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# English Version



The "Rivista Militare" is a training ground for thought aimed at disseminating and informing on what concerns military culture and all the issues and aspects which may refer to it. The "Rivista" focuses on the Army through debate and free and direct participation.

"The ground that science does not gain is inexorably conquered by ignorance". (L. Mezzacapo)

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## **EDITORIAL**

ear readers,
I am pleased to inform you that Rivista Militare –
a periodical which the brothers Luigi and Carlo
Mezzacapo founded back in 1856 – is once again available in
English. This issue comprises a selection of the best articles
published in 2022. It is, therefore, a special edition with an
international vocation. The aim is to strengthen relations with
all the other publishers in the sector (particularly EMPA, the
European Military Press Association) and provide a valuable
information tool for multinational circles. The selected articles
range from climate change to the condition of women in the
military context and much more.

In the hope of having done something pleasant, I wish you a good reading.



The Director,
Col. Giuseppe Cacciaguerra





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# CLIMATE: MEN ARE FROM MARS, AND THE EARTH BELONGS TO VENUS

by Grammenos Mastrojeni

Photo: am.pictet.it

The German study centre Adelphi has identified 79 climate-related conflicts for a study commissioned by the G7. The IPCC (Intergovernmental Panel on Climate Change) counts even more of them in various Reports. They are due to direct impacts of the climate or mediated by other forms of environmental degradation - for example, desertification or loss of biodiversity.

The causes of conflicts are multiple and multifactorial; among them, ecosystem services' disappearance, displacement or uncertainty is dominant. Climate is the synchroniser of natural cycles, and its relative stability and predictability affect the stability and predictability

of other ecosystem cycles, such as flowering. If this predictability fails, we can no longer count on the presence of certain further regular phenomena in the ecosystem at the desired time and place. Many of these phenomena appear above all as "services" nature does to itself, to its balance. For example, the warmth induces plants to blossom and sets in motion a series of events of vital importance for the animal kingdom, such as the availability of fruit in the period of wildlife births. By making these regularities uncertain, a changing climate puts the entire natural world in distress and causes the dramatic loss of biodiversity we are witnessing. However, many of these

regular phenomena are also services on which humanity directly relies: these are defined as "ecosystem services", and their disappearance, dislocation or unpredictability makes it impossible to organise many human activities. In other words, you cannot plan the harvest without being able to count on certain rains or temperatures, but neither can you design a road without knowing whether a particular valley will be dry or flooded.

Such uncertainty makes society insecure, chaotic, conflicted, and unstable. Climate change creates instability in two different ways. First, the climate of a more energetic atmosphere produces more violent phenomena that



such as heat waves - and our housing and production structures - such as violent precipitation of increasing intensity. Secondly, the cyclical arrival of certain natural services on which we rely to orderly organise society and production becomes unpredictable. These services are largely climate dependent and cover a broad spectrum, far beyond agricultural performance. Among them are health services, such as the rigours of winter preventing certain parasites from proliferating. They include bio-sanitary services, such as water purification in wetlands and encompass local climate mitigation, such as vegetation

comprise infrastructure services, such as the ability of certain plants to hold back landslides or moderate floods on a slope overhanging a highway, up to reaching much more imponderable but equally essential services, which can even be of social balance or cultural identity. One would think they are secondary aspects, yet the persistence or not of a specific plant confers or removes a productive role to women in some rural contexts. An unpredictable and unprecedented extreme climate turns into a problem for economic security and human rights: it suppresses, dislocates, or randomises ecosystem services; that

is, it makes them unpredictable. It causes insecurity while opening up the competition to grab the dislocated and more scarce services. Competition can create difficulties while remaining peaceful in more prosperous and structured contexts. In the more fragile countries, on the other hand, it more easily triggers formalised or creeping and hidden conflicts.

Thus, the environmental collapse we are causing will not remain a tragedy confined within the natural sphere that we could allow ourselves to observe with detachment from our tower raised above all and perhaps with saddened compassion for the sufferings of Gaia, the Earth. Suppose

we do not stop it in time. In that case, the collapse will overwhelm us, too: the environmental imbalance turns into a human imbalance, and the collapse of ecosystems will become the collapse of societies. Because we are part of that same nature that we are killing, on whose agonising remains, we will fight to grab the leftovers, risking perishing along with her.

We have entered the ecosystem "collapse threshold". Whether the collapse actually takes place depends on our ability to defuse a scenario of inert continuity of our behaviour. That is to say that if, for the next few years, the human pressure on nature follows its usual trends, continuing to increase as if nothing were, the scenario that we would face would be very problematic in itself and is stigmatised as "business as usual". It envisages the humanity that continues undaunted to do what it has always done, an actor who is not reactive to the growing changes in the ecosystem. Nevertheless, it is a tragically optimistic scenario. If, instead of contemplating in future the humanity that at worst does not change course, we insert probable human reactions to environmental degradation into the equation, the picture worsens terribly. The worst scenario described by the IPCC is that of a temperature increase of 4.8 degrees within a century. This would mean a real mass extinction on land and seas, rapid and traumatic rises in ocean levels, which will engulf many inhabited coastal areas, disastrous alternation of droughts and floods in continental regions, and much more. The biosphere mechanisms that likely make such an impressive acceleration of warming are called "positive feedback loops", i.e., incremental dynamics inherent in the biophysical system, which are set in motion if certain heating levels are exceeded. According to scientists, this would happen if the 2 degrees threshold was exceeded, which should be absolutely avoided. Some of these loops on our planet - 15 identified so far - have already been triggered. The most worrying of them is the thawing of permafrost, releasing methane, a much more powerful greenhouse gas than carbon dioxide. Terrestrial mechanisms of this type are less drastic, although not very different than those which have condemned the Venus planet to average temperatures above 450

degrees. These high temperatures are due to the fact that beyond a certain temperature threshold, Venus' surface minerals have gasified, creating an ever-greater greenhouse effect, which led to more significant gasification of the same minerals, in an incremental loop with a hellish outcome. However, another incremental loop, of which we are protagonists, is the following (fig1) The IPCC believes that the fearful biophysical scenario of feedback loops is achievable in the case of the human socio-economic scenario defined as "business as usual". Basically, it depends on human behaviour, and there are many chances of creating catastrophe if we humans continue "business as usual", i.e. to act as always, as if the problem did not exist. But that is not all. While aware of this. scientists have not modelled the allhuman factor. Mars - god of war.

In reality, if we exceed 2 degrees Celsius, the scenario of humankind continuing undeterred to do what it has always done - the dreaded "business as usual" - becomes an idyllic and entirely optimistic hypothesis. On the contrary, an unpropitious incremental loop of irresponsible conduct risks



setting in motion a destructive dynamic in the human sphere in parallel with the growing disaster in the biosphere, with the two dynamics triggering each other. In fact, severe climate changes will lead to rapid displacements of available resources, including the most basic ones, such as water, arable and habitable land, and food. We will then witness competitions and hoards, pockets of instability, violent poverty, and migratory waves of unprecedented significance. Under these conditions, the only human response possible to contain warming - the multinational, cooperative, and concerted response - would become increasingly difficult to implement; and Mars, the god of war, would inevitably appear on the scene. In this scenario, the conflict rages against the backdrop of weird weather; humankind bombards itself instead of committing to reduce emissions, and mors tua becomes vita mea. Although this scenario does not yet have a quantification in degrees, it is clear that it must absolutely be avoided and that we must act immediately. All this could happen quickly, and we have very little room for manoeuvre before Venus and Mars awaken: this is at stake.



Grammenos Mastrojeni, born in Milano on 23.05.1965, diplomat since 1991 and university professor, teaches Environment and Geostrategy in various national and international universities and has dedicated himself, for over thirty years, to the issue of climate change on the planet. Former coordinator for the environment of development cooperation, since 2019 he has been

deputy assistant secretary of the Union for the Mediterranean, based in Barcelona. He participates in major international negotiations on climate, biodiversity, water and oceans. Author of several successful articles and monographs, among others, he has published L'arca di Noè (2014), Effetto serra, effetto guerra (with Antonello Pasini, 2017) and Effetti Farfalla (2021) for Chiarelettere, L'evoluzione necessaria (2008) for Edizioni Scientifiche Italiane, Ora o mai più - Un decennio, e non oltre, per salvare noi stessi e la Terra; e cosa può farci ognuno di noi (2016) for Amazon.

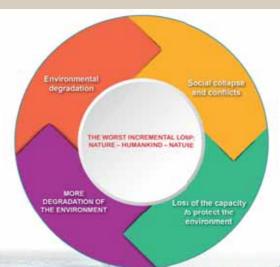


Fig. 1



husbands. The laws were clear. If the

woman were minor, her father would

provisions. During the war, a series of

interim measures were taken to make

they were ordered to employ female

labour also in heavier jobs because it



women autonomous and put them in a position to contribute to the national economy.

In the cities, women filled the offices and went to fill the positions of tram driver (3200 women) and postwoman, indispensable even if insulted and mocked. In the countryside, men were generally replaced by women and boys since almost all the peasants had been recalled. The peasant women, therefore, had to resign themselves to taking on their shoulders, with enormous effort, the work of men, guaranteeing food, not only to their families but also to the cities and soldiers. Women had always worked in the countryside picking grapes and olives or threshing wheat, but during

the war, they had to dig, plough, and sow, breaking the age-old balance of the sexual division of labour. In the three years of the conflict, production fell very slightly, despite the absence of male labour, the scarcity of fertilisers, the difficulties of transport and the requisitions carried out in large numbers. The skills of the female landowners and tenants who replaced their husbands in running the family businesses contributed to the positive results.

Nobles and bourgeois throughout Italy created an increasingly dense network of committees and associations, which carried out the most diverse but indispensable tasks. Let us remember that at the beginning of the twentieth

century, there was nothing that could be assimilated into modern public social assistance. The war preparation and assistance committees arose first, followed by the assistance committees for the families of the fighters and the many civil organisation committees mainly entrusted to women: assistance to children, widows, orphans, mothers of the fallen, the children of soldiers, prisoners of war, and all the vulnerable layers of the population the war had reduced to misery. Propaganda and assistance were the two pillars of women's activism in the long years of war.

In Bologna in September 1915, a woman, Countess Lina Bianconcini Cavazza, had the idea of setting up



Porters employed at Marylebone Station in London.

Women tramway riders in Italy.

the News Office (Ufficio Notizie), which had the task of integrating the activities of the Information Service of the Military Intendencies. The association's role was to collect news of dead, wounded and missing soldiers to give answers to families. 25,000 female volunteers activated 8400 sections. The military's distrust and complex relations forced the Ministry of War in February 1916 to pass a decree that required the military commands and chaplains to provide all the requested information to the volunteers. From 1917 the documentation collected in the files of the News Office was considered valid for granting allowances and pensions. At the end of the conflict, twelve million files on military combatants had been collected and processed at the headquarters in Bologna. Each file had a different colour according to the research results to facilitate replies to family members.

Hundreds of thousands of women worked in the fields, workshops, and factories, holding all kinds of positions where it was essential to replace men at the front. Thousands of them entered with precarious contracts in offices and banks. Hundreds of women created the first welfare state to meet the needs of the weakest. Alongside all of them, we should remember a few dozen women whose presence seemed so unusual that they were quickly erased from memory.

It took Elena Branca's stubborn perseverance to retrieve in the archives the documentation relating to the presence of female doctors in grey-



green uniforms some with 8-pointed and others with 5-pointed stars. A 1918 official list indicates 48 women doctors and pharmacists (about half of all graduate women in Italy). The hostility to letting women into hospitals was strong. Still, the Military Medical Service needed "the work of female doctors and even female students of the 5th and 6th year to provide urgent medical and surgical services claimed by a sudden and large number of sick and injured people" (Circular 5276 OT of 25 January 1916 addressed to the directors of the territorial hospitals).

Women called into service in the Red Cross were considered temporary staff at the disposal of the Military Medical Service.

The best known is Anna Dado Saffiotti. 'assistant doctor' in the war hospital no. 44 of Palermo (assimilated Medical Lieutenant). On the other hand. Doctor Eloisa Gardella was first assigned to the 50-bed field hospital no. 237 in Cervignano (III Army) and then at the 100-bed hospital no. 055 in Colubrida (II Army). Maria Predari worked in Carnia and then in Udine. Elena Fambri and Filomena Corvini appear to have served in the war zone in Trentino. Clelia Lollini worked as a medical lieutenant from October 1917 to November 1918 in the military hospital in Venice, where she worked as a surgeon. According to the service records, they all seem discharged in 1920, when the militarised hospitals became civil again, but above all, they were struck out from the documents, which contain corrections

with modern calligraphy denying what was written in the first place.

The opposite happened to the thousands of female nurses celebrated in prints, postcards, publications, and novels.

There were also indispensable women at the front, but no one has ever narrated their deeds. The Army recruited about two thousand women from the valleys aged between twelve and sixty to bring supplies to the soldiers on the front line. Carnia villages along the border had been evacuated at the war beginning, but when it became clear that not even the mules could reach the inaccessible areas where the troops were deployed, the women were allowed to return to their homes as long as they made the carriers as they used to do by loading wood or potatoes. During the war, in their pack baskets, they carried up to 40 kilos of hand grenades, grenades, ammunition and medicines, overcoming a slope of a thousand meters, paid a lira and a half per trip. They had a blue identification band with a star and a progressive number on their right arm. In 1968, the last ones still alive were awarded the Knighthood of the Order of Vittorio Veneto for participating in the war. One of them, Maria Plozner Mentil, killed in 1916, was awarded the gold medal for military valour and is the only woman to have given her name to a barracks for the Alpine troops, now unfortunately abandoned.



Anna Maria Isastia has taught History of the Risorgimento and Contemporary History at

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## NATO AND CYBERSPACE

## An evolving approach for Collective Defence





The military must adapt and shape capabilities as new threats evolve to be effective in different operational contexts. NATO has embarked on an evolutionary path to include the disruptive effect of cyberspace in view of an effective Collective Defence.

The new conflict scenarios are, and will increasingly be, characterised by a high rate of digitisation and network connection, where the safe management of information will be increasingly competitive. The Alliance included the threat of cyberspace in its political agenda for the first time during the 2002 Prague Summit. Policy indications on its defence followed in 2008, just a year after cyber-attacks hit Estonia (a NATO member since 2004) in its most critical public and private sectors. The 2010 Lisbon presented new elements. merged into a "strengthened policy" that connected cyberspace's defence Collective Defence tasks. At the same time, by approving a partnership with manufacturers, NATO countries have promoted the need to share information on cyber threats with the non-military, identifying this "arena" as a meeting point for innovative solutions in cyberspace. The 2016 Warsaw summit focused again on cyber. The Alliance officially identified this "space" as a "domain of operations" (like land, air and sea). It approved a shared commitment to the development of cyber defence in terms of resources, capability building and training. In the same period, NATO signed a joint declaration with the European Union indicating cyber as one of the vital areas of collaboration. It recognised the principle of applicability of International Law to this new domain. The two-year period that has just ended has been an opportunity for a refreshed momentum thanks to the awareness of new "emerging and disruptive technologies". These new technologies (Artificial Intelligence, autonomous systems, quantum technologies) will guide the paradigm shift of the concept of "mass" in the future "battlespaces", where the technological advantage will prevail over the traditional military effort. Cyber threats will bring more and more risk factors as these technologies evolve. For this reason, the Alliance has issued a doctrine for cyberspace operations and, during the 2021 Brussels summit,



approved a new "global cyber defence policy". In a statement on the summit's sidelines, NATO leaders said that the Alliance is determined to use its full range of military capabilities to deter and counter cyber threats, including those conducted within "hybrid campaigns". Furthermore. acknowledging significant and cumulative hostile cyber activities could be considered armed attacks, the Alliance reiterated the need to "prevent, detect, mitigate and respond" to vulnerabilities and intrusions. More effective integration between the Allied States and collaboration with partner countries, international organisations, industries and academia will be essential.

