

University of Reading

Civilian Casualties – Do We Really Care?

The Failure of the Revolution in Military Affairs of
Non-Lethal Weapons in the U.S., Russia and Israel.

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Doctor of Philosophy

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DECLARATION OF ORIGINAL AUTHORSHIP

I, Ofer Fridman, confirm that this is my own work and the use of all material from other sources has been properly and fully acknowledged.

4th January 2016

ABBREVIATIONS

ADS	Active Denial System
AHD	Acoustic Hailing Devices
AIPAC	The American Israel Public Affairs Committee
APC	Armoured Personnel Carrier
APEC	Asia-Pacific Economic Cooperation
BMSTU	Bauman Moscow State Technical University
BNLWRP	Bradford Non-Lethal Weapons Research Project
BRICS	An association of five major emerging national economies: Brazil, Russia, India, China and South Africa.
BTWC	1972 Biological and Toxin Weapons Convention
CAAAF	The Combined Arms Academy of the Armed Forces of the Russian Federation
CALL	Center for Army Lessons Learned
CBW	Chemical and Biological Warfare
CIVCAS	Civil Casualties
CN	Chloroacetophenone (chemistry)
CONOP	Concepts of Operations
CRRF	Collective Rapid Reaction Force
CS	2-chlorobenzalmalonitrile (chemistry)
CSE	Commission on Security and Cooperation in Europe
CSRI	Central Scientific Research Institute
CSTO	Collective Security Treaty Organization
CWC	1993 Chemical Weapons Convention
CWS	US Army Chemical Warfare Service
DABLA	The IDF International Law Department (Hebrew acronym)
DOD	U.S. Department of Defence
EMP	Electromagnetic Pulse
EWG-NLW	European Working Group Non-Lethal Weapons
FSB	The Federal Security Service of the Russian Federation
GAO	US Government Accountability Office
GATT	General Agreement on Tariffs and Trade
HSRC	Homeland Security Research Cooperation
IDF	Israeli Defence Forces
INLDF	Institute for Non-Lethal Defence Technologies
ISAF	International Security Assistance Force

ISIL	Islamic State of Iraq and the Levant
ITIC	The Intelligence and Terrorism Information Center
JCS	US Joint Chiefs of Staff
JNLWP	Joint Non-Lethal Weapons Program
LoAC	Laws of Armed Conflict
LRAD	Long Range Acoustic Device
MAGS	The Military Academy of the General Staff of Armed Forces of the Russian Federation.
MASS	M26 Modular Accessory Shotgun System
MFRFVS	Multi-Frequency Radio-Frequency Vehicle Stopper
MOOTW	Military Operations Other Than War
MPM-NLWS	Mission Payload Module – Non-Lethal Weapons System
MR	Military Revolution
MVD	The Ministry of Interior of the Russian Federation
NAFTA	North American Free Trade Agreement
NATO	North Atlantic Treaty Organization
NLE	Non-Lethal Effects
NLW	Non-Lethal Weapons
NLWSC	Non-Lethal Weapons Steering Committee
NSG	Nonlethal Strategy Group
OC	Oleoresin-Capsicum (chemistry)
PSYOP	Psychological Operations
RCA	Riot Control Agents
RFVS	Radio Frequency Vessel Stopper
RMA	Revolution in Military Affairs
SIPRI	Stockholm International Peace Research Institute
TRADOC	US Army Training and Doctrine Command
UAV	Unmanned Aerial Vehicle
UN	United Nations
USAF	US Air Force

ABSTRACT

Causing civilian casualties during military operations has become a much politicised topic in international relations since the Second World War. Since the last decade of the 20th century, different scholars and political analysts have claimed that human life is valued more and more among the general international community. This argument has led many researchers to assume that democratic culture and traditions, modern ethical and moral issues have created a desire for a world without war or, at least, a demand that contemporary armed conflicts, if unavoidable, at least have to be far less lethal forcing the military to seek new technologies that can minimise civilian casualties and collateral damage.

Non-Lethal Weapons (NLW) – weapons that are intended to minimise civilian casualties and collateral damage – are based on the technology that, during the 1990s, was expected to revolutionise the conduct of warfare making it significantly less deadly. The rapid rise of interest in NLW, ignited by the American military twenty five years ago, sparked off an entirely new military, as well as an academic, discourse concerning their potential contribution to military success on the 21st century battlefields. It seems, however, that except for this debate, very little has been done within the military forces themselves.

This research suggests that the roots of this situation are much deeper than the simple professional misconduct of the military establishment, or the poor political behaviour of political leaders, who had sent them to fight. Following the story of NLW in the U.S., Russia and Israel this research focuses on the political and cultural aspects that have been supposed to force the military organisations of these countries to adopt new technologies and operational and organisational concepts regarding NLW in an attempt to minimise enemy civilian casualties during their military operations.

This research finds that while American, Russian and Israeli national characters are, undoubtedly, products of the unique historical experience of each one of these nations, all of three pay very little regard to foreigners' lives. Moreover, while it is generally argued that the international political pressure is a crucial factor that leads to the significant reduction of harmed civilians and destroyed civilian infrastructure, the findings of this research suggest that the American, Russian and Israeli governments are well prepared and politically equipped to fend off international criticism.

As the analyses of the American, Russian and Israeli cases reveal, the political-military leaderships of these countries have very little external or domestic reasons to minimise enemy civilian casualties through fundamental-revolutionary change in their conduct of war. In other words, this research finds that employment of NLW have failed because the political leadership asks the militaries to reduce the enemy civilian casualties to a politically acceptable level, rather than to the technologically possible minimum; as in the socio-cultural-political context of each country, support for the former appears to be significantly higher than for the latter.

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INTRODUCTION

The purpose of this research is threefold. First, this research offers a more comprehensive understanding of the relations between society and its military in the 21st century. Civilian casualties and collateral damage have long been considered as an undesired outcome of military activity that has to be reduced. While most of the contemporary discourse on this topic has primarily concentrated on three main factors: the legal aspects of causing civilian casualties, the impact of war on local population, and different factors of military professionalism required to avoid disproportional harm to civilians; this research answers an entirely different question. As the subject of civilian casualties during military operations seems to be highly politicised, this research takes this discourse out of its usual niches and suggests that the indirect responsibility rests with the politicians and the public, which they represent. When a society, at the beginning of the 21st century, sends its troops to war, does it really care about the enemy civilian casualties? This work intersects with a growing body of work on the relationship of warfare and violence, while filling in an important gap in the available literature. One of the most fundamental works, recently written on this subject, is Steven Pinker's *The Better Angels of Our Nature: A History of Violence and Humanity*, which suggests that violence as a phenomenon of social behaviour, in general, and in making war, in particular, is in decline.¹ Another good example is Christopher Coker, in his *Humane Warfare* he discusses the idea that in the 21st century "Western Societies can only now fight wars which minimise human suffering"² and in his *The Future Way of War* he proposes that "developed societies are likely to continue with war but in a form that is more rational and optimal ... [and that] we may be able to humanize war, or make it more humane."³ This research would make an attempt to provide an alternative, though, not necessarily a contradicting, interpretation and approach to Pinker's and Coker's books, discussing political and cultural aspects that have sustained the level of violence in 21st century military operations at significantly higher level than it could possibly be.

¹ Steven Pinker, *The Better Angels of Our Nature: A History of Violence and Humanity*, (London: Penguin Group, 2011).

² Christopher Coker, *Humane Warfare*, (London: Routledge, 2002), p.2.

³ Christopher Coker, *The Future War: The Re-Enchantment of War in the Twenty-First Century*, (Oxford: BlackWell, 2004), p.141.

Secondly, this research seeks to contribute to the conceptual understanding of the causal chain between changes within a society and military innovations and vice versa. The idea of the interdependence between social-political changes and the military is not novel. This phenomenon was suggested by military historian Michael Roberts, who analysed the transformation of warfare in the context of social changes in the Early Modern Europe offering the term “Military Revolution” (MR).⁴ Almost simultaneous to Robert’s idea, another theoretical concept about military innovations was developed – the concept of “Revolution in Military Affairs” (RMA). RMA, the fruit of the Soviet military thought that was later picked up by American strategists, is more technology oriented and it emphasises internal military process that integrates new military technologies, novel doctrines and organizational structures that all together change the conduct of warfare.⁵ Current literature on RMA focuses mainly on the question of “How does it happen?” establishing different models to describe its occurrence,⁶ or by analysing historical examples.⁷ This research, however, will try to deal with the still unanswered question of “Why does it happen?”, creating a conceptual basis that increases our understanding of the interconnection between social, cultural, political and military changes, but also allows to examine failed RMA pointing out the reasons behind their failures.

Thirdly, this research deals with an issue that is much more practical and relevant to the current political-military debate. Non-Lethal Weapons (NLW) – weapons that are intended to minimise civilian casualties and collateral damage – are based on the technology that, during the 1990s, was expected to revolutionise the conduct of warfare. As Alvin and Heidi Toffler suggested in 1993:

Non-lethality emerges not as a simple replacement for war, or an extension of peace, but as something different. It is something radically different in global affairs – an intermediate phenomenon, a pausing place, an arena for contests where more outcomes are decided bloodlessly.⁸

⁴ Clifford Rogers, ‘The Military Revolution in History’, in Clifford Rogers (ed.), *The Military Revolution Debate: Readings on the Military Transformation of Early Modern Europe*, (Oxford: Westview Press, 1995), pp. 2-3.

⁵ Andrew Krepinevich, ‘Cavalry to Computer: The Pattern of Military Revolutions’, *National Interest*, No. 37, 1994, pp. 30-42.

⁶ See Colin Gray, *Strategy for Chaos: Revolutions in Military Affairs and The Evidence of History*, (London: Frank Cass Publishers, 2002); Richard Hundley, *Past Revolutions Future Transformation: What Can History of Revolutions in Military Affairs Tell Us about Transforming the US Military?*, (Santa Monica: RAND, 1999); Steven Metz, James Kievit, *Strategy and the Revolution in Military Affairs: from Theory to Policy*, (Carlisle: US Army Strategic Studies Institute, 1995).

⁷ See Colin Gray, *Strategy for Chaos...*; Max Boot, *War Made New: Technology, Warfare and the Course of History, 1500 to Today*, (New York: Gotham Books, 2006); Tim Benbow, *The Magic Bullet? Understanding the Revolution in Military Affairs*, (London: Chrysalis Book Group, 2004); Williamson Murray, Macgregor Knox, (ed.), *The Dynamics of Military Revolution 1300-2050*, (Cambridge: Cambridge University Press, 2001).

⁸ Alvin Toffler, Heidi Toffler, *War and Anti-War: Survival at the Dawn of the 21st Century*, (Boston: Little, Brown and Company, 1993), p. 134.

The rapid rise of interest in NLW sparked off an entirely new military, as well as an academic, discourse concerning their potential contribution to military success on the 21st century battlefields. It seems, however, that except for this debate, very little has been done within the military forces themselves. This research aims to address this problem analysing three different cases – the U.S., Russia and Israel – that were chosen not only because of their differences, but also due to their similarities. In the last decades all three were involved in armed conflicts: Israel in Lebanon and Gaza, the USA in Iraq and Afghanistan, Russia in Chechnya and Georgia. All three have armed forces with a track record as organisations capable of revolutionary changes.⁹ All three have strong defence industries that are able to support military demands for NLW.¹⁰ And, finally, all three seek to be military powers (whether regional or global), and therefore invest significant efforts (political and economic) to produce as effective armed forces as possible. Given this last similarity between the American, the Russian, and the Israeli military forces, it seems vital to understand the social-political rationale that prevents them from employing NLW that “may provide more effective power”.¹¹ Due to the combination of these characteristics, each one of these three cases represents political, military and technological prowess, and, therefore, is expected to implement revolutionary changes in military affairs ahead of any other country. Investigating the reasons behind the absence of the RMA of NLW in these three particular cases, this research addresses the political, social and cultural factors, which affect each other, preventing the employment of NLW on the battlefield. It presents the way that has led three completely different militaries, from completely different societies and political realms, to the same outcome: rejection of the technologies that intended to minimise civilian casualties during military operations.

The Argument

The argument of the research is twofold. Firstly, it rethinks the validity of the claim that harming civilian populations during military operations has high significance in international relations. Indeed, this claim is frequently used to criticise political adversaries in the

⁹ Dima Adamsky, *The Culture of Military Innovation: The Impact of Cultural Factors on the Revolution in Military Affairs in Russia, the US, and Israel*, (Stanford: Stanford University Press, 2010).

¹⁰ See Homeland Security Research Cooperation (HSRC), *Non-Lethal Weapons: Technologies and Global Market – 2012-2020*, 2011, <http://www.homelandsecurityresearch.com/2011/10/non-lethal-weapons-technologies-global-market-2012-2020/>, [accessed: 27 November 2015].

¹¹ David Koplow, *Death by moderation: The U.S. Military's Quest for Useable Weapons*, (New York: Cambridge University Press, 2010), pp. IX-X.

international arena. Moreover, different non-state international institutions, such as the Red Cross, Amnesty International, Human Rights Watch and others, repeatedly use this argument to criticise countries for the civilian casualties caused by their militaries. This research, however, offers a rethinking of the effectiveness of this criticism, arguing that countries, which are involved in military operations, have developed political mechanisms to fend it off. While it is generally argued that the international political pressure is a crucial factor that leads to the significant reduction of harmed civilians and destroyed civilian infrastructure, the relevant foreign policies have already been crafted in the context of international criticism, allowing the fending off any criticism related to military activity, including the one related to civilian casualties.

Each one of the analysed countries has developed its own foreign policy mechanisms that allow them to resist the international criticism raised before, during and after military operations. Using very effective political-cultural narratives, political decision-makers can be relatively relaxed about their military performance regarding civilian casualties and they feel no need to press their military to apply fundamental changes that would be required to make operations less lethal than it is politically required (i.e., to employ NLW on a large scale).

This leads to the second main argument of the research that challenges to rethink the weight that is given to the value of human life in the 21st century and its universality. Each nation has its own “way of war”, its “strategic culture”, influenced by its geography, society, history, religion, and other factors, and, therefore, it is assumed that different societies will value the life of the enemy civilian population differently. Yet in all three analysed cases, the societies showed very similar high levels of tolerance toward enemy civilian casualties during military operations. Indeed, each culture has gone its own way shaping its unique attitude towards the enemy. With regard to enemy civilian casualties, however, it seems that the outcome is surprisingly similar.

In the 21st century people, indeed, value human life significantly more highly than before. This appreciation, however, has been translated largely into general unwillingness to sacrifice one’s own life and the lives of one’s relatives, rather than a universal value. In other words, in the 21st century, societies do not send their sons and husbands to war as easily as they did in the past; and if they do, they demand that their leadership (and therefore their military) minimises the casualties of their own military personnel to the operationally possible and politically defensible minimum. However, when it comes to enemy civilian casualties, this narrow appreciation of human life has contributed to a general apathy among public opinion

towards enemy civilian population in conflict zones, due to the fact that society's relatives (military personnel) sacrifice their lives there, and by this justifying enemy civilian casualties.

In the last decade, all three countries analysed in this research were involved in armed conflicts, i.e., Israel in Lebanon and Gaza, the USA in Iraq and Afghanistan, Russia in Chechnya and Georgia. In all three of them, the military paid relatively little respect for the enemy's population. This research suggests that the roots of this situation are much deeper than the simple professional misconduct of the military establishment, or the poor political behaviour of political leaders, who had sent them to fight. While the technology that allows the maximum possible minimisation of civilian casualties, rather than just politically acceptable reduction (i.e., NLW), has been around for several decades, without extensive political pressure, the required RMA just cannot occur. Therefore, despite the seemingly bloodless images of contemporary warfare produced by precision-guided munitions, drones and selective strikes, war remains to be a very lethal affair, especially for enemy civilian population.

The history of previous RMAs shows that facing unmet challenges, the military knows how to perform fundamental revolutionary changes to confront them. This research argues that the RMA of NLW did not occur because the challenge of minimising civilian casualties has never been really put to the military.

Military Revolutions, Revolutions in Military Affairs and Political-Military System

During the last several decades, different scholars have suggested different ways to explain the phenomenon of MR or, in other words, a concept of the interconnection between technology, military, and society.¹² Each scholar, collecting and analysing historical data, has come to a slightly different result. For example, Alvin and Heidi Toffler developed their three-wave theory – *Agriculture, Industry, Knowledge*;¹³ Max Boot suggested four revolutions: *Gunpowder, First Industrial, Second Industrial, and Information*;¹⁴ and Williamson Murray and MacGregor Knox defined five main MRs while the second and the third overlap each other: (1) *The 17th Century Creation of the Modern State and Modern Military Institutions*, (2) *The*

¹² See Alvin Toffler, Heidi Toffler, *War and Anti-War...*; Max Boot, *War Made New...*; Williamson Murray, Macgregor Knox, (ed.), *The Dynamics of Military Revolution ...*

¹³ Alvin Toffler, Heidi Toffler, *War and Anti-War...*, pp. 33-85.

¹⁴ Max Boot, *War Made New...*, pp. 13-15.

*French Revolution, (3) The Industrial Revolution, (4) The WWI, and (5) Nuclear Weapons and Ballistic Missiles Delivery Systems.*¹⁵

The concept of RMA was developed independently, however, almost simultaneously with the historical patterns that try to portray the phenomenon of MR. And while MR includes society and considers social-political influences on and from military innovations, the concept of RMA is limited to the relations between military and technology only. Regardless of this narrower nature of RMA, the debate about it has created even more variable theories and models. For example, Steven Metz and James Kievit suggested a five-phase model: (1) *stasis*, (2) *initiation*, (3) *critical mass*, (4) *response*, and (5) *consolidation*;¹⁶ Richard Hundley proposed a model that includes 4 phases: (1) *preparatory*, (2) *breakthrough*, (3) *exploitation and selling*, and (4) *payoff*;¹⁷ and Colin Gray went further in details arguing for a nine-step RMA's life-cycle: (1) *preparation*, (2) *recognition of challenge*, (3) *parentage*, (4) *enabling spark*, (5) *strategic moment*, (6) *institutional agency*, (7) *instrument*, (8) *execution and evolving maturity*; and (9) *feedback and adjustment*.¹⁸

On the one hand, despite the traceable similarities and differences in these main works on MR and RMA, there is no feasible way to point at the most accurate ones, because “scholars can employ their imagination to read the same data in different ways, none of which is correct or incorrect.”¹⁹ On the other hand, this research has to be based on a certain theoretical framework established from one of these models and therefore a pivotal choice must be taken carefully.

Regarding the RMA models, the decision is relatively easy. Instead of choosing one of the theories, this research will adopt a comprehensive model that integrates all of them. This model is based on the meta-analysis of the existing literature and advocates four major steps in the RMA's life: (1) *preparations*, (2) *embodying*, (3) *implementation on the battlefield*, and (4) *losing initiative*.²⁰

The choosing of the broad theoretical framework that includes social, political and all other types of changes seems to be a more difficult decision to explain. This research will adopt

¹⁵ Williamson Murray, Macgregor Knox, ‘Thinking about Revolution in Warfare’, in Williamson Murray, Macgregor Knox, (ed.), *The Dynamics of Military Revolution...*, pp. 6-11.

¹⁶ Steven Metz, James Kievit, *Strategy and the Revolution in Military Affairs...*, p. 19.

¹⁷ Richard Hundley, *Past Revolutions Future Transformation...*, pp. 21-23.

¹⁸ Colin Gray, *Strategy for Chaos...*, pp. 67-81.

¹⁹ Colin Gray, *Strategy for Chaos...*, p. 53.

²⁰ Ofer Fridman, ‘Are We Ready for the Revolution of Non-Lethal Weapons? – Using a Comprehensive RMA Model to Examine the Current Strategic Situation’, *Comparative Strategy*, Vol. 32 No. 3, 2013, pp. 192-206.

the framework of MR as suggested by Williamson Murray and MacGregor Knox for two main reasons. The first is the fact that they integrated the idea of RMA in their concept of MR. The main quest of this research is to find the reasons for the lack of the RMA of NLW, and MR theory can provide an essential broader perspective for such examination. The second reason is that their MR theory is more conceptualised and generalised creating a certain historical pattern that repeats itself, unlike Tofflers' waves or Boot's revolutions that examined each event as unique case studies. And despite the fact that MRs are "uncontrollable, unpredictable, and unforeseeable" the idea of interconnection between pure military RMAs and "changes in politics and society"²¹ creates a solid theoretical ground for this research about an RMA that did not occur.

While this research deals with revolutions and revolutionary changes, it is important to ask a question of continuity. In other words, what place these fundamental events occupy in the continuity of overall social, military and technological transformations and what roles they play in the context of evolutionary process. Since "military revolutions are major discontinuities in military affairs... [linked] ... with broader social, economic, and scientific transformations",²² it seems right to argue that MRs are conceived as periods of instability within a system that incorporates all these elements. A system that generally is stable providing slow and controllable evolutionary development, but once imbalanced, it generates a political-social-military "earthquake"²³ with far-reaching consequences. It is not a novel idea that a discontinued event, one which actually manages to puncture the regular process of evolution, can reshape reality creating entirely new situations, in which old elements are compelled to adapt or suffer extinction and new ones are created. Initially, it was proposed by two palaeontologists Stephen Jay Gould and Niles Eldredge, who argued that species' change can be explained by relatively short spurts of change that lie between long periods of slow and balanced evolutionary development.²⁴ Since its first introduction, this idea of punctuated

²¹ Williamson Murray, Macgregor Knox (ed.), 'Thinking about Revolution...', pp. 6-7.

²² Michael Vickers, 'The Revolution in Military Affairs and Military Capabilities', in Robert Pfaltzgraff, Richard Shultz, (ed.), *War in the Information Age: New Challenges for US Security Policy*, (Washington, DC: Brassey's, 1997), p. 30.

²³ This geological metaphor for the MR phenomenon was introduced by Williamson Murray in 'Thinking about Revolution in Military Affairs', *Joint Force Quarterly*, Vol. 16, 1997, pp. 70-71.

