

HUMAN LOSSES IN MODERN WAR – CASE STUDY IN THE CURRENT RUSSIAN-UKRAINIAN WAR

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Abstract: *Information provided by the war propaganda, both of Russia and Ukraine, published in the mass media, exaggerates the losses of the enemy and understates their own in order to maintain the morale of the fighters and their population, but also the support of military operations' financiers. This action is also supported by censorship (military and media), but the effects, on those who receive them, can be different, depending on the veracity of the information and the goals pursued by the two actors, as well as the public beliefs.*

Human losses of the belligerents in the Russo-Ukrainian war, even if they are not equal in quantity, are usually comparable and even necessary to be compared in order to study the tactics and strategy used, as well as the possibility of each of them to continue the fight. The human costs of war significantly influence the achievement of victory. Also, for military planners, it is important to know the real situation, both for designing and conducting operations and for organizing and equipping the health service that supports combat actions. If there is no exhaustive estimate of the losses of the Ukrainian forces, the reason is that they are kept secret by their officials. Through indirect analyses, OSINT and medical intelligence, we present a situation as close as possible to reality.

Keywords: *Ukraine; Russia; medical intelligence; human losses; collateral victims.*

Introduction

All wars, of any kind and from any time, cause human and material losses, with the aim of defeating the adversary. The belligerent forces of Antiquity, of tens of thousands of fighters, of the Middle Ages, of hundreds of thousands of fighters and those of the Modern Age of millions of fighters, caused numerous human losses, military and civilian. Nowadays, a possible nuclear war could cause billions of human casualties and immense material losses, or even the destruction of civilization as we know it.

In the year 2022, the Russians thought they would be greeted with flowers by their Ukrainian brothers, like the Germans in Austria in 1939, or in the German Democratic Republic in 1989. The secret services, incompetent or treacherous, did not correctly appreciate that Ukraine, starting from 2014, it was moving away from Russia and the Commonwealth of Independent States, to get closer to NATO and the West. So the Russian army ran into a deadly trap, prepared in advance. The assault on Kiev was a tactical failure, and the Chechen Strike Group was annihilated on route to the objective. The Russian strategy was inadequate from the start and had to be changed on the fly, with heavy losses and incredible breakdowns in the logistical support of the operation.

By *human losses* is meant the number of fighters taken out of battle in total, respectively irrecoverable losses: KIA - killed in action or outside it (accidents, diseases, etc.) or recoverable or partially recoverable losses: WIA – wounded in action or outside it, sick (ordinary or

epidemic diseases, infected, intoxicated, burned, irradiated, etc.), shipwrecked, prisoners, arrested, deserters, MIA - missing in action, as well as refugees.

Contemporary military doctrines provide, in theory, intelligent combat actions, with minimal loss of human life and a number of wounded and sick, avoiding unnecessary excess mortality, if this is possible. In practice, however, the role of commanders at all levels intervenes directly, to lead the fight at a tactical, operative and/or strategic level, in such a way as to minimize human losses (recoverable and non-recoverable). In order to do so, there is need for the preparation of adequate forces and logistics (including medical) means, quantitatively and qualitatively, to care for the wounded and sick of the fighting forces and to maintain combat capability, and in terms of knowing the realities of ongoing wars, to be balanced is to know all perspectives.

In this paper, our aim is to present the role of war propaganda in maintaining both the morale of the population at home and the legitimacy and financial support abroad by hiding the real magnitude of human losses on both parties to the conflict in Ukraine. The research method is using secondary data and indirect analyses, namely OSINT and medical intelligence. In order to do so, in the first part we will present the manner and rationale of the belligerents to make recourse to war propaganda in previous conflicts in order to hide the real number of casualties or to mislead the public opinion about the real course of the conflict. In the second part of the paper we will expose the dimensions of human losses in the Ukrainian-Russian war and possible future scenarios derived from the dire situation of limited human resources available for the war effort.

1. War propaganda

It is obvious that the war propaganda of the belligerents is necessary, but it exaggerates the losses of the enemy and understates its own losses, in order to maintain the morale of the fighters and the population or the financial donors. This action is also supported by censorship (military and mass media), but the effects can be perverse. As an example, the German aviation in the World War II announced heavy losses of the British aviation (which in total would have been greater than the entire British aviation!). At the same time, the British were announcing on the BBC the real number of German planes shot down or damaged, aerial victories being confirmed with the video camera connected to the on-board artillery. Initially the Germans were encouraged by these successes, but soon it was obvious that they were not real and led to demoralization. Instead, the British, who were initially psychologically affected, when the truth was found out, had a moral ascendancy over the enemy. The result was that the British aviation, although quantitatively and qualitatively inferior to the German one, won the “Battle of Britain” and it was no longer possible to land the German forces in Great Britain.