In the face of an evolution that recognises cyberspace as a growing field of confrontation, what organisation has NATO shaped?

Various political, military, and technical authorities/institutions have developed the Alliance's cyber defence policy while considering that individual states hold leadership in cyberspace. The North Atlantic Council exercises the main political authority in managing

cyberspace-related crises through committees on cyber security for strategic planning and executive management of networks, as well as for technical and defence issues. The Cyberspace Operations Centre supports Commanders in the field for operational matters, ensuring the Alliance that operations are more resilient to threats. For technical aspects, the NATO Communications and Information Agency is the leading communications services manager, with its own Cyber Security Centre as a specialised sector hub.

Shared training and scientific research are essential in exploring opportunities and mitigating risks in this new conflict arena; the NATO School Oberammergau (Germany) responsible for cyber defence training to support operations. Two other schools are the NATO Communications and Information Academy in Oeiras (Portugal) and the NATO Defense College in Rome, Finally, the Tallinn Centre of Excellence is the NATOaccredited body that deals with research, training and development in the field of cyber security. This body - supported by Alliance sponsor nations and non-NATO contributing participants - boasts unique covering interdisciplinary expertise technological, strategic, operational and international law areas.

For this last aspect, the Centre



involved a group of experts to develop the "Tallinn Handbook", a non-legally binding academic work that provides a vision of the application/applicability of International Law to conflict situations in the cyber domain. This manual, now in its 2.0 edition (the centre recently launched the 3.0 project), has become a valuable resource for "legal and non-legal advisers" dealing with cyber issues, considering the rules of international law governing cyber incidents.

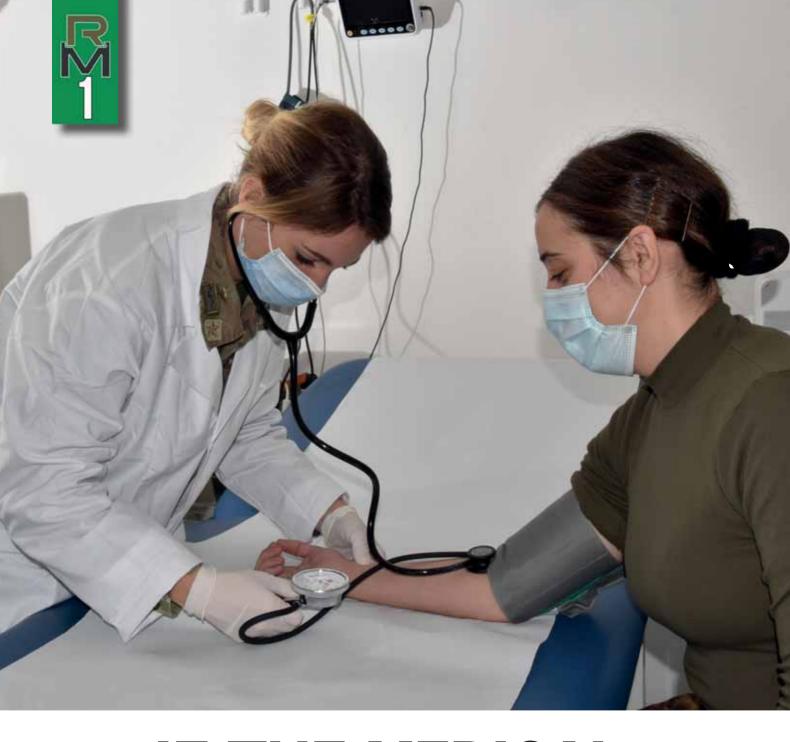
This is the cyber today, while its tomorrow is projected to consider cyberspace a "place" of opportunities to gain an advantage over competitors opponents, changing and traditional centres of gravity and strengths. Cyberspace also implies risks, with hybrid threats that undermine the stability and security of nations, with actors hidden within a "space" that allows anonymity and deception. It is a path and not a point of arrival that the Alliance is facing, trying to achieve ever greater effectiveness of the military instrument in the information age, where the "restlessness" of cyberspace activities opens up vulnerability but, at the same time, offers opportunities to transform and improve.



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# IF THE MEDICAL OFFICER IS A WOMAN

Captain Laura Cretì talks about her work at the Lancieri di Montebello regiment

by Paola Pucci

Captain Laura Cretì puts her heart into it every moment of the day, and with each of her patients, she uses all her energy for what she considers a real mission. Starting in 2019, this 29-year-old young woman is a medical officer in the Lancieri di Montebello regiment and has become a point of reference for the 800 military personnel of the structure. After passing the competition to be admitted to the Military Academy of Modena, she graduated in Medicine and Surgery to be part of the Medical Corps; commissioned Lieutenant, began her engagement with the regiment.

"I am aware that being a medical officer means carrying out a mission in the mission, in which the Hippocratic oath that every doctor takes joins the oath of loyalty to the homeland for a commitment of double value and responsibility", underlines Captain Cretì.

## After almost four years of employment, what is your balance?

"I had asked to be employed in this regiment, and when my request was accepted, I started with great enthusiasm. I had the opportunity to engage in a highly operational reality on multiple fronts: both on the national territory with the Safe Roads operation in Rome and abroad with missions in the various operational theatres. There is also the specific peculiarity of equestrian activity at the Lancieri di Montebello. Thanks to this additional specialty, the regiment now has a consistent female presence of 85 women".

## What is your relationship with "military patients"?

"A relationship of absolute respect, kindness and proper consideration for my role and the profession I carry out was established immediately, in a completely natural and spontaneous way. Every soldier, from the Non-commissioned Officer to the Colonel, knows that he finds a conscientious doctor in me and a person available to listen; in recent years, I have always had much satisfaction and never a criticality or a problem in dealing with soldiers:





women or men. Mainly the girls have always been happy to have had the opportunity to relate with me and speak openly about their needs and peculiar frailties.

And I listen to them, and sometimes I urge them to overcome their hesitations by telling them that they are perfectly capable of facing even the most apparently difficult commitments. I do it not only as a doctor but as a woman-to-woman. In this regiment, some young mothers have to reconcile family needs with the commitment in uniform. During this period, I got to know every soldier in the regiment, his reality, and his small or big problems. Being aware that each situation is a case in itself, I have always paid attention to both the clinical aspect and the emotional factor. This is a doctor's task: to monitor and diagnose, but also to know how to motivate. And this is even more evident in the military, where activities require constant commitment and discipline".

## What is a typical day like for a medical officer?

"In everyday life, my main activity is to release the medical fitness for military service after carrying out the required checks.

It starts at 7.00 in the morning with the first phase, which consists of blood sampling and subsequent blood



chemistry analysis and verification of the parameters; if anomalies are detected, diagnostic tests and further specialist visits are carried out at the Celio military hospital. As a medical service director, I am responsible not only for clinical activity but also for prevention and other related activities, such as the commission for the control and monitoring of water and canteen hygiene.

My working day is practically 24 hours a day also because, at this moment, I am the only medical officer on duty in a large regiment. Given the presence of 800 soldiers, even routine work alone entails a full-scale commitment throughout the year. And the emergency overlaps with everyday normality, anything but sporadic in a highly operational regiment on various fronts, with an additional specificity consisting of horse riding. This activity can lead to medical consequences of multiple levels ".

## You have a special memory of summer 2020 as you were in Lebanon.

"I was with the UNIFIL mission, and I was supposed to leave on August 6, after six months of employment, but on August 4, there was an explosion at the port of Beirut, and we were immediately involved in the emergency. Presently, General Di Stasio prepared the convoy to bring aid in connection with the other contingents. We left at 6 pm, and I brought everything I needed, assuming the various cases I would face, from burns to injuries to orthopaedic fractures. I remember that in the ambulance, as we were gradually approaching the port, the scenario unfolding in front of us exceeded all possible predictions as to the drama of the consequences.

We stayed on the ship for 48 hours to cope with the emergency, providing first aid. I dealt in particular with the Bengalis, who were part of the contingent, and were on the ship at the time of the explosion.

For the Italian contingent, I set up the Stratevac (Strategic Evacuation, medical evacuation from the Theater of Operations), which is the exclusive responsibility of the medical officer. My mission in Lebanon thus ended



on August 18, 2020.

Later, in May 2021, I was in Romania for a planning and simulation exercise of interventions in cases of maximum emergency".

Another emergency, which involved everyone, has the infamous name of Covid: how did the regiment experience the crisis and all the related problems?

"I returned from Lebanon in August, and the second pandemic wave began in October. I remember the difficulties due to a staff shortage as the NCOs had all been reabsorbed at the drive-throughs for tampons. It was an extremely demanding period from a physical and mental point of view. Everything had to be established and organised for maximum safety in the regiment because contagion became a real risk in an environment where so many people worked.

The commitment on the front of prevention was joined by another significant aspect: the care and management of people placed in quarantine. This required preparatory work because barracks were not structured to isolate quarantine cases. Much work has been done to readjust

the spaces and obtain as many single rooms as possible, all with the necessary ventilation and each equipped with a toilet because the person in isolation cannot use the common areas. We have always tried to create the best conditions of comfort for the psycho-physical wellbeing of the patient in isolation. For every positive person who could have triggered an outbreak, I had to manage everything from tracking, to contacts, to handling sensitive data. The most engaging aspect from an emotional point of view was the relationship with the "quarantined". They constantly asked to talk to me, and I went to them even three times a day to monitor them and, as far as possible, reassure them because the patient in isolation lives every day in fear of the potential worsening of the disease and every sensation can be carried to extremes to panic. In those days, I was the only link to the outside for them, and I had to constantly relate to families. My days were hectic, but the satisfaction rewarded me that everything was resolved well. The 60 cases of Covid, which we had in the regiment from October 2020 to March 2021, were

resolved without complications.

I remember in particular Christmas 2020 because I was assigned to the SIC (Controlled Isolation Structure) in Pomezia to control the soldiers leaving for the various operational theatres. This was an essential precaution in the acute phase of the pandemic because Italy, engaged in foreign missions, could not afford to "export" Covid to precisely those countries where Italy sends its military to give support. It was only on December 24th that I could leave the SIC to return home to Lecce in time to celebrate Christmas with my family of origin".

## What are your commitments and prospects for the future?

"I would like to continue my work in the regiment and foreign missions, commit myself to do more and better, trying to reconcile profession and private life. And then I hope to hit my main goal; the specialisation in Cardiology, my always dream ".

It seems self-evident, but who better than a doctor who takes every clinical case to heart could become an excellent cardiologist?

And this is our wish for Captain Laura





## A COMPLEX SITUATION

## Minorities in Ukraine

by Rodolfo Bastianelli

The majority spoken language divided by city, town and village councils

Result of the 2001 ukrainian census

Ukrainian
Russian
Romanian/Moldovan
Crimean Tatar
Hungarian
Bulgarian
Gagauz
Polish

Chernobyl disaster area (formerly Ukrainian)

**Albanian** 





Podolian farmers.

Crops confiscated during the Holodomor.

Among the many issues around the Ukrainian crisis, ethnicity is one of the most complicated.

#### Russians

Although the presence of Russianspeaking populations in Ukraine dates back to the 14th century, the beginning of Russian influence can be dated to 1667 when, following the Andrusovo truce with Poland, the Tsarist Empire incorporated eastern Ukraine and the city of Kiev. Subsequently, due to the two partitions of Poland in 1772 and 1793, Galicia became part of Austria while Podolia and Volhynia were annexed to Russia, which in 1783 annexed Crimea, too. After the First World War. Ukraine became a Republic of the Soviet Union. In the 1930s. Ukraine experienced the "Holodomor", the event which marked its national identity. Determined to break the resistance of Ukrainian farmers who opposed collectivisation, in 1932-33, Stalin initiated a policy of systematic repression of Ukrainian culture and language and requisitioning of crops, which in a short time caused the starvation of a large part of the population. Kiev claims that the extermination carried out by the Stalinist regime caused at least three million victims. It still constitutes one of the issues with Moscow because the Kremlin, while acknowledging its reality, has always denied the Soviet

government's intention to commit the genocide of the Ukrainian people. The events during the Second World War were no less relevant. Hostile to the Soviet regime, Ukrainians in the western regions welcomed the German troops, convinced that Germany would facilitate the birth of an independent Ukrainian state. An expectation soon turned out to be unfounded: in August 1941, Galicia was annexed to Poland, Bucovina returned to Romania, and the Ukrainian territory was organised as a "Reichkommissariat".

In this scenario, Stepan Bandera, the nationalist controversial exponent. appeared. The Ukrainians consider him a national hero, and the Russianspeaking population a Nazi responsible for atrocities against Russians, Poles and Jews. In 1944, Bandera started a guerrilla war against the Red Army with the "Ukrainian Rebel Army" (UPA), which would engage the Soviet units until the early 1950s. Another important event was the handover of Crimea from Russia to Ukraine, decided by Khrushchev in February 1954 to commemorate the 300th anniversary of the reunification of the two countries. However, historians believe that this happened for quite other reasons. The reference to the Treaty of Perevaslay of 1654, cited as the unification act of Russia and Ukraine, is devoid of historical and legal value as it did not contain any connection with Crimea, which became part of the Russian Empire only one hundred and thirty years later. Historians believe that Khrushchev took this decision to strengthen the Soviet





central power's control over Ukraine. He relied precisely on the presence of over 800,000 Russians who would join the Ukrainian SSR from that moment, thus implementing the same policy adopted in the Baltic republics where the Kremlin had settled Russian speakers to extinguish the autonomist aspirations of Estonia. Latvia and Lithuania.

#### **Crimean Tatars**

Settled in the Crimean peninsula, where in 1443 they founded the "Crimean Khanate", Crimean Tatars heavily suffered the consequences of the annexation to Russia in 1783. They became a minority in just over a century due to the expropriations and deportations carried out by the tsarist regime. The situation of the Crimean Tatars significantly improved under the Soviet government; in the first years of the USSR, an "Autonomous Republic of the Crimean Tatars" was established within the Russian RSFS, while on the cultural level, the use of Tatar names was readmitted.