²⁴ Donald Prothero, 'Punctuated Equilibrium at Twenty: A Paleontological Perspective', *Skeptic*, Vol. 1, No. 3, 1992, pp. 38-47.

balance, or equilibrium, has been widely adopted by different scholars from different scientific disciplines, including researchers of MRs and RMAs.²⁵

Similar to the species that exist in certain biological systems, the military is also “causally linked to its own environment, represented by the social, political and economical dimensions”,²⁶ as well as technological developments and political-military challenges. A fundamental and rapid change of one or more of these dimensions will imbalance the system fuelling changes in other dimensions until a new balance is created. The system that collaborates all these dimensions will be called *Political-Military System* and it always exists in the slow process of change and development, adapting and accommodating internal changes. And while MR is a sudden and fundamental misbalance, or dis-equilibrium, in this system that creates a cluster of major changes in social, political and military dimensions; RMAs represent one of the possible outcomes of this historical event.

In other words, RMAs are a result of an imbalanced Political-Military System. This argument creates an entirely novel perspective on the reasons behind the occurrence of an RMA (or its absence). And since this research tries to shed a light on the absence of the RMA of NLW, this failure can be explained by arguanalysing why harming enemy population did not imbalance the Political-Military Systems of the U.S., Russia and Israel.

The Puzzle of the Revolution in Military Affairs of Non-Lethal Weapons

Since the last decade of the 20th century, different scholars and political analysts have claimed that human life is valued more and more among the general international community and, particularly, within Western societies. This argument has led many researchers to assume that democratic culture and traditions, modern ethical and moral issues have created a desire for a world without war or, at least, a demand that contemporary armed conflicts, if unavoidable, at least have to be far less lethal forcing the military to seek new technologies that have “greater precision, shorter duration, less lethality, and reduced collateral damage... [as these technologies] may provide more effective power than their larger and more destructive, but also more inexact and crude, predecessors”.²⁷ Consequently, NLW have been seen as a

²⁵ See Steven Leonard, *Inevitable Evolutions: Punctuated Equilibrium and the Revolution in Military Affairs*, (Fort Leavenworth, KS: US Army Command and General Staff College, 2001); Colin Gray, *Strategy for Chaos...*; Clifford Rogers, ‘The Military Revolutions of the Hundred Years War’, *The Journal of Military History*, Vol. 57, No. 2, 1993, pp. 241-278.

²⁶ Steven Leonard, *Inevitable Evolutions...*, p. 39.

²⁷ David Koplow, *Death by moderation...*, pp. IX-X.

perfect answer within this new reality, when a greater respect for human life has become a crucial variable within the international community. At closer look, however, we find that this respect for human life indeed is not as universal, as it was claimed. Is this variable, therefore, politically crucial enough to pressure the military to revolutionise its practises?

Military operations, during the last several decades, have deviated from previous wars, where victory was considered solely by military terms. Winning the “hearts and minds” has become a vital factor in achieving the political aims of military operations.²⁸ Hence, the achievement of a comprehensive victory demands support from the local population;²⁹ and therefore, the unlimited harming of civilians, in most cases, will increase their mobilisation against the military and delay the successful end of operations. Moreover, it is assumed that in the era of mass media and especially the Internet, harming local population significantly decreases domestic and international support for the continuing of military operations.³⁰

While enemy civilian casualties are considered as an unnecessary and an undesirable outcome of warfare, an attempt to reduce the number of non-combatants’ casualties raises the problem of distinguishing between combatants and non-combatants. This problem has become more challenging due to two major changes that had occurred in the last twenty years. The first one has a military nature and constitutes the transformation of warfare – from the traditional-conventional warfare to the new concept of war, frequently called as Military-Operations-Other-Than-War (MOOTW) (such as, *asymmetrical war*, *hybrid warfare*, *war on terror*, *small war*, *peacekeeping operations*, etc.). In this type of warfare the distinguishing between combatants and civilians is even more complex than it had been in the past.³¹

The second major change has occurred within society. Today, there is no doubt that the Internet has transformed the social landscape of human life. One of the outcomes of this transformation is the ability of non-state actors to organize civilians to participate in conflicts that has risen significantly after the appearance of the Internet.³² Moreover, the development

²⁸ Tracy Tafolla, David Trachtenberg, John Aho, ‘From Niche to Necessity: Integrating Non-Lethal Weapons into Essential Enabling Capabilities’, *Joint Force Quarterly*, Vol. 66, 2012, p. 72.

²⁹ See Robert Mandel, *The Meaning of Military Victory*, (London: Lynne Rienner Publishers, 2006); Roger Barnett, *Asymmetric Warfare*, (Dulles: Brassey’s, 2003); Michael Gross, *Moral Dilemmas of Modern War: Torture, Assassination, and Blackmail in an Age of Asymmetrical Conflict*, (New York: Cambridge Press, 2010).

³⁰ See Gil Merom, *How Democracies Lose Small Wars*, (Cambridge: Cambridge University Press, 2003); Ivan Arreguin-Toft, *How the Weak Win Wars: A Theory of Asymmetric Conflict*, (Cambridge: Cambridge University Press, 2005); Andrew Mack, ‘Why Big Nations Lose Small Wars: the Politics of Asymmetric Conflict’, *World Politics*, Vol. 27, No. 2, 1975, pp. 175-200.

³¹ Eric Patterson, *Just War Thinking: Morality and Pragmatism in the Struggle against Contemporary Threats*, (Lanham, MD: Lexington Books, 2007), p. 4-8.

³² Peter Van Aelst, Stefaan Walgrave, ‘New Media, New Movements? The Role of the Internet in Shaping the ‘Anti-Globalization’ Movement’, *Information, Communication & Society*, Vol. 5, No. 4, 2002, pp. 465—493.

of the new Social Media Internet platforms, such as *Facebook*, *Twitter* and *YouTube*, took these capabilities a few steps further providing civilians with the ability to organise themselves.³³ Civilians have always taken a part in wars and armed conflicts. Their direct participation, as part of an underground movement, or a partisan unit (or even as a terror organization), as well as their indirect involvement by providing an essential support – were always a problem for military activity. While it seems that social-political reality in the beginning of the 21st century demands from the military a significant decrease in the lethality of conflicts;³⁴ the increase of civilian participation in zones of conflicts, triggered by Social Media, makes this demand even more challenging.³⁵ Consequently, it seem right to assume that the creation of less-lethal capabilities suppose to be a military challenge that has to be met.³⁶

There are many different terms that describe weapons that are intended to incapacitate people without causing death or permanent injury – “non-lethal”, “less-lethal”, “less-than-lethal”, etc.³⁷ Different organisations in different countries have adopted different terminologies. Nevertheless, all these terms are very similar in their referring to a group of weapons that are “explicitly designed and primarily employed so as to incapacitate personnel or material immediately, while minimizing fatalities, permanent injury to personnel, and undesired damage to property, facilities, materiel and the environment.”³⁸

During the last two decades, much literature has been written about NLW that can be divided into three major groups. The first group describes NLW and non-lethal technologies, these works discuss the technological developments of NLW and/or the history of their usage.³⁹ The second group advocates NLW and emphasizes the revolutionary promise of NLW and their potential to ignite new RMA and alter the nature of the way of conducting conflicts.⁴⁰ The

³³ Ofer Fridman, ‘Are We Ready for the Revolution of Non-Lethal Weapons?...?’.

³⁴ Sjeff Orbons, ‘Non-Lethality in Reality: a Defence Technology Assessment of its Political and Military Potential’, (PhD Dissertation, The University of Amsterdam, 2013) ,p.29.

³⁵ Ofer Fridman, ‘Are We Ready for the Revolution of Non-Lethal Weapons?...?’.

³⁶ Tracy Tafolla, David Trachtenberg, John Aho, ‘From Niche to Necessity...?’.

³⁷ Neil Davison, ‘*Non-Lethal Weapons*, (Eastbourne: Palgrave Macmillan, 2009), pp. 1-3.

³⁸ US Department of Defence, *Policy for Non-Lethal Weapons, Directive 3000.3E*, Washington, 25 April 2013.

³⁹ See Neil Davison, ‘*Non-Lethal Weapons*’; Michael Gross, *Moral Dilemmas of Modern War*; James Carafano, ‘The Future of Anti-Terrorism Technologies’, *Heritage Lectures*, No. 885, 2005; Sjeff Orbons, ‘Non-Lethality in Reality...’; Charlie Mesloh, Mark Henych, Ross Wolf, *Less Lethal Weapon Effectiveness, Use of Force, and Suspect & Officer Injuries: A Five-Year Analysis. Report to the National Institute of Justice*, (Florida Gulf Coast University, 2008).

⁴⁰ See John Alexander, *Future War: Non-Lethal Weapons in 21st Century Warfare*, (New-York: St. Martin's Press, 1999); Nick Lewer, Steven Schofield, *Non-Lethal Weapons: a Fatal Attraction? Military Strategies and Technologies for 21st Century Conflict*, (London: Zed Books, 1997); David Koplow, *Death by moderation ...*; Frederic Merget, ‘Non-Lethal Weapons and the Possibility of Radical New Horizons for the Laws of War: Why Kill, Wound and Hurt (Combatants) at All?’, *Social Science Research Network*, 2008 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1295348, [accessed: 27 July 2013].

third group questions the perspective of NLW, and claims that NLW have a place in the future, but it also cautions against bestowing any special status to the NLW and discusses the problems of the ethic and legal aspects of NLW.⁴¹ While all literature comes mostly from academia, there is also a noteworthy interest in NLW within military research publications. Interestingly, this attention, to the possible implementation of NLW, has appeared, almost simultaneously, in military organisations with completely different cultural backgrounds, such as the U.S.,⁴² Russia,⁴³ and Israel.⁴⁴ And yet, despite this extensive discussion on the possible perspectives of NLWs, and the significant investments in technological development that has occurred in this area⁴⁵, it seems that not much has happened in the last thirty years, as "the list of non-lethal weapons that are currently available does not differ greatly from similar compilations 30 years previously."⁴⁶

As it will be shown, current non-lethal technologies are able to provide a vast spectrum of non-lethal effects⁴⁷ that are ready to be adopted by the military, however, the methods of their delivery, designed for law enforcement units, do not meet military demands entirely. There are no technological obstacles that can prevent efficient integration of existing effective

⁴¹ See David Koplow, *Non-Lethal Weapons: The Law and policy of Revolutionary Technologies for the Military and Law Enforcement*, (New-York: Cambridge Press, 2006); Nick Lewer, (ed.), *The Future of Non-Lethal Weapons: Technologies, Operations' Ethics and Law*, (London: Frank Cass Publishers, 2002); Robert McNab, Richard Scott, 'Non-Lethal Weapons and the long tail of warfare', *Small Wars & Insurgencies*, Vol. 20, No. 1, 2009, pp. 141-159; David Fidler, 'Non-Lethal Weapons and international law – Three perspectives on the future', *Medicine, Conflict and Survival*, Vol. 17, No. 3, 2001, pp. 194-206.

⁴² See Tracy Tafolla, David Trachtenberg, John Aho, 'From Niche to Necessity...'; Richard Scott, 'Nonlethal Weapons and the Common Operating Environment', *Army Magazine*, Vol. 50, No. 4, 2010, pp. 21-26; Frank Siltman, John Frisbie, 'Fire Support Just Got Harder: Adding Nonlethal Fires as a Core Competency', *Fires Bulletin*, July-September 2008, pp. 6-8.

⁴³ For example see: V. Moiseev, V. Orlyanskii, 'Oruzhiye neletal'nogo deystviya i printsipy taktiki', ['Weapons with Non-Lethal Action and the Principles of Tactics'], *Voennaia Misl'*, No. 6, 2011, pp. 26-33; A. Nagovitsyn, A. Grudzinskii, A. Sporykhin, 'Oruzhiye neletal'nogo deystviya i perspektivy yego ispol'zovaniya v interesakh sil Organizatsii Dogovora o kollektivnoy bezopasnosti', ['Weapons with Non-Lethal Action and the Perspectives of Their Employment in the Interest of Collective Security Treaty Organization'], *Voenaya Misl'*, No.3, 2011, pp. 51-59; V. Snigur, 'Ovladet' gorodom bez zhertv i razrusheniy', ['To Capture a City without Casualties or Damage'], *Armei'skii' Sbornik*, No. 12, 2006, pp. 50-52; A. Pronin, A. Leonov, L. Kaplyarchuk, 'Osnovnyye kriterii voyenno-ekonomicheskoy otsenki oruzhiya neletal'nogo deystviya', ['The Major Criteria of Military-Economic Evaluation of Weapons with Non-Lethal Action'], *Voennaia Misl'*, No.10, 2012, pp. 43-50; V. Antipov, S. Novichkov, 'K voprosu o razrabotke i primenenii neletal'nykh sredstv porazheniya na khimicheskoy osnove', ['Regarding the Question about the Development and Employment of Non-Lethal Means Based on Chemicals'], *Voenaya Misl'*, No. 9, 2009, pp. 54-61.

⁴⁴ For example see: Uzi Ben-Shalom, "'Faser lematzav ham'em": mah'shevot al neshek pahot katlani be'sde hakrav' ["'Faser switched to Shock": Thoughts on Less Lethal Weapons on the Battlefield'], *Be'yabasha*, No. 15, September 2010; Yitzhak Ben-Israel, 'Neshel al-heger', ['Non Lethal Weapon'], *Ma'arachot*, Vol. 363, 1999, pp. 20-24; Guy-Zahar Shtultz, 'Ha' alat koah medureget be'imutim besviva ezrahit' [The Employment of Graduate Force in Conflicts within Civilian Environment], *Ma'arachot*, Vol. 438, 2011, pp. 8-17.

⁴⁵ David Koplow, *Death by Moderation...*, 198-199.

⁴⁶ Neil Davison, *'Non-Lethal' Weapons...*, p. 209.

⁴⁷ Erik Nutley, *Non-Lethal Weapons: Setting Our Phasers on Stun? Potential Strategic Blessings and Curses of Non-Lethal Weapons on the Battlefield*, Center for Strategy and Technology Occasional Paper No. 34, (Maxwell Air Force Base, Alabama: Air University, 2003), pp.13-24.

non-lethal agents within existing conventional military platforms. As it will be shown throughout this research, different industries around the globe already have introduced effective NLW that can be integrated within military forces. The fact, however, that this integration has not occurred yet, points to the existence of other aspects that prevent the vast adaptation of NLW within military.

On Methodology and Methodological Problems

As shown above, MR and RMA are very complex phenomena that involve a nexus of relationships between different variables from political, social and military spheres. In the light of this multifaceted reality that does or does not produce revolutionary changes in the character and conduct of warfare, only a finely honed methodology would be able to ensure the analytical empirical nature of this research. The following discussion of the methodology of this research will describe several methodological steps that were performed in an attempt to produce an empirical examination of the absence of the RMA of NLW in the U.S., Russia and Israel.

Considering different acknowledged research methods in the Social Sciences, it is important to keep in mind that “methodological choices must take into account the characteristics of the phenomena we seek to understand.”⁴⁸ While the phenomenon that lies in the core of this research is the failure of RMA of NLW, it has been already shown that the occurrence of RMA (or its absence) could be explained by the concept of Political-Military System. A more comprehensive understanding of this theory will be provided in the first chapter of this research, nonetheless, it is enough to state that Political-Military System consists of a variety of independent generic interconnected variables, which can influence (by their own or in a configuration with several others) the dependent variable in a number of possible ways. This general explanatory theory of MR and RMA can be identified as a *typological theory*:

A typological theory is a theory that specified independent variables, delineates them into the categories..., and provides not only hypothesis on how these variables operate individually, but also contingent generalisations on how and under what conditions they behave in specified conjunctions or configurations to produce effects on specified dependent variable.⁴⁹

The theory of Political-Military System outlines three main groups of variables: the political entity, the military, and the political-military challenges. Due to its nature to preserve

⁴⁸ Andrew Bennett, Colin Elman, ‘Complex causal relations and case study methods: the example of path dependence’, *Political Analysis*, Vol. 14, No.3, 2006, p. 250.

⁴⁹ Alexander George, Andrew Bennett, *Case Studies and Theory Development in the Social Sciences*, (Cambridge, Mass.: MIT Press, 2005), p. 235.

the balance (equilibrium) between these variables, it allows to hypothesise about the influence of variables that are specified as independent (as well as different configurations of them) on a defined dependent variable.

Once the general typological theoretical framework is established, the next step is the defining of the specific typology of the RMA of NLW in the context of the American, the Russian, and the Israeli cases. The deductive approach of this research requires specification of the relevant variables that define the property space of this research – “the relevant universe of all possible combinations of variables”.⁵⁰ The fact that the examined phenomenon is implicitly defined, combined with the fact that three chosen cases have enough similar characteristics, allows to establish a specific causal chain between independent variables that ultimately leads to the dependent one.

While the process of the establishing a conceptual causal chain that creates an RMA is discussed in the first chapter, the second chapter constructs the specific typology of the RMA of NLW. It produces a combination of three main independent variables: (1) foreign policy and its attitude towards international criticism regarding collateral damage and civilian casualties; (2) domestic national cultural attitudes toward enemy civilian population; (3) the military culture concerning novel technologies in general and NLW in particular.

After the defining of the independent variables, it seems that the dependent variable has also to be more accurately clarified: “the careful characterisation of the dependent variable and its variance is often one of the most important and lasting contributions to research.”⁵¹ While, previously, the dependent variable was generally described as the absence of the RMA of NLW, a better understanding of its nature can be provided by clarifying the nature of the opposite phenomenon: the RMA of NLW. The RMA of NLW, as any other RMA, means a vast employment of new technologies (e.g., NLW) by a military, supported by suitable novel operational and organisational concepts. Once, at least, one of these elements is missing, the RMA of these new technologies can not occur. Consequently, in the case of NLW, the dependant variable can have only two possible values: the occurrence of the RMA of NLW (all three elements exist) or lack of it (one or more are missing).

Once the nature of all variables is clarified, it is possible to define the research design that reconciles the research objective. The within-case analysis of each one of the cases, under

⁵⁰ Alexander George, Andrew Bennett, *Case Studies and Theory Development...*, p. 248.

⁵¹ Alexander George, Andrew Bennett, *Case Studies and Theory Development...*, p. 248.

the examination, is done using the process-tracing method, which is "a procedure for identifying steps in a casual process leading to the outcome of a given dependent variable of a particular case in a particular historical context." More specifically, it adopts an *analytical explanation*, which is one type of the process-tracing method that "converts a historical narrative into an analytical causal explanation."⁵² In other words, the analytical explanation allows the structuring of historical empirical evidence into a casual mechanism that explains the dependent variable. Regarding this research, the causal explanation of the absence of the RMA of NLW focuses on the different conjunctions of three specified independent variables that have preserved the balance of the Political-Military System of each country and, thus, prevented the RMA of NLW.

This research is based on data and evidence gathered from a vast spectrum of sources. The general typological theory is based mostly on the theoretical works of different scholars and thinkers from the fields of military history, strategy and politics. The chapter that discusses the RMA of NLW that did not occur utilises different primary sources, such as governmental reports, international laws, archival documents, industry reports, etc. The case of the U.S. is constructed from unclassified dissertations and articles written by senior American officers, as well as on academic publications produced by leading scholars and documents published by different political establishments. The Russian case utilises declassified scientific studies published in leading military periodicals, different governmental documents, and products of scientific studies conducted in leading Russian universities. The Israeli case is based on combined data gathered from curricula of academics, leading research institutions in the military and political spheres and professional journals. Where primary sources are unavailable, the research relies on secondary literature utilising the indigenous languages of each one of the cases: English, Russian and Hebrew. This multi-linguistic approach enables the enhancing and accentuating of the different sources, especially in the Russian and Israeli cases, that have not been translated into English before.

Concluding the discussion on methodology, it is imperative to focus on one methodological question: is it possible to analyse something that did not occur? To address this question it is important to clarify the fact that RMA is a finely defined concept, thus, this research analyses a finely defined scientific phenomenon. As with any scientific phenomenon, it is possible to establish a list of the required components, a combination of which leads to its

⁵² Alexander George, Andrew Bennett, *Case Studies and Theory Development...*, pp. 176, 211.

creation. Moreover, an RMA, as a scientific phenomenon, occurred many times in the past, proving the fact that when the required components are there, it does occur. Consequently, it seems right to argue that the absence of an RMA can be explained by the analysis of the components that failed to create the desired result (i.e., the RMA of NLW), and this research does exactly that.

What This Research Is Not

While this research is formed around Non-Lethal technologies, it does not mean that it accepts the approach of technological determinism, as Max Boot argued:

Technology sets the parameters of the possible; it creates the potential for a military revolution... No technical advance by itself made a revolution; it was how people responded to technology that produces seismic shifts in warfare.⁵³

Non-Lethal technologies have been around for many years,⁵⁴ in fact, certain Non-Lethal chemical agents have already been widely employed during different military conflicts in the past hundred years, as far back as the First World War.⁵⁵ While technology is vital, “a true revolution in the way military institutions organise, equip and train for war, and in the way war is itself conducted, depends on the confluence of political, social, and technological factors.”⁵⁶ Technology is not the reason behind the absence of the RMA of NLW, at least not in the U.S., Russia and Israel, and therefore it is not at the main focus of this research. Political and social factors, by contrast, seem to be able to provide a more adequate explanation for the absence of NLW on the modern battlefield.

This research also does not try to predict the future of NLW. The future is a kind of a “black box” and an attempt to open it would ultimately fail this research by a gargantuan number of assumptions and tendencies that have to be considered during forecasting efforts. Instead, this research analyses the past, focusing on the reasons that have led to the failure of the RMA of NLW, so far. While the analysis of three different countries implemented by this research might help the reader to have glance at a possible future for Non-Lethal technologies, it is at the reader’s peril only.

⁵³ Max Boot, *War Made New...*, p. 10.

⁵⁴ Neil Davison, *'Non-Lethal' Weapons*, pp. 12-40.

⁵⁵ See Stockholm International Peace Research Institute (SIPRI), *The Problem of Chemical and Biological Warfare. Volume I: The Rise of CB Weapons*, 1971.

