What is the main intention of this paper? To initiate a new, or at the very least, a different way of thinking about responding to crises. Experts from different academic and practice fields, as well as the professions, are immediately necessary in responding to crises, complex emergencies, hybrid threats, and asymmetric warfare. New answers to emerging threats, kinetic and non-kinetic, are required. Peace Operations doctrines are no longer adequate to meet the demands of today’s crises. The number of asylum seekers, migrants, and internally displaced people rises endlessly. The number of failed states continues to multiply. Covid-19 has found governments and institutions without effective answers. Trust, as the foundation of democracy, is collapsing like a sandcastle at the water’s edge.

It should not be difficult to realize that many doctrines and theories from the Industrial Age are not valid today, and that we must validate our new environment with a different understanding of the changes. We need to move closer to the algorithm as a guide to action, rather than the static paradigm, as it has a data-informed ability to adapt to new and shifting circumstances. The adaptable nature of algorithms is contrary to paradigm thinking, where paradigms must be dismantled and replaced with new ones to remain relevant.

During the pre-industrial era, hammers and simple tools were enough to cut the wood or stone needed to build, but today, even for daily repair work at home, people can buy hundreds and hundreds of metres of building materials and tools specially adjusted for a small fraction of the whole project. Do you remember the movie studio Universal Pictures? Today there are thousands of ‘Universal Pictures’. Have we achieved better results? Are movies qualitatively ‘better’, or do we simply have more of them?

Michelangelo’s David is lasting, standing above our heads, and we can admire his appearance as a masterpiece; work carved out of white Carrara marble a long time ago. Can we predict the same destiny for many of today’s art products, for example the hundreds of bicycles by Wai-Wei once exhibited in Venice? Are today’s art objects durable? Does the term ‘life-time warranty’ have any legitimacy? Is anything built to last longer than a short time?

Theories and paradigms have short shelf lives, so we must explore their utility within the context in which they were developed, and consider the issues which they were designed to address. We cannot blindly apply outdated theories and models to current crises. Critique is necessary. If we are hoping for the best results possible, we need the proper tools with which to accomplish our work. Specialized tools are required. There is no one-size-fits-all answer to crises. The only universal requirement is the courage and freedom to step out of the box and think differently, to not be constrained by the limits of the intellectual box. To paraphrase Albert Einstein, with logic you can go from point A to point B, with imagination, anywhere.
1 HISTORY IS ASYMMETRIC, THE PRESENT IS COMPLEX, AND HYBRID IS NORMAL

The Westphalia peace collapsing, the Clausewitzian principles in question, and military doctrines outdated the moment they are published; this is the world we are living in and that our children will inherit. A fluid, contradictory, and chaotic global space where state boundaries are becoming irrelevant and state sovereignty is giving way to the sovereignty of the individual. New theories and paradigms are required to confront contemporary issues. Asymmetric warfare presents itself as a dominant paradigm in Post-Industrial wars and conflicts, and strengthens the need of critique in a world where, actually, “war no longer exists” (Smith, 2007, p 13).

It is not that the military is weak in dealing with present and future threats; rather, the threats are too complex for command directed responses, and the military alone cannot provide appropriate, holistic responses. It is a smart defence that is built on shared tasks; coordinated interaction between militaries, civil stakeholders, government agencies, and academia (the principles of Joint Civil-Military Interaction will be explained further in the paper). To be resilient, nations, states, and the whole of society must be smart in adapting to the ‘reality on the ground’, since reality does not easily adjust itself to our theories.

Today, hybrid threats present the greatest challenge to national and human security. When speaking of hybrid threats, it is not uncommon for military and non-military experts to observe that the first documented case of asymmetric warfare was the legendary wooden horse used to gain entrance into the fortified City of Troy. Odysseus was possibly the first asymmetric warrior. Throughout history we find individuals or groups inventing context specific asymmetric attack or defence mechanisms. Who does not know of the Assassins and the fortress of Alamut? With eyes open wide we admire the huge results they achieved with simple tools and, frankly speaking, with meticulous and long lasting training, patiently preparing action all the way to the desired end-state, which was usually the assassination of a strong man, much stronger than that of the whole Alamut company.