If one follows the news as presented by the mass media (audio-visual and print media) it notices that some errors of approach are preserved. Thus, documentation from open sources (non-secret and public) is no longer accessible to the usual “consumer” of news, who is subject to contradictory or ambiguously formulated information, or who accesses the information only unilaterally due to exhaustive censorship. If for the general public this is of little importance, for the fighting forces it is important not to be demoralized by the negative news.

For the “actors” actively involved in military and political decision-making, it is very important to evaluate the situation correctly, to act accordingly and to create the context to use the “lessons learned”. Hence the importance of differentiated psychological operations (PSYOPS) for own forces, opposing forces and for international public opinion. But a real evaluation of casualties is also important for open source intelligence (OSINT) use, not for bomb articles in the press for the public, but for the real documentation of those involved or interested in current or future events.

The current Russian-Ukrainian war started as a “special operation”, with precise objectives, stalled after the occupation of almost 20% of the Ukrainian territory (the part mostly inhabited by

ethnic Russians, improperly called Russophiles), through dynamic actions with armored vehicles and aviation, as in the World War II, but gradually the opposing forces entered the phase of war of positions, as in the World War I. In this situation, the Russians built a triple defensive line¹, behind the temporary front line. The combat actions were on both sides intense heavy artillery duels, aerial bombardment, especially with drones and missiles, as well as tactical attacks at the subunit level, as well as by false attacks. Military forces, energy objectives, strategic nodes, critical national infrastructures were targeted in particular, in order to reduce the capacity of the Ukrainian army and the morale of the population, as NATO had done in Yugoslavia in 1999.

The air superiority of the Russians prevented the Ukrainian Air Force from acting in support of the ground troops. Conversely, at sea, the attack by Ukrainian aerial drones (supplied by Turkey) and naval drones (supplied by the UK) sank several ships and caused the Russian Black Sea Fleet to virtually abandon the naval base in Crimea and retreat to Novorossiysk. From a strategic point of view, the Ukrainians attacked the Kerch bridges, the port of Sevastopol, some military airports in Russia, military and civilian ships in the Black Sea, logistics hubs, etc.

The Russian winter offensive in 2023 has been a partial success, managing to occupy part of the claimed territory, and the Ukrainian summer counter-offensive has been a partial failure, only managing to block the enemy's advance and free some parts of territory. The resumption of the winter offensive in 2024 is expected on both sides, which would present advantages and disadvantages for each belligerent, but also an increase in human losses due to the difficult weather conditions.

2. Russian Forces Losses

Since the beginning of the Russian invasion, the Ukrainian and Western (mainly NATO and EU) narrative predicted the defeat of the Russians, praised the unexpected resistance of the Ukrainians and the inability of the Russian president to assess the risks rationally, being considered by some publications as sick, crazy or even dying (Motyl 2023) (The New York Times 2023) (Sky News Australia 2023). In mass media it was insisted that the losses of the Russians, in terms of people and equipment, are much higher than those of the Ukrainians (VOA 2023) (European Consortium for Political Research 2023), triggering a “war of numbers” in the mass media and in official communiqués.

At the war of number base stood secrecy, preserved through excessive censorship (Financial Times 2022), so that the real number would not be known. Thus, the Russians only partially communicated their own losses (Radio Free Europe 2022), and the Ukrainians did not communicate them at all, but only those of the opponent. So the estimates became “facts”. The statements made to the press by some “officials” (without knowing exactly what this term means) announced a ratio of 1 Ukrainian to 5 dead Russians, and the Secretary of the Ukrainian Security and Defense Council, Oleksei Danilov, even announced a ratio of 1 to 7 (Wilk and Żochowski 2023).

Examining the number of Russian losses, it is observed that the pro-Ukrainian press systematically applies the “mirror” technique in communication, so the reversal of the data would be closer to reality, as Colonel Jacques Baud, from the Swiss military espionage, specialist at the UN and NATO, appreciates (Janata Weekly 2022) (Scheerpost 2022). The goal is to demonstrate to the public that Russia will be defeated.

