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The physiognomy of modern multinational joint operations and the manifestation of mobility in contemporary warfare

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Abstract

Recent conflicts at the international level highlight the joint and multinational character of multinational operations in today's security environment where conventional and unconventional, asymmetric actions are combined. Over time, in order to optimise and make more efficient the human, information and material resources employed, and to ensure a flexible and pragmatic strategic vision, there has been a continuous need to seek proactive, collective involvement, both from a decision-making and an operational perspective. Thus, there emerged a pressing need for modernisation in the architecture of multinational joint operations. It applies the vision of a qualitative analysis of the global order in the context of great powers, emerging powers and international organisations whose effectiveness is questioned. At the same time, this article analyses the dynamics of contemporary multinational interventions and explores their options for manifestation as autonomous or assembled.

Keywords:
joint operations; multinational operations; current security environment; hybrid warfare; international organizations; modernization.

The melting pot of the international security system is a mixture of national security interests, values and objectives, and external challenges.
The physiognomy of the modern operating environment is becoming increasingly clear, the evolution of the armed conflicts of the future is imminent and accelerating, and the armed forces are increasingly characterized by versatility, mobility, interoperability, adaptability, flexibility, availability, diversity, and speed. Mass warfare is being replaced by hybrid warfare (conventional and unconventional). A revolution is taking place in the military in terms of information, ideology, operations, strategy, and force policy in general.

Artificial Intelligence contributes to some of the greatest strengths of modern warfare through its initiative, speed, multidimensionality, ubiquity, and convergence. Information warfare is fierce, with automation and digitization impacting the infrastructural, cultural and military, diplomatic, political and socio-economic domains.

From a methodological perspective, this article aims to develop, through the analysis carried out, a process of prefiguring possible solutions to current problems in the international security system. Through observation, description and explanation, the general framework, the social actors involved and their mission are outlined. The procedures of content analysis ensure increased objectivity and a systematic approach. They also prioritize anteriority, enhancing the feasibility of deriving a certain type of connection within this unique pattern of anticipation. Through the practice of triangulation, the veracity of information from a multitude of different sources is verified, the case study being one of them.

The modern, innovative multinational, joint operations are placed between Maslow's Pyramid, in its upper zone of the need for self-actualization, and Bloom's Taxonomy, in its exhaustive approach. Cognitive processes that underpin multinational joint operations evolve from information recognition, definition, repetition and reproduction to understanding, application, analysis, value judgments through evaluation, and are completed through creation. Innovation is built on imagination, planning and the generation of content of interest with significant value added in the security and defence sphere.

The article materializes an articulated vision between theory and practice, between armament in different generations of war and disarmament, stability and peace support, evolving from concepts, purpose, principles, characteristics, advantages and challenges of multinational operations in the context of security and defence modernisation. The proposed qualitative analysis is chosen in the logic of discovering elements of novelty. Starting from the society of the present and continuing with that of the future, it circumscribes a time of information, innovation and creativity.

1. Multinational operations. Conceptual references, classification, principles

Multinational joint operations are military actions of varying scale and size, carried out with groups of army forces, within coalitions and alliances, under single political control and command and with a single objective (Frunzeti 2000, 23). Multinational operations are those military actions involving two or more countries. The first is the simple combination of forces, so countries join together militarily to merge their separate military forces into a single, stronger force. They also serve a political purpose, as the combined efforts of two or more countries give legitimacy to action by demonstrating broad international approval of the operation.

Multinational joint operations are conducted both in war and in peacetime as part of stability and support operations. Military stability and support operations encompass a wide range of activities and actions aimed at achieving a variety of objectives, including the fulfilment of national interests, deterrence and prevention of war, promotion or, as appropriate, restoration of peace, reduction of tension between states below the level of armed conflict and resolution of international crises, and support to civilian authorities in dealing with internal crises.

In their content, military stability and support operations may include elements of both combat and non-combat operations conducted in peacetime, crisis and war (Frunzeti 2000, 23). In other words, there will be numerous situations that, due to their nature, will exhibit war-like characteristics, including combat actions utilizing military capabilities to achieve specific objectives.