1.1 Asymmetric tactics have always been here

Asymmetric tactics and techniques were nothing unfamiliar during the long march of Alexander the Great or Julius Caesar to battle with tribes along the way to the British Isles. In his famous manual for warriors, Sun-Tzu speaks of smart attack and smart defence when one’s opponents are far stronger. When human societies were divided into smaller administrative units (take this only as an expression, not as an exact term, since it is not important for the main subject of our article), there was not always a balance between two opponents, and the size of the units depended on many circumstances (human resources, funds, equipment, logistics and so on). In that spirit, the advantage was on the side of the most inventive, the side that did not follow the ‘rules of battle’, the side that ignored the minimum of fair play and which was able to use surprise as a tactic and technique.
With the development of New Era kingdoms and later states, together with the advent of industrialization, new weapons, as well as three-dimensional warfare – land, sea, and air – defined the new battlefield and an army-to-army strategy, and tactics developed which ended with the termination of the Cold War. Sybille Scheipers, in her book *On Small War – Carl Von Clausewitz and People’s War*, noted:

A number of scholars declared Clausewitz’s theory of war outmoded and ill-suited to the twenty-first century. John Keagan, Martin van Creveld, and Mary Caldor criticized Clausewitz’s alleged rationalism. Martin van Creveld argued that, already with onset of the Cold War, wars become ‘non-Clausewitzian’ and ‘non-trinitarian’, in so far as most wars fought after 1945 were ‘low-intensity conflicts’ fought by non-state actors. At the end of the Cold War, we entered the era of predominant asymmetric warfare challenging old ways of thinking with a demand for a new way of thinking. (Scheipers, 2018, p 8)

The Balkan war in the 1990s was a sample of what happens when an official national army such as the Yugoslav People’s Army was disintegrated into much smaller units under the command of different nationalistic leaders, chiefs of mafia, local warlords and other new-wave politicians who grab what remains of a dead state. Europe was shocked and unable to intervene; NATO, led by the United States military intervention, opened the gate for what was at that moment the only possible peaceful end to a Balkan slaughterhouse. Even today a peaceful transformation has not been concluded. With some exceptions such as Vietnam and Timor-Leste, most of the nations where the international community has intervened have been abandoned as failed states, a result of work never finished by the international community. Something has gone wrong, or mostly wrong, with the international community’s responses to asymmetric conflicts, and we may assume that will be the same with the increase in hybrid threats. The reasons for continuing conflicts in states are not the same, but some of them are similar, for example, Syria, Bosnia and Herzegovina, and Iraq; even the Cyprus dispute is unresolved, as well as the case of Israel and Palestine.

As we have observed, asymmetric warfare and hybrid threats are nothing especially new; what is new can be seen in the dilemma of the military ensuring it is trained, equipped, and organized properly to be the first and most effective responder to hybrid threats and asymmetric conflicts. At the end of the journey lies the strategic question Who is the winner?, since we know that the winner takes it all, and we know from post-Cold War conflicts and intrastate wars that the military can perfectly win the battle but not always the war. The military is often unable to win the peace. Not all wars end as gloriously as the Second World War.

### 1.2 From closed system thinking to open systems thinking

Let us focus for a while on two different contemporary engagements within NATO operations: KFOR in Kosovo and ISAF in Afghanistan (bearing in mind that ISAF was not the only mission in Afghanistan, but it was the most complex one). These
operations have many similarities, as well as deep differences. Both operations deserve more profound study, allowing us to learn some valuable lessons.

ISAF and KFOR after-action reviews could provide important guidance in the development of Joint Civil-Military Interaction (JCMI) as a precondition for building positive results, under one important condition: never stop the mission from pursuing its desired end-state outlined on paper, while simultaneously allowing the needs on the ground to inform and guide civil-military interaction. Missions are like controlling poles in a nuclear power plant, and that is the main difference between ISAF and KFOR: KFOR is still present in Kosovo, but the ISAF mission was transformed into the Resolute Support Mission and is almost gone.

Case examples demonstrate the focus of military actions in population-centric conflicts employing “population-centric warfare” (Gregg, 2018, p 238) as operations conducted within the human domain network characterized by civil society, political, economic, and security sector relationships (Cleveland, et al, 2018). Clearly, to find the correct answers it is necessary to ask the proper questions. A wrong hypothesis will only arrive at a wrong conclusion.

“Thinking outside the box” has become a well-worn phrase meant to help individuals and organizations imagine new and innovative ways to build peace in a world subject to increasing asymmetric threats. One thing blocking new ways forward, however, is that we often unthinkingly search for answers within a closed system. This can result in doing little more than rearranging the deckchairs on the Titanic, when what is required is a better ship.

If we choose to be guided by closed system thinking we must accept that there is no reason to ask the military what their answer is to current and future national security and defence questions; nor should we only ask civilians. We should ask them both at the same time, in the same place, around the same table. We will need to learn to accept there are only a finite range of responses, and nothing more. Our addition to the discussion of addressing hybrid threats and asymmetric warfare is that we need to engage open systems thinking, where the number of potential responses to threats are limited only by our imaginations. There is not a shortage of critical thinking, there is one of creative thinking.