The terms used to support the manipulation of data in the press, thus, through human losses, which include dead, injured, missing, etc. (casualties) is often used as a synonym for deaths (fatalities), creating confusion regarding the time, source and nature of the figures. Thus, one

¹The first line, with trenches, light weapons, anti-tank obstacles and barbed wire, facing huge minefields; the second line, the main one, with fortifications, casemates, anti-tank weapons and collective shelters, and the third line, for artillery, reserves, command points, logistical support (medical support), logistical flows (supply and replenishment axes), inflow and penetration communication routes, as well as bypass, etc.

compares 1351 Russians, recognized as dead, in March 2022, with the 70,000-80,000 human losses of Russians announced by the Ukrainians, in August 2022, so the public is misinformed by the terms used (Tass 2022) (Åslund 2022) (Tritten 2022). Also in August BBC (UK) and MediaZona (Russian opposition) announced 5185 dead Russian soldiers, and in September there were a total of 6129 (Peillon 2022). So they're dying by the thousands, not by the tens of thousands.

These examples show that the pro-Ukrainian press relies exclusively on exaggerated information received from Ukrainians, while information from their opponents is more realistic. Yet nearly a thousand Russian soldiers die per month in an operation with more than 100,000 ground forces, plus the losses suffered by other armed forces (Ukrainian separatist militias, Wagner Group mercenaries, pro-Russian Chechen forces, Russian and foreign volunteers), who have their own human losses, means important losses. To these are added soldiers and civilians from the territory of Russia or some neighboring countries, bombed by mistake or intentionally by the Russian and Ukrainian forces, about which the Romanian press also reported (DIGI 24 2024) (Hot News 2024).

Based on what is presented here, the losses of Russian combatants would be almost 1% per month, so more than 10% per year, which leads to a decrease in combat capacity and requires not only the replenishment of the forces, but also the replacement of the units on the front and their withdrawal for restoration. Moreover, in Russia, partial mobilization has been decreed to supplement the fighting forces.

Ukraine constantly announced Russian losses. Nine months after the start of the Russian invasion, the Ukrainian General Staff announced that Russian losses totaled over 86,000 people (The New Voice of Ukraine 2022), which Yahoo News amplified to 88,800 (Nsubuga 2022). President Zelensky predicted that there would be 100,000 dead by the end of 2022. The estimate was taken over public and by the European Commission president, but for both belligerents, with human losses of approx. 100,000 each, plus civilians (Felea 2023). On December 22, 2022, the threshold of 100,000 dead Russians was celebrated in Kyiv by projecting the number "100 K" on the National Library (Roos 2022). But on the same date, the Russian opposition announced 10,229 deaths (Media Zona 2023), and the Russian officials continued to keep silent.

BBC TV, which is pro-Ukrainian, and MediaZona, which is pro-Russian, but anti-government and against the war in Ukraine, and which are not influenced by the propaganda of the belligerents, announced much lower human losses, even by an order of magnitude, and these seem to be real data or, at least, closer to reality. Evaluation methods can also be discussed, from the unilateral and unverified takeover of communications by the state and private media, to the tracking of deaths, funerals and legacies in Russia by MediaZona, in order to circumvent the war information censorship.

A journalistic investigation (MediaZona and Meduza), carried out using open information sources, provides an overview of the losses suffered by the Russian army in the war in Ukraine, one of the Kremlin's best-kept secrets. Through statistical modeling it was estimated that about 47,000 Russian men under the age of 50 would have died in this war, about 25,000 in the first year and 22,000 in the second. The last time the Russian Defense Ministry reported casualties, General Shoigu said only 5,937 soldiers had been killed. The same analysis estimates the number of seriously wounded at about 125,000 soldiers, so a ratio of about 1:3 between dead and seriously wounded (as in modern wars) and 1:5 compared to the total number of wounded (Jucan 2023). It can be concluded that although the firepower is greatly increased, the effect on the manpower is about the same, and the proportion of casualties is lower due to the increased efficiency of the medical support of the force.

The chief of staff of the Norwegian army, General Kristoffersen, told the press in January 2023 that "the losses of the Russians are beginning to approach about 180,000 dead or wounded soldiers, without specifying the source of these figures" (HotNews 2023).