Stability and support operations contribute to the achievement of the strategic national security objectives of the states that organise them, and sometimes also to international security objectives. In peacetime, the primary mission of armed forces is to ensure deterrence of all types of aggression, i.e. both external and internal aggressive actions and combined actions.

We therefore consider it appropriate to use the term *multinational joint stability and support operations* for the following reasons:

- the impossibility of establishing the exact dividing line between war and military stability and support actions;
- the participation under a UN or OSCE mandate of several States in the resolution or management of crisis situations;
- the content of operations is correlated with the need to belong to stability or peace support.

For a correct understanding of the terms used we will briefly define the terms *alliance* and *coalition*.

Alliance is "*an arrangement made on the basis of formal agreements between two or more states, with medium and long-term political and military objectives, which*

aims to achieve common interests and goals and to promote the national values of its members". (Ministry of National Defence 2001, 12)
Coalition, as opposed to Alliance, "*is an ad hoc political and military commitment between two or more states to carry out joint actions*". (Ministry of National Defence 2001, 12)

Within the Alliance, exceptionally, a lead nation may be designated - where all Alliance members subordinate forces to a single nation by transfer of authority, or a joint staff command is formed to exercise control over both multinational and national units. Multinational actions within the coalition take place outside the Alliance's established links, usually for one-off situations or for long-term cooperation in a specific, narrowly defined area of common interest. As in the case of the Alliance (for conjectural situations), a lead nation may be established, based in particular on criteria relating to the extent of participation with combat, logistic and information forces and assets in planned operations.

Command structure of multinational forces:
a) Alliances are characterized by years of cooperation between nations.
In alliances, common objectives are agreed upon: standard operating procedures are established, appropriate plans have been developed and exercised between participants, i.e. there is an organisational plan, interoperability between equipment, and command relationships have been firmly established.
Alliances are normally organised under an integrated command structure, which provides unity of command within a multinational framework. Key elements in a command structure are that a single commander will be appointed, that his staff will be composed of representatives of all member nations and that all subordinate units and their staffs will be integrated down to the lowest echelon to accomplish the mission.

b) Coalitions are normally formed as a rapid response to an unforeseen crisis.
In the early stages of such an emergency, nations rely on military command systems to control the activities of their forces. Initially, therefore, the coalition will involve a parallel command structure.
As the coalition evolves, coalition members may choose to centralise their efforts by nominating a lead nation to receive command of the coalition. In this type of coalition, all coalition members subordinate themselves to a single partner, generally the nation that provides the predominant number of resources and personnel. However, subordinate nations' commands maintain their national integrity. The command of the leading nation establishes integrated staff sections, with a composition determined by coalition leadership.
The principles of multinational operations are Unity of effort/goal, Sustainment, Concentration of effort, Economy of effort, Flexibility, Definition of objectives, Initiative, Maintenance of morale, Surprise of adversary, Avoidance of surprise, and Simplicity (Ministry of National Defence 2001, 12).

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2. Architecture of multinational joint operations. Characteristics, advantages, and challenges

From micro to macro, an operation is a military action or the accomplishment of a strategic, tactical, assurance, and training military mission, the process of continuing combat including movement, supply, attack, defense, and maneuver necessary to achieve the objectives of any battle or campaign. Multi-nationality, on the other hand, is a reality at the operational level, as it reflects the Alliance's political need for international consensus and legitimacy for military action. Multi-nationality has become the standard for conducting missions around the world, and today we see more and more nations willing to pool their resources to promote global peace and stability (Ministry of National Defence 2001, 12).

When we talk about joint multinational operations, we refer to the totality of land, air, and sea actions carried out by a group consisting of forces or elements and assets belonging to several categories of military forces, with military forces of different sizes in the corresponding environment specific to each of them, in a determined geographical area, in a unitary concept and under a single command, exercised by a gathered operational command, under political control in order to achieve some strategic objectives. (Ministry of National Defence 2001, 12).