Our thinking needs to be fluid and unconstrained by convention. By-the-book responses should be viewed only as a starting point, and we must be prepared to throw out the book when it no longer meets our needs. Here we point out that we see hybrid threats and asymmetric warfare as separate actions which have the potential of flowing into each other, though not necessarily. Each can stand on its own. Hybrid threats can develop into asymmetric ones and manifest as geographically limited war. Asymmetric war can devolve into a hybrid threat. It is a permanent, dynamic process. This dynamic process is the reason why new, fast-adapting, resilient, and context-specific responses are needed at both national and international levels.
It is time to ask whether military operators are properly trained to address hybrid threats and asymmetric warfare, and what the role of civil society, governments and their institutions, Non-Governmental Organizations (NGOs), International Organizations (IOs), and Governmental Organizations (GOs) might be. Are they trained and able to work together collaboratively and cooperatively? Can they interact in a constantly chaotic, fragile, and dynamic operational environment?

1.3 Our desire for certainty and searching for options

What is needed is a profound, as well as nuanced, understanding of asymmetric warfare. Is it merely the opposite of symmetric warfare, or is it different in kind? If asymmetric warfare is the reverse of symmetric, existing asymmetric responses should be enough – but that has not proved the case. The numbers of special operating forces employing asymmetric means now comes close to the number of conventional forces. Are we prepared to address asymmetry with asymmetric approaches to defence and security, thereby building an asymmetric fortress? How are resilient and anti-fragile systems forms of asymmetric offence and defence? Is it more useful to focus on the current state as continuous, a condition of permanent crisis and global chaos, or look to the creation of future sustainable states able to battle against hybrid threats in asymmetric environments?

Like many phenomena today which we do not fully understand, asymmetric warfare cannot escape our desire for certainty in searching for options, even conducting experiments, so that we can write down the most comprehensive, simple, and understandable definition of asymmetric warfare. If we cannot even agree on a definition, how can we agree on solutions? And the most frightening part: are hybrid threats the first stage of asymmetric warfare or only an announcement of it? Can hybrid threats later develop or transform into something different? Is it more useful to replace the end-state with an understanding of the current state as continuous, a condition of permanent crisis and global chaos?

At the beginning of our journey we take as our definition one of many that can easily be found just one click away:

“Asymmetrical warfare, (defined) as unconventional strategies and tactics adopted by a force when the military capabilities of belligerent powers are not simply unequal but are so significantly different that they cannot make the same sorts of attacks on each other” (Ellen Sexton, 2014).

The historical proof of this definition is found, for example, in World War Two Balkan history, where much smaller and lighter armed resistance groups attacked and disrupted the heavier military structures of the Germans, Italians, Hungarians, and some minor neighbour states. A combination of guerrilla, terrorist, and conventional means of attack were used. At the local level resistance groups’ strategy, tactics, and techniques were successful, as they prevented the redirection of manpower and equipment to the Eastern Front by their ongoing engagement and occupation of
key resources. Euskadi ta Askatasuna (ETA) and the Irish Republican Army (IRA) are examples of organizations opposing much stronger regular armies in Spain and Great Britain. Al Qaeda and Islamic State (ISIS) employ terrorism in Afghanistan, London, Brussels, Paris, Iraq and Syria, to name only some of the locations in which they are engaged.

2 THE THIRD MILLENNIUM MILITARY MINDSET NO LONGER FITS

The era of classic, rigid industrial warfare is over. War and peace are no longer divided à la Clausewitz, two sides of the same coin; war on one side, flip the coin and ‘voilà’, peace. The borders of war and peace are blurred if not erased, and we cannot think only in terms of ‘battles’. The Third Millennium military mindset no longer fits our needs. If there is no war, classically defined, and the battlefield is a permanent condition incorporating cooperation, competition, and conflict, there is nothing to ‘win’. In this condition we all lose. War is between the people, with the people, and against the people (Smith, 2007), as we can observe when some leaders call upon the military to fulfil missions not legally designed for them, and they impose ill-supported provisional laws to which many high-ranking military personnel object. Operating against their own citizens is nothing less than a dictatorship – a playground well known from states not recognized as democracies in the past. When peace depends on the temper of an individual in the highest position, we are entering into the final circle of Dante’s Hell. We must agree with Admiral (ret.) James Stavridis: we are facing crucial questions about proper leadership and honest leaders (Stavridis, 2020).

Military thinking has atrophied. Some thinkers and politicians suggest all that is needed is to push a button and the military mindset will be reset. However, if we fail to change our way of thinking and move outside the intellectual constraints imposed by an overwhelming bureaucracy, whatever we reset will simply get us more of the same in a different order. It is better to think in a new way; we must recycle our way of thinking even if the risk is that we do not know exactly what will come out. What is needed is at least the courage of Alice when she stepped into the Looking Glass.