⁵⁶ Foreword by Col. Richard H. Witherspoon to Earl Tilford, *The Revolution in Military Affairs: Problems and Cautions* (Carlisle, PA: Strategic Studies Institute, US ArmyWar College, 1995).

While focusing on the problem of civilian casualties, this research does not deal with the definition of “civilian casualties”. It does not try to define or redefine who should, or should not, be defined as “an innocent” or “an undesired” casualty of war. Existent literature suggests two different ways to devise a definition. The first one is based on more traditional dichotomous distinction between combatants and non-combatants in a war zone, which is based on the Four Geneva Conventions of 1949 and the Two Additional Protocols of 1977. The second way suggests that this dichotomy is rooted in regular warfare and is no longer suitable when applied on contemporary counter-insurgencies, and, therefore, the distinguishing aspects should be, not between combatants and not-combatants, but rather between different levels of participation in war. One of the best examples for this type of distinction is given by the Israeli High Court of Justice that suggests a more general division between “direct” and “indirect” participation in hostilities. While “direct” participation includes: transporting militants, operating weapons or supervising the operations; “indirect” participation consists of: providing food, medicine and shelter to combatants, monetary aid, logistical support and distributing propaganda.⁵⁷ As it will be discussed throughout this research, its focus is not on the legal issues regarding the harming of enemy’s population, and, therefore, the reader can adopt any of the existing ways to define “civilian casualties”.

Finally, this research does not engage in the debate on the morality of harming civilians. This research does not try to claim that harming enemy civilian population is immoral, unethical or illegal, this job is preserved for philosophers and lawyers. Instead, the purpose of this research is a much more constructive one. As discussed previously, the main argument of this research is with those who assume that democratic culture and its traditions, modern ethical and moral issues have been restricting the level of violence during military operations in the 21st century. Indeed, it will be unfair to claim that the American, Russian and Israeli militaries do not understand the consequences of disproportionately harming civilians in the political environment of the 21st century and try to reduce the collateral damage caused by their activities. It seems that the World War Two-style city bombings, as practised against Hamburg, Dresden or Tokyo, indeed belongs to the past. However, there is a difference between the politically acceptable level of civilian casualties and the minimum possible one, between the “reduction by avoiding” and “minimisation by preventing”. This research tries to explain why,

⁵⁷ Public Committee against Torture in Israel and Palestinian Society for the Protection of Human Rights and the Environment vs. The Government of Israel (High Court of Justice 769/02, December 11, 2005), Paragraphs 34-37, (Hebrew).

while the technology of NLW allows to do the latter, the military organisations still follow the former.

The Structure

This research consists of five chapters, not including the introduction and conclusion. They are as follows:

Chapter 1: Why Revolution in Military Affairs Occur (or not)

The purpose of this chapter is to analyse different political, military and history studies in an attempt to define the social-political-military environment that creates an RMA, and, therefore, to establish a theoretical framework that will enable explaining its existence or absence. The problem that this chapters tries to solve is driven from the fact that the existent literature on RMA is generally divided between theoreticians, who discuss how it happens, and historians, who analyse the successful RMAs of the past, thus, again, focusing on the process rather than the reason. In other words, most of the research concentrates on *how* these changes occurred and not on *why*. To make the analysis of failed RMAs possible this chapter generally conceptualises RMA as an outcome of the imbalanced Political-Military System establishing a causal chain that triggers an RMA. To demonstrate the logic of the developed conceptualisation, this chapter will analyse two historical examples of failed RMAs: the RMA of Fortification in Early Modern England and the RMA of Armour Warfare in interwar Britain. In its conclusions, the chapter summarises the way in which the occurrence of an RMA can be explained by the concept of Political-Military System and paves a way for the analysis of RMAs that did not occur.

Chapter 2: 'Non-Lethal Weapons – The Revolution in Military Affairs that Did not Occur'

The purpose of this chapter is threefold. The main subject of this research is the RMA of NLW, and as such, the first part of this chapter examines the general background of these weapon systems. It discusses the perplexity of the definition of NLW, what they are and what they are not. It provides a historical brief discussing the implementation of NLW since their appearance in the beginning of the 20th century and focuses on different technological aspects of NLW and their effects. Finally, it examines the complex, and to some degree paradoxical, relations between NLW and modern international law of armed conflict. The second part of this chapter reproduces a theoretical depiction of the potential RMA of NLW. While the main purpose of this research is to explain the reasons behind the fauilure of the RMA of NLW, this

part provides an essential understanding of what this RMA could or should have been, as a reference for the analysis of its absence. The third part utilises this picture of the potential RMA of NLW to framework the examination of the following American, Russian and Israeli cases.

Chapter 3: 'The (absence of the) American RMA of NLW'

This chapter examines the reasons behind the failure of the RMA of NLW in the U.S. military. Despite the fact that the very idea of military employment of NLW was a product of the American military thinking, they have hardly been ever used. American military regards technology as a lodestar of military success. However, without political pressure that defines the minimisation of civilian casualties as an integral part of the military success, non-lethal military technologies remain underdeveloped and idle. American political leadership has developed strong foreign policy mechanisms to reduce the influence of international criticism on their decision- making process. The rhetorical narratives, such as *the protector of the free world against a great evil*, *the promoter and the defender of democracy*, and the ability to create *coalitions of willing* nations, have been allowing American leadership to minimise international criticism in general, and regarding enemy civilian casualties during US-led military operations in particular. Moreover, American public opinion has been showing very little interest in enemy civilian casualties. The American mind-set, shaped by different historical and cultural predispositions to disregard of everything that is not American and general belief that war is a temporary unfortunate phenomenon that has to be resolved as quickly and aggressively as possible, leaves very little space for the appreciation of enemy population. Without political domestic demand to minimise civilian casualties, and with a foreign policy that successfully fends international criticism off, the American political leadership does not pressure its military to revolutionise its ways of conduct and fully integrate NLW in military organisational and operational concepts. Consequently, this chapter demonstrates how NLW remain to be a marginal and oxymoronic phenomenon in the history of the technological adventures of the U.S. military.

Chapter 4: 'The (absence of the) Russian RMA of NLW'

This chapter examines the reasons behind the failure of the RMA of NLW in the Russian military. While the growth of interest toward NLW in the Russian military has been directly influenced by the American military attitudes emerged in the mid-1990s, the initial enthusiasm has been successfully buried by the Russian bureaucracy machine. The types of

non-lethal technologies and the level of their employment in the Russian military basically does not differ from its American counterpart. Despite a very productive professional debate on the possible usefulness of NLW on the battlefield, the Russian political leadership has never felt stressed to minimise enemy civilian casualties. Building on its status as a nuclear power and permanent member of the UN Security Council, its growing economy and broad domestic political support, the Kremlin, has been able to withstand international criticism and accusations of violations of international law, in general, as well as during military operations, in particular. Using the foreign policy narrative of *double standards* (i.e., the West has no right to criticise Russia, as it operates in the same manner), Russian leadership feels no pressure to make its military less lethal than its American counterpart is. Moreover, on the level of the unconscious cultural context, the Russian people are ready to suffer and sacrifice by fighting to protect their country, and by demonstrating levels of endurance that cannot be grasped by Western mind. If readiness for such self-victimisation is so high, it, subsequently, leaves no place for the concern for enemy civilian casualties. In other words, the suffering (and casualties) of the enemy's population during military operation is generally approved in the Russian cultural context, just as the Russians are ready to suffer themselves. Without internal political pressure, and with a resilient foreign policy, NLW do not pass this test of political necessity in Russia and are, consequently, doomed to remain a thought-provoking, yet unused tool in the Russian military arsenal.

Chapter 5: 'The (absence of the) Israeli RMA of NLW'

This chapter examines the reasons behind the failure of the RMA of NLW in the Israeli military. The Israeli Defence Forces (the IDF) had been employing NLW significantly before the American conceptualisation of these weapons in the mid-1990s. Since the end of the Six Day War, the IDF has been forced to fulfil law enforcement duties in the Territories (Judea, Samaria and Gaza) and deal with civilian disturbances, massive riots and other forms of civilian violence organised by the local population. Despite this long history of NLW employment, which was highlighted especially during the First and Second Intifadas, the IDF has always thought of NLW as a tool for riot and crowd control only, and the idea of their employment on the battlefield has never been considered as a serious option. Facing international criticism, the Israeli political leadership has been insisting that international opinion is dominated by anti-Israeli countries, and, therefore, Israel's performance is irrelevant - it does not matter what Israel does (or does not do) it will be widely criticised. Israeli political decision-makers have successfully played (*good*) *few against many (bad)* card, arguing that

the IDF is *the most ethical military in the world* and it does the utmost to reduce enemy civilian casualties, thus, fending off international criticism and tolerating the IDF's refusal to fundamentally change their practices. Moreover, the Israeli social and cultural context, based on the long Jewish history of persecution, the Holocaust heritage and the history of the Arab-Israeli confrontation, pays little regard to enemy population life. The Israeli *siege mentality*, the *existential anxiety* and the cultural narrative that *Never again shall Masada fall!* constitute the Israeli national character shaping its intolerance toward enemy population and, therefore, stimulating no reason to minimise enemy civilian casualties less than it is politically required. With successfully defied international pressure, and with no internal political demand to minimise civilian casualties, the employment of NLW in the IDF remains limited to riot control missions with no role on the "real" battlefields.

CHAPTER 1

WHY REVOLUTIONS IN MILITARY AFFAIRS OCCUR (OR NOT)

Introduction

During the last several decades, different historians and strategists have suggested different ways to explain the interconnection between technology, military, and society that produces a fundamental, even revolutionary, change in the ways of war.¹ Today, there is little doubt that these three dimensions create a symbiotic system and constantly interact with each other. While the slow development of one of them creates adaptive changes in the nature of the others (transformation or evolution); a rapid and fundamental alter produces frequently uncontrollable dissonance that affects all the elements, generating far-reaching changes (revolution). Most of the researchers, who study this phenomenon, operate with two different definitions: *Military Revolution* (MR) and *Revolution in Military Affairs* (RMA).

While current literature suggests many historical examples of revolutionary changes in military affairs,² there is very little research, if at all, that attempts to create a conceptual framework, which will be able to offer a conceptual explanation of their origins and the reasons behind their occurrence or absence. In other words, most of the research concentrates on *how* these changes occurred and not on *why*. One of the most comprehensive proposed conceptual ideas that explains the phenomenon is an attempt to apply theory of *Punctuated Equilibrium*. Different researchers already suggested that MR or RMA seem to be the products of an imbalance in the complex system that encompasses the political-social-military environment. This imbalance has a fundamental influence on all elements within this system (such as armed forces, governments, states, etc.)³ However, it seems that the main lacunae of existing research, which promotes these ideas, is the lack of a conceptual system, the imbalance of which create MRs or RMAs. Only defining this complex environmental system, will provide a conceptual

¹ For example see: Alvin Toffler, Heidi Toffler, *War and Anti-War: Survival at the Dawn of the 21st Century*, (Boston: Little, Brown and Company, 1993); Max Boot, *War Made New: Technology, Warfare and the Course of History, 1500 to Today*, (New York: Gotham Books, 2006); Williamson Murray, Macgregor Knox, (ed.), *The Dynamics of Military Revolution 1300-2050*, (Cambridge: Cambridge University Press, 2001); Theo Farrell, Terry Terriff, (ed.), *The Sources of Military Change: Culture, Politics, Technology*, (London: Lynne Rienner, 2002).

² See Williamson Murray, Macgregor Knox, (ed.), *The Dynamics of Military Revolution ...*

³ See Steven Leonard, *Inevitable Evolutions: Punctuated Equilibrium and the Revolution in Military Affairs*, (Fort Leavenworth, KS: US Army Command and General Staff College, 2001); Colin Gray, *Strategy for Chaos: Revolutions in Military Affairs and The Evidence of History*, (London: Frank Cass Publishers, 2002); Rogers Clifford, 'The Military Revolutions of the Hundred Years' War', *The Journal of Military History*, Vol. 57, No. 2, April 1993.

base for the complete understanding of the nature of revolutionary military changes, their processes, and reasons for their existence.

The purpose of this chapter is to analyse different political, military and historical studies in an attempt to define the social-political-military environment that creates RMA, and, therefore, to establish a theoretical framework that will enable to explain its existence or absence. It consists of seven main parts. The aim of the first one is to point to the misleading import of the term *revolution* from its pure political definition and understanding to its usage in the strategic context of MR and RMA. While the second part sheds a light on the nature of MR and RMA and the relation between them, the third part conceptualises this relationship in an attempt to establish a theoretical causal chain between social-political changes and RMAs. The fourth part generally conceptualises RMA as an outcome of the imbalanced Political-Military System. The fifth analyses the different characteristics of this system, establishing the causal chain that triggers an RMA. The sixth part discusses two historical examples, demonstrating the logic of the developed conceptualisation. The last part integrates the previous ones summarising the way in which the occurrence of an RMA can be explained by the concept of a Political-Military System, paving a way for the analysis of RMAs that did not occur.

Part One: The Five Characteristics of a Revolution

In 1962, a famous British economist and journalist Barbara Ward started her book *The Rich Nations and the Poor Nations* with the statement that “we live in the most catastrophically revolutionary age that men have ever faced”. Despite the fact that this claim is more than 50 years old, it seems to describe very accurately the realities of the first two decades of the 21st century. The strength, and the weakness, of Ward’s statement is concealed in her usage of the term *revolution*, defined by her as an event “changing our life, our ways of looking at things, changing everything out of recognition and changing it fast”.⁴ It seems, however, that while this broad and general definition is sufficient for forming a popular argument; it has a little use in the terms of academic empirical research.

The concept of *revolution* in Social Sciences is very broad and flexible, in fact, “flexible enough to encompass [events] as diverse as the Glorious, French, Copernican, and Industrial

⁴ Barbara Ward, *The Rich Nations and the Poor Nations*, (London: Hamish Hamilton, 1962), p.13.

Revolutions”.⁵ There is no doubt that the term *revolution* is used to describe a change in some state of affairs, however only a definition of the characteristics of this change will enable its empirical examination. Existing literature in social science suggests four major ones. The first two characteristics were best described by the sociologist Kumar Krishan:

There would not be any disagreement to the proposition that all these uses of the word ‘revolution’ turn on the notion of change. This change is, moreover, seen in two ways. It is in some sense fundamental ... and it is in some sense sudden, an acceleration of the previously existing rates of change ... Any concept of revolution then must incorporate somehow the notion of fundamental and accelerated change.⁶

The third and the fourth were best introduced by the historian Clifford Rogers. First, he argues that any revolution has to have a time-frame that “can range from a year to a century”. Although his claim regarding the generic length of this time-frame – “does not exceed a single (maximum) human life span”⁷ – is much debatable,⁸ this characteristic is vital, as it determines a revolution as an event, which has a visible beginning and a noticeable ending. The second of Clifford’s characteristic for a revolutionary change is its dichotomous nature: “... a revolution – however extended – must be in essence a single change, from state X to state Y, from front to back or top to bottom”.⁹ In other words, the change has to be traceable from a determinate status at the beginning to the completely different one at the end.

While these four characteristics are widely debated in literature, another, very important characteristic exists, though for some reason overlooked. Any revolution, whatever the nature of the change, occurs in a certain society in a certain place. This characteristic is obvious when political revolutions occur. In these cases their domestic nature is displayed within their titles: the English Revolution, the French Revolution, the Russian Revolution, etc. It is easy to be misled by a more generic name, such as the Industrial Revolution; however, even this global phenomenon has its domestic roots – it began in Great Britain and then migrated to other countries, although on a different scale and at a different pace. Therefore, the number of industrial revolutions is as varied as the number of countries in which they have occurred: the British Industrial Revolution, the French, the American, the Russian, the Japanese, etc. A

⁵ Clifford Rogers, ‘The Military Revolutions of the Hundred Years War’, in Clifford Rogers, (ed.), *The Military Revolution Debate: Readings on the Military Transformation of Early Modern Europe*, (Oxford: Westview Press, 1995), p. 76.

⁶ Krishan Kumar, (ed.), *Revolution: the Theory and Practice of an European Idea*, (London: Weidenfeld and Nicolson, 1971), p.10.

⁷ Clifford Rogers, ‘The Military Revolutions...’, p. 76.

⁸ See Geoffrey Parker, ‘In Defense of The Military Revolution’, in Clifford Rogers, (ed.), *The Military Revolution Debate...*, p. 339-340.

⁹ Clifford Rogers, ‘The Military Revolutions...’, p. 76.

determination of a revolution's occurrence within a specific place-and-society allows a more accurate understanding of all previous four characteristics - fundamentality, rapidness, time-framing and the dichotomy of the “before” and “after” - and thus turns them into factors that enable an empirical research of the revolution phenomenon. In other words, revolution is *the state of a fundamental and rapid change in a specific affair that occurs in a specific place, to a specific society and in a specific time*. Only the defining of all these characteristics can exclude the undesirable influences and variables and allow further analysis.

Part Two: Military Revolution vs. Revolution in Military Affairs

The idea of revolutionary change in warfare is not a novel concept. Colin Gray rightfully claims that “the concept of qualitative change in the terms and conditions of warfare has been as old as its apparent existential reality” and supports this statement by pointing at the famous works of Jean Colin, Basil Liddel Hart, William Liscum Borden and others,¹⁰ which were written much before the conceptualization of the current terminology of Military Revolution and Revolution in Military Affairs. However, as this research deals specifically with revolutionary military changes, a better explanation of these two is required.

Military Revolution

The term *Military Revolution* was first introduced by historian Michael Roberts in 1956. He used his inaugural lecture at Queen’s University Belfast to expound an early modern “military revolution”. In his later publications he continued to claim in favour of this term and finally determined it in his prominent article “The Military Revolution, 1560-1660”, first to appear in his *Essays in Swedish History* in 1967. The main idea of Roberts’s military revolution was “that purely military developments, of strictly technological kind, did exert a lasting influence upon society in large”.¹¹ The logical explanation that fundamental changes in the means of warfare can lead to the dramatic changes in society and its social institutions attracted as many followers as critics. The main weakness of Robert’s model, however, is that it is rather more descriptive than conceptual, i.e., it points at the phenomenon, yet, discusses too little its nature and characteristics. Therefore, Roberts' determination of a revolution’s time-period, its

¹⁰ Colin Gray, *Strategy for Chaos..*, p. 19-20.

¹¹ Michael Roberts, ‘The Military Revolution, 1560-1660’, in Clifford Rogers (ed.), *The Military Revolution Debate...*, p. 13.

place and even the definitions of altering military affairs became a much debatable statement,¹² with each historian rejecting the other and offering his own dates and main elements for the Early Modern Europe MR. The main dispute was (and still is) not on numbers, technological improvements, main events and their places, but rather on the interpretation of their influence on the fundamental change occurring within European society.¹³ It seems that the main reason for this disagreement is concealed in the erroneous definition that misled the dialogue on MR.

As already mentioned, the fifth characteristic of the revolution phenomenon is the most important one. Only a very accurate definition of its place and the society in which it occurs can allow its further examination. European society is too broad a classification, comprised of different individual states and countries. Therefore, the best way to understand the causal chain between early modern European military innovations and changes in European social structure is the defining of a narrower place-and-society characteristic. Hence, examining the general MR of an Early Modern Europe is incomplete, while examining the more specific MR of early modern Spain, or Sweden, or France, or England, etc., is required for a more complete understanding.

Revolution in Military Affairs

The concept of *Revolution in Military Affairs* appeared independently and almost at the same time as the concept of *Military Revolution* did, though at the very beginning it was called *Military-Technical Revolution*. The term was invented by Soviet military thinkers and much the same way as Roberts, Marshal Nikolai V. Ogarkov, the Soviet Chief General Staff, concentrated on a more descriptive analysis rather than on a conceptual one. The idea of Military-Technical Revolution remained more as an attempt to define certain changes in the American armed forces at that time, rather than on the theoretic-conceptual debate on the nature and characteristics of this type of change in general.¹⁴

The breakthrough in the conceptualization of this phenomenon occurred along with the Americanisation of the Soviet Military-Technical Revolution idea and the appearance of the

¹² See Geoffrey Parker, *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800*, (Cambridge: Cambridge University Press, 1988); Jeremy Black, *A Military Revolution? – Military Change and European Society 1550-1880*, (London: Macmillan Press, 1991); Clifford Rogers, (ed.), *The Military Revolution Debate...*

¹³ Beatrice Heuser, 'Denial of Change: The Military Revolution as Seen by Contemporaries', *International Bibliography of Military History*, Vol. 32, No. 1, 2012, pp. 3-27.

¹⁴ Williamson Murray, Macgregor Knox, (ed.), *The Dynamics of Military Revolution...*, p. 1-10; Dima Adamsky, *The Culture of Military Innovation: The Impact of Cultural Factors on the Revolution in Military Affairs in Russia, the US, and Israel*, (Stanford: Stanford University Press, 2010), p. 24-58.

term *Revolution in Military Affairs*.¹⁵ U.S. strategists, such as Andrew Krepinevich and Andrew Marshall, pioneered the field establishing the conceptual framework of an RMA that included three basic dimensions: doctrinal, organisational and technological.¹⁶ According to them, only a simultaneous fundamental change incorporating these three dimensions can be referred to as an RMA.¹⁷ Despite the fact that their definition is an axiom in the field, some clarification of the first dimension of “doctrinal change” is required. Their use of the term “doctrine” is more related to the new conceptual way of employing weapons on the battlefield, i.e. concepts of operation, rather than to the modern definition of the term “doctrine”, which is more general and includes almost all aspects of strategy.

In fact, compared to Roberts’ Military Revolution, RMA is a much more limited phenomenon. While MR claims to explain the relations between military innovations and social structure, RMA is restricted only to the military field. In other words, RMA theory tries to explain the very specific chain between military innovations and military institutions. The concept of RMA inspired strategists and military scholars to develop this idea further. In the following years many books and articles were written on the subject in an attempt to explore the RMA phenomenon from a variety of perspectives through the use of the historical events of past RMAs.¹⁸ It seems that the researchers were so mesmerized by the idea of RMA and the traceable historical evidences of successful RMAs that they paid little attention to the fact that they were misled by the lack of conceptualization. Again, as it happened to military historians with the idea of MR, strategists did not completely connect RMAs to place and society, or, more precisely in this case, to a specific military. For example, Colin Gray accurately and flawlessly defines a Nuclear RMA;¹⁹ however, according to the fifth characteristic of revolution, Revolution in Military Affairs must be determined by a specific military. Unfortunately, Gray’s Nuclear RMA refers only to the American one; yet there were also the Soviet, the British, the French and others. There are militaries that never went through this

¹⁵ See Stephen Rosen, ‘The Impact of the Office of Net Assessment on the American Military in the Matter of the Revolution in Military Affairs’, *Journal of Strategic Studies*, Vol. 33, No. 4, 2010, pp. 569-482.