The New York Times, in August 2023, published, citing US officials, that Russian military losses approach 300,000, including 120,000 dead and 170,000-180,000 wounded, significantly more than Ukrainian losses (Dumitrache 2023). Human losses (dead, wounded,

sick, shipwrecked, prisoners, missing, etc.), in the Russian-Ukrainian war, can significantly influence the continuation of combat actions in 2024.

Gathering and comparing the fragmentary and sometimes contradictory information that appeared in the written and audio-visual media, before this year, a rough estimate can be made, which, in opposition to the losses of the Russian forces, can show the extent of human losses in a large-scale modern war, carried between European armies. We have at our disposal, unfortunately, the case of the current fratricidal war between Russia and Ukraine, considered the biggest European war since the World War II.

3. Ukrainian Forces Losses

The number of dead Ukrainian soldiers is not officially known, because nothing is communicated, probably out of fear that if Western public opinion found out about the high number of dead and wounded caused by the war, it would oppose the support given by the governments of the respective states. As for the Ukrainians, not all support the war and some take refuge in neighboring countries. Observations on the ground and testimonies of volunteers from Western countries, returned from the theater of war, tend to confirm the opinion that Ukrainian forces suffer considerably higher human losses than Russian forces, and the press never publishes estimates of Ukrainian losses, in order to maintain the illusion of victory against the Russians, to maintain arms supplies (Baud 2023, 278).

The policy of keeping the death toll secret can have unexpected consequences. As an example, in Izyum, after the fighting in March 2022, when the Russians offered the Ukrainians the opportunity to collect their dead, they refused to take them back, probably to avoid having to report the actual number of dead, so the Ukrainian dead were buried by Russian soldiers (Radio Television Suisse 2022). In September, media propaganda attributed these deaths to Russian "massacres" (EuroNews 2023). This communication policy presents some contradictions, as it shows on the one hand negligible Ukrainian losses and enormous Russian losses, but on the other hand the Russians are presented as trying to destroy the country and kill as many Ukrainians as possible. But, in science, as in justice, the Latin principle "Audiatur et altera pars" must be applied.

It is obvious that the Ukrainian strategy of defending every square meter of territory by holding positions to the end ("centimeter", as US President Joe Biden publicly expressed) leads to the destruction of its own forces. It is what the French and the Germans did in the World War I and the Germans in 1945. But this time the Russians were mobile, as in the defensive in 1914, and the offensive in 1943. The result, in our opinion, was that the Ukrainian military potential was destroyed already in the summer of 2022 and the summer counteroffensive no longer had power. In this situation the Western allies compensated by supplying the Ukrainian forces with equipment, weapons and ammunition.

After British Prime Minister Boris Johnson's visit to Kiev, the Russians feared that the West would not allow the Ukrainians to negotiate peace, with him saying that "we will support Ukraine as long as it takes" (President of Ukraine 2022), so the conflict will be prolonged until Russia is exhausted. In our understanding, the Russians changed their tactics, instead of destroying the combat equipment sent from the West, because they could not stop the flow of weapons, they focused on destroying the servants of these weapons. A new stage of the war has begun, in which the goal remains the reduction of the military potential, but not by destroying the weaponry, but those who use it. Thus, in June 2022, President Zelenski admitted daily losses of 60-100 soldiers per day, and the presidential adviser admitted to the BBC daily losses of 100-200 dead soldiers (Ukrainska Pravda 2022) (Podoliak 2022).

Also in June 2022, David Arakamia, the chief negotiator and presidential advisor, speaks of 200-500 deaths per day and a total human loss (dead, wounded, prisoners, deserters) of a

thousand soldiers per day (Lawle 2022). According to Business Insider, Ukraine would have lost over 18,000 soldiers in that operation, i.e. the numerical equivalent of the entire British infantry (Anthony 2022).