Hybrid threats and asymmetric warfare are the new normal. General Rupert Smith (2007) is unequivocal in his observation that “war no longer exists” (Smith, 2007, p 13); no longer is war consigned to clearly demarcated battlefields where uniformed militaries engage in combat governed by the rules of war. Smith further notes that conflict now occurs among the people where the “dynamic of confrontation and conflict, rather than war and peace, (are) at the heart of war amongst the people” (p 183). The hybrid battlefield is everywhere. Asymmetric responses are required.

2.1 Changing models of war – changing role of the military

Traditionally war has been the province of the state, as it held a monopoly on violence (Clark, 2015: p 4). But states have lost their monopoly, and one result is that military leaders must develop new collaborative responses in addressing asymmetric threats.
First, however, military leaders need to understand the changes. Military leaders too often remain anchored to a Clausewitzian understanding of war. A Westphalian model is regularly employed as if it is a state of nature to analyze and explain asymmetric warfare, a model that is proving to have limited utility, as “fewer and fewer wars involve conventional clashes of opposing armies” (Levy & Thompson, 2010, p 13). Outdated analysis tools are used to try and understand ill-defined, amorphous, virus-like hybrid and asymmetric threats. Military effectiveness has primarily been determined on how conventional forces fared in interstate conflicts (Cleveland, et al, 2018).

Smith’s new battlefield can be seen in the refugee crisis confronting the European Union (EU). Beginning in 2015, massive numbers of refugees began to flow into the EU. The crisis has had the effect of disrupting the EU and NATO alliance, and contributing to the escalation of internal disagreements to the point where some question the utility of the NATO alliance and the poor response of the EU. What bad actors could not achieve through kinetic action they accomplished, expressed metaphorically, through the weaponization of refugee populations as biological weapons (it is interesting that the term ‘biological weapon’ is familiar to extreme right political parties harshly opposed to the EU migrant policy).

Refugees walking towards the EU in their thousands presented the governments, police, military, and civilians with a new challenge, one that cannot be dealt with by kinetic means. The only available option is political. Refugees as a threat to domestic peace and freedom of movement have left the military on the side-lines, primarily providing policing activities. Political and military leaders are slow to recognize refugees as a potential hybrid threat.

The flow of refugees through Turkey is an example. Failed negotiations between the EU and Turkey resulted in the Ankara Government opening the gates of existing refugee camps literally overnight. This action can be understood as a hybrid threat, where the EU was pushed into a corner and obliged to pay billions of euros to address the burgeoning refugee crisis without any good results. Some countries, e.g. Italy, Austria, Hungary, Slovenia and Croatia, sent their militaries to their national borders to address the influx of refugees. This action initiated a legal dispute over the legitimate role of the military on national borders when the perceived threat is from unarmed, barefoot refugees and migrants intermingling and moving into sovereign states. Governments and the solidarity of the EU were stressed as the administrative treatment of refugees and migrants was confused, even though international law treats each differently. The state structures were not prepared for the complexity of the crisis.

An over-reliance on power as determinative can cause military leaders to struggle to understand the profound changes impacting responses to hybrid threats which have the potential to carry over into future forms of asymmetric warfare (where we have entered an era of war without conclusion (Naim, 2013, p 108)). Military
organizations are conservative, and their risk averse nature can lead them to resist the necessary changes (Cleveland, et al, 2018).

2.2 Farewell to the geography

Civilian and military actors are obliged to develop a competency in recognizing and understanding the hybrid threats that now characterize an unbounded operational environment. The battlefield is no longer hemmed in by geography. Technology has extended the physical fight into the cyber realm. Human and technological networks dominate. Networks, not military formations, are the new organizing structure (Ferguson, 2017; McChrystal, et al, 2015). It is necessary to embrace a new paradigm; hybrid threats have the potential to lead us into network war.

Hybrid threats are by their nature asymmetric; they behave like living organisms that replicate themselves throughout the unbounded battlefield demonstrating a fractal nature. Hybrid threat activities develop their own logic and move towards an internal congruence. The threat manifests itself at each level of the structure – tactical, operational, strategic, and political – differently, yet the same. To understand a hybrid threat, it can be useful to think of broccoli. The tiniest floret and the whole vegetable replicate the same pattern at each level of analysis. A “self-similarity” develops (Gadlin, et al, 2013, p 476). To combat hybrid threats, it is necessary to disrupt this self-replicating pattern.

2.3 Resilience – nothing new, but always different

Unconventional warfare is no longer a shadow activity. Both state and non-state actors conduct military and non-military operations using hybrid means when power relationships are unequal and the consequences of force-on-force engagements are too great. The cost-benefit analysis has tipped towards the unconventional.