In the late 1920s, the worsening

of the Stalinist regime led to a new Russification policy, which included the introduction of the Cyrillic alphabet. The Second World War deeply marked the fate of this population. In the summer of 1941, the Crimean Tatars welcomed the Germans because of their profound hostility towards the Soviet regime, a behaviour later used by Stalin as a pretext for carrying out harsh repression. Accused of being "traitors", almost two hundred thousand Tatars were deported to Central Asia, their villages in Crimea were Russified with populations from central Russia, and, above all, they were deprived of all rights. Apartial restoration was granted not before 1967, and it was only in 1989 that the Supreme Soviet granted the Tartars and Volga Germans the right to resettle in their lands of origin. Currently, according to estimates, the Tatars constitute 12-14% of the peninsula's population. While looking unfavourably at the return of Crimea to Russian sovereignty, they avoid taking an attitude of confrontation towards Russian speakers. Similarly, given the common Turkish ethnic origin and

Sunni Muslim religion, Turkey has expressed its closeness to their claims while maintaining a very moderate line, given the significant economic and energy ties with Moscow.

### **Hungarians**

According to the 2001 census, the Hungarian population in Ukraine is slightly over 150,000, concentrated almost entirely in the Transcarpathian region. Hungarians became citizens of the new Ukrainian state in 1991 and enjoy several rights, including being taught in their native language in bilingual schools, displaying the Hungarian national flag alongside the Ukrainian one in public buildings, and using the Magyar language on road signs.

Five years ago, however, the Kiev Parliament approved a controversial law stating that education must be given in Ukrainian. This provision overturned the law introduced in 2012, under the presidency of Viktor Yanukovich, which allowed the use of national languages to different minorities if, in a district, they were



more than 10% of the population.

### **Poles, Romanians and Moldovans**

According to the 2001 census, Poles living in Ukraine numbered 144,130. Most of them reside in the regions of Khmelnytskyi, Lviv, Zhytomyr, and Kiev. Although the Polish presence can be traced back as far as 1030. it was only around the seventeenth century that many arrived in Ukraine in search of better opportunities and living conditions. In the following years, their number increased; in 1926, almost half a million Poles were residing in Ukraine, 1.6% of the country's population. With the worsening of the Soviet regime, their situation worsened considerably. In the 1930s, many Poles were deported to Kazakhstan or became victims of the Stalinist purges. After achieving independence in 1992, the new Ukrainian government passed the minority rights law, under which Poles were allowed to use and receive education in their language. However, in later times many provisions of the law were considerably limited. Following

the Orange Revolution of 2004, Kiev granted the Polish population the right to use a particular identity card that allows multiple entry visas to Poland. The Warsaw government appreciated this measure, considering it the signal of a new phase in bilateral relations. The position of the Romanian minority

is more controversial. According to official estimates, there are only 151,000 Romanians in Ukraine, while Bucharest estimates their numbers at 400,000, including the over 250,000 Romanians of Bessarabia, whom Kiev considers Moldovans, a distinct minority. The law approved by the Bucharest Parliament for granting Romanian citizenship to Romanians from Bessarabia (Moldavia) and Bukovina northern has raised controversy. This law made it easier to obtain Romanian citizenship for people who resided in those regions in June 1940 - when these territories came under the control of the USSR - if they could prove that they lost it against their will. This measure aroused protests from Ukraine, whose legislation does not provide the right

to dual citizenship and considers this as proof of Romania's expansionist ambitions. A new issue arose last November over Kiev's decision to declare the Moldovan language distinct from Romanian. Bucharest criticised this decision, claiming that Moldova's 1991 declaration of independence recognises Romanian as the country's official language.

#### **Bulgarians**

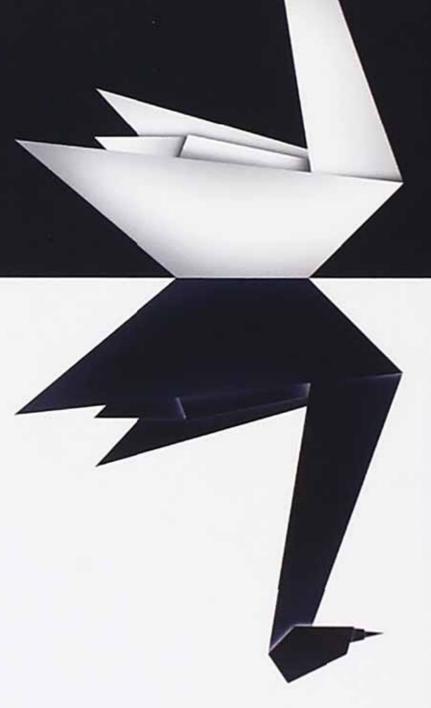
The minority in Ukraine is the largest Bulgarian community abroad. Bulgarians settled in Ukraine between the end of the 18th and the beginning of the 19th century. They live mainly in the Odessa district, where they constitute 60% of the population of the city of Bolgrad. Tensions in relations between Kiev and Sofia occurred in 2020 over the reform that reorganised Ukrainian local administrations, which, according to the Bulgarian Parliament, put the rights of their compatriots at risk. This framework can provide a further key to understanding the current situation in Ukraine.



# THE BLACK SWAN

The trap of cognitive bias

by Giuseppe Diotallevi



The time will come to study the current crisis in Ukraine from a purely military point of view, but to do so now would mean falling hostage to the dialectical the confrontation between opposing narratives without being able to understand reality and ending up becoming the sounding board of one or the other party. Perhaps it is better to understand why we abandoned the doubt by falling prisoners of the prejudice that, at any cost, tried to confirm only what we thought plausible: the impossibility of war.

At this stage, perhaps, it is more useful to reflect on why we did not foresee the conflict, an event characterised by: "rarity, extreme impact, and retrospective (though not prospective) predictability" (1), a "Black Swan". A series of misleading considerations generated in the so-called inductive "platonic fold" of Taleb clouded the ability to predict: Putin, after 31 years, just wanted to recover his role and rank in the international arena and find an expedient to speak on an equal footing with the USA. The "Platonic fold" acted through mental categories corroborated by historical experience and academic principles.

A country's strategic potential is based on three key factors: military, economic and demographic power; therefore, with a GDP about half of the Italian one and a collapsing demographic, Russia did not have the means and, therefore, the possibility of waging war. This reasoning has led us to exclude the possibility of conflict a priori.

So far, we have considered only the quantitative aspect, to which historical considerations must also be added. "Prolonged war in limited conflicts", the so-called "Strategy of the artichoke" (2), works and allows those who apply it to gain small cumulative advantages

without reaching conflict because it would break the threshold of tolerance of the international forum, putting an end to the usefulness of this strategic approach and sliding inevitably into an armed confrontation on a large scale. The Artichoke Strategy, therefore, ensures advantages only if it does not lead to conflict.

A classic example is the conduct of Hitler Germany before World War II: the first leaf of the artichoke was the Anschluss of Austria, the annexation of the Sudetenland was the second, and the third leaf was the invasion of Poland: it did not work because it broke the Allied tolerance threshold leading to World War II.

The inductive logic led to an overlap between the events of 1939 and the conduct of Putinian Russia, specifically: the first leaf of the artichoke, Georgia 2008 and its constitutional amendment, which self-recognised Russia's right to intervene to protect citizens; the second leaf of the artichoke, Maidan events and consequent annexation of Crimea in 2014. From this comparative analysis, conducted in the light of "inductive" logic, it seemed natural to conclude that the conflict could not materialise.

These considerations have "led" to exclude the possibility of invasion, considering Putin and his entourage too rational actors to start an impossible war. For a problem of knowledge or, better said, of presumed knowledge, we have transformed the impossible into "unpredictable".

In other words, we thought that Putin would not invade Ukraine because this choice seemed irrational.

Considering conflict as an irrational option was the first and most serious mistake because strategy actually responds to its own form of rationality

or, better said, to logic. Certainly not the Cartesian linear logic: calculation inspired by the effective allocation of resources, but the anti-intuitive paradoxical logic (3). The linear positivist approach, based on the certainty of being able to predict events by simple induction from the past, has no place in the strategic logic dealing with complexity. The typical tools of the Cartesian approach, based on decomposing the main problem into sub-problems, cannot manage complexity (4).

This simplification has led us to compress complexity, with the inevitable consequence of not understanding reality and not making a correct prediction. Hence the genesis of the surprise, the worst of surprises, namely the strategic one.

In this regard, it is correct to clarify that the etymology of the word 'strategy' refers to the stratagem based on deception. Therefore, it is in the very nature of strategy to recognise surprise as a power multiplier and an element functional to its aims. Strategic surprise is assured when the paradoxical logic leads one to choose the option that develops along the line of "least probability" (5).

Hence the need to admit that Putin "played his game" by choosing this line and knowing how to create the conditions for a strategic surprise.

At this point, the problem is linked to the understanding of reality: despite American intelligence, media, and think tanks had monitored the presence of about 120 Russian batal'onnaya takticheskaya gruppa (battle groups) deployed on the border, and they had announced a possible invasion even indicating the dates, why have many of us ruled out a priori the possibility of conflict? Why have we been unable to

understand reality, denying what was now evident?

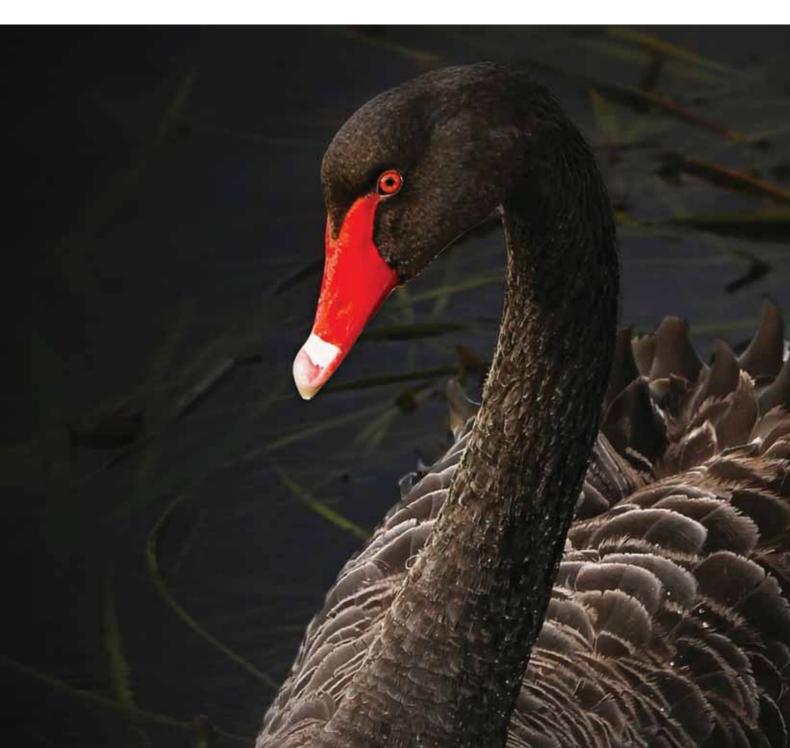
We have not considered the US predictions because they are excessively biased and inspired to support an anti-Russian narrative: this is the first self-absolving interpretation. However, intellectual honesty must lead us to deepen and try to understand. Why have we relied so heavily on our "inductive" reasoning by preventing intuition from emerging? (6).

That said, it is worth reflecting on the power of cognitive bias that made invisible what was actually appreciable before it all started.

The bias is based on what Marc Bloch calls "the imagination of the masses" who wait only for plausible or pseudo-plausible events hoping to find confirmation of what they want to be confirmed; in other words, the bias "is the mirror in which the collective consciousness contemplates its features" (7). When the unthinkable becomes possible, our ability to question our beliefs is permanently compromised by creating a trap of self-induced certainty.

Deepening some aspects of strategic logic and its predictive functions requires considering the psychological

dimension. In Jean's words, "cognitive sciences should be placed at the service of both prediction and strategic decision" (8). Also, according to Jean, paraphrasing him, the cognitive sciences highlight the danger of factors such as beliefs and illusions for strategic prediction. They are filters that prevent an objective examination of reality by actually creating a self-deception. At this point, the risk is not only to sort information by accepting as true only those confirming our expectations (Mlodinow) but, even worse, generate a distorted perception of reality (Bloch). In short, it was a trap that was inspired

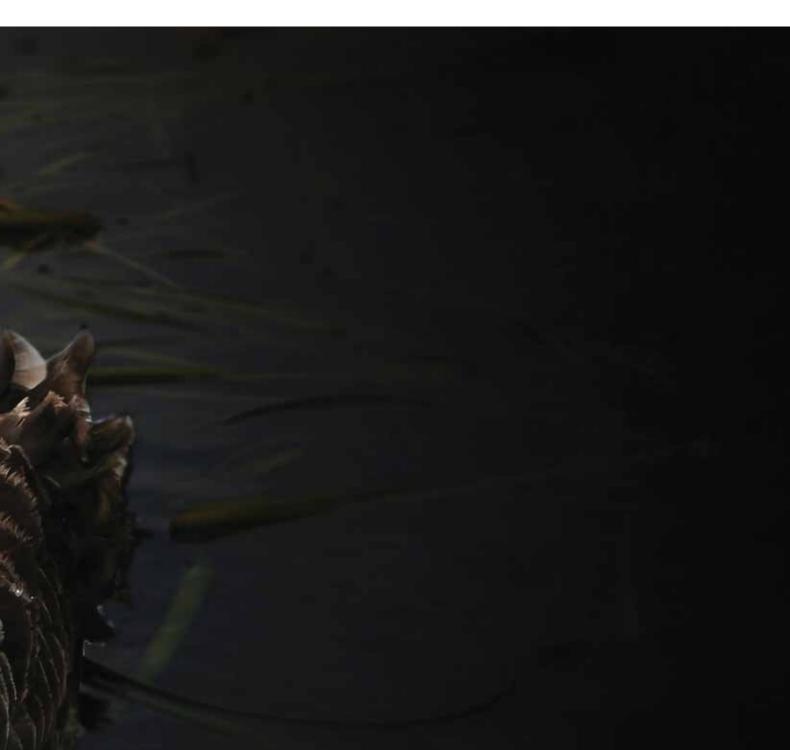


by the desire for certainty that leads to simplifying reality. Experiences and beliefs determine expectations which in turn set the cognitive filters of the unconscious system, risking that excessive rationalisation will discard a good idea or, as in this case, a plausible option such as the Russian attack (9). It was, therefore, a question of falling into the worst of traps, the one we built by ourselves, the trap of confirmation bias. Like the Gauls who opposed Caesar, we followed the general logic that "men willingly believe what they wish to be true" (10).