It is not possible to know if these figures are accurate, the experts of the intelligence services believe that they are greatly underestimated, and the Ukrainians estimate even greater losses of the Russian forces. Some claim that the Ukrainians would have had, until June 2022, approx. 60,000 dead and 50,000 missing, and the American general St. Twitty estimated the losses of the Ukrainian army at 200,000 soldiers (Exxpress 2022). A group working for the BBC (Great Britain) and MediaZona (Russian opposition), analyzing obituaries and funerals, estimated Ukrainian losses at 402,000 dead. During this “secret” conflict, military analysis based on open sources intelligence (OSINT) was also developed, i.e. espionage from open sources, based on public, non-secret sources, mainly circulated by the written and audiovisual media, therefore accessible to anyone who is interested. But these are difficult to interpret because each side presents the reality partially or lies in its favor and to the detriment of the opponent. The methodology and professionalism of these analysts leaves much to be desired, the estimates must be considered with caution, and the data presented are lower than in reality (Baud 2023, 280). Thus, the Washington Post quotes the testimony of a commander of the 46th Parachute Brigade (a large elite unit of the Ukrainian army) that at Bahmut he was the only survivor in the battalion and that it was completed only with inexperienced recruits (Kurshudyan, Sonne and DeYoung 2023). As a confirmation, after three days he was dismissed (Kyrylenko and Roshchina 2023). It is probably an exaggeration, but this shows that despite the losses attributed to the Russians, the Western military environment is starting to ask itself questions (Baud 2023, 281).

In October 2022, Russian General Surovikin, then the commander of the invasion forces, declared that the Russian army was not trying to carry out major operations but only to “sweep” the opponent without exposing the Russian military, and the Westerners believed that the weakness of the Russian army was visible and that the war must be continued in the same way. In November, the Swiss ambassador in Ukraine declared that Russia should ask for peace negotiations, because it is at a disadvantage (Radio Television Suisse 2022), an opinion that was also taken up by others. It seems that after the Russians had occupied about 20% of the territory of Ukraine, in the east and in the south, they had achieved their objective of invasion and went on the defensive. In November 2022, Ursula von der Leyen, the president of the European Commission, declares that “more than 20,000 civilians and over 100 000 Ukrainian soldiers have died so far” triggering the anger of the government in Kiev, which asked to correct the statement, which was done immediately (The New Voice of Ukraine 2022). This diplomatic incident demonstrates that the number of war dead is a sensitive topic for Ukraine's internal stability, and the EC president's statement is certainly not a personal opinion but an official but confidential estimate circulating in the Western chancelleries, and which would rather tend to minimize Ukrainian losses. The Mossad estimates the number of Ukrainian dead at 157,000, and the Turkish press supports this estimate (Hurseda Haber 2023), even though their countries support Ukraine.

As the Swiss Colonel Jacques Baud, an expert on NATO and the EU, observes, Ukrainian propaganda attributes the number of its own losses to the Russians and attributes its own losses to the Russians, as in a mirror effect. If the Russian opposition TV site MediaZona is to be trusted, there are 14,000 Russian dead, as of February 2023, and over 150,000 Ukrainian dead, so it looks like the number of Ukrainian vs. Russian military dead would be 10-11 to 1, so with a difference of an order of magnitude for the Ukrainian army, difficult to recognize from a political point of view.

Another way to approach the problem is by comparing the consumption of artillery ammunition to estimate human losses on which two sides of the front line. Ukrainian and Western military officials have calculated that the Ukrainians fire between 2,000 and 4,000 heavy artillery shells per day, and the Russians between 40,000 and 50,000, so an average of 45,000: 3,000, which is 15 times more, which it could also mean human losses about 15 times higher, if we take into account some analysis (Rice 2023). It is difficult to believe and to confirm, but it is a way of calculation, unlike what the press announces without any basis of calculation.

Another way to approach the problem is based on the effectiveness of the belligerent armed forces. In May 2022, President Zelenski declared that the army had 700,000 people (Euronews/AP/AFP 2022), about 10 times larger than the current Romanian Armed Forces, and in July 2022, the Ukrainian Minister of Defense announced that: "We have about 700,000 soldiers who adds the National Guard, the Police and the Border Guard, we are almost a million" (McGarvey 2022). In September 2022, the German newspaper Frankfurter Allgemeine Zeitung considered that the Ukrainian army is the second strongest in Europe, with 250,000 combatants (Fuhr 2022), probably at peace.