It is not obvious, nor is it necessary, that hybrid threats will evolve into asymmetric warfare. As all adversaries are different, the determining factors are their goals and competing agendas, as well as human, technical, and economic resources. Do not forget that the threat of nuclear war is real, hanging above world peace like the Sword of Damocles, and if a leader of one power decides to strike with nuclear weapons, even if his state will be attacked by conventional weapons in retaliation, it is time to switch on the loudest possible alarm to begin new negotiations between all the states that possess nuclear weapons.

Resilience speaks to a system’s ability to recover from a shock; to quickly get back on its feet, so to speak. The military has a renewed interest in resilience as a key coping strategy (Jermalavičius & Parmak, 2018, p 26). Discussions around resilience should be extended to include the need for fluidity. Late in the 20th century “nimbleness and flexibility became increasingly valuable” (Naim, 2013, p 117). “Flexible” suggests systems capable of bending under stress and not breaking, but flexibility is only good enough; it is not the answer to network war. Networks must develop the capacity to
flow with hybrid threats, using their energy to build network-wide responses. Fluid, non-kinetic conflict management approaches which “embrace the chaos in a unity-of-aim, self-organizing, systems approach to peacebuilding” are required (Matyók & Stauder, 2020 p 339).

To successfully transform hybrid threats, it is essential to build anti-fragile political and military networks. This approach moves beyond flexible resilience. Resilience relies on building systems that can absorb a shock and recover. In contrast, Taleb (2014) outlines a need for the development of anti-fragile systems – systems that embrace shocks and use the energy to make the system stronger. Military networks must become anti-fragile in meeting hybrid threats, and become dynamic, complex adaptive systems: “a scale-free network...a web without a spider” (Ferguson, 2018, p 37).

Resilient, anti-fragile systems are the answer to hybrid threats and asymmetric warfare. The question is whether military networks are capable of becoming anti-fragile without networking with non-military specialists. Most military headquarters have no need to transform an Industrial Age military way of thinking to one that is adept at dealing with a flattened and dynamic digital world. Calls for change do not endanger the rigid, sturdy military system. Change can be viewed as an opportunity or a threat, and many military leaders have learned to be risk averse.

3 JOINT CIVIL-MILITARY INTERACTION IS NOT AGAINST THE MILITARY, BUT FOR THE MILITARY

Conflict analysis and transformation, as part of joint civil-military interaction (JCMI) employing a unity-of-aim approach (Matyók & Stauder, 2020) to achieve a harmony of effort, should become the primary non-kinetic response to hybrid threats. Currently, education and training in joint civil-military interaction is inadequate, leaving military actors ill-prepared to confront hybrid threats that have no kinetic response.

This is not to suggest that a classic military capability is no longer needed, only that our understanding of the military and the requirements placed on military actors have changed. The military is now one tool among many in conducting whole-of-society responses to hybrid threats and asymmetric conflicts, and for kinetic responses, the military remains the best option. The military can establish a safe-and-secure environment within which humanitarian actors and other experts can function; but the military is incapable of leading the entire process.

As war has transitioned and now occurs amongst the people, new forms of military response are required. Conflict resolution methodologies must become part of a warrior’s tool kit. Negotiation, mediation, and facilitation are tools for combating hybrid, people-centric, network war. Unfortunately, “NATO personnel are lacking awareness of CMI”, and they are unable to effectively engage non-military actors
positively (van der West & Warstat, 2018, pp 46-47). A myopic focus on kinetic operations continues, irrespective of the observation of how the military engages regularly with local civilian actors in non-kinetic engagements (Davidson, 2009; Gezari, 2013). Increasingly, military actors find themselves engaged in the political sphere 80% of the time and employing the remaining 20% of their time in kinetic operations (Gezari, 2013).

3.1 Battlespace as a social body

The complex nature of hybrid threats makes them a challenge to understand vis-à-vis conventional war. Hybrid threats are asymmetric by their nature. Possibly it is useful to borrow from the medical community in working to understand hybrid, asymmetric warfare. When approaching a patient, more than one specialist gives their opinion and makes a diagnosis and a prognosis, and then a treatment plan is developed to 1) Save life, 2) Treat the main cause, 3) Treat side effects, and 4) Help the immune system to become more resilient. According to the decisions made, monitoring is constantly in place through technical equipment and well-trained human resources.

Possibly it is useful to imagine the battlespace as a social body where diplomacy, information, security forces, and economics interact. Peace-builders approach the social body as a different specialized physician approaches a patient; they conduct a diagnosis, make a prognosis, and apply a therapy or intervention. Rather than meeting threats with direct military force alone, JCMI actors address a social virus using therapeutic means, treating the patient holistically.