#### **NOTES**

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- (6) L. Mlodinow, Flexible thinking, Sperling & Kupfer, Milan 2018, p. 152 (Italian edition).
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- (8) C. Jean, Manual of strategic studies, Franco Angeli, Milan 2004, page 128. (9) Mlodinov, op. cit., p. 152.
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## 24 KILOMETRES

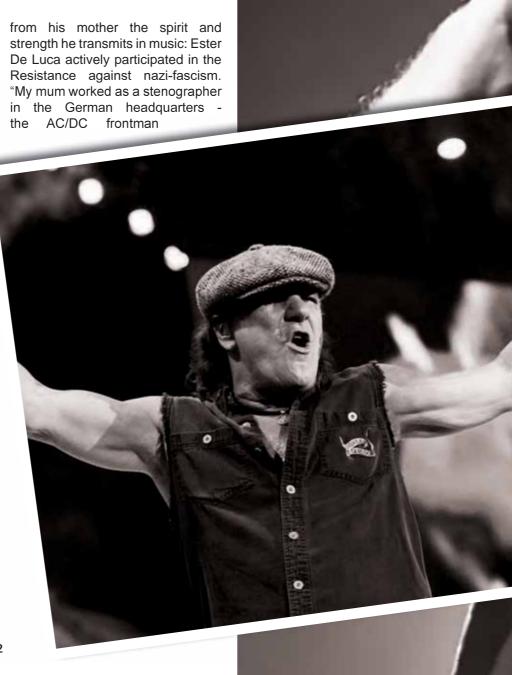
by Pierfrancesco Sampaolo

## The distance between the roots of Roger Waters and Brian Johnson

Brian Johnson and Roger Waters are two of the most important and well-known artists of all time in the world rock music scene. But perhaps not everyone knows that, in addition to being British, they have in common a past linked to our country, a very close root in central Italy and precisely in Lazio, at the time of the

Second World War.

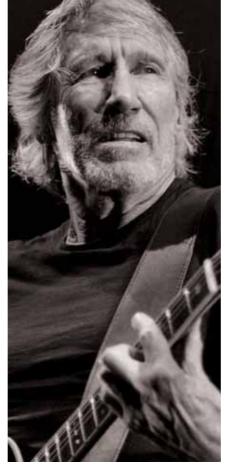
Brian Johnson is the acclaimed lead singer of the Australian band AC/DC, born in 1946 in Dunston, UK. He joined the band after Bon Scott died in 1980. Johnson's powerful and biting voice is an icon that has characterised all of the band's biggest hits and hundreds of concerts around the world until today. Brian says he got his voice from his father, Alan, Sergeant Major of the British Army, who served in Italy in 1944 with the Durham Light Infantry Regiment. Brian inherited his love for our country from his mother, Ester De Luca, Yes, because Ester De Luca. an Italian, met her future husband Alan in Rocca Di Papa during the Allies' advance after the landings in Sicily, Salerno and Anzio. Rocca di Papa is a mountain town in the Castelli Romani area, where Brian still has relatives and spends a holiday period at least once a year. Who knows if he didn't also inherit





revealed to Al Murray's microphones - and any time she would get any little bits of information, she would secretly pass them to the Allies. At her farm, underneath the chicken run, unbeknownst to her three brothers, all of them Blackshirts, there was a hideout where my mother hid the downed Allied pilots for a couple of days. Then, she helped them to reach Switzerland to get out of the country".

Roger Waters, born in 1943 in Great Bookham, near London, is one of the founders of the famed Pink Floyd, with whom he found space as bassist, producer and singer with Syd Barret (before) and David Gilmour (after). Although his artistic career is closely linked to the English band, from which he separated in 1983 after the release of the album The Final Cut, Roger Waters continued triumphantly as a soloist. released numerous albums and achieved worldwide success. Eric Fletcher Waters was the father of Roger, Second Lieutenant of the 8th Battalion of the British Royal Fusiliers (Company Z), who landed in Anzio in January 1944. He fell near Aprilia on the following 18 February, when Roger was just five months old, after a counterattack by German tanks on the Allied bridgehead. This loss profoundly marked the life of the artist, who has dedicated to his father songs like When The Tigers Broke Free. featured in Alan Parker's film "The Wall" (1982), named after the 1979 Pink Floyd album. Or like Free Four, where a passage reads, "You are the angel of death // And I am the dead man's son // And he was buried like a mole in a fox hole." The most ardent fans of Waters even believe that in all of his songs, there are references to his father. In addition, Roger's activism, demonstrated over the decades against all wars and forms of oppression in the world, seems to originate in his father's loss, snatched from him by the madness of war without even the comfort of receiving his remains. In a documentary on Wish You



Roger Waters.

Were Here, he said, "I wanna be in the trenches of life. I don't want to be at headquarters, I don't wanna be sitting in a hotel somewhere watching the world change, I want to change it. I wanna be engaged. Probably, I might say, in a way that my father would approve of". Eric's body was never found. For many years, all that remained of Roger's father was a plaque with his name written on it, in the Commonwealth War Cemetery of Cassino dedicated to all the British fallen in Italy, a cemetery that Roger has visited on many occasions without knowing exactly where the facts actually happened and where Eric's remains were. To fill, at least in part, the artist's void was the in-depth research of Harry Shindler, representative of the British Army Veterans Association. He managed to identify the precise place of Roger's father's death and the circumstances in which it occurred. Second Lieutenant Eric Fletcher Waters fell near Aprilia, but his body could have been destroyed or buried on the spot without reference. In 2014 Roger, accompanied by all his

family, visited those places and inaugurated a monument dedicated to his father in Aprilia. On February 18 of the same year, exactly seventy years after the death of Second Lieutenant Waters, Roger received honorary citizenship of Anzio, further welding the deep bond with our country.

A few kilometres apart in Lazio, in the same years and under the same circumstances, the roots of two great artists saw the light and made them what they have become, giving endless beauty and passion to the whole world. It is comforting to see that humanity somehow has been able to draw glimmers of hope from the ruins and the disaster of man's madness. The bitterness and hardship of war experienced by the fathers of these two artists, just 24



kilometres from each other, has become the hope that now walks on the legs of their sons.

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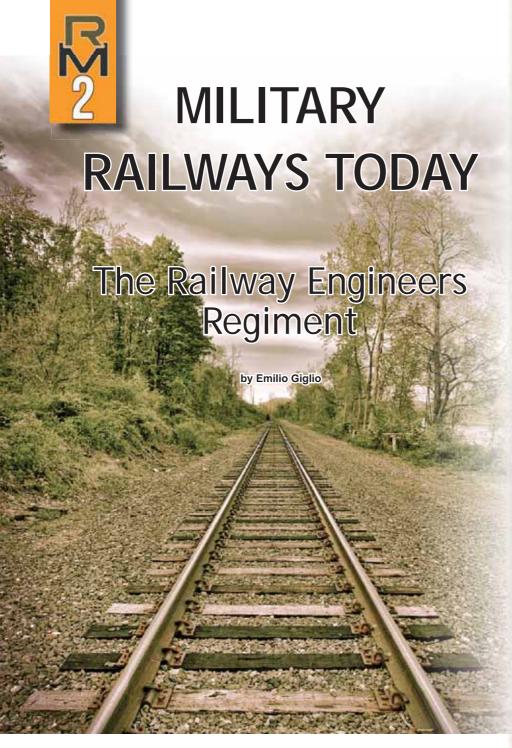
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Roger on the lap of his mother Mary, with father Eric and brother John.





Is it still relevant to move armies using the railways? The changing international geostrategic situation has made this type of transport increasingly advantageous. Moreover, the Italian Army is a leader among NATO member countries in this sector. Moreover, perhaps not everyone knows that the debut of the construction of military railway lines, aimed at supplying the battlefield, is entirely Italian: it dates back to 1855, during the Crimean War.

Although the "strategic railway" is built exclusively for military purposes, nowadays, strategic transport travels on railway lines, which are used daily for "civil" purposes. From the mid-1800s to the present day, railway transport has proved unbeatable in its ability to move heavy and bulky loads, vehicles and personnel over long distances, even at relatively high speeds and low costs. Over the decades, however, this type of use has progressively decreased with the progress of military technology and, particularly, the increase in the air threat. However, as confirmed by a recent study by the US Government Accountability Office, a section of the US Congress, rail transport has reconfirmed itself as one of the best





ways to move forces and materials to and from the homeland.

Since the end of the Cold War, over the years, NATO's centre of gravity has gradually shifted to the EAST. Rail traffic has become a no longer negligible element, assuming greater importance following the Russian invasion of Crimea in February 2014. In the Baltic area, Russia has a wellintegrated railway system and would be able to supply and move troops quickly in the event of a conflict, while the situation is evolving for the Alliance. The allies, until recently, would have had to take a very long time to bring reinforcements and supplies using aircraft or roads, while now the situation is changing, and work is being done to strengthen the

railway network. The awareness of this network's importance for the area, also highlighted by the summit held in Brussels in June 2021, has allowed the allocation of significant capital to strengthen the railway connection between the various countries. A plan has been developed to connect the Baltic states through the "Rail Baltica" line, a high-speed, double-track 870-kilometre-long electrified line (Warsaw-Tallinn-Helsinki), facilitating the sorting of troops and logistics coming from Germany and Poland NATO bases.

Rail and road transport integrate perfectly with other transport systems, allowing you to reach all places on the planet. Let's think, for example, of an equipment transfer from the USA to the Scandinavian Peninsula: the materials would arrive by plane, then they would be transported on the "Rail Baltica" railway (or road) from Riga airport to the port of Tallin, embarked here and subsequently reaching the final destination. The use of multiple types of carriers is now a consolidated practice. The "Rail Baltica" is a railway line about 870km long, which a single nation cannot manage. Even though Italy provides the Atlantic Alliance with about 50% of its railway capacity, the activity still requires collaboration the various between member countries. In this regard, the Italian Railway Engineers Regiment already promotes multinational activities with its English, Dutch, German and Spanish counterparts.





Every year the TURNOUT exercise takes place during which sections of tracks and switches are built and repaired, bridging is carried out to overcome interruptions in railway lines, aluminium thermal welding, and re-railing of derailed wagons, favouring the comparison between the different procedures of the various units, also promoting a valuable exchange of skills.

In the case of the actual use of the "Rail Baltica" during a military campaign, Italy would be the only nation within the Alliance able to manage the railway operation, the maintenance/repair of infrastructures, the assembly of

bridges and railway loading platforms, exclusively employing personnel and playing a key role within NATO, as has already happened in Bosnia and Kosovo. Thanks to a unit of specialists such as the Railway Engineers Regiment, our Army is a reference element of the entire Alliance in the specific sector and can load and unload materials autonomously, even to guarantee intermodal transport in impervious and not equipped areas. In addition, to deploy their units in the most disparate places on the globe, new cutting-edge materials are experimented with, such as a recently designed modular loading platform;

these can be mounted on any railway gauge and allows the movement from road to railway (and vice versa) of light wheeled vehicles, tracked vehicles, armoured vehicles, tanks and self-propelled artillery.

In the 21 st century, rail transport remains lively and, in alternating phases, is rediscovered and enhanced, so much so that it is considered the strategic transport capable of contributing significantly to the success of military campaigns. Many NATO countries have lost this capability, others have never developed it, and others would like to acquire it and look to Italy and its Army as a reference model.



#### HOUSE TO HOUSE

Operations in the urban environment and their continuous evolution

by Andrea Spada and Livio Cavallaro

From the siege of Troy to the use of drones, how have urban operations changed, and what developments will they have in the future? In the past, cities were mostly besieged during wars, and there was not always fighting inside them. Since the Second World War, things have changed, evolving until considering metropolises as battlefields. To learn a little more about it, let's interview Lt. Col. Livio Cavallaro, one of the leading experts on combat in this type of environment.

Considering what has happened and is happening in Ukraine, how has the concept of urban warfare or urban operations changed, or how will it necessarily have to change?

The concept of urban warfare is constantly evolving for two reasons: the unstoppable weapon technological development and the constant city

size increase (megacities). often concentrate in coastal areas and are characterised by complex infrastructures and heterogeneous populations. Ukraine has largely confirmed all the basic principles of urban operations already firmly consolidated during the Second World War, the only recent example of urban warfare in a "conventional" context until today. In the recent past, the urban fight was conducted against insurgents, which is very different from the current confrontation in Ukraine. Indeed, military think tanks have long been urging a "return" to training in urban operations, for which the Second World War offers countless lessons learned. To complete my answer, the real novelty for me is drones. Their use entails that surface units are more vulnerable, and consequently, the need to develop an adequate antidrone capability as soon as possible.





Urban fighting in Ukraine is regarded as a critical lesson and is being scrutinised internationally. In your opinion, will the problem of fighting in cities be one of the main challenges in the event of future conflicts?

Studvina the behaviour of the Ukrainian and Russian units in an urban environment in this conflict is vital to compare the capabilities and effects of the new weapon and surveillance systems with the doctrine and procedures in use, especially at a tactical level. Sometimes, an innovative system may not be perfectly integrated with the users' doctrine and procedures. In my opinion, the most evident aspect of this conflict is that the attackers often do not take into account the lessons learned during the Second World War. For example. despite their supremacy, the Russians often sacrifice their units first with saturation bombing (an aspect that makes a built-up area easier to defend) and then with the mass deployment of land units, according to their favourite principle: "quantity is quality". Furthermore, armoured vehicles often operate in urban centres without the close support of the infantry, and consequently, the losses are very high. In a hypothetical future conflict, those on the defensive will surely fight in urban areas due to their enormous advantages compared to a defence in open terrain. But be careful; sooner or later, even defenders will have to counterattack and need adequate capabilities.

Does the empirical rule that attack forces must outnumber the defenders 10 to 1 because defenders have the advantage of knowing the territory still hold?

No, it no longer holds (I'm being ironic!) Recent American studies bring this ratio from 13 to 15 to 1. The advantage of defenders is enormous, not only for knowledge of the terrain but for many reasons. The main advantages for defenders are protection offered by buildings, protection from areas not covered by enemy fire, control

of approaches, etc. The main disadvantages for the attackers consist in the fact that the firing sectors are limited, the deployment of support weapons and vehicles is limited, the combat episodes are fragmented, and finally, there is a lack of situational awareness.

It would be suicidal to send tanks or armoured vehicles into urban areas because they can hardly manoeuvre properly. In your opinion, is a highly motivated professional infantry sufficient to conquer the cities, or is some other component necessary?

Quite something else, it would be suicidal for infantry (both attacking and defending) not to have support from tanks or armoured vehicles. Although obvious limitations. mobile platforms offer indisputable advantages to those who use them wisely. For example, such platforms can support infantry from outside the urban area. They offer the ability to hit targets in the city's outskirts and the skill to isolate the urban area. As for support from inside this area. the platforms themselves provide firepower against targets inside buildings; vision capabilities with thermal cameras, improved mobility over rubble, transport of ammunition, equipment, water and wounded for the infantry; secured radio equipment for communications, psychological deterrence towards the enemy and psychological support for friendly troops. All other supports are also vital, starting with the Engineer Corps, which is essential to ensure mobility and counter mobility, not to mention artillery, signals and helicopters. Logistics deserves a separate mention, and its support in urban operations is crucial. Suffice it to say that ammunition expenditure in built-up areas is more than double the ammunition normally consumed in the open field.