The battles in western Donbass are significant from the point of view of our analysis. Without being of particular strategic importance, the Russian army and the militia of the People's Republic of Donetsk wanted to conquer it to complete Donbas, and the Ukrainian army and volunteers (the "neo-Nazis" as the Russians call them) wanted to keep it in Ukraine, as a symbolic political importance. In the first stage, the West saw the heroic resistance of the Ukrainians and the accumulation of dead on the Russian side. Then the press claimed that there were heavy losses on both sides and that the battles resembled those at Verdun in the First World War. At the end of winter, the heavy losses of the Ukrainians begin to be recognized. In Newsweek magazine, a former American volunteer stated that the life expectancy of a Ukrainian fighter on the front line was only 4 hours (Skinner 2023). It is not known how it was calculated, nor if it corresponds to reality, but it suggests the perception of the Ukrainian fighters.

It turned out that the old myth of infantry waves that attack is no longer relevant, nor is the overconcentration of "breaking" forces used in certain situations in the world wars. These are contrary to common sense, because when using firearms fighters must be as dispersed as possible and not directly exposed to enemy fire. But what is true at the tactical level is not always true at the operational level. Regarding the attack with armored vehicles or aircraft, if they come in isolation they can be destroyed in turn, but if they attack simultaneously, only the first ones will be destroyed, according to the principle of "saturating the opponent's defense", and the others will fulfill their mission. The fact that the Ukrainian army received modern weapons, staggered in small quantities, facilitated its destruction on the front, not being able to achieve a critical mass for the realization of the principle of saturation.

4. Ukraine population losses

Since the war is taking place on the territory of Ukraine, it is obvious that there are human and material losses among civilians as well. It has already been seen that there are important human losses, "collateral victims", which are not missing even in the so-called "surgical" military actions, recognized as having caused tens of thousands of victims. However, a month after the start of the invasion, the Russian ambassador to Switzerland, Ghenadi Gatilov, declared on RTS that the Russian troops are making efforts to carry out the operation "delicately" (G4Media 2022) seeking to minimize collateral losses, being mocked by journalists. However, on the same day, in the American magazine Newsweek, an analyst from the Defense Intelligence Agency (DIA, the American military espionage) declares that: "[...] (the Russians) do not intentionally attack civilians, that they are probably aware

that they have to limit the damage, to leave an exit door for negotiations” (Arkin 2022). The objectives announced by the Russians were not to occupy or destroy the country, but to remove the threat to Donbas, so the attacks were not preceded by massive bombings affecting the population, as they had been in Iraq, Afghanistan and Syria. Incidentally, in January 2023, Oleksei Arestovichi, then the personal adviser of President Zelensky, in an interview with the Ukrainian media Mriya, confirmed that: “The Russians do not want to kill anyone, they tried to wage an intelligent war ... An elegant, beautiful, lightning-fast operation, where polite people, without harming babies and children, liquidated a few resistances. And not really eliminate them, but proposing them to surrender, desert, understand, etc. They didn't want to kill anyone. It was enough to sign a waiver” (Mriya 2023). As a result, he was soon removed from office.

The reality shows that human losses of all kinds have created a significant shortage of forces. Military leaders plan to mobilize hundreds of thousands of men and women, according to President Zelensky's statement at his year-end press conference on December 19, 2023. Ukrainian military wants more troops, even 500,000 (!), but it is not easy to be achieved, due to the reduction of the demographic base and the corruption related to incorporation in 2023, “Conscription and corruption issues in 2023 revealed a lot” (The Daily Digest 2023).

It can be seen that the media sometimes amplify or even contradict the statements of Ukrainian officials, propagating hate messages, prohibited by the Munich Charter. But the same mass media had not reacted to the civilian victims in Donbas, in the period 2014–2022, or many others. Perhaps if they had done it, this criminal military intervention would not have come to this.

The population was affected by the living conditions (worsened by Russian attacks) and the risk inherent in the war, and a significant part took refuge within the country or in neighboring countries. According to the United Nations High Commissioner, by January 2023, over 5 million Ukrainians were refugees in neighboring countries, more than half in Russia, the rest in the EU, Moldova, Belarus, etc. (Baud 2023, 278) This has drastically reduced the recruitment base for the army and the economic capacity of Ukraine, and the press publishes much higher data than the official ones, it is not clear for what purpose.