A more comprehensive definition of the joint operation stipulates that, within it, the effort focuses on synchronizing the forces and capabilities provided by the "land, naval, air, space, cyberspace, special operations and other functional forces" components, one of which being able to predominate at a certain stage of the operation. Under these conditions, the actions carried out assume the integrated and united involvement of all categories of forces that intersect, overlap, complement and inter-condition each other dimensionally, informationally and operationally. (Ministry of National Defence 2012, 136)

NATO must always be prepared to work with traditional members and partners, but also with other, less familiar forces – in coalitions. Mutual trust is essential when working in a multinational environment (NATO 2012).

Within NATO, *Multinational Combined Joint Operations* are those operations in which armed forces from two or more countries participate and which involve at least two categories of forces. The concept of *Allied Joint Operation* refers to operations in which forces from only NATO member countries participate.

In NATO Doctrine, multinational military operations conducted in wartime are considered multinational joint operations for collective defence under Article 5 of the North Atlantic Treaty, and those conducted in peacetime are considered UN/ OSCE peace support operations conducted directly by the UN/ OSCE together with non-Article 5 crisis response operations conducted by NATO under a UN/ OSCE mandate (NATO 2012).

The fundamental purpose of a multinational operation is to direct the military effort to achieve a common objective. Multinational operations are unique. Each national commander is responsible to the multinational force commander. The joint operation is executed within a defined period of time, within the physical boundaries of a geographical area (called a Joint Operation Area - JOA), where the joint force commander plans and executes a mission. "*The military structures of the future will be designed and trained to carry out complex military actions, in a joint context, with a multinational, modular structure that can be adapted at short notice to the mission and to the specific conditions of deployment*" (Mureşan 2005, 46).

In terms of characteristics, in addition to the existence of groups of two or more categories of forces (land, air, sea), we also find: action in a well-defined geographical area, the existence of a unitary concept, exercising a single command, aimed at achieving strategic objectives and commanded by a joint operational command. The integrated nature of military action is a feature of operations, the emergence of which has been brought about by the multiplication of the action couplings that make it up, and is a natural consequence of the increase in the number of types of weapons and the organisation of the modern army into categories of army forces.

3. Perspectives of modernity on multinational joint operations

3.1. Generations of war on the time axis

Modern warfare has evolved generationally. It is believed that the strategic and tactical advantage will go to the one who is proactive, the first to transition to a new generation, the one who understands change and adapts in the shortest time. In contrast, a nation that is slow to adapt or not open to change will lose its advantage. From one generation to the next, there has been a steady increase in battlefield dispersion and a decrease in reliance on logistics.

The first generation of warfare (1648-1850) involved large numbers of troops, linear tactics (line or column tactics), predictability, and low readiness of enlisted troops. Technique and weaponry were rudimentary (the smoothbore musket), operational art was conceptually non-existent, but was practiced in isolated cases by an illustrious commander such as Napoleon.

The second generation of warfare (1850-1918) was characterised by the perfection of weapons, the means of combat, and the increase in firepower. War industries (artillery, bombardment aircraft), repeating fire weapons, and tactics remain linear, but a large volume of fire can be executed. Resources improved with machine guns, barbed wire, indirect fire, and movement, still remain linear. Means of fire are carefully planned with a view to hitting an objective, and defence is by direct contact (Lind, Schmitt and Wilson 1989, 22-26).

The third generation of warfare (1918-1990) involves the increased mobility of forces, manoeuvre is given greater importance in the battle space, across the spectrum of military action, blitzkrieg attacks, tanks, and non-linear tactics whereby the opponent is surprised by envelopment, reversals, infiltration. The defence is based on counter-attack, takes place in depth, and static actions are replaced by rapid actions (Petrescu 2021). Mobility makes the transition from third to fourth generation more visible. Thus, the smaller the troops, the more agile and manoeuvrable they are. Fixed points of communication will be increasingly rare, precisely because of the vulnerability they imply. The lines between responsibility and mission are increasingly blurring, and this will become more and more apparent in the next generation.