In 2016-17, the Iraqi army needed eight months to defeat a few thousand Islamic State jihadists barricaded in Mosul. In your opinion, are there differences in



the conduct of urban operations in Europe compared to other geographical areas, or is fighting in the cities always difficult for any Army?

It is always very difficult for any army. The main factors that can make an attacking army gain momentum are several: the superiority of armament and training compared to the defender; a will to fight (motivation) superior to the defending army; the ability to hinder the defender's radio communications; ISTAR (Intelligence Surveillance Target Acquisition and Reconnaissance) capabilities to identify targets and their consistency, skills, etc. and the ability to carry out operations in underground environments and at night. A motto coined in the last century read: "night has no friends"; in other words, the night does not decisively favour either attacker or defender. Today, thanks to the capability offered by night vision goggles, this gap is partially overcome to the advantage of those who have such systems and are trained to use them in urban areas.



John Spencer, "Modern War Institute" of the American military academy at West Point, says that fighting in cities is a relatively modern phenomenon. Do you agree with this statement?

I personally know and respect John Spencer, yet his statement surprises me a little. I'll give you some examples, but they are the tip of an iceberg: let's think of Troy or Carthage. The Roman legions attacked the latter city dividing the sectors to the right and left of the decumanus maximus, with forward movements coordinated between the two sides of the road and an Overall Commander controlling the two wings. It may seem ordinary and intuitive, but this procedure is still valid today: infantry should avoid large roads, which are natural killing zones! Pietro Micca in Turin reminds you of anything? Or, the use of engineer Corps in disputed cities? Even Waterloo was 90% a field battle, but the decisive actions took place at Haye Sainte, the castle of Hougnmont (a large complex), and the village of Plancenoit. The Landsknechts in Rome, then Porta Pia, and I stop...

I agree with John that in modern times the phenomenon is increasing in frequency; indeed, for over a century, it has been inherent in the concept of total war.







## CULTURE AND MERITOCRACY AS OBSTACLES

#### The Savoy Army towards the First War of Independence

by Walter Barberis

In less than a year and a half, the Savoy army dispersed its fame and tradition matured over the centuries. At the end of August 1849, after the lacklustre episodes of Custoza and Novara, a defeat closed the first campaign for Italian independence. The tricolour with the House of Savov's coat of arms in the centre, a debutant in an international conflict, had to bow to the skilful General Radetzky's army. The combativeness, the discipline, the armament, the command, everything that had made the Piedmontese's reputation for "firmness" different from other Italians, was fading at the first significant engagement in the field amid many complaints in the era of the greatest European upheavals.

At the end of 1949, public and confidential

reports on the war's progress immediately appeared. Differences in views among the Army's leaders promptly emerged, leading to the search for personal extenuating circumstances when not to exchange mutual accusations.

A few years had to pass for the matter to cool down and for reasoning to begin. In 1855 events were re-read for the first time, including the opinions expressed in the heat of the moment. A distant observer, not yet famous for his association with Karl Marx, but already known as an expert on military matters - Friedrich Engels - noted that "their heavy batteries, carrying sixteen pounders rendered" the Sardinian field artillery "the heaviest field artillery of the continent" (1). Half a century after Napoleon's exploits, that was

a comment not without indications. Certainly more penetrating than the previous ones, intended to raise ideological and political questions about the hostility to the war of a "pro-Austrian reactionary party" nestled in the court of Turin. With a strong but basically consonant accent. Carlo Cattaneo had spoken of the obvious incapacities of a "parade army" and of "an anteroom officiality" (2). He seemed to echo General Eusebio Bava's statement, who had written that even the sappers' axes looked more like "simple parade objects, absolutely useless under the circumstances" (3). Of course, something must have happened in the highest cadres of the Piedmontese army if Carlo Alberto had entrusted the command to the Polish





general Wojciech Chrzanowski.

In 1855, the "retired major" Ferdinando Pinelli put together the pieces of the Piedmontese military mosaic, which had fallen apart (4). Meanwhile - he said - Carlo Alberto had not been up to the situation: presumptuous, uncertain, distrustful, "pale and haggard, he witnessed a battle with that same recollection with which he heard mass". He had not been a "king capable of personally leading his armies"; he was not "endowed with that courage which electrifies the masses"; he was "inept therefore in the field [...] hesitant and uncertain in the council". Going to war against a power like Austria with such a leader did not bode well.

But the officers, the non-commissioned officers, the soldiers? Pinelli wrote in no uncertain terms that, while Radetzky had kept the troops in exercise even in the most peaceful years, the Piedmontese had essentially settled down among the decorations of their uniforms, reaching the test of the field old, unprepared but opinionated. As often happens to unworthy heirs, that corps of officers had cloaked themselves in the martiality of their ancestors but which was by now usurped fame. The men who had waged war between the eighteenth and nineteenth centuries were no longer there; if there were still any, they could no longer mount horses leading the troops. The Staff Officers were - and this is the real problem - "lacking in strategic and, I would almost say, tactical notions": they had not studied the terrain, did not know their men and even ignored the army organisation. They shunned fatigue,

detested privations, and thought only of personal care. They had no knowledge of the use of weapons. They had believed in a career entirely made away from the battlefields and now baulked at rushing into action. non-commissioned officers were "few, ignorant, some illiterate, and if not old, worn out by the use of alcoholic beverages and incapable of that sense of dignity which makes any military rank appreciated". The cavalry was not significantly different from the infantry: "no education in officers, little in men, no knowledge of service...". And finally, revealing, Pinelli wrote: "The sappers of the Engineers were good, but insufficient in number [...] The artillery was not numerous enough, but excellent both in material and personnel: brave, educated, young, full of honour and desire to distinguish themselves: likewise, the non-commissioned officers and elite gunners above all the Army...".

In short, here are the results of a profound hostility that the most conservative Piedmontese aristocracy had nurtured towards "cultured" arms in the second half of the eighteenth century: that is, towards those men who, not being noble by birth, had to rise through their studies. These men had to work to emerge since they did not have lineages that generously bestowed positions of command, only that one knew how to fence and mount a horse as befitted a courtier. As if centuries hadn't passed since the mythical art of war gained fame, sword in hand and tournament lances, as if the knights of yore could continue to instil epos in the new cavalry officers. Since the foundation of the Theoretical and

Practical Schools of Artillery in 1739, reactions of great contempt had taken place at Turin's court and in the Army's ranks towards those technicians specialised in the ars mechanica, so distant from the aptitudes and prospects of a gentleman in uniform. At first, the aristocracy opposed the military status of engineers, architects, chemists, mathematicians, hydraulic engineers, and physicists. They were and had to remain in an auxiliary, submissive, bourgeois, if not workingclass position. Secondly, it had been expected for decades that the guns remained nailed to the fortresses: how could they have dared to take the field to contest the noble gesture of the swordsman? Emanuele Filiberto at the end of the sixteenth century, then Carlo Emanuele I, and finally Vittorio Amedeo II, not to mention, in Europe, Carl Gustaf King of Sweden, or Frederick Il King of Prussia up to Napoleon, had been much more advanced in their views. But in Piedmont, in 1751, Casimiro Gabaleone di Salmour presented a project for the construction of regimental guns, arguing that "le service que peut rendre à une armée une nombreuse artillerie, lestement équipée, et servie avec vivacité, est tellement connu, qu'il seroit superflu en parler" (5). Therefore, this project was neither pioneering nor daring, and, nevertheless, it was rejected: resubmitted in 1855: it was rejected again (6). In 1775, the Piedmontese artillery was divided into the Royal Artillery Corps and the Battalion Artillery Corps. However, this branch had no relevance in the structure of the army. Field artillery existed on paper but was far from finding legitimacy and



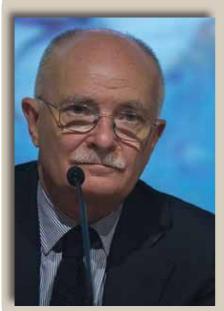


employment.

The wage of war required at least notions of ballistics, architecture, and engineering, integrated with other knowledge of military techniques. This idea could not penetrate the Army's top ranks. A few positive aristocrats of more cosmopolitan backgrounds tried to illuminate a considerably narrow-minded

environment with detailed reflections (7). When the corps of light troops intended to control the Alpine borders was formed, some compulsory courses became necessary to give the Officers a smattering of elementary mathematics, fortification, and topography. On that occasion, at the end of the 1770s, the Commendatore de Châtillon had

proposed to create a military library and short compulsory courses for all officers. All the nobles firmly opposed it. They "feared that when the experience made on the officers of the light troops had shown the study's usefulness, they too would be forced to do something contrary to their inclinations" (8). In the eyes of a young man of noble ascendancy, the



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study was not only incompatible with social rank but inserted elements of meritocracy that disrupted the social hierarchy. It was almost obvious that a cultured officer could be considered better than one "simply" born noble.

Therefore, the artillerymen and engineers cultivated studies of a continental level in their Theoretical-Practical Schools; they were the Turin Academy of Sciences founders in 1783. Although many of their inventions were of great scientific importance, those men and their cultured research remained on the margins of the military organisation. More often, they were successful by transferring their machines to the textile and mechanical industry field. Some of them became world-famous characters – Lagrange, to name one - but the nobles who occupied the command posts of the Piedmontese Army pretended not to notice.

When - and not surprisingly - the Napoleonic armies occupied Piedmont, the Army was dissolved, except for the artillerymen and engineers, who were all integrated - due to their excellent technical

and military qualities - into the French army. In those years, the officers trained at that school would remain the only ones with sufficient knowledge to enter the field in 1848. But many were now out of the game or in irrelevant career and function positions. Savoy Piedmont, rich in history and tradition, presented itself at the appointment with the first War for the Independence of Italy in these conditions. And so it was defeated.

#### **NOTES**

- (1) See F. Engels, The armies of Europe, in "Putnam's Monthly", no. XXXVI, December 1855 (now in K.Marx and F. Engels, Sul Risorgimento italiano, edited by E. Ragionieri, Rome 1979, pp 86, 93, 97, 132-33.)
- (2) C. Cattaneo, Dell'insurrezione di Milano nel 1848 e della successiva guerra, in Il 1848 in Italia. Scritti 1848-1851, edited by D. Castelnuovo Frigessi, Torino 1972, pp. 151-74.
- (3) Relazione delle operazioni militari dirette dal generale Bava comandante

- il primo Corpo d'Armata in Lombardia nel 1848, Torino 1848, p. 54.
- (4) F. A. Pinelli, Storia militare del Piemonte in continuazione di quella del Saluzzo, cioè dalla pace d'Aquisgrana sino ai dì nostri, Torino 1855, vol. III, p. 196 ff.
- (5) "the service that a large artillery, lightly equipped and served with vivacity, can render to an army is so well known that it would be superfluous to speak of it" Progetto del Cavaliere di Salmour per la costruzione di cannoni di reggimento, 16 April 1751, in the Archivio di Sato Turin (AST), section I, Military Matters, General Artillery Office, m. 2 of add., n. 15.
- (6) Sentimento del Cavaliere di Salmour sovra il progetto già presentato a S.M. nel 1751, per lo stabilimento di cannoni di reggimento, 19 settembre 1755, ibid., n. 18.
- (7) For example the Marquis Argentero di Bersezio: Réflexions sur le préjugés militaires par le marquis de Brézé adjutant général de cavalerie au service du Roi de Sardaigne, à Turin, chez les frères Reycends, MDCCLXXIX
- (8) Cfr. Pinelli, Storia militare del Piemonte cit., vol. I, pp. 40-41.



# WHEN THE PAST TAKES YOU INTO THE FUTURE

The Tethered Gas Balloon

by Elio Cimiraglia

#### **TECHNICAL FEATURES**

The VA consists of a ground part and an air part. The first part consists of an ISO 20-type platform, installed on board a roll-off platform truck already used by the 'Folgore' paratroopers' Brigade, which houses an electric generator capable of guaranteeing autonomous power supply to the system and a winch capable of releasing/retracting a steel cable up to a height of 400 metres at a maximum ascent and descent speed of 60 m/min.

The second part, the so-called air, consists of:

- an aerostat (inflated with helium of 5,600 m3, dim. L 34 m x H 22 m), connected by a steel cable to the winch and able to always orient itself against the wind thanks to its aerodynamic shape, which in turn is equipped with 3 stabilising tail fins (two tail fins, the vertical one of which is equipped with a drift) that can, if necessary, be deflated/reinflated by the amount of air required to facilitate manoeuvring during stowage inside the hangar;
- a metal cabin, so-called "gondola", with a rectangular layout (dim. L 5.0 m x W 1.8 m x H 2.2 m), capable of carrying up to a maximum of 16 passengers, connected to the aerostat in such a way that the entry/exit opening is always positioned downwind with respect to the point where the aerostat is hooked up to the winch. The intended limitations of use of the system include a wind speed below 30 knots (55 km/h or 15.5 m/s).

Who would have thought that the old, picturesque airships and hot air balloons could inspire the most modern training techniques? Well, so it is. The "Tethered Gas Balloon for Parachutists Training (TGB - PT)", known in Italian as Aerostato Vincolato (AV), has been available to Brigade "Folgore" since 15 June. It is meant to complement the Air Force and the Army conventional aircraft in static-line air launch training activities.

The AV is a unique system in terms of size and load capacity. Although the idea is not new - the Belgian Army's Parachuting Training Centre in Schaffen has been using a similar but smaller system since the 1970s. The new system is marketed by ASIA Equipaggiamenti of Anzio (RM) and produced by Lindstrand Technologies Ltd, a sector-leading English company. Not surprisingly, its owner, engineer Per Lindstrand, is known worldwide for a long series of records connected to flights and attempts to circumnavigate the earth with "balloons".

The operating principle is the same as that of old airships and hot air balloons: it floats thanks to the lift of helium (which is lighter than air and is not flammable) and, as explained by Archimedes' principle, is buoyed

up according to the volume of the displaced air.

The system is equipped with emergency procedures/systems which protect the crew in case of breakdown/ malfunction. Although the airship is not manoeuvrable, it can, in extreme cases, lose altitude by discharging helium to reduce the lift (the gas loss reduces the pressure of the balloon and increases wind resistance).

The AV is classified as a "military aircraft" as it is a "machine used for transporting men and equipment in the air, for military purposes". Consequently, it went through a long certification process conducted by the European Union Aviation Safety Agency and by the Directorate of Aeronautical Armaments and Airworthiness (DAAA) to guarantee its airworthiness and safety (also for the population overflown).

The system is an absolute novelty in the national military aeronautical landscape. A multidisciplinary and joint approach has been adopted. A package of ad hoc rules/directives has allowed the "Folgore" Parachute Brigade personnel, already possessing a military parachuting certification, to develop skills to fly and maintain the AV. For this purpose, authorities

established the qualifications of Tethered Aerostat Military Operator (OMAV) and the specially designed Military Aeronautical Maintenance License for

Tethered Aerostats.