The current novel coronavirus, Covid-19, is a threat to global health, and at the same time it is a teacher instructing us that without a global scientific approach, research, and unity of effort no one wins. The coronavirus has no respect for national borders; it is progressing in a fast-moving world, adapting to its specific environment. Systems, states, societies, and individuals must adapt too, and they must reinvent and develop a value regretfully forgotten in the past few decades: solidarity. Solidarity is needed in minimizing the living space of a virus; the virus must have a host; unfortunately, selfishness is expanding to meet the pandemic’s size. In this instance large portions of populations are refusing to take Covid-19 seriously, not understanding that solidarity and following the rules is \textit{sine qua non} for better success. The global community must be called to action to meet the threat; a threat that can be exploited by bad actors. Please note that whenever we refer to the Covid-19 pandemic we are not placing health crises on the list of hybrid threats; we are trying to explain the nature of the phenomena using this fresh and painful example.

It is important to recognize that Covid-19 is not a traditional hybrid threat, nor is it a form of asymmetric warfare; however, bad actors can exploit crises such as pandemics to achieve destructive ends. Health crises can be leveraged to gain advantage. For example, when governments and institutions are unable to effectively respond to health emergencies and protect citizens, bad actors can use this failure to engender mistrust of the government among the people.
3.2 Replacing the ‘war on terror’

The post 9/11 and ISIS ‘war on terror’ paradigm must be replaced with ‘solidarity for everyone’, although we might find some similarities between terrorist attacks and spreading viruses. Hybrid threats that operate like, or as, viruses require whole-of-society responses. Cultural, religious and ethnic differences are minor when facing global, existential threats which endanger life and show no respect for the social differences dividing individuals. The smallest denominator is ‘basic life’, or ‘human rights’ if you prefer. Human security and national security are two sides of the same coin.

Asymmetric warfare (Al-Qaida, ISIS, Taliban), or less violent, or even pretending to be, daily routine hybrid threats, infect the social body and when left untreated can affect the DNA of a society. Social structures become addicted to violence and conflicts become intractable.

Hybrid threats as social viruses live off their hosts gaining strength as host-bodies seek to develop an immunity. The virus adapts to changes in the social body. It is a dynamic activity. The idea guiding civil-military intervention should be bringing the social body to a state of wellness. The treatment plan should be holistic. It cannot be military-centric. When a physician treats a patient, they treat the whole patient; physically, emotionally, and spiritually. Responses to asymmetric, hybrid threats can be no less focused. Societies have physical, emotional (cultural), and spiritual dimensions. A pathology in any one dimension will impact all the others.

3.3 C3 – Collaboration, Cooperation, Complementarity

Civil-Military Interaction (CMI) will be the most progressive, adaptable, and useful tool available to civil authorities and the military in tackling hybrid threats and providing humanitarian assistance and disaster response to crises. Employing a CMI way of thinking, civil and military stakeholders harmonize their efforts in complex operational environments to ensure the meeting of human needs and the continuation of national security objectives, as national and human security merge. A CMI way of thinking is a goal where the civilian and the military worlds act out of their expertise and complement each other. Competition is anathema to CMI. Collaboration, cooperation, and complementarity (C3) are the process and the goal in building resilience. JCMI recognizes the need for joint complementarity.

Time is the most critical resource when responding to crises and executing humanitarian assistance and disaster response operations. The CMI mindset is built upon a common language or grammar. Agreeing to and using settled-upon terms and definitions facilitates C3 and speeds joint problem-solving and joint decision-making. Agreed-upon conflict resolution processes expand the amount of time available to civil and military actors. Operational delays resulting from a misunderstanding of the terms in use with no conflict resolution structure in place can lead to unnecessary confusion between individuals and agencies.
To better manage the time available in complex operations we require new ways of thinking and acting. Bureaucratic, stovepipe responses to fast-moving chaotic, complex, and complicated situations is no longer acceptable. The Joint Civil-Military Interaction (JCMI) Network provides a structure within which the CMI way of thinking is made manifest.

3.4 Joint Civil-Military Interaction Network

The JCMI Network brings civil and military actors as well as scholars together to investigate issues impacting civil-military interaction in peace operations and humanitarian actions. JCMI is based on communication, planning, and coordination between international, national, and local non-military representatives and military leaders before, during, and post-crisis to facilitate the mutual effectiveness and efficiency of all. The purpose of JCMI is to construct a new way forward in addressing hybrid threats and humanitarian crises. Its goals are to:

- Establish and strengthen partnerships between JCMI stakeholders,
- Build international cooperation,
- Inform and educate policymakers with regard to JCMI,
- Promote public policy initiatives that advance JCMI within peace operations and humanitarian response communities.