The fourth generation of warfare (2003-2011) has manifested itself, particularly after 1990, characterised by a predominance of unconventional forms of combat, non-linear tactics, and technological potential, but also asymmetry as a product of huge technological gaps. The threats present in the future operational environment are hybrid, including, in addition to conventional actions, catastrophic actions – chemical, biological, radiological and nuclear weapons of mass destruction (WMD/ CBRN), disruptive actions such as cyber aggression, information operations, psychological operations, and irregular actions – terrorism, insurgency, guerrilla warfare, piracy, extremism, partisan groups, organised crime, subversive actions (Petrescu 2021).

There is a low possibility of interception of communications, artificial intelligence can radically alter tactics, robotics is evolving at a rapid pace, vehicles can be remotely piloted, and intelligent soldiers armed with state-of-the-art weapons can cover large areas.

The American vision superimposes asymmetry on an '*axis of evil*'[1] with which it associates the proliferation of weapons of mass destruction, terrorism, and the actions of highly technological countries. A distinction is made between confrontations which are the product of chaos and generate chaos, and asymmetric confrontations which oppose forces that are disproportionate in terms of organisation, technology, equipment, or potential (Mureșan and Văduva 2004, 49).

Leadership is a priority in this framework, as it is important to continuously pursue operational and strategic objectives, to be able to concentrate, select targets, manage challenges, supervise a constantly changing environment, manage and manipulate the excess of information, without losing sight of the essential content, i.e. those with value potential.

Forces participating in the armed conflicts of the future will be further developed through surgically precise strike systems, electronic and

[1] The emblematic metaphorical concept of the George W. Bush era, which became an essential pillar of the foreign policy architecture, referred to the major threats to the US - Iran, Iraq and North Korea, to which Syria, Libya and Cuba were later added. In the same key, there is the concept of the Troika of Tyranny describing the authoritarian, dictatorial Latin American triad of three enemies of democracy – Cuba, Nicaragua and Venezuela.

information or psychological warfare. The army is thus shaping up to become a fast-action, mobile, maneuverable, modular and versatile force, proactive, trained and equipped, with a high degree of connectivity to information networks and, above all, self-sustainable through its resilience (Petrescu 2021).

A future generation of warfare is beginning to take shape in terms of the future operational environment, so we could already start to bring to the table the idea of a fifth generation of warfare, a generation of innovation, of digitization, still insufficiently understood and exploited to its true potential. Knowledge and the revolution in thinking continue to serve as inexhaustible sources that facilitate the preparation and construction of unpredictability, non-traditional actions, enhanced precision, and the acquisition of new equipment and installations.

Future warfare as critical infrastructure involves the transition from the brutal form of the use of force to subtle modalities, today's new armies aim to shift from space-oriented to time-oriented, and military doctrines are adapting to increase the ability to project power over long distances, with an emphasis on joint operations between different multinational operations, on synchronized simultaneous attacks, with increased speed, with an emphasis on initiative (Georgescu 2016, 18-19) As Alvin Toffler notes, "*military doctrine continues to change in all the world's militaries*." (Toffler 1996)

3.2. Perspectives of modernity in security and defence

Primary technologies have been around for over 50 years, but with the rapid growth of computing power, major advances have occurred in recent years as a result of more and more new algorithms.

Modernisation has been gradual on several levels. Crisis management or collective defence through alliances is a benchmark in the modernisation process. The North Atlantic Treaty is thus the central international political document governing their establishment, organisation and operation.

Disruptive technology is an innovation that integrates, creates and recreates the lifecycle, in a global and centralized context where investors or consumers are ready to vary different areas such as artificial intelligence, robotics, nanotechnology, autonomous vehicles, machine learning, specific industries and business operations, in the context of the need to fund military operations.

The proactive approach envisages a transition from traditional technologies to high-tech expressions of human societies. Embracing the digital sphere is a lengthy process for ordinary people, but the impact of disruptive technologies is having a strong impact on their mobility, improving the quality of everyday life. The masses need to understand the challenges of excellence, to perceive digital learning as a valid and competitive competitor to traditional patterns. Changing the mindset of this comfortable resistance is the first step to generating sustainable solutions.