¹⁶ See Andrew Krepinevich, ‘Cavalry to Computer: The Pattern of Military Revolutions’, *National Interest*, no. 37, 1994, pp. 30-42; Andrew Marshal, ‘Some Thoughts on Military Revolutions’, *Office of Net Assessment memorandum*, 1993.

¹⁷ See Andrew Krepinevich, ‘Cavalry to Computer...’; Andrew Marshal, ‘Some Thoughts on Military Revolutions...’.

¹⁸ See Colin Gray, *Strategy for Chaos...*; Max Boot, *War Made New...*; Tim Benbow, *The Magic Bullet? Understanding the Revolution in Military Affairs*, (London: Chrysalis Book Group, 2004); Richard Hundley, *Past Revolutions Future Transformation: What Can History of Revolutions in Military Affairs Tell Us about Transforming the US Military?*, (Santa Monica: RAND, 1999).

¹⁹ Colin Gray, *Strategy for Chaos...*, p. 222-269.

process, and there are some that seem to be still in the midst of the process, even 70 years later.²⁰

The Merger

There is no doubt that these two independently developed concepts, MR and RMA, share a mutual nature. The very first attempt to integrate them was made by the historian Williamson Murray in 1997 in his article “Thinking about Revolution in Military Affairs”²¹ and later in his book, co-edited with another military historian Macgregor Knox, *The Dynamics of Military Revolution, 1300-2050*. Murray’s main breakthrough is rooted in his attempt to take the idea of MR out of its context of Early Modern Europe and determine a conceptual definition of this phenomenon and the relation between it and RMA. According to Murray, MRs are “earthquakes” that bring “systematic changes in politics and society ... [and] recast society and the state as well as military organisation”; and RMAs are “less-embracing changes” that appear within military institutions and “require the assembly of a complex mix of tactical, organisational, doctrinal, and technological innovations in order to implement a new conceptual approach to warfare or to a specialized sub-branch of warfare”.²² Murray claims a very interesting connection between MRs and RMAs: “If Military Revolutions are compared with earthquakes, we can think of RMAs as pre- and aftershocks”.²³ In other words, RMAs can be considered as traceable evidences before and after MRs. For example, he argues that the MR of Early Modern Europe had pre-shock RMAs: the longbow, Edward III’s strategy, gunpowder, and fortress architecture; and direct and aftershock RMAs: the Dutch and Swedish tactical reforms, the French tactical and organisational reforms, the naval revolution.²⁴ It seems, that all these innovations, indeed, can be related to the Early Modern Europe MR; however, an attempt to establish any casual relations between them and their influence on or from the social and political “earthquake” of the 17th century creation of the modern state looks as a very confusing procedure.

The perplexity of Murray’s connection comes, again, from taking too broad perspective. As it was shown above, any revolutionary phenomenon must be analysed

²⁰ The Iranian Nuclear Program can be easily defined as an on-going Iranian Nuclear RMA. There is no doubt that if Iranian military will have nuclear capability (i.e., a technological breakthrough), it will project on future Iranian military organization and concepts of operation.

²¹ Williamson Murray, ‘Thinking about Revolution in Military Affairs’, *Joint Force Quarterly*, Vol. 16, 1997, pp. 69-76.

²² Williamson Murray, Macgregor Knox, (ed.), *The Dynamics of Military Revolution*.... p. 6-7. p.12.

²³ Williamson Murray, ‘Thinking about Revolution...’.

²⁴ Williamson Murray, ‘Thinking about Revolution...’.

regarding a specific place. Therefore, a casual chain between MR and the related RMAs can be established only in the context of a specific country, its society and its army. For example, the relations between MR of Early Modern England and: the English RMA of Fortification, the English RMA of Navy, the English RMA of “Dutch and Swedish tactical reforms”²⁵, etc. The misleading current conceptual debate about MRs, RMAs and the connection between them is concealed by its broadness and the detachment from nationalised specification. The next part makes an effort to cover this gap in the current theory. Its title contains the term *nationalisation*, emphasizing the connection to a specific player. It is obvious that the discussed phenomena are much older than the term *nation* in its modern context; however, it seems more suitable and accurate to use, than “localisation” or “domestication”.

Part Three: The Conceptualisation of MR and RMA

It seems, especially as discussed above, that RMAs have a pivotal role in the MR’s life-circle, though the connection between them is still unclear. On the one hand, RMAs trigger MRs; on the other hand, RMAs are the direct outcome of MRs. In addition to these indistinguishable relations, there is no doubt that different RMAs seem to be connected one to another. For example, The Fortification RMA of the 16th century (*trace italienne*), is the obvious answer to the improvements of siege artillery that occurred at the end of 15th.²⁶ Also, there is no doubt that any revolutionary change in one sphere of social life, such as economy, would have significant impact on other social spheres, such as politics.

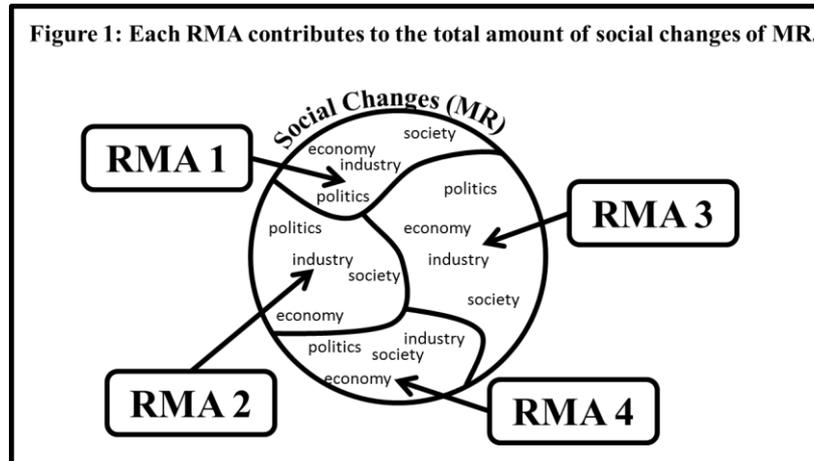
There are two major steps that should be explored in order to clarify these relationships. The first is the examination of specific nationalised cases, as any revolution is specific to the certain society and only within this context it can be properly examined. The second is making several very generic assumptions: (1) All RMAs have certain impact on the social-political structure, such as required economic or political changes; (2) All RMAs need specific social-political conditions required for their occurrence, such as a suitable economy, form of governance, proper army, etc.; (3) RMAs are usually inter-connected and their connections can have a consequential nature (e.g., one RMA provides a technological background to another) or replying one (RMA replies to the changes caused by the previous one); and (4) Social-

²⁵ The adaptation of Dutch and Swedish tactical reforms by the English infantry.

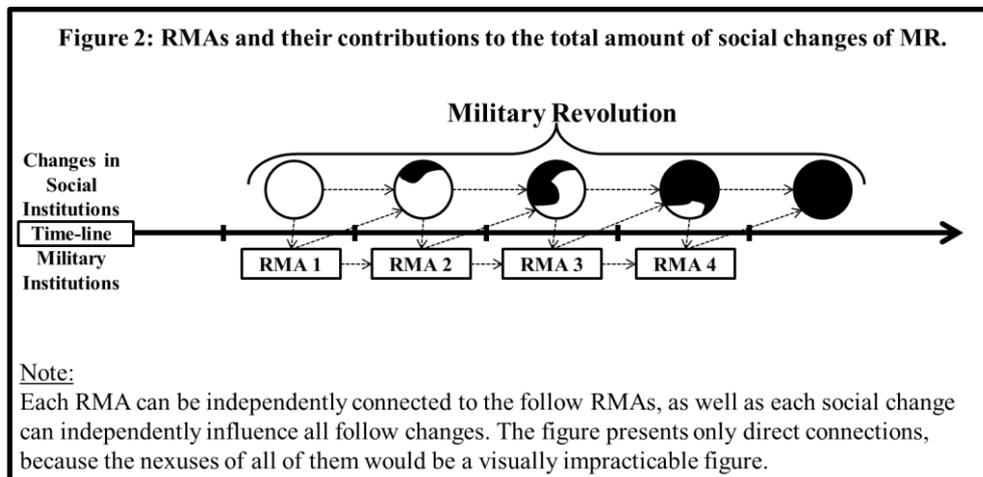
²⁶ Geoffrey Parker, *The Military Revolution...*, p. 6-13.

political changes within MRs are, also, usually consequentially connected (e.g., each following change requires the occurrence of a part, or even all, of previous changes).

According to the first assumption RMAs that occur within the military of a specific country contributes its own part to the total amount of social changes within what is called “the Military Revolution of the country”. (See Fig. 1).

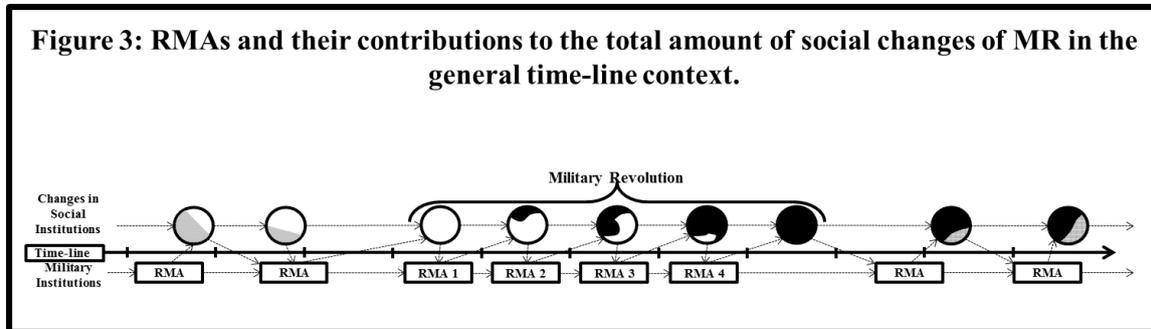


The visualisation of the connections presented by the second, third and fourth assumptions requires situating RMAs and the social changes on a time-line. (See Fig. 2). Due to the fact that the history of only one country is under analysis, there should be no difficulties to situate the events chronologically.



The vulnerability of the connections, as illustrated in Fig. 2, is concealed in its general detachment from the historical time-line. There is no doubt that before and after a presented period, whatever it is, pre- and post RMAs occur, as well as social changes. Therefore, the phenomena within the right context of the general time-line are presented in Fig. 3. Nonetheless, even this illustration is not free of criticism, as it raises a new conceptual dilemma

regarding the rules that determine the start and the end of MRs; in other words, a theory that decides which RMAs and social changes are included and which remains behind (or ahead) is still missing. This theory will be introduced in the following part providing a more conceptual explanation about the relation between social changes and military innovations.



Part Four: RMA and the Unbalanced Political-Military System

Previously, the revolution phenomenon was defined as a fundamental, rapid, time-frameable and dichotomous change, which had taken place within a certain context within a certain place. Considering the later discussion on problematic interconnection between social-political changes and military innovations, this definition raises questions whether these relations are a matter of revolution, rather than an evolutionary development. Evolution is defined as “[an] advancement through a near-infinite number of infinitesimal changes”;²⁷ and indeed, it seems that RMAs and socio-political changes might be defined as a evolutionary development, rather than revolution. On the one hand, it is obvious that the innovations in warfare and socio-political life might be a part of the evolutionary process. On the other hand, historians of MRs point at certain periods of time and present changes that can hardly be named “infinitesimal”. Moreover, it seems that these periods of revolutionary changes in social-political, as well as military, dimensions were surrounded by slower evolutionary process. Concurrently, the definition of the phenomena of RMA, or MR, as a revolutionary event within an evolutionary development, demands a more developed theory.

A paradigm that is able to provide a conceptual framework for the further examination of RMA and MR and determination their revolutionary (or not) nature is a theory of Punctuated Equilibrium. Initially, this theory was proposed in 1972 by two palaeontologists Stephen Jay Gould and Niles Eldredge, who for the first time interpreted the fossil records and not just

²⁷ Clifford Rogers, ‘The Military Revolutions...’, p. 77.

described it, as it was acceptable before.²⁸ Gould and Eldredge, in an attempt to explain the development (or lack thereof) of fossils, argued that species' development occur in relatively short bursts, punctuated by the long periods of near stasis or equilibrium. In other words, the incremental, evolutionary, equilibrated development is interspersed by a rapid, short, discontinuity event. Their theoretical concept of Punctuated Equilibrium combines both, evolutionary as well as revolutionary, types of development;²⁹ hence, it seems suitable for the examination of RMA and MR theories.

The concept of Punctuated Equilibrium was rapidly adopted by the Social Sciences and other scientific disciplines³⁰, and the fact that it fits RMA and MR theories has already been noted by many researchers.³¹ The problem with the existing literature, however, is that it only suggests that RMAs or MRs can be defined as a discontinuity or nonlinearity in the general background of the slow incremental progress. It does not define why this disequilibrium happens or why the system remained equilibrated. Thus, a further examination of the ways, in which the concept of equilibrium explains the revolution phenomenon, is required.

In 1966, six years before the Punctuated Equilibrium concept of evolution was presented, an American Professor of Political Science Chalmers Johnson published a book *Revolutionary Change*, in which he made an attempt to explain the reasons behind political revolutions.³² Johnson assumes that due to the fact that revolution is a socio-political phenomenon, the key to "the study and the conceptualization of the revolutionary violence lies in social system analysis".³³ Following this assumption he established a theory that explains revolution as a failure of homeostasis or system disequilibrium.³⁴ According to Johnson, even rapid changes within a society do not necessarily cause a revolution, and that there are two different possible results: either, change would be absorbed by the system causing the homeostatic changes and preserve the system's equilibrium; or, the dissonance caused by the change would exceed the homeostatic capacity of the system, creating system disequilibrium – i.e., revolution.³⁵ In other words, as long as the system is equilibrated, stasis would remain;

²⁸ Donald Prothero, 'Punctuated Equilibrium at Twenty: A Paleontological Perspective', *Skeptic*, Vol. 1, No. 3, 1992, pp. 38-47.

²⁹ Clifford Rogers, 'The Military Revolutions...', p. 77.

³⁰ See Albert Somit, Steven Peterson, *The Dynamics of Evolution: The Punctuated Equilibrium Debate in the Natural and Social Sciences*, (Ithaca: Cornell University Press, 1992).

³¹ See Steven Leonard, *Inevitable Evolutions...*; Colin Gray, *Strategy for Chaos...*; Clifford Rogers, 'The Military Revolutions...'

³² Chalmers Johnson, *Revolutionary Change*, (London: University of London Press, 1968).

³³ Chalmers Johnson, *Revolutionary Change*, p. 13.

³⁴ Chalmers Johnson, *Revolutionary Change*, p. 59-87.

³⁵ Chalmers Johnson, *Revolutionary Change*, p. 70-71.

once the balance between the system's components is lost, revolution would occur. This dichotomous differentiation seems to be more suitable for the determination of the RMA's or MR's phases of existence. However, as RMA and MR are a more political-military phenomena than Johnson's socio-political revolution, a definition of appropriate *Political-Military System*, situated in a supposed equilibrium is required.

The Political-Military System

The very first step in defining *Political-Military System* is a determination of what a system is. The term *system*, when properly used, means:

Any group of variables which are so arranged that they form a whole, and which have a particular kind of relationship with each other.... [these variables] are mutually influencing and they tend to maintain the relationship they have with each other over time.³⁶

According to this definition, there are two main characteristics of a system as a group of variables. The first is the mutual influence that characterises the variables within the system as interdependent. And the second is the variables' tendency to maintain their relationship as an aspiration to preserve the system equilibrated; without these relations, whatever their nature is, the system would collapse (dis-equilibrated), its variables would be replaced until a new equilibrium would be reached. Consequently, the definition of a Political-Military System has to answer these two generic characteristics of the term *system*.

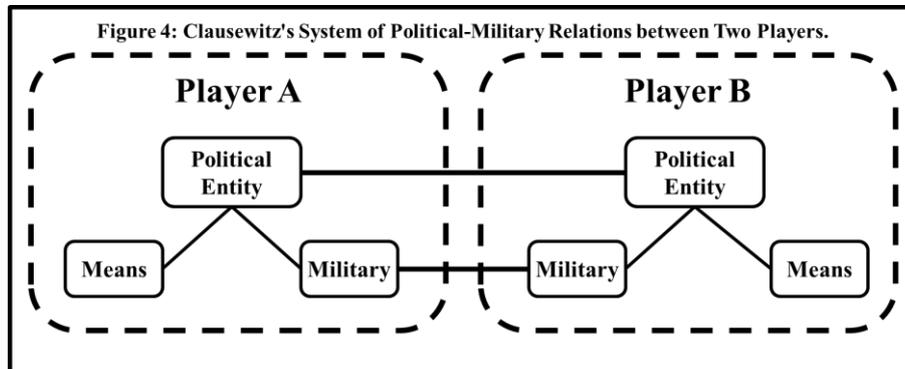
The second step in the conceptualization of the Political-Military System is defining the variables that create this system, and there is no better way for that than turning back to the classic writings of Carl von Clausewitz. In his book *On War*, Clausewitz claims that "war is nothing but a duel",³⁷ a bipolar phenomenon that occurs between military forces of two nations, or a group of nations. Accordingly, the first two most basic elements of war are rivaling armed forces. He continues to state that "war is a mere continuation of policy by other means",³⁸ emphasizing that there are two additional components needed to compose "war" – the rivaling political entities standing behind their militaries forces. Moreover, political bodies can relate not only through military means, but also have an independent political link. Further on in the book, Clausewitz advocates the importance of the capabilities and means that governments assign specifically for the purpose of war, saying that: "Governments [...] had to

³⁶ Chalmers Johnson, *Revolutionary Change*, p.40.

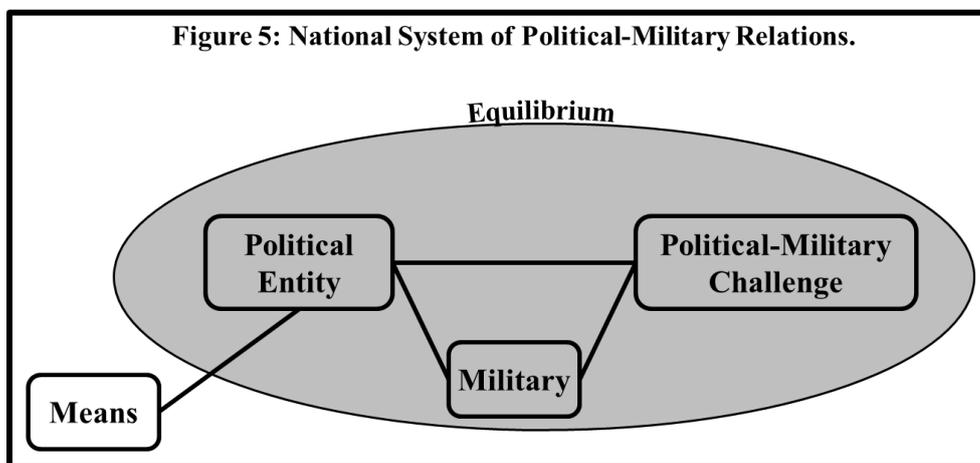
³⁷ Carl Von Clausewitz, *On War*, edited and translated by Michael Howard and Peter Paret, (Princeton: Princeton University Press, 1989), p. 75.

³⁸ Carl Von Clausewitz, *On War*, p.87.

treat the maintenance of the army”.³⁹ Therefore, as the assignment of capabilities and means is an essential part of a political decision, they are connected to the military through the political entity. (See figure 4).



The importance of the definition of a revolution as a phenomenon related to one player has already been discussed at the beginning of this chapter. Therefore, for the sole purpose of analysing revolutions, the Clausewitzian system has to be reduced to a national level – in essence, it has to be nationalised.⁴⁰ To achieve this nationalised level all the elements of one of the players would be assembled into a single component – the political-military challenge that a player presents to his opponent. This component would present the individual player as a homogeneous element within the system of its rival (See Figure 5).



The three main component of the system – political entity, military and political-military challenge – constitute the Political-Military System that, according to the definition of system,

³⁹ Carl Von Clausewitz, *On War*, p.331; See also p. 196 – “In practice, the size [of the army] will be decided by the government. This decision marks the start point of military activity...”.

⁴⁰ Here again, as with the concepts of RMA and MR, the term *nationalization* emphasizes the connection to a specific player and not to the term *nation*.

has to be equilibrated. As the means are controlled by the political entity, this element is subordinate, and therefore not included in the main political-military equilibrium.

The analysis of the Political-Military System demands an understanding of its interdependency; however, it is important to discern that war, in itself, does not mean that the Political-Military System is imbalanced. Essentially, the Political-Military System can continue functioning in equilibrium during a war, as long as its components succeed in maintaining their mutual balance. Moreover, as it was discussed previously, RMAs constitute MRs, consequently it seems right to argue that while a MR is the product of a significant imbalance of the Political-Military System, followed by dramatic alternations of all its components, an RMA is a lesser imbalance, followed by a military transformation only.

Part Five: Why RMAs Occur (or not)

Theo Farrell and Terry Terriff in their book *The Sources of Military Change* argue that the main factors behind fundamental military changes (i.e., RMAs) are: technology, politics and culture.⁴¹ The question is, however, which one of these factors triggers an RMA and which determines its way. In other words, which factors explain *why* the RMAs occur and which shapes the *how*. As it was discussed in the beginning of this chapter, the existing conceptual literature of the RMA phenomenon does not offer an immediate answer to this question, however, it seems that an analysis of RMA theories, suggested by different scholars, can help to conceptually differentiate between the “triggers” of the RMA phenomenon and its “designers.”