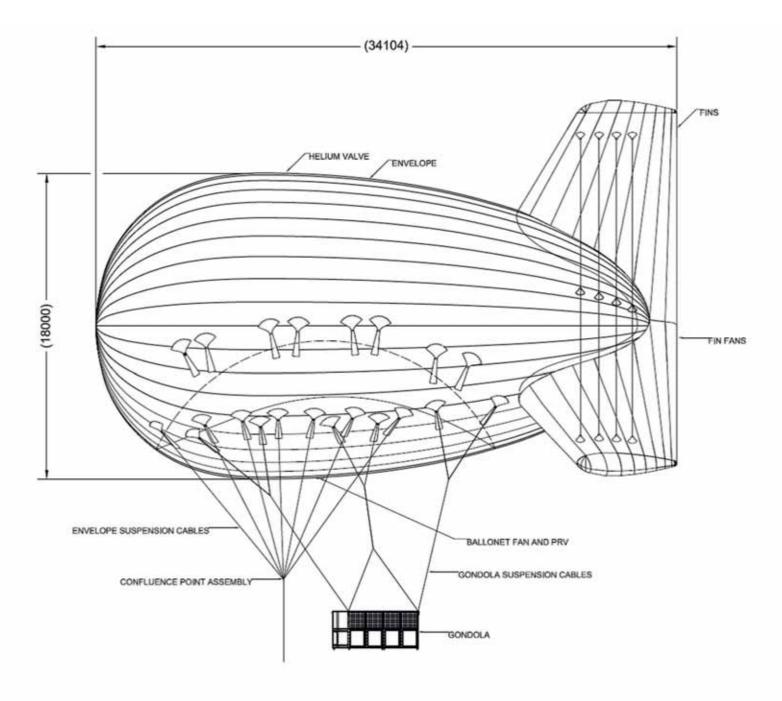
Lindstrand Technologies Ltd provided the initial staff training and will maintain its responsibility of following the system evolution throughout its operational life as a "System Responsible Company", also ensuring logistic support for the next three years.

During air training, the basket accommodates:

- a qualified Tethered Aerostat Military Operator who also performs the function of "Aircraft Captain" and can activate emergency procedures;
- the Launch Director who carries out coordination functions on board for the paratroopers' jump procedures;
- paratroopers in training, up to a maximum of 12.

Ground operators include:

- a winch operator, who ensures the ascent/descent of the AV at the end of each launch session;
- the vehicle's driver, who ensures transport from the hangar to the Launch Zone according to storage



procedures;

 the AV platoon commander, who performs the function of supervisor and coordinator of the activity.

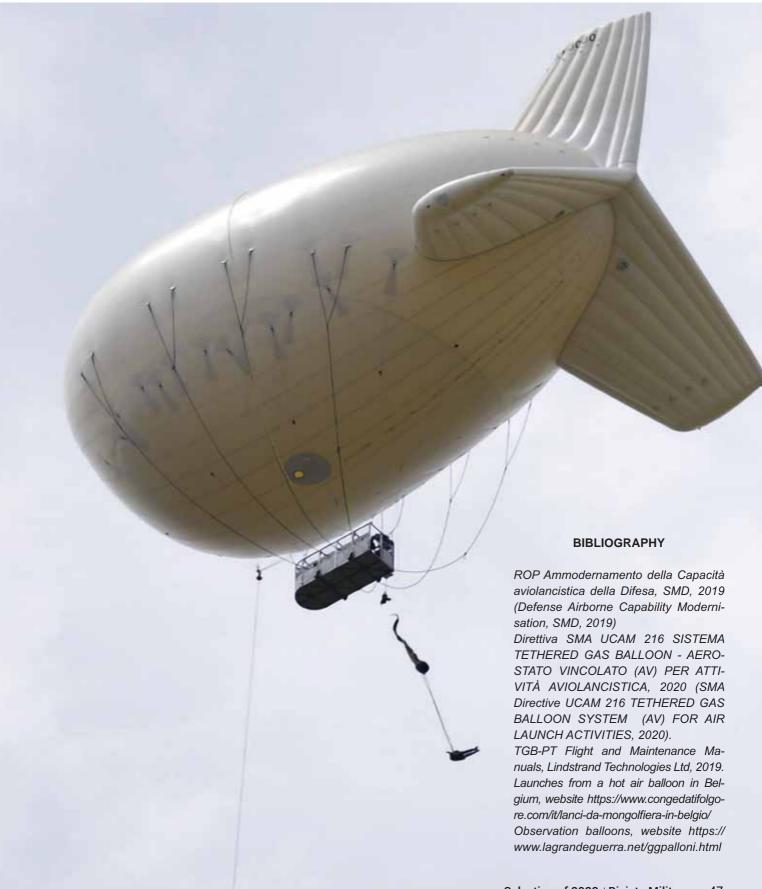
To carry out the air launch activity from the AV, the Army has acquired new dorsal and ventral parachutes with an automatic activation device. The French SAFRAN Aerosystems is the producer of this new system, known as EPC (Ensemble de Parachutage du Combattant), which best suits the new launch method (opening and deploying at the so-called zero speed). This new system, already in use in other European countries, offers the possibility of performing jumps at lower altitudes, reducing the parachutist's vulnerability in the air while allowing

a greater load capacity and a normal speed, increasing operator's safety. To accommodate the new aircraft and protect it from bad weather, the Army has built a new and imposing structure (L 53 m, W 48 m and H 38.5 m) in Capannori (province of Lucca), near Tassignano. The structure has a modern design, with two large electric front doors with vertical "eyelid" openings, allowing the AV to enter and exit. John Cage, an American composer and theorist of the 1900s, said: "It is not necessary to give up the past to enter the future", and this is just one of those cases. The past of the First World War, old tethered observation balloons is back for a new phase of Italian military parachuting. The "Folgore" parachute brigade, specifically the Parachuting Training Centre (CAPAR), will be the pivot of the education/training of all the air troops of the Army, the other Services, and the State Armed Corps. The AV complements the current airlaunch "platforms", a training gym that optimises training times and increases air-launch activities at a meagre cost. Studies and evaluations estimate that it will be able to perform 15,000 launches with the static line per year. All this will help define a single and harmonious joint training path increasing safety in the air-launch sector, as the Chief of the Defence Staff hoped for in 2019. Furthermore, this new system has lower emissions. It will help significantly reduce environmental and acoustic pollution as part of a broader environment protection project, to which the Army is very attentive.

The AV project is also an opportunity

for the Army and the Defence to operate in support of the community. In fact, a fair compromise has been reached between the need to train and the expectations of the territory. We

may even elicit a smile and arouse the amazement of Tassignano's residents, who will see it work for the first time.





## WAR MISTAKES (IN MOVIES)

#### Movies without mistakes do not exist

by Fabrizio Luperto

Undeniably, there are no films without mistakes, but it is important to know how to make distinctions.

Blunders in big-budget productions, with a lot of dedicated staff on the set, are unforgivable. Mistakes in small productions or B-movies of the 60s and 70s, where producers had to make a virtue of necessity, can be looked at benevolently, perhaps, even with a smile. In this context, the metal dummy that crashes on the rocks in Lucio Fulci's "Don't Torture a Duckling " is unforgettable, as are the barrels, obviously empty and made of very light material, which kill Mario Brega in Sergio Leone's "A Fistful of Dollars".

There can be different types of mistakes; technical (like the operators' shadows on the walls), anachronistic (a car or a TV program produced after the period when the plot takes place), or production (different hairstyles in two sequential scenes).

Of course, with new technologies, many mistakes are eliminated in post-production.

When not very obvious, mistakes escape detection by average viewers but not the trained eye of film critics and enthusiasts who know where to look.

Some of the most astonishing examples are found in one of the most successful films of recent years, "Gladiator" by Ridley Scott, a winner of 5 Academy Awards, shot with an exceptional cast and a very high budget.

Well, in "Gladiator", there are many

mistakes: when the story takes place in Africa, there appears a coral snake that lives in the southern states of the USA and Mexico, regions still unknown at the time of the events. Moreover, in the African desert, coral snakes could hardly stay alive. The film also features a crossbow; a weapon invented in the Middle Ages. There are plenty of historical errors in the film, and one stands out above all: they mention the Colosseum, but at the time of the events, the structure was called the Flavian Amphitheatre; the term Colosseum came into use a very long time later.

Even the symbolic phrase of the film is anachronistic, "At my signal, unleash hell", given that the concept of hell in the religion of pre-Christian Rome was unknown. The director confirms this when he pictures the afterlife and does it by imagining the Elysian Fields, not paradise.

Below, we will enjoy pointing out the most obvious errors in war movies that are among the best known to the public.

"Green Berets" (John Wayne, USA 1968), a fully-fledged propaganda film (on the Vietnam War), starring and directed by John Wayne. In this film, we often see pine trees, vegetation not exactly consistent with the Vietnamese setting. In fact, the film was shot in Georgia.

"Miracle in Sant'Anna" (Spike Lee, USA 2008), a film that tells the story

of African American soldiers and the relationship of one of them with a child who survived the massacre of Sant'Anna di Stazzema:

- the head of the marble statue, which is supposed to be very heavy, has an embarrassing weight. The American soldier carries it hanging like an ordinary keychain throughout the film.
- 2. During the crossing of the Serchio by American troops, the vegetation is far from that of the Lucca plain.

"Black hawk down" (Ridley Scott, USA 2001), the acclaimed director of "Gladiator" once again does not give up on mistakes:

- in the scene where the first ranger is killed, the Somali who kills him holds a rifle. The rifle is different when he comes out of the wall to fire again.
- In the scenes shot in the American base, the sun is often low on the horizon as if it was sunset or late afternoon, while in the scenes set in Mogadishu, which take place at the same time, the sun is high as if it was morning.
- When a Somali man prays on the beach, he sees the sun setting over the sea. Given the position of Mogadishu, the sun should rise from the Indian Ocean (this is because the film is shot in Morocco).

"The Hunter" (Michael Cimino, USA 1978). Even Cimino's masterpiece

is not without mistakes:

- 1. during a party, De Niro watches Meryl Streep dance while she drinks almost an entire glass of beer, but after the camera cut, the glass is full.
- 2. Russian roulette in the prison camp: in the frame with De Niro, it is daytime, while in the one with the Vietnamese, it is dark.

"Saving Private Ryan" (Steven Spielberg, USA 1998). The Normandy landing as told by Spielberg:

- 1. during the disembarkation, in particular when Tom Hanks takes off his helmet, the water level changes at each camera cut.
- 2. Eight soldiers are looking for Ryan. One is killed, but in the next scene, there are still 8 of them.

"Paths of Glory" (Stanley Kubrick, USA 1957). Even a perfectionist like master Kubrick had to surrender to a tiny mistake: although the regiment commanded by Colonel Dax is the 701st, on the uniforms of some soldiers, we read 710. A small mistake by costume designers and tailors.

"Operation Valkyrie" (Bryan Singer, USA 2008). The film narrates the preparations for Hitler's assassination attempt by German officers. During the scene of the attempted coup, many officers wear coats, but the action takes place on July 20, in the middle of summer.

"Apocalypse Now" (Francis Ford Coppola, USA 1979). The director of Lucan origins adapts for the cinema "Heart of Darkness" by Joseph Conrad. Palme d'Or at the Cannes Film Festival:

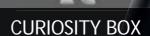
- 1. when Captain Willard argues for fuel, the cigarette he smokes appears and disappears.
- 2. In the scene on the illuminated bridge, when the boat sets off again, it is preceded by a water trail: the trail left by the boat from where the filming takes place.

"Mediterranean" (Gabriele Salvatores, ITA 1991). At the end of the Greek campaign, some Italian soldiers arrive on a small Aegean island. Academy Award for Best Foreign Film:

 the soldiers arrive on the island aboard small boats and make the last stretch on foot in the water. Once on the shore, their trousers are dry.

- 2. In the final scenes, when they cut the aubergines, the one Abatantuono is holding changes shape with each shot.
- The film is set in the period 1941

   1944, but the soldiers sing
   "the song of the Italians", which became the national anthem (provisional) only in October 1946.



"Quel maledetto treno blindato" (lit. 'That damned armoured train'), a 1978 war film directed by Enzo G. Castellari, was distributed abroad with the title "Inglorious Bastards". It is precisely this very Italian film that Quentin Tarantino was inspired by for his 2009 masterpiece. In fact, if you pay attention, you will notice that the original title of Tarantino's film is "Inglourious Basterds", an intentional mistake precisely made because he could not give his film a title already used for another one.

Tarantino also pays homage to Enzo G. Castellari and Italian B-movies in other ways. In fact, Castellari participated in the film with a small cameo, which was cut during editing. In the scene of the premiere at the cinema, known as the "scene of the Italians", Brad Pitt and associates, posing as Italians, present themselves with obviously false names, one of which is Antonio Margheriti. Antonio Margheriti, also known by his alias Anthony M. Dawson, was one of the most popular directors of Italian genre movies of the 60s. He was mostly known for being the proponent of science fiction films made in Italy.

Furthermore, the English general's name is Ed Fenech, a clear homage to Edwige Fenech, a leading actress in many Italian B-Movies.



# BETWEEN MANIPULATION AND ECHO CHAMBERS

The Post-truth

by Antonio Pandolfi

You just won \$25,000 by knowing absolutely nothing

All generations need to take care of their discernment skills and know an insidious adversary: the post-truth, which hides in comforting forms of illusory thought. Often, manipulation and rejection of science hide under a layer of an apparent search for profound meanings. All is amplified within echo chambers, where everyone can rediscover a sense of completeness induced by the illusion of living a reality perfectly in line with one's expectations.

Netflix recently introduced a format similar to the well-known "Who Wants to Be a Millionaire". The viewer is led by the hand to the extreme edge of the post-truth concept, demonstrating how pervasive and accepted it has become in society.

Unlike what happened in classic quizzes, in this broadcast, it is unnecessary to know the answer to receive a reward. The contestant can be awarded a significant sum of money against one of two options: choosing the correct answer or convincing a jury of his peers on the authenticity of the incorrect answer.

So, even in the face of a clear mistake, anyone can try to come up

with a credible narrative, combined with some suggestive or moving anecdote tailored to the audience, to bring home more than just a positive result.

Truth solidity has already been challenged since 2016 when the Oxford Dictionaries reported "post-truth" as the word of the year. This word can be translated into Italian as "post-verità" (literally "post-truth") or, according to the Accademia della Crusca, "oltre la verità (literally "beyond the truth"), understood not in a chronological sense, but with the desire to underline "the overcoming of the truth to the point of determining its loss of importance."

Overall, truth deformation, the substitution of facts with feelings, and the fluidity of critical thinking dissolving into fake news move from the audiences targeted by propaganda to the dimension of entertainment, undermining the very concept of objective reality even more.

Recent news events demonstrate how, from 2016 to today, the truth has undergone a downward spiral. In previous years conspiracies and speculations were limited to the



most striking facts, probably to provide a reassuring feeling of control over terrifying and unpredictable events. Today even the most trivial news is the subject of discussion on the merits of the event itself, up to the point of denying its existence.