Science solves the toughest economic, societal, military, health, and environmental challenges.
Disruptive technologies are the future of technological ecosystems, and their advances will be heralded by revolutionary interventionism in future industries.
In recent years, our planet has changed, with the 21st century marking the emergence of a new industry based solely on information and technological advances.

Throughout its history, in order to keep pace with the new imperatives in the field of security and defence, specialists have progressively worked on Artificial Intelligence and other technical, technological and informational revolutions, having had a purpose, and a vision; thus, they have brought benefits, but also risks. These can be used to develop new algorithms that can perform everything from accurately calculating distances (e.g., the shortest route to work) to forecasting environmental trends, so important in environmental security. At the same time, Artificial Intelligence improves the capabilities of an intelligent vehicle and makes it autonomous. Several applications are used for military and humanitarian purposes. For example, a multi-sensor dispatch robot uses laser technology combined with *intelligent thinking*. These machines are usually personalised, with robots being given funny or human names.

Artificial intelligence is a growing field with implications for national security. Artificial intelligence technologies present unique challenges for military integration, especially since most AI development is taking place in the commercial sector. Development in conjunction with intelligent vehicles can actively contribute to both the private and public sectors. The military already uses autonomous machines, especially flying machines and smart vehicles in so-called "*decoy operations*".
Artificial intelligence strengthens state security through its algorithms that can accurately predict vulnerabilities, risks, and threats. The coalition between autonomous vehicle technology and artificial intelligence aims to improve the efficiency, safety, and performance of military logistics.
There is constant use of Artificial Intelligence in all fields of activity, in security and defence it is imperative, even a priority, thanks to the benefits it brings.

At the global level, there is an accelerated technological advance, with China and the United States remaining the leading states. The benefits of Artificial Intelligence are contained, in the field of internal and external intelligence, through the formulation of the concept of "*augmented intelligence*" which implies an extension, not a replacement of the human intellect (Mocanu 2020).
Artificial Intelligence finds wide applicability by exploiting open sources. OSINT, a predominantly technical discipline, processes large volumes of information material (big data), in radio research - SIGINT operators extract information from signals in the electromagnetic spectrum, the applicability of Artificial Intelligence continues by exploiting human HUMINT resources, as well as by exploiting information from images - IMINT.

Another important area in the representation of Artificial Intelligence in security and defence is the protection of information. Thus, in the broad theme of cyber-security, the risks of compromising the various systems of institutions, companies and organisations are identified.
In the future, violence is going to become dependent on technology (artificial intelligence, optics, drones, satellites, telecommunications, infrared thermal imaging equipment, night vision equipment, state-of-the-art software, digital accessories, detectors, temperature sensors, etc.).

In cyber warfare, advanced hostilities are the result of initiatives characterised by intelligence, inventiveness, adaptability and interconnection, observation, insight and, above all, perseverance.
The modern battlefield is moving from the physical to the virtual, the physiognomy of military action is evolving rapidly, adapting its speed of reaction to current challenges, and the contemporary military phenomenon acts by integrating these connected actions into joint operations.

4. Operation Desert Storm – Case Study

Operation Desert Storm took place on the invasion of Kuwait by Iraqi leader Saddam Hussein on August 2, 1990 (Kaplan 2020, 69). The international community responded accordingly to Hussein's military action and organized itself into a large military coalition led by the US. What made Kuwait so desirable to both Iraq and other international powers was that it offered control over the region's rich oil resources. (Kaplan 2020, 69). The goal of Operation Desert Storm was to liberate Kuwait from Saddam Hussein's troops.

Prior to *Operation Desert Storm* there was *Operation Desert Shield* which consisted of action by American Rapid Reaction Forces. This operation also used ground, air, and naval forces to lead actions in Iraq. The operation ended on 17 January 1991 when Operation Desert Storm began (Encyclopaedia Britannica 2023).

Operation Desert Storm was authorized by UN Security Council Resolution 678 issued on 29 November 1990, which called for the withdrawal of Iraqi troops from Kuwait and a cessation of violence in accordance with previously issued resolutions. The resolution also provides for the use of all necessary means by UN Member States to bring Iraq into compliance with the provisions of the resolution (UNSCR 1990).