On the one hand, different scholars suggest different models for the RMA phenomenon. While in his *Strategy for Chaos* Colin Gray suggests a nine-step model of an RMA life-cycle,⁴² Steven Metz and James Kievit in their *Pattern of Military Revolutions* offer only a five steps model,⁴³ and Richard Hundley in his *Past Revolutions Future Transformation* reduces the number of the RMA’s phases to four.⁴⁴ On the other, it seems that these models overlap and complement, rather than contradict each other, expressing the interest of the study of their

⁴¹ Theo Farrell, Terry Terriff, (ed.), *The Sources of Military Change...*, pp. 3-20.

⁴² Colin Gray, *Strategy for Chaos...*

⁴³ Steven Metz, James Kievit, *Strategy and the Revolution in Military Affairs: from Theory to Policy*, (Carlyle: US Army Strategic Studies Institute, 1995).

⁴⁴ Richard Hundley, *Past Revolutions Future Transformation...*

architects.⁴⁵ While their models are different, all scholars came to the same conclusion that despite the fact that technology is, undoubtedly, an essential component of the RMA phenomenon, it does not trigger it. Indeed, history provides a large number of cases when a novel military technology failed to ignite an RMA.⁴⁶ Moreover, when Hundley argues that “RMAs are often adopted and fully exploited first by someone other than the nation inventing the new technology,”⁴⁷ he does not only underline the fact that the “novel” technology behind an RMA is not exactly novel, but also suggests that it was even invented by somebody else. The story of the RMA of Armoured Warfare offers one of the best examples of a technology (i.e., tanks) that was developed by the British military in the First World War, but the RMA itself occurred first in Nazi Germany, 20 years later.⁴⁸ While this example will be analysed in more details in the next part of this chapter, it is possible to claim that technology by itself does not serve as a trigger for RMA. In other words, a new technology is essential for the occurrence of an RMA, but it does not ignite it.

In describing the process that leads to an RMA, Richard Hundley claims that “unmet military challenges are an essential element” that drives to the breakthrough process of RMA.⁴⁹ Colin Gray elaborates this idea of *unmet challenge* arguing that the implementation of RMA demands that “some lawful authority” will “decide that there is a challenge, a threat, or an opportunity, in need of RMA solution.”⁵⁰ Further in his book he states:

For an RMA to succeed, both narrowly as a military-technical (inter alia) enterprise, and strategically as an agent for enhanced effectiveness, it has to translate into political defined goals.⁵¹

Combining this understanding with the conclusion of Theo Farrell and Terry Terriff that “strategic pressures operate through political processes in shaping military change”⁵² it seems possible to deduct that a successful implementation of RMA demands political leadership to define to their military a challenge, which will require a fundamental military change. In other words, for an RMA to be triggered, a military organisation has to realise that a challenge that

⁴⁵ Ofer Fridman, ‘Are We Ready for the Revolution of Non-Lethal Weapons? – Using a Comprehensive RMA Model to Examine the Current Strategic Situation’, *Comparative Strategy*, Vol. 32, No. 3, 2013, pp. 192-206.

⁴⁶ Gregory Wilmoth, ‘False-Failed Innovation’, *Joint Force Quarterly*, Vol. 22, 1999, pp. 51-57.

⁴⁷ Richard Hundley, *Past Revolutions Future Transformation...*, p. XIV.

⁴⁸ John Stone, ‘The British Army and the Tank’, in Theo Farrell, Terry Terriff, (ed.), *The Sources of Military Change...*; Williamson Murray, ‘Contingency and Fragility of the German RMA’, in Williamson Murray, Macgregor Knox, (ed.), *The Dynamics of Military Revolution...*; Robert Larson, *The British Army and the Theory of Armoured Warfare, 1918-1940*, (London: Associated University Press, 1984)

⁴⁹ Richard Hundley, *Past Revolutions Future Transformation...*, p. XV.

⁵⁰ Colin Gray, *Strategy for Chaos...*, p. 76.

⁵¹ Colin Gray, *Strategy for Chaos...*, p. 271.

⁵² Theo Farrell, Terry Terriff, (ed.), *The Sources of Military Change...*, p. 10.

had been put in front of it by its political leadership cannot be met by existing capabilities and, therefore, a change is required, and the bigger the challenge, the bigger the change. As Stephanie Carvin and Michael Williams claimed: “it is civil policy-makers that set the framework within which military doctrine is composed.”⁵³ It is important to note, however, that while there are scholars who claim that a military, facing new strategic developments, such as new enemy strategy or technology, might perform an internal change, independently from political pressure,⁵⁴ this argument seems to be not fully developed. In the end, it is a political leadership that defines a challenge, which its military would seek to meet, and supports its military throughout the process of change. While some RMAs might be seen as independently performed, they were nonetheless triggered by a political challenge that was translated by the military in an unmet military challenge. Consequently, it seems right to argue that it is a political decision to deal with a certain threat that forces military transformations, and in the case when this threat cannot be faced by existing technology, concepts of operations and military organisation, an RMA will occur.

The last factor behind military changes that was suggested by Theo Farrell and Terry Terriff is culture. The vitality of cultural characteristics for the understanding of military organisations and their transformations has been suggested by many scholars in the field of military affairs and strategy, producing a vast variety of theoretical and empirical studies. While Theo Farrell, Collin Gray and Jeremy Black concentrated more on the national defence policies examining the interconnection between national norms, culture and strategic behaviour,⁵⁵ Stephen Rosen focused on the influence of social structures on national styles in generating military power.⁵⁶ While Elizabeth Kier and Beatrice Heuser examined how cultural predispositions of specific nations shape their military doctrines,⁵⁷ Dima Adamsky focused on the influence of cultural aspects on the military organisational, doctrinal and technological

⁵³ Stephanie Carvin, Michael Williams, *Law, Science, Liberalism and the American Way of Warfare: The Quest for Humanity in Conflict*, (Cambridge: Cambridge University Press, 2015), p.8.

⁵⁴ For example see: Kimberly Ziks, *Engaging the Enemy: Organisation Theory and Soviet Military Innovation, 1955-1991*, (Princeton: Princeton University Press, 1993); Stephen Rosen, *Winning the Next War: Innovation and the Modern Military*, (Ithaca: Cornell University Press, 1991).

⁵⁵ For example see: Theo Farrell, *The Norms of War: Cultural Beliefs and Modern Conflict*, (London: Lynne Rienner Publishers, 2005); Collin Gray, *Out of the Wilderness: Prime Time for Strategic Culture*, (Fort Belvoir: Defence Threat Reduction Agency, 2006); Jeremy Black, *War and the Cultural Turn*, (Cambridge: Polity Press, 2012).

⁵⁶ For example see Stephen Rosen, ‘Military Effectiveness: Why Society Matters’, *International Security*, Vol. 19, No. 4, 1995, pp. 5-31.

⁵⁷For example see: Elizabeth Kier, *Imagining War: French and British Military Doctrine between the Wars*, (Princeton: Princeton University Press, 1997); Beatrice Heuser, *Nuclear Mentalities? Strategies and Beliefs in Britain, France and the FRG*, (London: MacMillan Press, 1998).

innovations.⁵⁸ All of these studies, however, focus on how different cultural factors influenced military changes and transformations, as Farrell and Terriff concluded: "cultural continuity can shape military change by defining organisational responses to strategic, political, and technological developments."⁵⁹ As Adamsky argued in his book *The Culture of Military Innovations* that "under the impact of [different] cultural factors countries interpret differently the changing character of war,"⁶⁰ it seems, therefore, right to argue that culture is important as it shapes the way of the political-military decision-making process, as well as the way a novel technology is perceived by the military. While culture, undoubtedly, influences political leadership in their definition of challenges and threats, as well as the military in its interpretation of these challenges and finding possible solutions, it is the context of RMA, rather than the reason for it. In other words, culture shapes the environment for the fundamental military changes (i.e., RMA), rather triggers them.

Combining the analysis of these three main factors that stand behind the occurrence of RMA (i.e., technology, politics and culture) with the model of Political-Military System discussed above, it seems right to propose a conceptual framework that explains the occurrence of RMA: *an RMA occurs when a political leadership, shaped by certain socio-cultural circumstances, defines to its military a challenge that military culture interprets as unmet and dealing with it requires fundamental change that combines novel, but an already available technology, operational concept and organisation.* Usually, as most of the discussed above literature suggests, the military organisation will realise that the challenge is, indeed, unmet only after a defeat or almost-defeat. However, this is not always the case, as, sometimes, a close dialogue between the political leadership and its military, combined with the right cultural environment, can help to avoid this detrimental experience.⁶¹ Whether this way or that, as was discussed above, an RMA can only begin after a political-military challenge was posed by a political leadership, and its military defined it as an unmet.

To conclude this conceptual discussion, it is important to highlight an obvious precondition of an RMA's occurrence: an availability of the required means and resources (economic, industrial, human, etc.), without which an RMA just cannot occur. This "availability", however, is relative and usually determined by the political will of a nation. While, sometimes, there are states that for obvious reasons have no resources, no political will

⁵⁸ For example see Dima Adamsky, *The Culture of Military Innovation...*

⁵⁹ Theo Farrell, Terry Terriff, (ed.), *The Sources of Military Change...*, p. 7.

⁶⁰ Dima Adamsky, *The Culture of Military Innovation...*, p. 141.

⁶¹ For example see: Kimberly Ziks, *Engaging the Enemy...*; Stephen Rosen, *Winning the Next War...*

to perform an RMA (e.g., San Marino or Somalia), in most of the cases it is just a matter of political decision. In other words, *for an RMA to occur, a decision of political leadership to face an unmet challenge is not enough, it also has to stand behind it.* In both of the analysed below examples, the political leadership decided not to redirect all resources required for the occurrence of RMA (experimentation with new technologies and operational and organisational concepts requires not only cultural openness for new ideas, but also significant funding).⁶² As it will be highlighted in the case of the RMA of Fortification in Early Modern England, when a political leadership does not provide enough material support to its military when it faces unmet challenges on the battlefield, it means that it can tolerate the consequences (i.e., defeat or surrender). The second case will focus on the RMA of Armour Warfare in interwar Britain, when the Royal Army was not only undersupplied to perform the RMA, but also displayed strong cultural conservatism in adopting tank technology. It will be shown, however, that these two drawbacks that failed this RMA were highly interconnected, as it was the British political leadership that did not pose a required challenge to their military, rather than a stagnation of the British military thought, after all, Fuller and Liddell Hart were both Britons.

Part Six: Why RMAs Occur (or not) – Historical Examples

The following examination will focus on two historical examples of RMA: the RMA of Fortification in Early Modern England and the RMA of Armour Warfare in interwar Britain. Utilising previously established conceptual understanding of the RMA's occurrence, the following examination will analyse these two unsuccessful RMAs in an attempt to point to the reasons that stood behind their failures. In each case, the analysis will focus on: (1) what was the RMA about (i.e., technology, concept of operation and organisation); (2) the absence of this RMA in England/Britain; (3) the reasons behind this absence.

The absence of the RMA of Fortification in Early Modern England

There are some historians who suggest that the initial drive behind the MR of Early Modern Europe was the revolutionary development of fortification – the *trace italienne*.⁶³ While the criticism against the concept of an European MR was already raised in previous parts

⁶² Richard Hundley, *Past Revolutions Future Transformation...*

⁶³ See Lohn Lynn, 'The trace italienne and the Growth of Armies: The French Case', in Clifford Rogers, (ed.), *The Military Revolution Debate...*; Thomas Arnold, 'Fortifications and the Military Revolution: The Gonzaga Experience 1530-1630', in Clifford Rogers, (ed.), *The Military Revolution Debate...*

of this chapter, there is no doubt that the *trace italienne* was an outcome of the significant improvement in siege artillery.⁶⁴ Clifford Rogers called this relatively rapid growth in siege artillery power, in the 14th and 15th centuries, an “Artillery Revolution”. This development, however, can hardly be called RMA, as Rogers explained this himself, it did not involve organisational or tactical changes, and these “new” guns were used in the same way as the regular siege artillery was used in the pre-gunpowder era, such as the ballista or the catapult.⁶⁵

Technology –The *Trace Italienne*

The proliferation of stone-built castles in the 11th and 12th centuries altered the balance between defence and offence in favour of the first one. The domination of these fortifications extended for more than two hundred years, and was terminated by the appearance of powerful siege artillery in the 15th century.⁶⁶ The significant and rapid developments of siege guns during the first 30 years of the 15th century made high and thin stone walls too vulnerable and thus obsolete. Novel designs and manufacture processes, new loading methods, as well as improved gun-powder formulas, made possible the destruction of even the strongest fortresses of the time.⁶⁷

The answer to this new artillery’s far-reaching effects was found in Spanish Italy in the end of the 15th century, when a novel design of fortification –the *trace italienne* – was invented. This new design was based on two main innovations: the bastion and the novel, low and thick walls. The first reduced the dead zones close to the walls and allowed to place effective flanking fire. The second effectively protected the defenders against the enemy’s bombardment and enabled to place defensive artillery, keeping the siege-guns distant enough. This new type of fortification was the perfect defensive answer in the early modern gunpowder environment. It allowed “(1) to protect the fortress from storm by infantry; (2) absorb bombardment without tipping or crumbling; (3) shelter the defenders from attacking fire, and (4) subject the attackers to effective artillery fire.”⁶⁸

Operational Concept – The Comeback of the Siege

The introduction of the *trace italienne* did not just reinstate the balance between defence and offence, but shifted it back in favour of the first. During the 16th and 17th centuries the new

⁶⁴ Frank Tallett, *War and Society in Early Modern Europe, 1495-1715*, (London: Routledge, 1992), p. 32-38.

⁶⁵ Clifford Rogers ‘Military Revolutions of the Hundred Years War’, p. 64-73.

⁶⁶ Geoffrey Parker, *The Military Revolution...*, p. 6-8.

⁶⁷ Clifford Rogers ‘Military Revolutions of the Hundred Years War’, p. 68.

⁶⁸ Lynn John, ‘The trace italienne and the Growth of Armies...’, p. 172.

defensive style was widely spread throughout continental Western Europe, making a siege an event that could take months or even years.⁶⁹ According to the development of besieged tactics, different tactical solutions were invented to maximise the strength of walls and bastions, as well as the effectiveness of defenders. “Crownworks”, “hornworks”, “ravelins”, redoubts and other tactical fortifications were invented to improve defensive capacity. While the *trace italienne* brought the siege tactics back into fashion, compared with the 11th century, early modern siege demanded more manpower, more time and much more money from both sides of the walls.⁷⁰

Organisation – Permanent garrisons

The significant improvements of fortification in the 16th and 17th centuries made them sophisticated and valuable assets, and their value increased not only as strategic defence strongholds, but also in terms of funds invested in their building. These two reasons, sophistication and costs, demanded a creation of permanent garrisons that protected the fortress during peace time, maintained the fortifications and were familiar with all their advantages and weaknesses. During the 17th century, the number of troops assigned to garrison duty in Europe multiplied: “seventeenth-century military opinion insisted that it was unacceptable to maintain a fortress without a garrison”.⁷¹ These permanent garrisons tied down an enormous number of troops. Although the number of troops in any individual fortress was not that significant, their numbers multiplied by the number of strongholds, making the actual sum of all defensive troops pivotal. For example, in 1639, the Spanish Army of Flanders “numbered 77,000 men, of whom over 33,000 were distributed in 208 separate garrisons, the largest of which numbered scarcely 1000.”⁷²

The absence of the RMA of Fortification in Early Modern England

The English military was aware of the revolutionary change of fortification in continental Europe in the 16th century. Thus, in 1539, Henry VIII of England established a massive development program, building 28 new forts and improving many older ones in eastern and southern England, as well as in English territories in France.⁷³ Unfortunately, the fortifications were built by English native architect and had a shape of hollow rings and not angular bastions according to the *trace italienne* design. These forts were ineffective against

⁶⁹ Geoffrey Parker, *The Military Revolution...*, p. 13.

⁷⁰ Geoffrey Parker, ‘In Defense of The Military Revolution’, p. 345-353.

⁷¹ Lohn Lynn, ‘The trace italienne and the Growth of Armies...’, p. 183.

⁷² Geoffrey Parker, ‘In Defense of The Military Revolution’, p. 352-353.

⁷³ Geoffrey Parker, *The Military Revolution...*, p. 26.

concentrated artillery bombardment, as was proven in 1558 when after a short siege; England lost its sole remaining possession on the European mainland – Calais.⁷⁴

Even though it was Edward III who introduced gunpowder weapons to Europe in 1327,⁷⁵ and though his predilection for artillery technology was adopted by his successors, the English military failed to produce effective fortresses: Henry VIII's massive and very expensive plan proved itself as an entire failure. Moreover, in 1559, Elizabeth I found that the fortification programme that started twenty years earlier was stalled, many defensive works were unfinished and garrisons suffered from unsatisfactory firepower and deficient personnel.⁷⁶

One hundred years later, on the eve of the Civil Wars, the fortifications in England were still completely outdated compared with their improvements on the continent. Only few forts on England's coasts acquired the standard of the *trace italienne* in 1642. During the Civil Wars, several strategic cities, such as London and Oxford, were fortified according to modern standards. Others were provided with partial fortifications.⁷⁷ While one can argue that these ad-hoc modifications were in fact the English RMA of Fortification, it was, however, too little and too late for two reasons. The first is indeed the quantity: the number of modern fortifications and especially the amount of troops designated to garrisons in peace time were notably small by European continental standards.⁷⁸ The second is the time factor. The Civil Wars and Cromwellian conquests of Ireland, in 1649-1652, and Scotland, in 1650-1652, offered other military transformations, in light of which the RMA of the *trace italienne* was, indeed, too late.

Why the RMA of Fortification did not occur in Early Modern England

To answer why the RMA of Fortification did not occur in England, it is important to understand whether the challenge of the rapid growth in siege artillery power in the continental armies was realised by the English political leadership and was posed as a challenge to its military. It seems, however, that the answer is obvious: England controlled territories in France and was constantly confronted by continental militaries. Moreover, the very fact that Henry VIII of England established a massive fortification program suggests that he realised the unmet challenge of siege artillery and pressed his military to change.

⁷⁴ Geoffrey Parker, *The Military Revolution...*, p. 28.

⁷⁵ Clifford Rogers, "'As if a New Sun Had Arisen': England's Fourteenth-Century RMA", in Williamson Murray and Macgregor Knox (eds), *The Dynamics of Military Revolution...*, p. 26-27.

⁷⁶ Mark Fissel, *English Warfare 1511-1642*, (London: Routledge, 2001), p. 38.

⁷⁷ Geoffrey Parker, *The Military Revolution...*, p. 28.

⁷⁸ Bruce Porter, *War and the Rise of the State*, (New York: The Free Press, 1994), p. 83.

While this attempt proved itself as a failure, it seems that the English political leadership withdrew its support from military attempts to revolutionise its fortifications. An assumption that the lack of English political pressure led to the absence of the Fortification RMA during the 16th century suffers from simplicity of explanation, after all, England was fighting and losing in France and the enemy's siege artillery remained to pose a challenge that Englishmen had no answer for. During the 16th and 17th centuries, the English Crown had no doubt that the French Army was superior, the question is, therefore, why English monarchs did not provide their military with the resources and support required to implement the RMA of Fortification.

Historians point to the fact that the RMA of Fortification in continental militaries was accompanied by a rapid centralisation of power converting France or Spain into absolute monarchies.⁷⁹ The English political system, however, shaped by the heritage of the Magna Carta and the consequential dependence of the Crown on parliamentary grants, refused to accept European absolutism. Although, due to their increased power, Henry VIII and Elizabeth I were often called despots or absolute monarchs; in terms of real power they were, in fact, powerless and relied to an extreme extent on Parliament. The key to their ascendancy was a close relationship with the House of Commons, rather than gain more power by attempting to undermine or destroy Parliamentary power.⁸⁰ Charles I's decision to centralize power under his own "personal rule" led him to the scaffold and England to the Civil Wars. The early Tudors made several different attempts to find alternative sources, such as the reorganization of the Exchequer by Henry VII⁸¹, or the dissolution of the monasteries by Henry VIII, after the break with the Church of Rome.⁸² These sources of money, however, had a temporary character. They were essential in allowing the Crown to maintain certain, or rather specific, campaigns and military developments, such as Henry VIII's fortification program, but it was not enough to go through the very expensive RMA of Fortifications, which required not only a massive investment in fortresses, but also an establishment of a powerful regular army that had to protect them. In other words, the English Crown was unable to recruit enough resources for its wars in France due to the culture of the English political system that was based on separation of power between Parliament and the Crown. As Parliament saw no potential benefit from the

⁷⁹ Lohn Lynn, 'The trace italienne and the Growth of Armies...'; Thomas Arnold, 'Fortifications and the Military Revolution...'

⁸⁰ Brian Downing, *The Military Revolution and Political Change: Origins of Democracy and Autocracy in Early Modern Europe*, (Princeton: Princeton University Press, 1992), p.161-162.

⁸¹ Bruce Porter, *War and the Rise of the State*, p. 35.

⁸² Bruce Porter, *War and the Rise of the State*, p. 48.

wars in France and felt no threat (due to geographical isolation from the continent), England had to accept its defeat.

Analysing this understanding by the concept of the Political-Military System, it seems right to argue that the French Army presented an unmet challenge that imbalanced the English system. However, the RMA of Fortification did not occur because *the English cultural-political background shaped by the Magna Carta heritage prevented the Crown from supporting its military in the required transformation, thus, rebalancing the system not by military transformation, but by military defeat.*

The absence of the RMA of Armoured Warfare in interwar Britain

It has been much thought and written about the “big surprise” of the Second World War – the German *Blitzkrieg* or the RMA of Armoured Warfare performed by the German military during the interwar period.⁸³ Also, a significant amount of research has been done analysing the failure of the British Army to implement this RMA despite the fact that the technology (i.e., tanks) had been developed by the British military during the First World War, and despite the fact that Britons (i.e., J. F. C. Fuller and B. H. Liddell Hart) invented the theory of its employment.⁸⁴ While these works analyse this failure from different angles, suggesting slightly different explanations, it seems right to argue that they do not contradict each other, but compliment, and therefore their generalisation under the concept of Political-Military System is possible.