The JCMI Network offers a way forward. JCMI is a humanoid-algorithm, flexible enough to adapt as rapidly as possible in meeting new kinetic and non-kinetic threats – conventional, hybrid, and asymmetric – providing real-time advice to military and non-military actors with regard to conflict analysis and transformation.

As a network, JCMI has the capacity to provide tailored responses based on need. Off-the-shelf responses that are not context driven can have limited utility and are not part of the response set; rather, subject matter experts ‘swarm’ to address specific needs in context. Strategy and tactics are developed case-by-case.

It may appear as though we are suggesting that addressing hybrid threats and asymmetric warfare is like coping with the spread of disease, and that is, in a way, correct. When confronting the spread of disease, it is important to move fast, and to bring experts together who can collaborate and freely exchange information in building the capacity to respond. Governments must understand that all political decisions must be based on the most comprehensive scientific data at that moment, and their role is to calm citizen populations and explain to them how the situation is changing, that response measures must adapt to the changing situation, and that scientific conclusions are always made in a dynamic environment. Strategic communication with populations is sensitive and must be frank and as optimistic as possible, calling for individual participation, goal oriented in such a way that if there are victims it will not be for lack of a meaningful response, but because we do not know enough about the threat; nonetheless, we are working to improve.
In a civil-military interaction context, ‘fight’ is not exclusively used as a military term. It describes concerted action in the same way that we speak of ‘fighting climate change’, ‘fighting the coronavirus’, and ‘fighting for peace’. We are obliged to use precise terms precisely. When we are confronting a pandemic then we are not fighting traditionally, but we are working to stop the spread, minimize the number of victims and the damage to the economy, and find a safe vaccine for the future.

4 VERTICAL FLATNESS

The world is flat, and military organizations are vertical, hierarchical. This can lead to slow bureaucratic thinking and inadequate responses when quick action is required. The military can default to what it knows best, kinetic responses. We must invent responses that are appropriate to the demand.

A JCMi architecture already exists in rudimentary form. What has delayed development of a mature JCMi structure? Possibly one of the main reasons is that since 2005 the development course of Civil-Military Cooperation (CIMIC) as a peace-building tool has been a stormy one. Many schooled in classic military thought have remained permanent sceptics of CIMIC (Zajc, personal observation during different CIMIC conferences since 2011).

Current CIMIC doctrine can be viewed as a-little-of-this-and-a-little-of-that; something for everyone, and consequently not much of anything. Vertical military command structures seem to ‘hide’ CIMIC, not integrate it. Possibly a reason for hiding CIMIC is political; however, it points towards now being the time to examine CIMIC concepts, considering JCMi as an organizing concept.

There are doubts. In the last five years the idea of blending INFOPS, PSYOPS, and CIMIC and placing them under one structure has been presented. Notwithstanding some brave and forward-thinking exceptions, most high-ranking decision-makers have communicated a discomfort when considering the full integration of civilian supporters into operations from the first day of planning to the conclusion of operations. A hesitancy remains in adapting to a new reality. In our experience some of those decision-makers accepted CIMIC not as a tool which contributes to successful peace operations, but as nothing more than an ornament on their shield used to keep peace in the room. A total defence of an old way of thinking. Military leaders can delude themselves into believing that because their approaches to conflict have worked in the past, they will work in the future. The saying that armies are always fighting the last war holds true.

We acknowledge our goal of changing the military way of thinking, considering JCMi will not be easy to achieve. Recognizing the challenges ahead, we start today, introducing the CMI way of thinking; step-by-step, unit-by-unit, nation-by-nation. In the end we are confident that both civil and military leaders will accept JCMi as a better way of doing more with less when faced with hybrid threats in complex
asymmetric environments. Our initial objective is to establish a permanent structure that will produce and reproduce JCMI at all levels within NATO, EU, and the UN using a common 'language' and way of thinking. Wherever possible JCMI will employ existing resources, i.e. Centres of Excellence, military education systems, academia, the internet, AI, military and non-military subject matter experts, media, and so on to advance the development of a common mindset. Some may ask whether we need to focus on the development of such a large JCMI network. Our response is to consider what is required to confront a pandemic or complex crisis? Who should not be part of a coordinated civil-military response?