On 17 January 1991, *Operation Desert Storm* began with an air action led by 9 AH-64 Apache helicopters, 101st ABN DVN, Air Force MH-53 Pave Low helicopters. Twenty-seven Hellfire missiles were used to target Iraqi radars, followed by 100 Hydra-70 missiles hitting anti-aircraft weapons. These strikes allowed U.S. Air Force F-15E Strike Eagle aircraft, along with EF-111 Ravens, to penetrate Iraqi airspace

without resistance. Together with these, both coalition air and naval missiles were able to hit targets without difficulty (U.S. Army Center of Military History n.d.).

On 24 February, ground action began. The first ground actions included placing intelligence troops on the ground so that they could gather the necessary intelligence and provide it to allied forces. At the same time, ground troops began their assault on Kuwait City and took advantage of the tired and hungry Iraqi troops to disrupt their structure eventually causing them to retreat east. Iraqi resupply and withdrawal routes were also blocked. On 26 February the decisive battle with the Tawakalna Division took place. Allied forces utilized tanks, ground components, Apache helicopters, and air components in the ensuing battles, resulting in numerous successes. Actions at ground level lasted about 100 hours; and together the air and ground actions managed to destroy more than 3000 tanks, 1400 armament carriers and 2200 artillery pieces (U.S. Army Center of Military History n.d.). The air actions lasted 6 weeks, being also the ones with which Operation Desert Storm debuted (Collins 2019).

There were also a series of coalition naval operations in the Persian Gulf designed to protect US Navy aircraft carrying equipment into the theatre of battle, to strike at any Iraqi defensive attempts from the coastal area, to remove potential submarine mines and to prevent possible amphibious attacks by Iraqi forces. (Encyclopaedia Britannica 2023) The air operation targeted Iraqi strategic targets so that the coalition could achieve its political goal as quickly and with as few strikes as possible (Beagle 2001).

Operation Desert Storm ended with the declaration of a ceasefire. The effectiveness of the coalition strikes was noted as, in two days, Iraqi troops lost 185 armed vehicles and 400 trucks carrying ammunition. The success of the mission was based on coalition force training and air-to-ground combat doctrine (doctrine tested during *Operation Desert Storm*). (U.S. Army Center of Military History n.d.)
Following the liberation of Kuwait, humanitarian missions took place to assist refugees, re-establish Kuwait's control over the city, and make arrangements for the distribution of water, food and necessary medical assistance (U.S. Army Center of Military History n.d.).

Underpinning the performance in the operation was the use of new technologies in combat techniques at the time, including hardware that made high-precision strikes possible, Abrams tanks, Apache attack helicopters, Bradley Fighting Vehicles, Black Hawk utility helicopters and the Patriot missile system. Operation Desert Storm is also known as the *First Space War* because it is the first major military operation to use space-based capabilities. *The Global Positioning System* (GPS) was used for ground-level navigation which led to the victory of ground troops after only 4 days. SATCOM satellite communications provided communication between forces on the ground and between forces on the ground and the base, which was

particularly important because there were no communication systems in the areas of operations. *Friendly Force Tracking* provided military decision-makers with very clear information on the situation on the ground, as well as effective command and control capabilities. (U.S. Army Center of Military History n.d.)

The operation also involved close cooperation between forces operating in theatre and the intelligence services. Coalition troops also acted in the psychological realm, through their quick successes they caused Iraqi soldiers to surrender; other actions in the psychological realm consisted of them turning off the electricity causing psychological effects within the opposing troops (Beagle 2001, 54).
In order to successfully achieve the strategic goal of causing the withdrawal of Iraqi forces from Kuwait, Allied forces carried out actions consisting of imposing air superiority, destroying strategic targets, and striking Iraqi ground targets. These were successfully accomplished by coalition forces (Encyclopaedia Britannica 2023).

