things: survival, the protection of comrades (especially for a support weapon like the Milan), a certain sense of responsibility (one must know how to control its destructive power), and so on. Furthermore, just because combatants, like other professionals, love their job does not mean they love taking lives; sociological studies show that this is generally not the case, and the military refuses to recruit such psychological profiles (Porteret, 2003; Hattoet al., 2011).

In which case, the bond between a soldier and his or her weapon can be interpreted as the fighter's personal, intimate, and unique commitment, expressed through the service of his or her weapon, a commitment he or she has chosen and honors each time he or she uses his or her weapon, just like a craftsman or a musician who has chosen his or her profession would put his or her heart into every gesture made with the instrument, striving to make his or her practice, his or her movements, and the emotionally charged image he or she holds of his or her craft.

3.3 THE EFFECTS OF LOVE AND FAITH ON POTENTIAL USES

The leader of Group B was convinced that his weapon had a place in Afghanistan because, during a previous operation, he had realized that it was capable of destroying more than just tanks. This realization is not as obvious as it seems. It was actually during a training exercise, firing at a target he had cobbled together himself, that our man truly grasped the penetrating power of his weapon. He then concluded that it was perfectly capable of destroying targets other than those specified in the user manual.

In addition to loving his weapon, this group leader had reflected on it, in the Latin sense of *reflectere*, to divert one's attention to something, and not *pensare*, to weigh on his mind. Reflection creates a link between the one who reflects and the object being reflected upon. To reflect on an object is to create this intimate, personal connection, which starts with the person, moves toward the object, and returns to the person. It was through his reflection on the object that he was able to "grasp," in the dual sense of understanding and encompassing, the object's various potentialities, with a view to exploiting them later. The Afghan mission provided an opportunity to give the object a place and to reveal its potentialities through its use.

Love, interest, belief in one's instrument, and care lead to an intimate understanding that allows lead to an intimate understanding that enables one to get the most out of it, but also to know when to use it — in other words, to recognize opportunities for its use even when they were not obvious. Poole and DeSanctis had emphasized the importance of attitudes in the process of mastering a system. To know one's weapon well is to understand and recognize its full potential, but also its limitations — what one can and cannot do with it.

The personnel of the 27th BCA proved to be highly faithful to the Milan's original framework of use; in an attempt to put forward some explanatory hypotheses, we shall describe a case of misuse of the same equipment dating back to 1999, and a failed attempt at misuse that occurred in 2012.

The first case, the success story, is recounted by a non-commissioned officer from the 2nd REI who was sent to Iraq to fight in what would later be known as the First Gulf War. He had been trained to destroy Soviet tanks invading national territory, and comments, amused, that in Iraq, "*it was us who were chasing after them!*": here, it was the doctrine of use that had to be adapted. A few years later, he was sent to Yugoslavia. Having some idea of what his mission there would entail, his team bought a camcorder from a shop before setting off, mounted it on the Milan's firing station and rigged up a makeshift video-

surveillance system, which was used to monitor Sarajevo airport and protect it from sniper fire. Thus, legionnaires — despite a culture of obedience being deeply ingrained — were able to demonstrate creativity and a willingness to deviate from the operational procedures initially imposed. Conversely, Alpine hunters sent to Afghanistan in 2010 were unable to envisage a possible use for their weapon in a context very different from that of their training, as we have seen.

However, it may be worth noting a second instance of a failed hijacking attempt. In 2012, other crew members from the 27th BCA were sent back to Afghanistan, this time with the temporary replacement for the Milan, the Javelin, whose targeting system relies on infrared technology. They were trained on a simulator where they learned to lock onto a target. Then they would press a button, and the missile would automatically head for the target. During an operation, a team faced a problem: Taliban fighters were hiding behind a low wall, near a tree, and their simulator training had taught them that branches disrupted targeting. They therefore decided not to fire: *“because there were some trees and the like, we knew we could not open fire. As soon as there is a branch, the missile will hit the branch and there is nothing we can do.”* Yet, even if it had struck nearby, the blast effect could have reached those men. *“Yes, there is the blast effect,”* confirmed this gunner. *“We know that in any case, the personnel, how to say, won’t be hit directly but they’ll take the blast anyway; we can reach them anyway.”* A neighboring team faced a very similar situation. The small size of the distant target and its low heat signature made it difficult to lock onto. So the shooter targeted a low wall behind which they were hiding. The target was destroyed indirectly, and the team, far from taking pride in their adaptability, felt ashamed of it. Their emotions are clear signs of their attachment to the original purpose — that is to say, of their strong desire for loyalty.

How can we explain this discrepancy between the situation of the Foreign Legionnaires and that of the Alpine Hunters? Three hypotheses can be put forward. The first relates to the process of ‘bureaucratization’ that has had a significant impact on the armed forces (Lefeez, 2020) and encourages a high degree of conformity (Craipeau & Metzger, 2011); as a result, imagination and inventiveness are no longer valued as highly within the armed forces as they were in the past. The second is that the experience gained by the Legionnaires in Iraq allowed for a gradual adaptation of their tactics to the theater of operations, with a continued focus on targeting tanks in Iraq, followed by a particularly innovative application in a second phase, in Yugoslavia. As they used their Milans, they adapted the technology’s objectives, whereas the 27th BCA had been trained for anti-tank use and had not employed it in an operational context prior to Afghanistan: there was a significant gap between theory and practice, requiring a more abrupt adaptation than for the legionnaires. Finally, based on the interviews conducted, it can be assumed that the legionnaires’ emotional attachment to their weapon system was greater in 1990 than that of the crewmen of the 27th BCA in the early 2010s.

CONCLUSION

The relationship between soldiers and their weapon is usually a strong one. Mastery of a weapon is based on an understanding of its technical workings and intensive practice. Ultimately, one might speak of the weapon becoming an extension of the fighter, a notion confirmed by the metonymic term ‘Milan’ used to refer to personnel specializing in this weapon. Modifying the weapon has therefore implications for the personnel operating it.

The combatant’s mastery of a weapon requires an understanding of its technical operation, which includes, but is not limited to, learning its operating instructions, as well as drill. The combination of technical and theoretical knowledge with tactical and practical knowledge allows the weapon’s potential to be exploited to the full, up to creating opportunities to use it. This potential is more likely to be realized if there is an emotional bond between the weapon and its user, if the latter loves and has faith in the

equipment. Simply knowing how the artifact works and how to operate it is therefore not enough to get the most out of one's weapon system and identify new opportunities for its use. Yet these are the very criteria for the effectiveness of equipment.

Measures such as the pooling of weaponry, its standardization, or a lack of training and practice time create a distance between soldiers and their equipment. In the relationship between a human and an object described above, it is nevertheless important to ensure that the object is not prevented from being understood in its singularity and uniqueness, to encourage an emotional connection, and not to render combatants passive in the use of their equipment. For successful familiarization is a prerequisite for the effectiveness of equipment in operation.

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