Conclusion

The golden decades after World War Two left the West unprepared to respond to oil, financial and health crises. Most of us were worshipping the advent of permanent unending development, enhanced technology, human rights, liberalization, global and free markets, and labour mobility. Of course, crises are mostly unpredictable in their size and force. In the relative ease of the post-war years we became comfortable in our Western way of life. We entered an era of big data, artificial intelligence, and robotics, algorithms of all kind controlling individuals and collecting data about their private lives. Did we realize that along with the collection of all that data we continued to live in an unpredictable and chaotic world? We find ourselves in a world of constantly recurring patterns of unpredictability. Ongoing crises is the new normal, or maybe better, the new abnormal? To address this pattern of unpredictability and ongoing chaos the new terms in use are ‘resilience’, ‘comprehensive’, ‘civil-military’, and finally ‘interaction’. We do not have the luxury of retrenching as an outcome of intervention fatigue.

We propose to move beyond the limits of end-state and desired end-state to speak of next-state. End-state planning and execution has often left behind failed states that produced millions of refugees and left the space open to be misused and exploited by authoritarian state actors. There is need for a shift in our thinking. Civil-military actors need to view crises as on-going activities without conclusion, manifesting at any given time as cooperation, competition, or conflict.

During the Industrial Age businesses replicated the vertical military structure as a way of streamlining processes to produce more with less investment. In our post-industrial, digital age the military must now copy the new horizontal business environment. An environment that can assemble rapidly adapting teams without a permanent structure, adjusted for specialized tasks, and inclusive in bringing subject matter experts together and where new inventions are immediately incorporated (AI, Web etc.); teams-of-teams.

In this article we proposed an examination of the dynamics of hybrid threats, asymmetric warfare and resilience in an open-security environment, and the requirement for a trained and constantly learning core of military and non-military experts who speak the same language and hold the same mindset, respecting their permanent tasks in an always changing and flattened environment.
The coronavirus is painful, but it provides an important lesson for JCMI: national borders protect no-one; they divide and make the work necessary to build solidarity much harder. Tragic stories remind us that wrong political decisions always lead to victims. To avoid future pandemic catastrophes, the EU and the USA must operate together within a responsible Joint Civil-Military Interaction Network where subject matter experts lead collective responses irrespective of operational domains, civil society, or military biases. And what about the rest of the world? They are welcome in an open-code society.

A globally networked world requires global responses. JCMI is a global activity that prepares civil society and military actors to work side-by-side in providing collective responses to hybrid, asymmetric threats. In the end hybrid threats affect us all. Health crises, supply chain disruptions, and disrupted economies are a few examples of how a networked world requires transnational, comprehensive responses to catastrophes where the time available to respond is limited.

In a global world, interconnected and interdependent, states are more vulnerable than ever before, despite better trained and equipped militaries and other security instruments and measures. Some people doubt whether it remains a reasonable strategy to continue NATO, the UN, the EU, and other networks which were established on the ruins of World War Two and the Cold War. The question is simple: do we have something that will replace them, even if we agree they are far from being efficient enough and properly tailored to respond to a new, global reality? Behind the institutional walls of all of them are states, their interests, willingness, and selfishness, thousands of lobbyists paid by corporations, political parties, and individuals. That is reality, like it or not, and it will go on.

As always, we have two options: leave the situation as it is and hope and pray it will change by itself, comforting us in our inactive lives, or try to do our best to change our institutions, mostly the UN, the EU, and NATO, simultaneously changing national states. Even if it does not look like it, we try to encourage international organizations to begin to reform their essential parts, educating people to adjust their daily lives and work to a new reality. We are facing a challenging problem: we are building a better boat while still sailing it, and that is why our work is so complicated. But, if we can send people into space, constructing spaceships to deliver people to Mars, then we are able to control complicated, structured, and constantly changing systems in unknown environments. Money is not a question; experts are not a question; only the will to change our way of thinking, and a bit of courage, to step into a recycled land. What we propose in this article are not final answers or even a recipe for adjustment; it is an invitation for change at the national and international level. But most of all we need leaders with vision and courage to change ways of thinking and of doing at a time when leading corporations must realize that unlimited growth is their death and that the ‘law’ of free markets is lawless. How about a new term: responsible markets?
The first lesson from the novel coronavirus, Covid-19, is that we must unite our efforts, we must improve international mechanisms of crisis management to respond next time faster, more accurately, and more efficiently.

Geography no longer provides security. In a crisis, it does not matter from which direction the threat comes. Chaos theory is clear: the butterfly flapping its wings in the Amazon will influence weather patterns throughout the earth. We must move forward collectively in addressing asymmetric threats. In the end all our work will be useless if we do not try to answer what A New Role for Military Forces Responding to the New Digital Reality should be. On the one hand, there is not much change in the military’s role, but on the other, the substantial change in how that role is executed is significant. As Dutch General (ret.) Ton van Loon said: ‘I am always trying to convince my old-fashioned generals that tanks are not coming through the internet...’

Bibliography