Technology – The Tank

In terms of military technological innovations, the First World War generally held to be the cradle of the radio, the over-the-horizon artillery, the military airplane and the tank. While all these were essential for the RMA of Armour Warfare, it seems right to argue that the

⁸³ For example see: James Corum, *The Roots of Blitzkrieg: Hans von Seeckt and German Military Reform*, (Lawrence: University Press of Kansas, 1992); Matthew Cooper, *The German Army, 1933–1945: Its Political and Military Failure*, (Chelsea: Scarborough House, 1997); Michael Citino, *The German Way of War: From the Thirty Years' War to the Third Reich*, (Lawrence: University of Kansas Press, 2005); Mary Habeck, *Storm of Steel: The Development of Armour Doctrine in Germany and the Soviet Union, 1919-1939*, (New York: Cornell University Press, 2003); Williamson Murray, ‘May 1940: Contingency and Fragility of the German RMA’, in Williamson Murray, Macgregor Knox, (ed.), *The Dynamics of Military Revolution ...*

⁸⁴ See for example: Paul Harris, *Men, Ideas and Tanks: British Military Thought and Armoured Forces, 1903–1939*, (Manchester: Manchester University Press, 1995); David French, *Raising Churchill's Army: The British Army and the War Against Germany 1919–1945*, (London: Oxford University Press, (2000); Peter Beale, *Death by Design: British Tank Development in the Second World War*, (Stroud: The History Press, 1998); Robert Larson, *The British Army ...*

main technological drive behind this RMA was the tank, not only due to its technology per se, but because it was the main inspirer for novel operational concepts.⁸⁵ Since its first appearance on the battlefield on 15 September 1916, through different military conflicts during the interwar period, and until the late 1930s, the technology had been significantly developed and improved. During the 1920s and 1930s, from the slow and unreliable machines of the First World War with limited firepower and thin armour, tanks had become the symbol of manoeuvrability and the core of land warfare in the Second World War.⁸⁶

Operational Concept – The Theory of Armour Warfare

The stalemate of the First World War, shaped by the rise of the firepower, drove many military theorists to look for a way to bring the manoeuvrable offence back onto the battlefield.⁸⁷ While most historians agree on the fact that the initial prophets of what would become the theory of armour warfare were J. F. C. Fuller and B. H. Liddell Hart, they also agree on the fact that its true fathers were Heinz Wilhelm Guderian, Mikhail Nikolayevich Tukhachevsky and other German and Soviet generals in the interwar period. Through close (but short-lived) cooperation in the late 1920s and the series of confrontations during the interwar period these two militaries experimented with the operational concepts, as well as technology, to maximise both.⁸⁸ The way in which the Second World War began (and especially Operation Barbarossa – the German invasion into the U.S.S.R.), however, teaches that Germans, in contrast to their Russian counterparts, were much more successful in the implementation of the RMA of Armour Warfare, after all, the second name of this RMA is *Blitzkrieg*. An analysis of the German military publications before and during the Second World War, defines best the operational concept of this RMA:

The concentrated employment of armour and air forces to confuse enemy with surprise and speed and encircle him, after a successful breakthrough, by means of far-reaching thrusts.⁸⁹

⁸⁵ Mary Habek, *Storm of Steel...*; Paul Harris, *Men, Ideas and Tanks...*; Robert Larson, *The British Army...*

⁸⁶ Peter Beale, *Death by Design...*; Mary Habek, *Storm of Steel...*

⁸⁷ Robert Citino, *The Quest for Decisive Victory: From Stalemate to Blitzkrieg in Europe 1899-1940*, (Lawrence: University Press of Kansas, 2002), chapter 6.

⁸⁸ Mary Habek, *Storm of Steel...*; Robert Citino, *The Quest for Decisive Victory...*, chapter 6.

⁸⁹ Karl-Henz Frieser, John Greenwood, *The Blitzkrieg Legend: The 1940 Campaign in the West*, (Annapolis: Naval Institute Press, 2005), p.6.

Organisation – The Panzer Division⁹⁰

While the immature technologies of the First World War shaped the organisational concept around the understanding that tanks were only “available for use to help infantry to get through heavy defences,”⁹¹ with the progress of technology combined with the development of new operational concepts in the 1920s and 1930s, this perception had found itself outdated. To achieve the “far-reaching thrusts” and “successful breakthroughs” that the theory of armoured warfare was based on, tanks had to be concentrated in large units, rather than parcelled out in “penny pockets” among slow infantry forces.⁹² In other words, the RMA of armoured warfare required “a self-contained combined arms team, in which tanks were backed up by other arms brought up, as far as possible, to the tank’s standards of mobility”⁹³ – a Panzer Division.

The absence of the RMA of Armoured Warfare in interwar Britain

Analysing the development of the theory of armour warfare, as well as technological improvements of British tanks, it seems right to argue that the British Army was one of the leaders for more or less the first decade after the end of the First World War. However, as Robert Citino put it:

While it seemed as if Britain had an insurmountable lead in theory and practise of mechanised war, it lost that lead in the course of the 1930s to its once and future foe, Germany.⁹⁴

While all researchers agree that the British Army failed to implement the RMA of Armoured Warfare during the interwar period,⁹⁵ “a failure for which it paid a heavy price between 1939 and 1942,”⁹⁶ the remaining question is why a military, which performed so well in inventing the technology, as well as the theory for its employment, failed to implement it on the battlefield.

⁹⁰ The term ‘Panzer Division’ and not ‘Armoured Division’ was used to avoid the confusion between the German organisational concept (the first) and the British one (the second). While the German ‘Panzer Division’ was a combined-arms military unit, the British ‘Armour Division’ included tanks only and was lacking in support arms. See Robert Citino, *The Quest for Decisive Victory...*, p. 210.

⁹¹ Peter Beale, *Death by Design...*, p. 20.

⁹² Robert Citino, *The Quest for Decisive Victory...*, p. 195.

⁹³ Richard Ogorkiewicz, *Armour Forces: A History of Armoured Forces and Their Vehicles*, (New York: Arco, 1970), p.73.

⁹⁴ Robert Citino, *The Quest for Decisive Victory...*, p. 192.

⁹⁵ Paul Harris, *Men, Ideas and Tanks...*; Peter Beale, *Death by Design*; Robert Larson, *The British Army*; Robert Citino, *The Quest for Decisive Victory...* pp. 189-193; John Stone, ‘The British Army and the Tank’, in Theo Farrell, Terry Terriff, (ed.), *The Sources of Military Change...*

⁹⁶ Robert Larson, *The British Army...*, p. 241.

Why the RMA of Armoured Warfare did not occur in interwar Britain

The existent research suggests three main explanations for the British failure in the implementing of the RMA of Armoured Warfare before the Second World War. The first one is that while during this period the army tried to exploit the potential inherent in the tank, it “was held back in this endeavour by its own institutional conservatism.”⁹⁷ The second explanation claims that the main reason was the “Cinderella” position of the British Army, in general, and the British armour units, in particular, in terms of funding. Having been in this position for almost a decade (since the Depression of 1930-1931), “the Army was ill prepared in 1939, and the Army’s tank forces had suffered from inadequate preparation and funding more than all other arms.”⁹⁸ The third explanation blames the British political leadership, “who, anxious to avoid another bloodbath on the scale of the First World War” kept their army “short of funds and decreed that its main function was to act as a colonial force.”⁹⁹ It seems, however, that these three do not directly contradict each other, but rather help to establish a clearer picture of events.

To hold the British Army’s conservatism as the main reason behind the failure to implement the RMA seems to be a too simplistic explanation. All military organisations are conservative, and even in the German military in the mid-1930s, Guderian had to deal with comments like “*Alles Unsinn, Alles Unsinn, mein lieber Guderian*” (all nonsense, all nonsense, my dear Guderian).¹⁰⁰ The British Army had the material and intellectual potential to perform the required transformation, the question, however, is for what. Until the late 1930s the British government had never put before its military the challenge of fighting an European military (i.e., Germany’s), and when finally it had, it was too little too late.¹⁰¹ The balance of the Political-Military System of Britain, at that time, remained intact because the unmet military challenge of the German threat was never defined by the British political leadership. This explains not only the lack of funding, but also the conservatism of the British military that was not forced to innovate.

⁹⁷ John Stone, ‘The British Army and the Tank’, p. 199.

⁹⁸ Peter Beale, *Death by Design...*, p.197; see also A. J. Smithers, *A New Excalibur: The Development of the Tank 1909-1939*, (London: Grafton Books, 1988), chapters 21-23; Benjamin Coombs, *British Tank Production and the War Economy 1934-1945*, (London: Bloomsbury Publishing, 2003), Chapter 1.

⁹⁹ David French, *Raising Churchill's Army...*, p. 3; Peter Beale, *Death by Design...*, p.207-209.

¹⁰⁰ Quoted in Williamson Murray, ‘May 1940: Contingency and Fragility...’, p. 161.

¹⁰¹ Peter Beale, *Death by Design...*, p.196-197, See also Ernest May, *Strange Victory: Hitler's Conquest of France*, (London: I.B. Tauris&Co, 2000).

It is important to note, however, a military, as well as its political leadership, are the products of their parent society. The “blindness” of the British political leadership was deeply rooted in the British cultural-social interpretation of the political reality. After the First World War, the view of the British people was “that they had made immense sacrifices but above all they won” and therefore “it will never be necessary to do it again.”¹⁰² In other words, the RMA of Armoured Warfare did not occur in interwar Britain because *the British cultural-political background, as was shaped by the First World War, prevented the British political leadership from defining to its military a challenge that would require this RMA.*

To conclude the discussion on this example it is important to point to another important factor that has been discussed in existent literature – the British military culture. The best examples are David French’s *Raising Churchill’s Army* where he focuses on the impact of British military culture on the British army and its relation with tanks before and during the Second World War, and John Stone’s *The Tank Debate* where he continues this discussion from then and until today.¹⁰³ While it is difficult to deny the importance of military culture on the occurrence of an RMA, as was discussed above, military culture does not stop (or trigger) its occurrence, it shapes its way, but this is a completely different story.

Part Seven - Conclusions

The main purpose of this chapter was to enrich the existent knowledge and literature by offering an alternative conceptual explanation of the RMA phenomenon. It is important to highlight, that the idea that political-military relations determine fundamental military changes, and the point that political decisions shaped by cultural characteristic drive an RMA forward – both are not novel ideas. As it was shown in the previous parts of this chapter, these ideas have already been vastly discussed in existent literature. The problem that this chapter tried to solve was driven from the fact that existent literature on RMA is generally divided between theoreticians, who discussed different concepts of how it happens (such as Andrew Krepinevich, Richard Hundley, Steven Metz and James Kievit, etc.), and historians (such as Max Boot, Williamson Murray, Clifford Rogers, etc.), who analysed the successful RMAs of the past, thus, again, focusing on the process only. While there were scholars, who dealt with both theory and history, (e.g., Colin Gray) or analysed the RMA phenomenon through the

¹⁰² Peter Beale, *Death by Design...*, p.196.

¹⁰³ David French, *Raising Churchill's Army...*; John Stone, *The Tank Debate: Armour and the Anglo-American Military Tradition*, (Amsterdam: Harwood, 2000).

cultural lens (e.g., Dima Adamsky), they all focused on successful RMAs. Moreover, many researchers analysed fundamental military challenges without using the RMA terminology at all (e.g., Theo Farrell and Terry Terriff). Of course, not every military change is an RMA, after all, RMA is a very narrowly defined change in military affair, and, therefore, any valid analysis of military transformation is important. While it seems that nobody tried to analyse an absence of RMA, the opposite is true. For example, as it was demonstrated above, the British Army failure with the armour warfare before the Second World War was vastly studied. The problem, however, that these studies were primarily done by historians, who paid little regard to the theoretical concepts, or by strategists, who appreciate concepts, but pay little attention to cases of failure that do not allow conceptualisation. This research focuses on RMAs that did not occur, and, therefore, it requires a modified conceptualisation that combines what has been studied, so far, by history and by strategy.

Throughout the parts of this chapter, this combination ultimately has led to the idea that an RMA is an outcome of imbalance between political leadership, its military and challenges that are defined as ones that have to be met. While the political decision to define a challenge is the instrumental trigger of an RMA, the culture that shapes the political environment has an indirect but equally important role. As the case of Early Modern England demonstrated, the existence of an unmet challenge in the cultural environment, which does not create required political conditions to meet this challenge (i.e., that society is ready to tolerate the consequences), will not drive the required RMA forward. Moreover, as the case of the British Army and armour warfare displayed, the inability of political leadership to realise the challenge and put it in front of its military is primarily rooted not in its inanity, but in the political-cultural context of its parent society. Consequently, an RMA occurs when:

- (1) a political leadership, shaped by certain socio-cultural circumstances, defines to its military a challenge;
- (2) the military, shaped by its military culture, interprets this challenge as unmet and dealing with it requires fundamental change that combines novel, but an already available technology, operational concept and organisation;
- (3) in return, the political leadership decides to supports the military fundamental transformation.

Thus, an analysis of the RMA in a “certain affair” that did not occur has to follow the following questions:

- (1) Did the political leadership define this “certain affair” as a military challenge? If not, then what was the socio-cultural context that influenced the political-military leadership in its decision-making process?
- (2) If the challenge was defined, how did the military, shaped by its military culture, interpret this challenge? If it was interpreted as a challenge that the military can deal with, then what was the military cultural context that influenced the military leadership in its decision-making process?
- (3) If the challenge was defined by the military as unmet, did the political leadership support its military through the transformation? And if it did not, what was the socio-cultural context that prevented the political leadership from supporting it military?

While these three questions seem to be straight forward, it will be wrong to assume that any of them will provide a clear-cut answer. Human nature is a too complex phenomenon, let alone a combination of culture, politics and military affairs. It seems however, that through these questions it would possible to shed light on the reasons behind the absence of an RMA, an understanding that might contribute no less than the existent analysis of successful RMAs, because, as Richard Hundley put it: “there are probably as many failed RMAs, as successful.”¹⁰⁴

¹⁰⁴ Richard Hundley, *Past Revolutions Future Transformation...*, p. 15.

CHAPTER 2

NON-LETHAL WEAPONS – THE REVOLUTION IN MILITARY AFFAIRS THAT DID NOT OCCUR

Introduction

The main subject of this research is the Revolution in Military Affairs of Non-Lethal Weapons, and as such the purpose of this chapter is threefold. The first part of this chapter provides a general background about the idea of non-lethality in general and Non-Lethal Weapons (NLW) in particular. The analysis of the background is divided into four main topics. First, it discusses the perplexity of the definition of NLW, what they are and what they are not. Secondly, it provides a historical brief discussing the implementation of NLW since their appearance in the beginning of the 20th century. Thirdly, it discusses different technological aspects of NLW and their counter-personnel and counter-materiel effects. Finally, it examines the complex, and to some degree paradoxical, relations between NLW and modern international law of armed conflict.

The second part of this chapter reproduces a theoretical depiction of the potential RMA of NLW. While the main purpose of this research is to explain the reasons behind the lack of the RMA of NLW, this part provides an essential understanding of what this RMA might have been or could still be, as a reference for the analysis of its absence. The third part utilises the concept of Political-Military System, as presented in Chapter 1 in the specific context of the potential RMA of NLW in Russia, Israel and the U.S. The main purpose of this part is to pave the methodological way for the further analysis of the American, Russian and Israeli cases.

Part One: NLW – The Background

Non-Lethal Weapons – A Perplexing Definition

Defining “Non-Lethal Weapons” is not a simple task. The very idea of non-lethality sounds like an oxymoron, when applied to weapons. Different terms have been suggested to avoid this semantic contradiction: “less-lethal”, “less-than-lethal”, “disabling”, “sub-lethal”, “soft-kill” and others. While all of these refer to the same family of weapons, none can escape criticism.¹ This, in fact, is one of the main reasons for the variety of terms that have been used

¹See Neil Davison, *‘Non-Lethal’ Weapons*, (Basingstoke: Palgrave MacMillan, 2009), p.1; Nick Lewer, Steven Schofield, *Non-Lethal Weapons: A Fatal Attraction?*, (London: Zed Books, 1997), p. 5-6.

by different institutions in different countries. In the U.S., the two most prevalent terms are “Non-Lethal Weapons” and “Less-Lethal Weapons”. While, in Russian military literature, the dominant term is *oruzh'ie neletal'nogo deistviya* (Weapons with Non-Lethal Action);² the Russian Ministry of Interior has decided to avoid any connection with lethality defining devices with non-lethal effects employed by the Russian Police and other Ministry of Interior forces, adopting the term *special'nie sredstva* (Special Means).³ In Israel, there are three terms, used concurrently: *neshek pahot katlani* (Less-Lethal Weapons), *neshek al-hereg* (Non-Kill Weapons), and simply *emtzaim lefizur hafganot* (Riot Control Means).⁴

This variety of terms directly projects the perplexities of the attempt to fit together the concept of weapons with the idea of non-lethality. Nonetheless, this research adopts the term “Non-Lethal Weapons” (NLW),⁵ as it focuses on the military (and not law enforcement) implementation of these weapons, and the professional military literature in all three countries of interest titles them in that way. The interesting reason for this similarity is the fact that the U.S. Department of Defence (DOD) was the first military to distinguish NLW from other armaments, starting to pay more coherent attention to NLW in the early 1990s and igniting the intensive discourse about the military implementation of NLW.⁶ Since then, the DOD’s definition states that NLW are weapons “that are explicitly designed and primarily employed to incapacitate personnel or materiel immediately, while minimizing fatalities, permanent injury to personnel, and undesired damage to property, facilities, materiel, and the environment.”⁷ This definition serves as a starting point in official and professional military literature not only in the U.S. and NATO,⁸ but also in Russia⁹ and Israel.¹⁰

² V. Selivanov, ‘Oruzhiye neletal'nogo deystviya kak sredstvo bor'by s terrorizmom, obespecheniya mirotvorcheskikh operatsiy i operatsiy po pravoprinuzhdeniyu’, [‘Non-Lethal Weapons as Means for Struggle against Terrorism, Provision on Peacekeeping and Law Enforcement Operations’], *Vestnik Rossii'skoi' Akademii Estestvennih Nauk*, No. 4, 2005, pp.1-11.

³The Federal Law of the Russian Federation № 3-ФЗ, *O Politsii*, [About Police], Moscow, 1 March 2011.

⁴ See Roi Ben-Horin, ‘Non-Lethal Weapons: Theory, Practice, and what Lies Between’, *Strategic Assessment*, Vol. 2, No. 4, 2001, pp.21-27; Guy-Zahar Shtultz, ‘Haf'alat koah medureget be'imutim besviva ezrahit’ [The Employment of Graduate Force in Conflicts within Civilian Environment], *Ma'arachot*, No. 438, 2011, pp. 8-17.

⁵ Interestingly enough, the term Non-Lethal Weapons was probably adopted by the U.S. Military due to its political attractiveness, rather than the non-lethal nature of these weapons, see – Steven Aftergood, ‘The Soft-Kill Fallacy’, *The Bulletin of the Atomic Scientists*, Vol. 50, Issue 5, 1994, pp. 40-45.

⁶ Charles Swett, *Strategic Assessment: Non-Lethal Weapons*, Office of the Assistant Secretary of Defense for Special Operations and Low-Intensity Office, 9 November 1993.

⁷ US Department of Defence, *Policy for Non-Lethal Weapons, Directive 3000.3E*, Washington DC, 25 April 2013.

⁸ NATO, *NATO Policy on Non-Lethal Weapons*, Brussels, 13 October 1999.

⁹ For example, see V. Selivanov, ‘Oruzhiye neletal'nogo deystviya ...’.

¹⁰ For example, see Roi Ben-Horin, ‘Non-Lethal Weapons: Theory, Practice...’.

This commonly used definition, however, requires several clarifications. First, unlike their lethal counterparts that are designed to eliminate the threat through gross physical destruction caused by blast, penetration or fragmentation, NLW prevent targets from functioning through temporary and reversible incapacitation.¹¹ Secondly, though the term “Non-Lethal” suggests that no fatalities can ever occur through an employment of NLW, this is not the case. By their definition, NLW are developed with “the intent to minimize the probability of producing fatalities, significant or permanent injuries ... but do not, and are not intended to, eliminate risk of those actions entirely.”¹² Similar to lethal weapons that do not always fulfil their purpose, and their lethality depends on many factors (the level of the soldiers’ professionalism, the state of the target, environmental conditions, etc.); NLW are also victims of these factors, and, despite their non-lethal nature, can, under certain circumstances, cause permanent damage or even death. Third, NLW do not exclude the probability of damage to property and the environment. In fact, there are certain systems that are deliberately designed to cause property damage in an attempt to reduce the probability of causing serious injuries or fatalities.¹³ Fourth, unlike lethal weapons that are designed to cause irreversible damage to the target, NLW “are intended to have relatively reversible effects on personnel or materiel.”¹⁴ Fifth, while there are many military actions that aim to reduce fatalities during military confrontations, such as Psychological Operations (PSYOPs) or Cyber Warfare (except for non-lethal “electronic attack”);¹⁵ NLW are physical weapons, rather than activities, and therefore have to be considered accordingly.

A Brief History of Non-Lethal Weapons

The definition of NLW, as discussed above, is the fruit of American military thought of the early 1990s; however, the history of weapons, defined today as non-lethal, is long and complex. Probably the first known application of NLW can be dated over 2,000 years ago, when the Chinese forces used ground-pepper to temporarily blind their enemies.¹⁶ The modern

¹¹ John Alexander, *Future War: Non-Lethal Weapons in Twenty-First-Century Warfare*, (New York: St. Martin’s Press, 1999), p. 5.

¹² US Department of Defence, *Policy for Non-Lethal Weapons...*

¹³ Erik Nutley, *Non-Lethal Weapons: Setting Our Phasers on Stun? Potential Strategic Blessings and Curses of Non-Lethal Weapons on the Battlefield*, Center for Strategy and Technology Occasional Paper No. 34, (Maxwell Air Force Base, Alabama: Air University, 2003), pp. 2-3.