On the other hand, this involution in the approach to reality perception is firmly linked to language. Since the 19th century, many philosophical currents have wondered about the relationship between language and reality. These theories studied the influence that language and reality exert on each other, considering that the first is the way to represent the second. Therefore, to create neologisms that go beyond truth involves an ontological revolution with innumerable consequences in the short and long term.

The situation worsens due to the

phenomenon of echo chambers. This concept refers to the fact that digital and immediate information often does not guarantee pluralism. Still, on the contrary, it isolates everyone in a "virtual" enclosure where what is appreciated, though not necessarily real, is constantly reintroduced. This constant repetition creates the false belief that multiple sources corroborate the truthfulness of this piece of information.

Consequently, one of the effects of this paradigm shift is on decision-making. Choosing an option, faced with an ever-changing situation, first of all, requires the ability to obtain the broadest possible understanding of the context, in its facts and in the relationships that bind them.

It is, therefore, a question of being

able to identify the truth in a given moment, of being able to culturally and psychologically accept collected, observed or detected elements. One must resist the irrepressible instinct of proposing an alternative vision of what is evident to constitute a scientific basis on which to exercise the artistic component of command by accepting, if necessary, a reality that goes against what was hoped, expected or planned.

Faced with a society which rewards discussion, encouraging the supremacy of sentiment over truth, a constant effort of critical thinking is needed. Critical thinking is consequently a fundamental characteristic for all those who may be called to analyse a situation and make decisions for whatever reason and in any context.





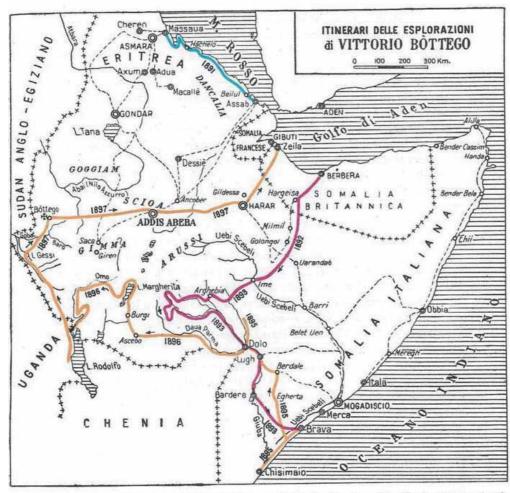
### VITTORIO BOTTEGO, THE EXPLORER

by Niccolò Lucarelli

At the dawn of the Italian colonial adventure, between the 1880s and 1890s, several military explorers contributed to the knowledge of those new lands. Among these, Vittorio Bottego was born in San Lazzaro Parmense in 1860 in a family of wealthy landowners. He had a restless character with a taste for adventure, perhaps also strengthened by reading Homer, Dante, Virgil and Ariosto. A military career seemed to him the most suitable to travel the world. Captain of Artillery at the Pinerolo riding school, in 1887, he asked to leave for Africa. He arrived in Massaua in November 1887, employed in General Alessandro Asinari di San Marzano's expeditionary corps a few months after the tragic battle of Dogali, which cost the lives of hundreds of Italian soldiers. Right under the orders of one of the survivors, Captain Micheli, he took up service as a colonial battery officer, a position he held until December 1890. Living in close contact with the natives, he carefully studied their culture and mentality. However, he was interested not only in the anthropological side of Africa; landscapes so different from those of the Po plain fascinated him. When he was off duty, he would take long horse rides to study the local flora and fauna. Over the months, he put together a vast collection of vertebrates and invertebrates, which he sent to the Museum of Natural History in his native Parma, together with numerous ethnographic items such as spears, arrows, and Eritrean masks (1). In 1890, Governor General Gandalfi commissioned him to draft a

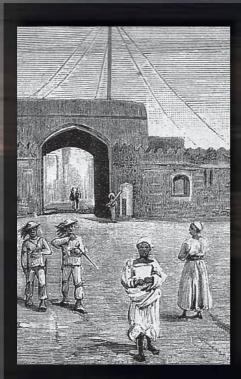
In 1890, Governor General Gandolfi commissioned him to draft a geographical mission project in the Juba region. Baldissera, commander in chief in Eritrea since 1888 and the Foreign Ministry approved the project, but it was not carried out due to the collapse of the Crispi Government. However, fate gave a second chance to Bottego: Marquis Giacomo Doria, Senator and President of the Royal Italian Geographic

Society, asked him to organise the exploration of the coast between Massawa and Assab, almost unknown due to its dangerousness. That stretch of coast bordered the lands of hostile Eritrean tribes, which had already massacred the Munzinger, Bianchi and Giulietti expeditions. The convoy left on 1 May 1891. After just two weeks and having touched Hache'o, the order arrived to return due to the risk of attacks by local armed gangs. Bottego reached Assab on 25 May. Despite its brevity, the mission was useful because it allowed Bottego to draw a map of that coast and to list new species of mammals and birds. The report "In the land of Danakil: travel journal" (2) increased Bottego's reputation as an explorer to the point that Marquis Doria decided to follow up on the old project to explore the middle and lower reaches of the Juba, which the Italian-British Convention established as the limit between the spheres of



Itinerari delle tre esplorazioni di Vittorio Bottego (da Enrico De Agostini, Pionieri italiani nel mondo, Roma, Editrice N.E.M.I., 1959).

Exploration itineraries.



Bersaglieri at Massaua in a late 19th century engraving.

influence of London and Rome. On 30 September 1892, the new expedition set out from Berbera. For 11 months and 22 days, it crossed the Agaden's land, avoided the warlike Arussi, who lived on the mountains of central-southern Ethiopia, explored the upper course of the Uebi, the middle course of the Juba and its tributaries, passed through the city of Lugh and finally ended in Brava on 8 September 1893. The expedition achieved important results. They found out that the Juba was not the continuation of the Omo but originated from the confluence of the Daua Parma with the Ganale Doria (Bottego added the names of both his hometown and his patron to the rivers), and they drew those valleys' topography. The expedition's report was released in 1895 by Loescher, with the title "The explored Juba". The expedition also had hu-

manitarian merits: when it reached Lugh in August 1893, it found Emilio dal Senio and the German Wilhelm Borchardt, who had been members of Prince Ruspoli's expedition and had stopped there due to health problems, soon becoming de facto prisoners of the local Sultan. They would almost certainly have died of starvation if Bottego had not negotiated their release. The Italian Geographical Society awarded him a Gold Medal upon his return to Italy. The "sickness for Africa" had taken hold of the young officer by then. In May 1894, he planned a new mission along the course of the Omo and in the region west of Lake Rodolfo, below the 6th parallel, to expand the Italian zone of influence. In fact, article 2 of the Convention mentioned above allowed the limit of the two zones of influence to be modified "subject to agreement

and as a result of further explorations that took account of the hydrographic and orographic conditions of the country". The expedition set out on 12 October 1895 with some Italian officers, 270 local porters, 120 camels and 30 mules. In November, on the way to Lugh, they came into contact with the Rahanuin Gassar-Gudda, a Somali population settled on the right bank of the Juba; in an ambush, the bugler was seriously injured and lost his left hand. Having reached Lugh, where he founded a commercial station on behalf of the Italian government, Bottego ordered the march to resume on 27 December. The convoy entered an arid territory, had to ration water and suffered from thirst; a situation that stoked tensions, so much so that fights were frequent among porters and several dozen of them deserted. Having gone up the Ganana and the Daua and passed the village of Burgi, on 1 May 1896, the expedition advanced towards the Scioa and entered the Omo basin, a region rich in water and with a mild

climate, fertile and populated, where the game was abundant. Here, on 12 May, Bottego discovered a lake, which he named after Queen Margherita (today's Lake Abaya).

At the end of June, having crossed the territory of the Docò and Oromo tribes, Bottego continued towards Kaffa (3). On 29 July, he reached the course of the Omo, then followed it as far as its mouth in Lake Rodolfo. After a long stop for the necessary geographical surveys, in November, he headed northwest and touched the banks of the Sobat, the southernmost of the great eastern tributaries of the Nile. Bottego could draw a detailed map of western Ethiopia's orographic system and show its extent.

A tragic epilogue marked his adventure. On his way back, after passing the Uollegà in March 1897, he was preparing to cross the Amhara territory, for which it was necessary to obtain a permit from the Degiac Giotè (an Ethiopian dignitary). Bottego sent him an official letter. At first, the permission seemed gran-

ted, as demonstrated by the good reception in the village of Salò. But the Degiac's assurances soon turned out to be false: passed Jellem, the Italian column fell into an ambush of robbers. Bottego was killed by an Abyssinian who, crawling through the scrub, managed to shoot him from close range. Bottego's companions were made prisoners, managed to reach the northern Somali coast only in July, and from there, they returned to Italy. The report of the expedition, written by Infantry 2nd Lieutenant Carlo Citerni and Navy 2nd Lieutenant Lamberto Vannutelli, was published by Hoepli in 1899 under the title "L'Omo; voyage of exploration in East Africa".

Although posthumously, the Italian Geographical Society awarded Bottego a second Gold Medal. On the tenth anniversary of his death, the city of Parma commissioned the sculptor Ettore Ximenes the monument that still dominates the square in front of the railway station and passes on the memory of this brave explorer.



Vittorio Bottego in 1889. Bartolomeo Baroni and Enea Gardelli photographic studio, Parma.

#### NOTES

- (1) Still to this day, the Sala Bottego houses the entire ethnographic and zoological collection he collected between 1889 and 1891
- (2) Published in the Bulletin of the Royal Italian Geographical Society, issues 5 and 6, G. Civelli, Rome, 1892.)
- (3) An ancient kingdom formed around 1390, extending between the Gojeb river of the Gimira people, in the southern area of the Ethiopian plateau, which was very fertile and partly covered with forests. It reached its peak between the 1600s and 1800s and was annexed to Ethiopia in 1897.



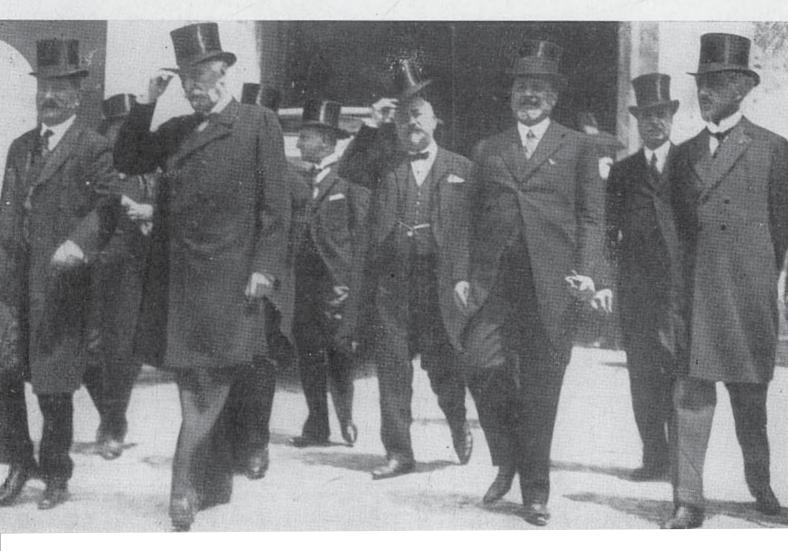
The stamp issued by the Italian Republic in 1960 for the centenary of Vittorio Bottego's birth..



# A CHILD OF THE COUNTRY, AN EXAMPLE TO FOLLOW MARCELLO SOLERI

by Giuseppe Cacciaguerra

Political liberty is a vain shine unless accompanied by freedom from want and hunger and social liberty.



At a ceremony in 1925 (Soleri first on the right, Giolitti second on the left).

"Carneades! Who was he?" Don Abbondio's famous question could, reluctantly but realistically, also concern the figure of Marcello Soleri. What's more, it would not be only a simple country curate who asked himself the question, but entire generations of his fellow countrymen, much more educated than him. Nowadays, the name of Soleri is undeservedly hidden in the fog of oblivion. He was a great statesman in the true meaning of the word and a heroic fighter in the Great War. He excelled in many sectors of politics, from the economy to defence, always at the country's service. Moreover, he never came to terms with fascism; on the contrary, he was a proud opponent. The roots of his behaviour - honest, sincere. and crystal clear - are to be found in family education. The father, Modesto Soleri, chief engineer, raised Marcello and his older brother Elvio according to the highest dictates of the Risorgimento: love for the country, righteousness, total devotion to service to the institutions and great attention to social issues. On these parameters, the young Soleri set his "route angle" and never abandoned it. They tried to bribe him in every way: with flattering assignments, with money (a lot) and even with the fairer sex. Nothing diverted him from what he knew was right and necessary to do.

As a very young lawyer, his strong civic sense led him to compete in the political arena. The first challenge was the election as mayor in his hometown, Cuneo. He took flight from that assignment, a real internship in state institutions. Appointed deputy in Parliament, he became

a pupil of Giovanni Giolitti, who immediately perceived his vigorous potential. In short, a brilliant young man to whom to hand over the baton of liberalism. At the outbreak of World War I, Soleri confirmed his party's position of strict neutralism. When Italy, however, also took the field, he wasted no time. He urgently needed to serve his homeland and, albeit a parliamentarian, left as a volunteer for the front. This was by no means an about-face or an afterthought. He did not hide and did not resort to the so-called Form 5 (exempt) as he courageously and rightly reproached Farinacci, who accused him of knowing nothing about the national spirit. For the record. Farinacci was an interventionist and one of the founders of the Combat Fasci. However, he was exempted from the war for almost its entire

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Copy of the draft, handwritten by Soleri, of the minutes of the Council of Ministers of October 28, 1922 - taken from Soleri M. (edited by Quaglieni P.F.), "Memoirs," pp. 167-168.

duration. On the other hand, Soleri took the oath of Officer of the Alpini and asked to fight on the front line. He will remain tied to the "black feathers" until the end. He knew them and trusted them. It is no coincidence that as Minister of War, on the fateful 28 October 1922, when the gloomy clouds of fascism gathered over Rome, he asked that there be as many as five battalions of Alpini in the capital. He wanted loyal troops who would serve to reinforce the state of siege, the declaration of which was believed imminent. At the front, in the mountains and trenches, he behaved exemplarily; first among the first, he asked his superiors to command even simple patrols personally. He was not always granted this permission. His men loved and respected him; he did not like taking them to court for shortcomings he could handle alone. The Alpini trusted him in return, they believed in him. He was brave against the enemy, but not only. Soleri, in his memoirs, recalls an episode that occurred to him shortly before being wounded in the assault on Monte Vodice (during the "tenth offensive"). Having reached hill 656, our artillery "posted on the opposite Sabotino gallery regurgitant of spectators and fans of the battle - continued to fire on the said hill". To avoid this friendly fire, as no one else could, Soleri got on the phone and wanted to speak to Gen. Badoglio. He asked him to move the fratricidal fire, but Badoglio hesitated. Soleri did not lose heart: "General, if you don't believe it, come and see". Finally, he was convinced. The episode, however, has a curious and perhaps even bitter epilogue. The General, who went to the Cividale hospital to visit, underlined "having left such an answer unpunished" just because it came from him. Bear in mind that Soleri, on the Vodice, was seriously wounded. A machine gun bullet passed through his chest, puncturing his right lung. He was awarded the Silver Medal of Military Valour for that action and was promoted to Captain. He recovered very slowly, but finally, he did. He again asked for an assignment to the front. They satisfied him, but he had a severe breakdown, which forced him to spend a long time in Cuneo, where he also fell ill with Spanish flu. With his military commitment, Soleri knew he had to fulfil a precise duty, but he also thought he was setting an example. He had to admit he was wrong: "I received thousands and thousands of examples of self-denial and sacrifice from those humble Alpini".