Operation Desert Storm was conducted under the leadership of the US, with 35 states participating in the coalition of forces: Afghanistan, Argentina, Australia, Bahrain, Bangladesh, Belgium, Canada, Denmark, Egypt, and France. Germany, Greece, Hungary, Honduras, Italy, Kuwait, Morocco, Netherlands, Niger, Norway, New Zealand, Oman, Pakistan, Poland, Portugal, Qatar, Saudi Arabia, Senegal, USSR, Spain, Syria, Turkey, United Arab Emirates, United Kingdom (Englehardt 1991). Each of these forces contributed a different number of troops and military equipment, with the largest contributor being the US, followed by the UK, which provided the highest level of technology and equipment. Good cooperation between coalition members was highlighted, although Saddam Hussein had thought that Saudi Arabia would oppose the arrival of foreign forces on its soil, he was wrong, as the Saudi regime allowed US troops to be stationed in the country. At the same time, the international community cooperated to offer aid to Saudi Arabia, Turkey and Israel, all of which were considered possible victims of an Iraqi attack (Opriș 2001). Iraq also attempted to turn Israel against coalition forces by launching missiles over its territory, but this attempt was unsuccessful given the good cooperation and US-Israeli partnership (Collins 2019).

The shared political goals made cooperation, support between allied nations and coordination of the military operation possible so that it successfully achieved its goal (Beagle 2001, 54).

Conclusions

Joint operations are a collection of forces combined in either an alliance or coalition structure under a single command. Multinational participation has given these operations the necessary legitimacy within the system of international relations, while at the same time making action on the ground more effective because each

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state contributes specialised forces, new techniques, and new methods to achieve the objectives set.

Operation Desert Storm is an example of such operations because the force structures of 36 states agreed on a common goal of the need to withdraw Iraqi troops from Kuwait, organised themselves under US command, contributed the necessary manpower and cooperated in the three environments. *Operation Desert Storm* also employed the latest technology of the time, which led to the operation's goal being achieved in a rapid timeframe, and the strikes had a high degree of precision with low collateral losses. *Operation Desert Storm* illustrates the benefits of incorporating new technologies into the military theatre as well as ground-to-air doctrine.

Over time, these operations have highlighted modern combat techniques that have advanced over generations to facilitate better field readiness. Future warfare as a military phenomenon will evolve with the evolution of post-modern society, but with the birth of the United Nations, multilateral disarmament and arms control have been central to the maintenance of international peace and security.

The transition period, reflecting past-present and present-future relations, will be characterized by numerous conflicts in which armies with doctrines, structures, and equipment specific to information societies will prevail. Asymmetric reactions to modern military action may be long-lived, taking the place of classic military conflicts, with disarmament as the evolutionary step and de-escalation becoming the high priority.

The qualitative, psycho-anthropo-sociological approach is based on a phenomenological, interpretative orientation. The data used are complex and rich in meaning and propose a new, modern perspective on the relationship between the signified (representation on the mental map) and the signifier (material representation).

The constructed analysis confirms the hypothesis that the security environment is shaped by the interplay between the paradigm of future war, speed, unpredictability, information innovation, and the desirable goal of disarmament, peace, and stability. Disarmament integrates a perspective that has been timely and recommended since ancient times, and war, though chameleonic, is essentially the same. Before being a politico-military phenomenon, it is a socio-psychological construct that engages destructive energies and mobilises hostilities in one form or another. When references are made to conventional weapons, terms such as *'arms limitation'* or *'arms control'* are used more often than *'disarmament'*. War, whatever its configuration, whatever its manifestations, is a dimension of a dispute, not a solution to it.

The post-modern era, as a result of the imbalances identified in the balance of power centres, as a result of technological gaps, strategic bottlenecks or limitations, brings to the fore the imminence of vulnerabilities and threats to security systems.

By dissecting the body of architecture of multinational operations assembled in an analytical manner of its own, including from the angle of the generational evolution of the history of warfare, this paper provides a broad perspective on the quality of systems interconnectedness in response to the challenges of today's global security environment. The most recent generation of warfare, the fifth, corroborates modern strategies in managing large-scale conflicts that are increasingly competitive across security horizontals and verticals.

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