¹⁴ US Department of Defence, *Policy for Non-Lethal Weapons...*

¹⁵ Electronic attack is ‘Division of electronic warfare involving the use of electromagnetic energy, directed energy, or anti-radiation weapons to attack personnel, facilities, or equipment with the intent of degrading, neutralizing, or destroying enemy combat capability and is considered a form of fires’. See US Joint Chiefs of Staff, *Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms*, 8 November 2010 (as Amended Through 15 October 2013), p. 87.

¹⁶ John B. Alexander, *Future War...*, pp. 76-77.

history of NLW can be traced as back as 1912, when the French Police for the first time employed hand-grenades that dispersed an irritant chemical agent (ethyl-bromoacetate) to subdue “criminals and riotous individuals or groups”.¹⁷ During the First World War, similar non-lethal irritant agents were the first chemical weapons to be used, before they were precipitously replaced by more lethal gases.¹⁸ These two examples from the early history of NLW already point to the fact that non-lethal technologies and their employment policies have two different, but interconnected, story-lines – military and law enforcement.¹⁹ While it is obvious that these two complement each other to create the most comprehensive history of NLW development; the principal focus of this research is military, thus, its main emphasis is on the military record of NLW. Moreover, as this research is about the RMA of NLW, its main interest is the cases of the military implementation of NLW on the battlefield and during military operations, rather than civil disorder and riots, e.g., the British military employment of NLW in Northern Ireland²⁰ or Cyprus,²¹ or the IDF’s usage of NLW in the Western Bank.²²

The history of the military implementation of NLW during military operations²³ can be generally divided into four main periods: (1) the First World War, (2) the inter-war period and the Second World War, (3) the Vietnam War and other military interventions during 1960s and 1970s, and (4) Post-Cold War conflicts. It is important to clarify that until 1970s, the NLW employed by the different militaries were mainly irritant non-lethal chemical agents, that, on the one hand, increased the effectiveness of conventional lethal weapons;²⁴ but on the other, (due to their non-lethal nature) allowed to bypass legal issues related to the implementation of chemical weapons.²⁵

The first appearance of non-lethal chemical agents on the battlefield was very short. An interesting fact is that while the question of which nation initiated Chemical Warfare in the

¹⁷ Carol Ackroyd, Karen Margolis, Jonathan Rosenhead, et al., *The Technology of Political Control*, Second Edition, (London: Pluto Press Limited, 1980), pp. 197-198.

¹⁸ Stockholm International Peace Research Institute (SIPRI), *The Problem of Chemical and Biological Warfare, Volume 1: The Rise of CB Weapons*, 1971, p. 131-134.

¹⁹ See Neil Davison, *‘Non-Lethal’ Weapons*, chapters 2,3,4.

²⁰ Sjeff Orbons, ‘Non-Lethal Weapons: Peace Enables or Troublesome Force? Assessing the Role of CS and Baton Rounds in the Northern Ireland Conflict’, *Small Wars & Insurgencies*, Vol. 22, No.3, 2011, pp. 467-494.

²¹ SIPRI, *The Problem of Chemical and Biological Warfare, Volume 1...*, p. 212-213

²² Sarit Michaeli, *Crowd Control: Israel’s Use of Crowd Control Weapons in the West Bank*, (Jerusalem: B’tselem, 2013).

²³ As the purpose of this discussion is purely a historical background, the nature of the military operation, whether it is a full scale war, Low Intensity Conflict (LIC), or Military Operation Other Than War (MOOTW), is not important.

²⁴ Neil Davison, *‘Non-Lethal’ Weapons*, pp. 17-18.

²⁵ Such as - League of Nations, *Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare*, Geneva, 1925.

First World War ignited an acrimonious debate among French and German commentators in the early 1920s, very little attention was paid to the French employment of tear-gas hand-grenades. The use of irritant chemical agents on the battlefields of the First World War was apparently initiated by a conscripted Parisian policeman who, upon returning from leave, brought back to the war front some tear-gas hand-grenades.²⁶ Though the significance of this incident is unclear, non-lethal irritants, undoubtedly, were the first chemical agents to attract the imagination of military commanders on both sides of the front. As war progressed, more effective ways to deploy gases were invented (e.g., artillery shells) and more lethal agents developed. The introduction of chlorine gas²⁷ in the Second (1915), and the later employment of mustard gas in the Third (1917), Battles of Ypres were milestones in the rapid military adaptation of more lethal chemicals that replaced previous non-lethal irritants.²⁸

After their short appearance on the battlefields of the First World War, Chemical NLW remained in the focus of military research and development as integrated major parts of the inter-war chemical and biological warfare (CBW) programmes.²⁹ For example, during the 1920s the US Army Chemical Warfare Service (CWS) performed more research on CN (*chloroacetophenone*) than any other chemical agent, promoting civilian use of this irritant agent as an anti-riot police weapon.³⁰ The broadness of the 1925 Geneva Protocol,³¹ which aimed to limit the usage of chemical weapons as a method of warfare, did not stop either development, or employment of chemical weapons, including non-lethal ones. Two such examples were: the employment of artillery shells with tear-gas by Spanish governmental forces in 1936, during the Spanish Civil War; and the employment of artillery shells, air-bombs and toxic candles consisting of CN by the Japanese forces in China in 1937 (although, CN was only a part of the vast variety of chemical agents employed by the Japanese, including highly lethal hydrogen cyanide, mustard gas and others).³² Toward, and during, the Second World War large arsenals of chemical weapons (including chemical NLW) were produced and

²⁶ SIPRI, *The Problem of Chemical and Biological Warfare, Volume 1...*, p. 129.

²⁷ Chlorine gas is also an irritant, but it is significantly more lethal than previously employed agents and it is not considered as NLW.

²⁸ SIPRI, *The Problem of Chemical and Biological Warfare, Volume 1...*, pp. 131-135.

²⁹ Ronald Sutherland, 'Chemical and Biochemical Non-Lethal Weapons', *Stockholm International Peace Research Institute (SIPRI) Policy Paper*, No. 23, 2008, p. 1.

³⁰ SIPRI, *The Problem of Chemical and Biological Warfare, Volume 1...*, pp. 59-60.

³¹ League of Nations, *Protocol for the Prohibition of the Use in War...*

³² SIPRI, *The Problem of Chemical and Biological Warfare, Volume 1...*, p. 147.

stockpiled by both the Allies and the Axis powers. These arsenals, however, remained unused for fear of retaliation and the bewildering lack of certainty in their military effectiveness.³³

The period of the 1960s and the 1970s was, probably, the period of the vastest military employment of non-lethal chemicals. While CS (*2-chlorobenzalmalononitrile*) was invented and researched in the U.S. during the 1930s and the 1940s, it was the British military, which in the mid-1950s concentrated its efforts on developing weapons based on this more effective non-lethal agent.³⁴ The incomparable effectiveness of CS over CN was demonstrated by the British police as early as 1958-1959, however, both agents remained in the service of the British colonial police and military and were employed on, at least, 124 occasions during the short period between 1960 and 1965. CS munition became an integral part of the weapon arsenal of British troops sent abroad; for example, the British contingent deployed to Anguilla in 1969 was armed (in addition to conventional weapons) with some 2,000 CS cartridges and grenades.³⁵ While the British were the first to employ CS, it was the U.S. military in Vietnam that realised the concept of massive employment of this non-lethal agent. Despite the initial intention of the U.S. military to use CS only for riot-control, CS based weapons were, almost immediately, widely employed in the form of various munitions, including hand-grenades, mortar and artillery shells, and even helicopter and aircraft canister dispensers.³⁶ The second part of the 1960s was the period with the most massive employment of CS in regular combat operations; between 1964 and 1969 the U.S. forces employed almost 7,000 tons of different forms of CS.³⁷ It is important to note that while the initial explanation of American officials for the use of chemical non-lethal agents was the humanitarian nature of these weapons and their ability to separate harmlessly between combatants and non-combatants,³⁸ CS based weapons, very quickly, became the normative choice of the available weapons and were frequently used to make other fires more lethal.³⁹

Due to the wide-spread criticism of the American employment of CS in Vietnam and uncertainty regarding the effectiveness of CS against troops equipped with gas masks,⁴⁰ the

³³ SIPRI, *The Problem of Chemical and Biological Warfare, Volume 1* ..., pp. 332-335.

³⁴ SIPRI, *The Problem of Chemical and Biological Warfare, Volume 1* ..., pp. 69-70.

³⁵ SIPRI, *The Problem of Chemical and Biological Warfare, Volume 1* ..., pp. 212-213.

³⁶ Malcolm Dando, *A New Form of Warfare: The Rise of Non-Lethal Weapons*, (London: Brassey's Ltd, 1996), pp. 78-79.

³⁷ SIPRI, *The Problem of Chemical and Biological Warfare, Volume 1* ..., p. 194.

³⁸ Malcolm Dando, *A New Form of Warfare* ..., pp. 76-77.

³⁹ Neil Davison, *'Non-Lethal' Weapons*, p. 18.

⁴⁰ Malcolm Dando, *A New Form of Warfare* ..., pp. 78-81.

1980s were a period of relative stagnation regarding NLW in the military.⁴¹ Despite the fact that most NLW available to law enforcement at this time were the result of military-funded research, “[NLW] were given no real priority in context of Cold War military planning.”⁴² With the end of the Cold War there were two main factors that reshaped the attitude toward NLW. The first was the re-evaluation of new political-military environment and the emerging understanding of top level Washington decision-makers regarding the enormous potential of NLW in future military conflicts.⁴³ The second was a bottom-up process formulated within the growing demand for NLW from U.S. operational commanders. The culminating point of this demand in the early 1990s was the operation “United Shield”, the U.S. assistance to the withdrawing UN peacekeepers from Somalia, when the I Marine Expeditionary Force, due to specific requirement “to pursue less-lethal alternatives in dealing with unarmed hostile elements,” became a test-bed for military employment of new technologies designed “to fill the gap between verbal warning and deadly force.”⁴⁴

These two vectors drove the DOD to start paying more attention to NLW. The process of the institutionalisation of NLW in the DOD started in 1990 when Richard Cheney, then the U.S. Secretary of Defence, became interested in the subject and, in March 1991, commissioned the Nonlethal Strategy Group (NSG) to examine it.⁴⁵ Based on the NSG report, the process was led by a Non-Lethal Weapons Steering Committee (NLWSC) established in 1994 and the Council on Foreign Relation; the process was finalized in 1996 with the establishment of the Joint Non-Lethal Weapons Program (JNLWP).⁴⁶

While it is obvious that this new policy toward NLW, led by the U.S., was almost immediately adopted by NATO;⁴⁷ more interestingly, the military institutions of other countries started to develop their own policies echoing the Post-Cold War political military environment dominated by low intensity asymmetric conflicts involving civilian population and growing international concern regarding harming innocent civilians. The best example of

⁴¹ Neil Davison, *‘Non-Lethal’ Weapons*, pp. 31-37.

⁴² Nick Lewer, Steven Schofield, *Non-Lethal Weapons: A Fatal Attraction?*, p.34.

⁴³ Nick Lewer, Steven Schofield, *Non-Lethal Weapons: A Fatal Attraction?*, pp. 34-36.

⁴⁴ F.M. Lorenz, ‘Non-Lethal Force: The Slippery Slope to War?’, *Parameters*, Vol. XXVI, No. 3, 1996, p.52.

⁴⁵ Steve Metz, ‘Non-Lethality and the Revolution in Military Affairs’, in Malcolm Dando, (ed.), *Non-Lethal Weapons: Technological and Operational Prospects*, Jane’s Special Report, November 2000, p. 13; Charles Swett, *Strategic Assessment: Non-Lethal Weapons*.

⁴⁶ Neil Davison, *‘Non-Lethal’ Weapons*, p. 52.

⁴⁷ NATO, *NATO Policy on*

this is the Russian's "Conception of the Development and Employment of NLW", approved by the Military-Industrial Commission of the Russian Federation in 2005.⁴⁸

The rapid rise of interest toward NLW in the yearly 1990s ignited an entirely new military, as well as academic, discourse, an outcome of which different centres of knowledge and research were established, such as the Institute for Non-Lethal Defence Technologies (INLDF) at the University of Pennsylvania,⁴⁹ the Bradford Non-Lethal Weapons Research Project (BNLWRP) at the University of Bradford,⁵⁰ and the European Working Group Non-Lethal Weapons (EWG-NLW).⁵¹ There is little doubt that in the last 20 years NLW have been at the centre of a vast professional and academic debate, concerning their potential contribution to military success on the 21st century battlefield. It seems, however, that except for this debate, very little has been done within the military forces themselves. From the technological point of view, it is notable that "[NLW] that have been recently adopted by the military are primarily commercial off-the-shelf technologies, rather than the product of military sponsored research and development."⁵² Moreover, the spectrum of NLW that are currently employed "does not differ greatly from similar compilations 30 years previously."⁵³

From the implementation point of view, the "operational use of available NLW by the military has been limited."⁵⁴ For example, the employment of NLW by the U.S. forces in Iraq was mostly in two very limited areas: compliance tools for controlling prisoners and the stopping of vehicles at check-points.⁵⁵ The reports on, and the analyses of, two other military operations – the Russian forces in the Russia-Georgia War (2008) and the Israeli forces in the Operation Cast Lead (2008-2009) – that were greatly criticised for the disproportional use of force and harming enemy civilian population, mention nothing of NLW. Not only that NLW had not been used, but there were not even plans to use them.⁵⁶ In 2004, an Independent Task

⁴⁸ A. Nagovitsyn, A. Grudzinskii, A. Sporykhin, 'Oruzhiye neletal'nogo deystviya i perspektivy yego ispol'zovaniya v interesakh sil Organizatsii Dogovora o kollektivnoy bezopasnosti', ['Weapons with Non-Lethal Action and the Perspectives of Their Employment in the Interest of Collective Security Treaty Organization'], *Voenaya Misl'*, No.3, 2011, pp. 52.

⁴⁹ The Institute for Non-Lethal Defence Technologies (INLDF), <http://www3.arl.psu.edu/INLDT/>, [accessed: 1 December 2013].

⁵⁰ Bradford Non-Lethal Weapons Research Project (BNLWRP), <http://www.bradford.ac.uk/acad/nlw/>, [accessed: 1 December 2013].

⁵¹ European Working Group Non-Lethal Weapons (EWG-NLW), <http://www.non-lethal-weapons.com/index.html>, [accessed: 1 December 2013].

⁵² Neil Davison, *'Non-Lethal' Weapons*, p. 86.

⁵³ Neil Davison, *'Non-Lethal' Weapons*, p. 209.

⁵⁴ Neil Davison, *'Non-Lethal' Weapons*, p. 86.

⁵⁵ Neil Davison, *'Non-Lethal' Weapons*, p. 86.

⁵⁶ For Israel see Anthony Cordesman, Arleigh Burke, *The "GAZA WAR": A Strategic Analysis*, (Washington D.C.: Center for Strategic & International Studies (CSIS), 2009); UN Human Right Council, *Human Rights in Palestine and Other Occupied Arab Territories: Report of the United Nations Fact Finding Mission on The*

Force sponsored by the U.S. Council on Foreign Relations stated that “currently, both military and civil leadership remain insufficiently familiar with the capabilities and limitations of NLW.”⁵⁷ It seems that ten years later on this situation has not been changed.

Non-Lethal Weapons – A Technological Brief

As it was mentioned in the introduction, this research does not accept the idea of technological determinism. However, organised around NLW, it has to provide a basic technological background of these types of weapons and their capabilities. As the main purpose of NLW is the temporary and reversible incapacitation or neutralisation of the target, the main focus in the development of NLW is the Non-Lethal Effects (NLE) that these weapons cause to the target. The following discussion focuses on seven main types, or “families”, of NLW according to their NLE: kinetic, chemical, biological, electrical, optical, acoustic, and directed energy. Another important division of NLW is the nature of the target and it includes two main categories: counter-personnel – NLW that affect people, and counter-materiel – NLW that affect machines of war and related to them equipment. In other words, each family of NLW can be divided to two: counter-personnel NLW and counter-materiel NLW (e.g. chemical counter-personnel NLW and chemical counter-materiel NLW).

Kinetic NLW

“Kinetic”, “Low-Kinetic Impact”, “Blunt Impact” or “Traumatic” – all these terms describe a family of impact projectiles that are intended to “induce pain, irritation and minimal injury to the subject without causing any life-threatening injuries.”⁵⁸ First introduced in 1960s in the form of baton rounds made of teak wood, Kinetic NLW experienced significant and rapid development creating vast variety in calibres (from 5.56 mm and 12ga to 40mm and above) and impact power (from 30 Joules to 100 Joules and even more); projectiles’ material (plastic, rubber, foam, beans bags and others) and shape (batons, rounds and bullets); and the methods to shoot them (from the direct use of lethal platforms such as rifles, shotguns and grenade launcher, through different attachments and adaptations to these lethal platforms, to the specially designed non-lethal rifles, pistols and launchers).⁵⁹

Gaza Conflict, 2009; For Russia see The Independent International Fact-Finding Mission on the Conflict in Georgia, *Report*, 2009.

⁵⁷ Graham Allison, Paul Kelley, Richard Garwin, *Nonlethal Weapons and Capabilities: Report of an Independent Task Force*, (New York: Council on Foreign Relations Press, 2004), p. 33.

⁵⁸ Gary Vilke, Theodore Chan, ‘Less Lethal Technology: Medical Issues’, *Policing: An International Journal of Police Strategies & Management*, Vol. 30, No. 3, 2007, p. 342.

⁵⁹ See Neil Davison, ‘Non-Lethal’ Weapons, pp. 29-21; John Alexander, *Future War...*, pp. 89-93; David Koplow, *Death by Moderation: The U.S. Military’s Quest for Usable Weapons*, (New York: Cambridge University Press,

The NLE of Kinetic NLW are directly related to the blunt trauma created by an immediate impact of the projectile. While this family of NLW designed to merely cause superficial hurt rather than penetrate, causing more serious injury or even death, there are no assured guaranties, as the non-lethality (or lethality) of the Kinetic NLW depends on many different variables. For example, striking an especially vulnerable person (young, old or sick), or in a very sensitive or defenceless body part (eye, head or neck) can cause permanent damage or even death. Another very influential variable is the difference between the effective distance of the projectile and the actual distance to the target (each Kinetic NLW has very specifically defined effective range, i.e., when the impact occurs at a shorter distance it might be lethal, and when it occurs at a longer distance it is not effective).⁶⁰ This operational disadvantage, however, does not stop Kinetic NLW to be widely employed, as a way to overcome this disadvantage has been found in suitable training and appropriate rules of engagement.

The second part of the Kinetic NLW include the various counter-materiel technologies, which consists of different stopping devices (explicitly designed barriers, nets, etc.) that are intended to stop the vehicles and vessels containing kinetic power and, in this way, minimizing damage to their operators.⁶¹

Chemical and Biological NLW

Chemical, Biological and Biochemical NLW are different non-lethal agents commonly dispersed in form of gases, smokes, aerosols, powders and liquids that cause laceration, irritation and inflammation or other types of temporary incapacitation.⁶² While the most known agents are Chloroacetophenone (CN), 2-chlorobenzalmalononitrile (CS) and Oleoresin-Capsicum (OC);⁶³ there are many other malodorants, calmatives and other chemical or

2010), p.192; Joint Non-Lethal Weapons Directorate, *Non-Lethal Weapons(NLW): Reference Book*, 30 June 2011; A. Silnikov, 'Vidy spetsial'nykh sredstv sostoyashchikh na vooruzhenii OVD, i ikh klassifikatsiya', ['Types and Classification of Special Equipment Adopted by the Russian Interior Ministry Units'], *Vestnik Sankt-Peterburgskogo universiteta MVD Rossii*, No. 3(51), 2011, pp. 66-70; Sarit Michaeli, *Crowd Control...*; National Research Council, *An Assessment of Non-Lethal Weapons: Science and Technology*, Washington, 2003, pp.24-26.

⁶⁰ David Koplow, *Death by Moderation...*, p.192.

⁶¹ Joint Non-Lethal Weapons Directorate, *Non-Lethal Weapons(NLW): Reference Book*, pp. 63-79.

⁶² See Gary Vilke, Theodore Chan, 'Less Lethal Technology...', p. 343; Ronald Sutherland, *Chemical and Biochemical Non-Lethal Weapons...*, pp. 9-10; Neil Davison, '*Non-Lethal*' Weapons, pp. 105-106; National Research Council, *An Assessment of Non-Lethal Weapons...*, pp. 26-28.

⁶³ For more detailed information about these and other non-lethal chemical agents see: Eugene Olajos, Woodhall Stopford (ed.), *Riot Control Agents: Issues in Toxicology, Safety, and Help*, (Boca Raton: CRC Press LLC, 2004).

biological based substances, such as Skunk, a liquid that creates a terrible odor of rot and sewage on whatever it touches.⁶⁴

The spectrum of the possible delivery methods of Chemical and Biological NLW is vast. It can be generally divided into two main groups. The first is special methods, designed explicitly as NLW, these include: water cannons, aerosol sprays, canisters and dispensers, a variety of non-lethal munitions and projectiles that consist of non-lethal chemical agents (hand grenades, pepper-balls, pneumatic and pyrotechnic explicitly designed pistols and rifles). The second group is non-lethal munition that consist of non-lethal chemical agents fired from conventional lethal weapon system (rifles, shotguns, grenade launchers, mortars, artillery guns and even tanks, helicopters and jets).⁶⁵ The NLE of Chemical and Biological NLW are directly related to the spectrum of symptoms that these non-lethal agents cause. On the one hand, the more common CS, CN and OC cause direct irritation to eyes, skin and mucous membranes, creating burning and tearing of the eyes, flushing, tingling and intense burning sensation of the skin, and the feeling of burning in the mouth, increased salivation, gagging, nausea and vomiting.⁶⁶ On the other hand, there are other calmatives that cause completely different symptoms varying from unconsciousness to hallucinations.⁶⁷

As most of Chemical and Biological NLW are delivered by kinetic methods (i.e. bullets, rounds, grenades) their NLE might be complemented by blunt trauma (for example FN-303).⁶⁸ Most of Chemical and Biological NLW, however, are not designed for a kinetic impact with the target, but only for delivering the agent into the area. In the case of direct hitting, these munitions suffer from the same disadvantages as Kinetic NLW. Together with these counter-personnel Chemical and Biological NLW, there is a large group of counter-materiel agents that are intended to disable vehicles and prevent effective infrastructure functioning. These NLW include combustion modifiers, fuel and lubricant contaminants, and other substances that disable engines and vehicles. Against infrastructure might be used corrosives, abrasives and

⁶⁴ Sarit Michaeli, *Crowd Control*..., p. 35-37.