Soleri was not only a fighter but also a keen observer of that war. Exemplary was his speech on Caporetto delivered to the Chamber of Deputies on 28 November 1918 to denounce the lack of understanding of the soldier's soul on the part of the commands: "in those days I lamented the example of careerism that came from high and the injustice in the distribution of risks. I regretted that evasion of military duties could not be eradicated, that the rest shifts for the troops were not respected as they should, and that the special allowances were given to everyone except the soldiers in the trenches". He was severe in his judgments: he could afford it because he was even more uncompromising with himself. It is no coincidence that in the first post-war period, he was assigned a burdensome – in many ways awkward – position: Undersecretary and then High Supply Commissioner. His official biographer, Raimondo Collino Pansa, explains well why the choice fell on Soleri: "above all, he was known for his proverbial adamantine honesty, which allowed him to defend the state from the adventurers who circumvented it, in a sector where negotiations, purchases, and supplies took place for hundreds of millions". He was forced to make unpopular but necessary choices like certain bitter medicines. It was essential to overcome the political price of bread to restore state finances. Just think that bread was so cheap that farmers bought wheat to feed their livestock. On the subject, his expression was: "we must give bread the dignity to which it is entitled". It was a long battle, but in the end, that bill became "Soleri law" n. 145 of 27 February 1921. Even in this case, he did not forget his father's teachings

and guaranteed attention to those in difficulty through corrective measures. He foresaw that the agricultural consortia would apply 20% discounts to the packaging of working-class bread, the one in large loaves.

For a short time, he was Minister of Finance in the government of Ivanoe Bonomi. Under the government of Luigi Facta, he was entrusted with the Ministry of War (1 August - 31 October 1922). He accepted the assignment with a worry engraved in his head: "I have two big things to fix; the attitude of the Army towards the fascists and the order for peace to make". His correspondence with the Army Corps Commanders indicates his firm stance against the fascists. In particular, on 26 October 1922, he wrote to the Commanders: "various sources report indications of an imminent insurgent movement, which aims to seize the powers of the State by violent means. I am certain that no military element will want to join this movement by breaking essential military oath duties [...] eliminate any different conviction [...] take exemplary sanctions promptly". In defence of Rome, he placed General Pugliese, to whom he gave the order to block any access to the capital by road and rail. In short, men and means did not lack. The measures taken and the intention to declare a state of siege were sufficient to make many columns of Blackshirts marching towards Rome give up. The state of siege decree was drawn up on the night between 27 and 28 October and finished at six in the morning to "prevent the fascists, by all means, to occupy Rome and public authorities (...)". The ending is known: the King did not sign the declaration. Indeed, he charged Mussolini to form the new government. Soleri's place was taken by Gen. Diaz. On 27 June 1924, following MP Giacomo Matteotti's disappearance, most parties began the protest, defined as the secession of Aventine Hill. Thanks to Soleri, the liberal party did not participate. He managed to convince Giolitti of the need to stay and make one's voice heard. Not least, because "the absent are always wrong". Soleri's arena was the Parliament, where he

always fought. He launched memorable invectives against fascism until the Duce got rid of the opposition thanks to the national list, also known as the "big list". For Soleri, the years from 1930 to 1942 were "politically a dead pond, a squalid and empty period". He lived utterly detached from public life "and journalism, which also became totalitarian". Wanted and kept under observation in Piedmont, a region under the harsh Nazi-Fascist yoke, he fled to Rome, where he also found refuge in the pontifical seminary of San Giovanni in Laterano. He lived under a false identity, with his new name: Santi Massimo, late Giorgio. It was a difficult time: he moved house seven or eight times in four months. Only with the fall of fascism did Soleri revive politically. In June 1944, Prime Minister Bonomi wanted him to be the Treasury minister. For a change, the situation was desperate. His job was to get the finances back on track. He restarted where he had precisely left off as Supply Commissioner, i.e. from the political price of bread. Already gravely ill, he made one last masterful speech in Milan on 15 July 1945, eight days before his death, to promote the national loan for reconstruction. It was a real spiritual testament: "I tell you only one thing: we all must have a common vibration in our hearts: that is, we would all like to be nothing so that this Italy of ours will once again be everything".

On 23 July, Marcello Soleri died. Our country lost a son, a wonderful example of dedication.

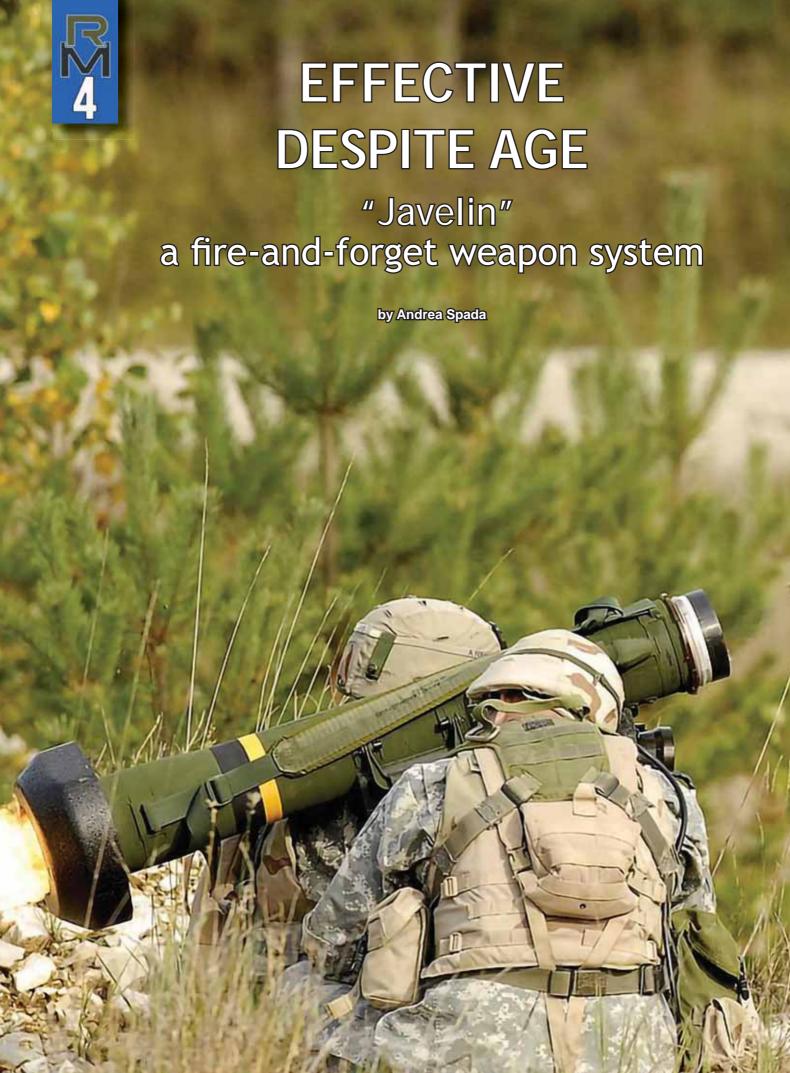
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Can an anti-tank missile turn the tide of war? Certainly not, but it can determine a series of reactions (rethinking the active protections for armoured vehicles or adopting new ones, different movement strategies for tanks on the operation field, etc.) which must be considered.

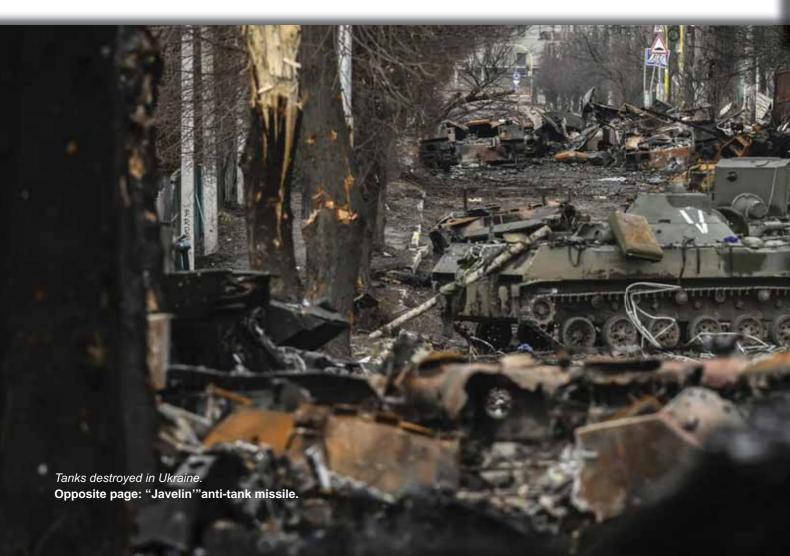
Among the various and numerous weapons supplied to Ukraine to defend itself from the Russian attack, the portable anti-tank missile launchers stand out, becoming a real nightmare for the Moscow army. In particular, the American FGM-148 Javelins are proving to be very effective, among the most advanced and modern weapons (despite being 26 years old) designed against armoured vehicles, but also effective against helicopters flying at low altitudes.

Javelins have become one of the symbols of Ukrainian resistance, capable of annihilating hundreds of tanks and armoured vehicles sent by the Kremlin. These missiles have become crucial and a symbol of the Ukrainians' resistance to the advancing Russian army. A meme created by a Canadian advertiser, Christian Borys, is also circulating on social networks, showing a saint of the Orthodox church, Mary Magdalene, holding the launcher.

Javelins are certainly the most sophisticated and effective weapons in Ukrainian hands, but they are not the most numerous at their disposal. Among the anti-tank equipment in the Ukrainian arsenal, the most numerous are, in fact, the Israeli-made NLOS "Spike" missiles and the German Panzerfaust 3. Still, in the common imagination, the Javelins have taken on a symbolic value far beyond the military one. The US companies Lockheed Martin and Raytheon developed FGM-148, the Javelin missile launcher. It officially entered service with the US military in 1996 in Afghanistan, where the US forces employed the missile launcher in anti-insurgency operations. Well-trained marksmen could deliver precision strikes against enemy

positions such as caves and fortified positions unassailable with traditional heavy machine guns and grenade launchers. Lockheed Martin is now investing to increase the missile production rate beyond the current 2,100 per year (the target is 4,000 missiles per year); likewise, Raytheon is investing to maximise production of the reusable, lightweight Command Launch Unit (CLU). Since 1996, the Javelin Joint Venture has produced more than 50,000 Javelin missiles and more than 12,000 reusable command launch units. The missile system is expected to remain in the US arsenal until 2050 and is undergoing continuous upgrades to maintain technological leadership against emerging threats and to support evolving operational needs.

The Javelins were developed to replace the older M47 Dragon wire-guided anti-tank missile launchers with a system that was more effective, versatile, and easier to use. Unlike wire-guided anti-tank





frared homing guidance system, allowing the operator to seek shelter and cover immediately after firing. The system consists of a reusable launcher (CLU) and a solid-fuel HEAT missile. It can overcome modern tanks' defences and reactive armour, even attacking them from above, where the armour is thinner. The fire team is usually made up of two people, but the Javelin can also be fired by a single person. The target is identified in the aiming phase and is "locked" and followed autonomously by the missile through the heat given off by the target itself, without the need for other human interventions ("fire and forget"). Aiming is facilitated by the weapon's electronics, which include night vision and zoom.

When the trigger is pulled, the Javelin is ejected from the launcher to reach a safe distance before the rocket's main engine fires. So, the

propulsion jet does not invest the shooter who can remain well hidden or move away. The firing team, or single launcher, can switch positions as soon as he fires the missile or even prepare to fire on the next target while the first missile is still in the air. Employable in urban combat, this missile can be fired from a room through a window due to the reduced flash. From the moment it is shouldered to the possibility of firing, about half a minute passes.

single missile costs about \$70,000, while the entire weapon system, launcher and missile, cost about \$225,000. Despite its graceful name (Javelin), it is not precisely the equipment with which one would like to run through the trenches. Each single Javelin missile weighs about 12 kg for a length of one meter and 10 centimetres (80mm calibre), while the launcher weighs 6.4 kg for a length of 120 cm. However, it is much more manageable than other anti-tank systems such as the TOWs, whose weight, including launcher, missile and container, is close to a quintal. The muzzle speed is 50 km/h in departure and 250 km/h in dive, with a shot distance between 75 and 3000 m. It is credited with overcoming homogeneous armour of 750 mm, a value that drops to 650 mm if it engages tanks equipped with reactive armour.

The missile can operate in two different modes: "Direct Attack", the missile directly hits the target at a maximum altitude of 60 meters higher than the release point; "Top Attack", the missile soars up to 150 meters in height before striking, if necessary, in a dive. In fact, the upper part of armoured vehicles is usually flat and does not have the typical inclined and receding profiles intended to deflect horizontal projectiles. In the "Top Attack" mode, the missile falls on the target with a very high penetration power, thanks to the speed condition reached in a dive. The missile uses a double HEAT warhead to neutralise the defence of modern reactive armour. The first explosive charge blows up the outer reactive armour, and the second (main) charge penetrates the armour. While HEAT warheads are not considered particularly effective laterally against modern tanks due to reactive armour designed to deflect and blast missiles and rockets outward, coupled with a Javelin launcher, they are considered absolutely lethal to these vehicles. In fact, the missile does not hit the tank from the side, where the heavy and efficient armour is present, but from above. This allows the missile to hit the thinnest and most delicate part of a tank (the turret with the access door), favouring the destruction of the vehicle or, in any case, its deactivation and the crew's neutralisation.

The Javelin missiles in the hands of the Ukrainians have therefore become a nightmare for Russian tankers. But what countermoves does Moscow use to limit the damage to its armoured vehicles? Modern Russian tanks have developed and tested the ARENA active protection system with (relative) success to neutralise the threat posed by modern anti-tank missiles. The Arena Active Protection System is an active-type countermeasure system developed by the Russian engineering design bureau Kolemenskoye to protect armoured fighting vehicles against small anti-tank weapons, anti-tank guided missiles and those designed with attack capability from above. After the disastrous losses suffered by Russian armoured forces during the First Chechen War, most of which were caused by RPGs, Kolemenskoye devised the ARENA system of active countermeasures in the early 1990s. The system uses millimetre-wavelength Doppler radar to determine incoming warheads. It then fires a defensive shell timed to detonate immediately above the target and flood it with sub-munitions.