5. Possible way ahead

The Ukrainian counter-offensive was also expected in the summer of 2023, and the Ukrainian army had been mobilized for the war, the first weapons and ammunition (Soviet-type from the former socialist countries and NATO-type from the other allies), foreign volunteers with combat experience, huge funding and political support, had up-to-date information and NATO military leadership through American and British strategists and tacticians. Only in the spring of 2023, what could no longer be called a counteroffensive, but the *Ukrainian offensive*, which became somewhat more active in the summer and continued into the fall, began timidly and with many delays with some local successes. In general, they were small tactical attacks, at subunit level, with armored and artillery support, but without air support because they had lost air supremacy. With the start of the autumn rains, the offensive slowed down and practically stopped, around December 1, 2023, with the promise that there will be a *winter offensive*. But due to the huge human and material losses (in fact of both belligerents) and the high consumption of ammunition, especially heavy artillery projectiles, rockets, drones, etc., it was obvious that it would no longer be possible and that the promises were unrealistic.

However, the tactics, operations and strategy of the NATO regulations, which provide for expeditionary actions (close to “Blitzkrieg”), would not have worked as well in a classic war of position, with classic fronts, with the total length of over 1,000 km, as the situation was and how the Ukrainian military were prepared, theoretically and practically. This difference in approach would have led to some contradictions between the Ukrainian commanders, between them and the allies, but also between the military leadership and the political leadership of the country, also expressed through the interview of General Zalujnii, the former chief of staff of

the Ukrainian army. In fact, such contradictions had also existed in the Russian forces, manifested by the criticism of General Surovikin (nicknamed "Armageddon" after the activity in Syria) and the revolt of the Wagner mercenaries, which were quickly suppressed. As a result, American and European support decreased, going as far as stopping the financing of the war through the US Congress and transferring responsibility to the EU, which is also not doing very well from this point of view. Probably, Romania also acquired a key role, politically, militarily and economically, in this conjuncture. But it seems that the promise of support "as long as needed" has come to an end, and it should be noted that the Ukrainians were not misled, as no one mentioned *victory* or *peace*, only *need*, a term that does not commit to anything concrete. Therefore, it is likely that soon the weakened Ukrainian forces will be unable to continue the fight, and if the Russians launch the winter offensive, they could achieve victory on the battlefield. The attacks and bombings over the winter holidays seem to confirm this. In this situation, undesirable for the alliance, in our opinion, two main scenarios can be seen.

A predominantly military scenario, involving a last major effort to support Ukraine, materially and financially, and the provision of ultramodern weaponry (which until now has been missing from the battlefield): F16 and F18 planes (which also have nuclear capabilities), "stealth bombers", latest generation missiles, modern tanks (Abrams was promised, but did not arrive at the front), etc. It is true that the Ukrainian military does not know how to use them and has no time to learn, but as was done in many other wars of the 20th century. The risk would be that even these would not influence the situation on the front, and some could fall into the hands of the enemy who will also modernize their combat technique by copying or for means of protection.

Another scenario, predominantly political, would consist in the conclusion of peace or at least an armistice for humanitarian reasons, possibly with some sacrifices, but which would prevent the opponent from achieving victory. The political solution would be presented in the media as a victory for the international community, allowing criticism of the winner, from all points of view and the optimized presentation of the situation. This would allow the permanence of a *frozen source of conflict*, which can be reactivated at any time, with adequate forces and means to achieve a real victory. The advantage would be the reduced financial, material and human cost, so it would have more chances of success.

Conclusions

War propaganda is used to avoid showing the real casualties and destruction in order for the combatants and population not to lose morale and for their finance supporters to continue deliver capital and weapons to fuel a part of the other in the conflict.

Human losses are inherent in any war: dead, wounded, shipwrecked, missing, prisoners, etc. as well as refugees. They can influence the fighting capacity of the army and the resilience of the population, therefore, the politicians of the countries involved in war try to keep the real data secret. But for military planners, the real data must be known, for lessons learned, which can change the military art at tactical, operative and strategic level.

For orientation in this field, we studied the OSINT documents available up to now on the Russian-Ukrainian war and tried to present a realistic synthesis. It turned out that human losses in modern warfare are very high, comparable to those of the World Wars, but not higher, as we would have expected because of modern weaponry, with greater accuracy, hit and explosive power, so in theory more effective, but which is not even more effective. Still, for the Russian-Ukrainian war, given the nature of the conflict, the bulk of the casualties are from the crews of destroyed vehicles and equipment, but also from indiscriminate attacks over population.

Another important conclusion of the Russian-Ukrainian war is that the proportion of dead in the total number of wounded is lower, because the military health service of both belligerents is more efficient, having the forces, means and appropriate procedures for caring for the wounded, so mortality is significantly reduced.

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