⁶⁵ See Neil Davison, *'Non-Lethal' Weapons*, pp. 118-133; Joint Non-Lethal Weapons Directorate, *Non-Lethal Weapons(NLW): Reference Book*...; A. Silnikov, 'Vidy spetsial'nykh sredstv ...'; Sarit Michaeli, *Crowd Control*...; Michael Crowley, *Drawing the Line: Regulation of "Wide Area" Riot Control Agent Delivery Mechanisms under the Chemical Weapons Convention*, (Manchester: Omega Research Foundation, 2013).

⁶⁶ See Gary Vilke, Theodore Chan, 'Less Lethal Technology...', pp. 343-345; N. Chuvatkin, 'Irritany v sredstvakh neletal'nogo deystviya', ['Irritant in Non-Lethal Means'], *Proceeding to the International Conference 'Special Means of Non-Lethal Action'*, Moscow, 2012, pp.39-42.

⁶⁷ Ronald Sutherland, *Chemical and Biochemical Non-Lethal Weapons*..., pp.18-19.

⁶⁸ Joint Non-Lethal Weapons Directorate, *Non-Lethal Weapons(NLW): Reference Book*..., p. 13.

depolymerisation agents.⁶⁹ Despite the fact that theoretical literature considers these agents as NLW, most of them barely answer the criteria of the reversibility requested of NLW and, in many cases, they might even be lethal to personnel. Consequently, despite the vast research programs in this field,⁷⁰ there is no official employment of such counter-materiel chemical or biological agents in any modern military or law enforcement agencies.

Electrical NLW

Unlike many others, Electrical NLW do not originate from the military or law enforcement, but rather from farming and torture. The first stunning device was the “picana electrica”, the electrical version of the barbed cattle prod, introduced in Argentina in the 1930s and rapidly adopted by local police as a torture device during interrogations.⁷¹ Since then the family of Electric NLW significantly expanded including different types of electro-shocking devices, stun batons and stun guns.⁷²

The NLE of Electrical NLW depend on implemented technology and can be generally divided into two groups: neuromuscular incapacitation and muscular pain. The first group includes different stun guns that fire harmless projectiles that deliver electrical charge by means of very thin wires that temporary immobilise the target, as “the affected person normally falls to the ground due to inability to operate his or her legs.”⁷³ The second group includes different “touch stun” devices (i.e., batons) with effects ranging from significant painful muscular sensations up to unconsciousness, but have no neuromuscular paralysing effects. Despite this general division, there are certain stun guns that project electrical charge with wires (as the first group), but create only muscular effect similar to “touch stun”.⁷⁴

The counter-materiel counterparts of these Electrical NLW are different electrical devices for the temporary and reversible disabling of vehicles by targeting their electrical circuits and components (e.g., the Pre-emplaced Electric Vehicle Stopper that stops and

⁶⁹ Ronald Sutherland, *Chemical and Biochemical Non-Lethal Weapons...*, p. 9; John Alexander, *Future War...*, pp. 71-76.

⁷⁰ Ronald Sutherland, *Chemical and Biochemical Non-Lethal Weapons...*, p. 19.

⁷¹ See Darius Rejali, *Torture and Democracy*, (Princeton: Princeton University Press, 2008).

⁷² Neil Davison, *'Non-Lethal' Weapons*, pp. 21-23; John Alexander, *Future War...*, p. 67; David Koplow, *Death by Moderation...*, pp.192-193; National Research Council, *An Assessment of Non-Lethal Weapons...*, pp. 32-33.

⁷³ John Alexander, *Future War...*, p. 67; See also Neil Davison, *'Non-Lethal' Weapons*, pp. 22-23, 60-62; David Koplow, *Death by Moderation...*, pp.192-193; Also see the official website of Taser International Inc. <http://www.taser.com>, [accessed: 1 December 2013].

⁷⁴ For example see the official website of MARCH GROUP LLC, <http://www.shoker.ru/>, (Russian), [accessed: 1 December 2013].

disables vehicles by providing an electrical pulse through deployed contacts that shuts down power train electrical circuits and components).⁷⁵

Optical and Acoustic NLW

While Acoustic NLW produce a direct beam of powerful acoustic energy,⁷⁶ and Optical NLW create a light powerful enough to dazzle or temporarily blind the target;⁷⁷ the NLE of both of these families are similar – disorientation and temporary incapacitation of the target. The Acoustic NLW aim to employ powerful audio beams to create effects ranging from significant discomfort and nausea to a tickling in the mouth and a disturbance of physical equilibrium, without causing permanent damage to the hearing mechanism.⁷⁸ Despite significant research efforts from the early 1960s to the late 1990s, the technological difficulties of producing an effective, but also non-lethal, Acoustic NLW led the researchers to generally dismiss this concept.⁷⁹ Only two non-lethal Acoustic technologies have been developed. The first one is the Acoustic Hailing Devices (AHD),⁸⁰ which, in fact, are not NLW, but devices that “provide scalable, directional warning tones or intelligible voice commands beyond 500 meters.”⁸¹ The second type of Acoustic technology is a range of underwater acoustic guns. Interestingly, as acoustic beams behave differently underwater than in the air; it seems more feasible to implement this technology in a non-lethal way. These systems, however, are still under development.⁸²

Optical NLW aim to produce a powerful light that targets the eyes, creating their reflexive closure and saturating the vision cells that lead to a temporary loss of vision.⁸³ Despite significant improvement in optical technologies during the last decades, Optical NLW proved as inefficient, especially after the appearance of directed energy technologies.

⁷⁵ Joint Non-Lethal Weapons Directorate, *Developing Non-Lethal Weapons: The Pre-emplaced Electric Vehicle Stopper*, <http://jnlwp.defense.gov/DevelopingNonLethalWeapons/PreEmplacedElectricVehicleStopper.aspx>, [accessed: 1 December 2013].

⁷⁶ Neil Davison, *‘Non-Lethal’ Weapons*, pp. 186.

⁷⁷ John Alexander, *Future War...*, p. 67.

⁷⁸ Neil Davison, *‘Non-Lethal’ Weapons*, pp. 186-187.

⁷⁹ Neil Davison, *‘Non-Lethal’ Weapons*, pp. 188-195; National Research Council, *An Assessment of Non-Lethal Weapons...*, pp. 31-32.

⁸⁰ Or – Long Range Acoustic Devices (LRAD).

⁸¹ Joint Non-Lethal Weapons Directorate, *Developed Non-Lethal Weapons: Acoustic Hailing Devices*, <http://jnlwp.defense.gov/CurrentNonLethalWeapons/AcousticHailingDevices.aspx>, [accessed: 1 December 2013].

⁸² Neil Davison, *‘Non-Lethal’ Weapons*, pp. 201-202, Joint Non-Lethal Weapons Directorate, *Non-Lethal Weapons(NLW): Reference Book...*, p.46-47.

⁸³ John Alexander, *Future War...*, p. 67.

While Acoustic and Optical NLW have struggled to find their ways as stand-alone technologies, their combination, in one NLW, proved as very effective. Different “flash-bang” devices that combine a very powerful beam of light (a flash) and a painful, but short, sound pressure (a bang) have been in use for more than 30 years.⁸⁴ The most common devices are hand grenades; there are, however, also other different types of air-burst munitions, intended to produce these effects above the target.⁸⁵

Directed Energy NLW

While Directed Energy is a general term that covers different types of technologies, which create “a beam of concentrated electromagnetic energy or atomic or subatomic particles;”⁸⁶ the Directed Energy weapon is “a weapon or system that uses directed energy to incapacitate, damage, or destroy enemy equipment, facilities, and/or personnel.”⁸⁷ In general, the technology of Directed Energy weapons embraces two main areas: lasers (laser is an acronym for Light Amplification by Stimulated Emission of Radiation) and devices that produce radio frequency, microwave, or millimetre wave beams.⁸⁸ While the major military interest in Directed Energy weapons was in their potential as lethal weapons, different technological developments in the field have found their way to NLW.

The NLE of Directed Energy NLW, based on laser technology (so called “dazzling” lasers), are “temporary blindness (flash-blindness) or visual disturbance without permanent adverse effects on the eyes.”⁸⁹ In the early 1990s, when first “dazzling” laser were introduced, the immature technologies struggled to find the right equation between the type and the power of the devices and the safety concerns about possible permanent damage. The fruit of this labour is the fact that from the mid-2000s different types of “dazzling” lasers have been successfully employed in different countries.⁹⁰

Today, Directed Energy NLW, based on laser technology, are solely counter-personnel.⁹¹ The research and development process, however, has not stopped; and there are

⁸⁴ Neil Davison, *‘Non-Lethal’ Weapons*, p. 97.

⁸⁵ Joint Non-Lethal Weapons Directorate, *Mission Payload Module – Non-Lethal Weapons System (MPM-NLWS) Fact Sheet*, October 2011; A. Silnikov, ‘Vidy spetsial'nykh sredstv ...’, p. 69.

⁸⁶ US Joint Chiefs of Staff, *Joint Publication 1-02, Department of Defense Dictionary...*, p. 79.

⁸⁷ US Joint Chiefs of Staff, *Joint Publication 1-02, Department of Defense Dictionary...*, p. 79.

⁸⁸ Neil Davison, *‘Non-Lethal’ Weapons*, p. 143.

⁸⁹ Neil Davison, *‘Non-Lethal’ Weapons*, p. 149.

⁹⁰ Joint Non-Lethal Weapons Directorate, *Non-Lethal Weapons(NLW): Reference Book...*; A. Silnikov, ‘Vidy spetsial'nykh sredstv ...’.

⁹¹ However, it is important to note that one of the most prevalent implementation of ‘dazzling’ lasers is as a tool to stop a vehicle at checkpoint by dazzling the driver. Consequently, these NLW might be considered as counter-materiel.

several very promising developments in this field (e.g. “The Pulse Energy Projectile”, “Wireless Electrical Weapons” and “Thermal Lasers”) that might expand the future arsenal of counter-personnel, as well as counter-materiel, NLW. Though, these programs receive their funding mainly because of their potential as lethal weapons, there is still time for their non-lethal implications to be studied.⁹²

The development of Directed Energy weapons that produce radio frequency, microwave, or millimetre wave beams also started as extremely classified military programs in the second part of the 20th century. Only at the late 1980s and early 1990s the concepts of possible non-lethal implementation had emerged.⁹³ While today this technology is “perhaps the most intriguing new nonlethal weapons technology,”⁹⁴ and there are already different concepts and prototypes; the U.S. remains the only country that has ongoing (or, at least, unclassified) research programmes in this field.

The counter-personnel Non-Lethal system that is based on this technology is the Active Denial System (ADS) that produce an invisible and inaudible millimetre wave energy beam that causes targets to feel “as if they are being intensely burned.”⁹⁵ The NLE of the ADS are based on beams that have a frequency of 95 gigahertz (GHz) that instantly heat the skin of the target at a depth of 0.3-0.4 millimetre to the temperature of 45-55 degrees Celsius. Permanent damage and burns that might be caused by these beams are prevented by very limited duration of exposure.⁹⁶ Although the ADS has already been proved as safe in more than 11,000 tests and demonstrations on more than 700 humans, it has never been employed as “the newness of the technology, coupled with concerns over its mischaracterisation as a “microwave” weapon that “fries,” ”cook,” or sterilize its targets, resulted in a lack of willingness to employ it.”⁹⁷

The counter-materiel NLW that produce radio frequency, microwave, or millimetre wave beams are the Multi-Frequency Radio-Frequency Vehicle Stopper (MFRFVS) and the Radio Frequency Vessel Stopper (RFVS) that produce high power microwaves to disrupt the vehicle's or vessel's electrical components and cause their engines to stall.⁹⁸ These two systems

⁹² Neil Davison, *‘Non-Lethal’ Weapons*, pp. 154-162.

⁹³ Neil Davison, *‘Non-Lethal’ Weapons*, pp. 162-167.

⁹⁴ David Koplow, *Death by Moderation...*, p.196.

⁹⁵ David Koplow, *Death by Moderation...*, p.196.

⁹⁶ Neil Davison, *‘Non-Lethal’ Weapons*, p. 167.

⁹⁷ Tracy Tafolla, David Trachtenberg, John Aho, ‘From Niche to Necessity: Integrating Non-Lethal Weapons into Essential Enabling Capabilities’, *Joint Force Quarterly*, Vol. 66, 2012, p. 76.

⁹⁸ Joint Non-Lethal Weapons Directorate, *Future Non-Lethal Weapons*, <http://jnlwp.defense.gov/FutureNonLethalWeapons.aspx> [accessed: 1 December 2013]

are currently under development and there is no indication as to when they will be ready to be employed.

Another possible technology for counter-materiel Directed Energy NLW is Electromagnetic Pulse (EMP) – “the electromagnetic radiation from a strong electronic pulse, most commonly caused by a nuclear explosion that may couple with electrical or electronic systems to produce damaging current and voltage surges.”⁹⁹ The potential of EMP to damage and destroy electrical equipment has attracted the military from the first time it was observed in high-altitude airburst nuclear tests. Since then, extensive work has been done in different countries on nonnuclear EMP,¹⁰⁰ however, to this day much of this work is classified and there is no evidence of emerging NLW based on EMP.

Other Non-Lethal Technologies

While these seven families embrace the most prevalent modern NLW, there are certain devices, systems and technologies that are not covered by this umbrella. The first group of such NLW includes technologies and concepts that had been developed and even employed in the past, but proved to be inefficient. The best examples of these are different net-guns that were intended to capture and restrain individuals by deploying a net, and different foam-based weapons that were intended to create barriers by instantly employed very sticky foam.¹⁰¹ Even though some of these systems had actually been employed on several occasions; they proved themselves as tactically impractical.¹⁰²

The second group of NLW that are not included in this brief consists of different features or activities that despite their non-lethal nature, are not physical perceptible weapons. While some researchers include these features and activities within their discussion of NLW due to cultural, legal or linguistic differences in the definition of NLW, others suffer from a lack of conceptualisation. An example for the first type is the fact that the term *special'nie sredstva* (“special means” – the equivalent of NLW used by the Russian Ministry of Interior) does not comprise the word “weapons”, which allows it to include, for example, specially trained police dogs.¹⁰³ An example for the second type is the misleading attempt to place Information Warfare under the definition of NLW.¹⁰⁴

⁹⁹ US Joint Chiefs of Staff, *Joint Publication 1-02, Department of Defense Dictionary...*, p. 86.

¹⁰⁰ John B. Alexander, *Future War...*, p. 65.

¹⁰¹ John B. Alexander, *Future War...*, pp. 81-83.

¹⁰² Martin Stanton, ‘What Price Sticky Foam?’, *Parameters*, Vol. XXVI, No. 3, pp. 63-68.

¹⁰³ For example see A. Silnikov, ‘Vidy spetsial'nykh sredstv ...’.

¹⁰⁴ For example see John Alexander, *Future War...*, pp. 103-115.

The last group includes a very limited list of very different, mainly counter-materiel, niches of NLW that due to their unique and original nature cannot be referred to any of the families listed above. The best example of this type of NLW is cluster bombs (in which each bomblet is stuffed with 147 tiny spools of glass-like and highly conductive aluminum fibers) designed to cause reversible damage to electricity lines and transformation stations taking them out of service for many hours or even days.¹⁰⁵

NLW and International Law

While the idea that armed hostilities can be regulated by rules and laws is a part of “almost all societies, without geographical limitations,”¹⁰⁶ the history of the current, applicable, Laws of War starts from the mid-nineteenth century when unilateral codes and bilateral agreement¹⁰⁷ started their transformation into open-ended multilateral treaties (i.e., open to later accession by other states).¹⁰⁸ The modern law of armed conflict (LoAC) is based on four cardinal principals: arms control regulations on specific weapons, discrimination, military necessity, and proportionality.¹⁰⁹ While the first principle deals with the prohibitions or restrictions on the development, production, stockpiling, transfer or use of certain military technologies and weapons (Arms Control Regimes); the next three focus on the regulations and restrictions on the employment of permitted weapons (International Humanitarian Law).

As NLW are weapons by definition, they have to be subject to the full corpus of LoAC and answer to all its principals. Consequently, it is not surprising that any comprehensive analysis of NLW includes their legal implications.¹¹⁰ Moreover, the relations between the concept of “non-lethality” and LoAC have inspired a vast debate in the field of International Law.¹¹¹ Today, there are 19 different international treaties, laws, protocols and regulations that

¹⁰⁵ William Arkin, ‘Smart Bombs, Dump Targeting?’, *The Bulletin of the Atomic Scientists*, Vol. 56, No. 3, 2000, pp. 46-53.

¹⁰⁶ Adam Roberts, Richard Guelff, ‘Introduction by the Editors’, in Adam Roberts, Richard Guelff, (ed.), *Documents on the Laws of War*, 3rd edition, (New York: Oxford University Press, 2002), p. 3.

¹⁰⁷ For example- The ‘Articles of War’ decreed by king Gustavus II Adolphus of Sweden in 1621 for his army departing to fight Russians in the Baltic provinces included at least 7 articles (from 150) that can be considered as humanitarian laws. See Kenneth Orgen, ‘Humanitarian Law in the Articles of War Decreed in 1621 by King Gustavus II Adolphus of Sweeden’, *International Review of the Red Cross*, No. 313, 1996, pp. 438-442.

¹⁰⁸ Adam Roberts, Richard Guelff, ‘Introduction...’, pp. 4-7.

¹⁰⁹ David Koplow, *Death by Moderation...*, pp. 55-78.

¹¹⁰ For example see John Alexander, *Future War...*, pp. 189-199; David Koplow, *Death by Moderation...*, pp. 205-208; Erik Nutley, *Non-Lethal Weapons...*, pp.37-43; Ronald Sutherland, *Chemical and Biochemical Non-Lethal Weapons*, pp. 5-7; Neil Davison, ‘Non-Lethal’ Weapons, pp. 37-38,68-68,101-102.

¹¹¹ See Frederic Merget, ‘Non-Lethal Weapons and the Possibility of Radical New Horizons for the Laws of War: Why Kill, Wound and Hurt (Combatants) at All?’, *Social Science Research Network*, July 1, 2008, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1295348, [accessed: 1 December 2013]; David Fidler, ‘The International Legal Implications of “Non-Lethal” Weapons’, *Michigan Journal of International Law*, Vol. 21, No.51, 1999, pp. 51-100; Eve Massingham, ‘Conflict without Casualties ... A Note of Caution: Non-Lethal

concern NLW¹¹² and the following discussion is divided into three main parts: NLW and International Arms Control Regimes; NLW and International Humanitarian Law; and – The impact of LoAC on the employment NLW.

NLW and International Arms Control Regimes

The seven main families of NLW can be regrouped into three main categories according to International Arms Control Regimes: chemical, biological and conventional.¹¹³

Chemical NLW and International Arms Control Regimes

While the 1925 Geneva Protocol generally prohibited the use of “asphyxiating, poisonous or other gases, and all analogous liquid materials or devices,”¹¹⁴ the more contemporary and detailed 1993 Chemical Weapons Convention (CWC) prohibits developing, producing, acquiring, stockpiling, retaining, transferring, or using chemical weapons.¹¹⁵ It defines chemical weapons as “toxic chemicals and their precursors ... which through [their] chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals.”¹¹⁶ Consequently, the counter-personnel chemical NLW, designed to incapacitate enemy troops, fall under this treaty. It is important to note that counter-materiel chemical NLW are not directly restricted by CWC, as long as their employment does not affect humans or animals (or the environment, as covered by International Environmental Laws),¹¹⁷ and, hence, these types of chemical weapons are not forbidden.¹¹⁸

Weapons and International Humanitarian Law’, *International Review of the Red Cross*, Vol. 94, No. 886, 2012, pp. 673-685; David Fidler, ‘Non-Lethal Weapons and International Law: Three Perspectives on the Future’ *Medicine, Conflict and Survival*, Vol. 17, No. 3, pp. 194-206; Julian Robinson, ‘Non Lethal Warfare and the Chemical Weapons Convention’, *A further HSP submission to the OPCW Open-Ended Working Group on Preparations for the Second CWC Review Conference*, 24 October 2007, <http://www.sussex.ac.uk/Units/spru/hsp/Papers/421rev3.pdf>, [accessed: 1 December 2013]; David Fidler, ‘The Meaning of Moscow: “Non-Lethal” Weapons and International Law in the Early 21st Century’, *International Review of the Red Cross*, Vol. 87, No. 857, 2005, pp. 525-552; Michael Gross, *Moral Dilemmas of Modern War: Torture, Assassination, and Blackmail in an Age of Asymmetric Conflict*, (New York: Cambridge University Press, 2010), pp. 77-99.

¹¹² Erik L. Nutley, *Non-Lethal Weapons...*, pp.39-40.

¹¹³ David Fidler, ‘The International Legal Implications ...’, pp. 67-76.

¹¹⁴ Protocol for the Prohibition of the Use in War Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, (adopted 17 June 1925, entered into force 8 February 1928) , 94 L.N.T.S. 65.

¹¹⁵ Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, (adopted 13 January 1993, entered into force 29 April 1997), 32 ILM 800, Article I(1).

¹¹⁶ Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, Article II (1,2).

¹¹⁷ Erik L. Nutley, *Non-Lethal Weapons...*, p. 43.

¹¹⁸ See David Fidler, ‘The International Legal Implications...’, p.70.

The CWC also differentiates Riot Control Agents (RCA) from other chemical weapons. It defines RCA as “any chemical not listed in a Schedule, which can produce rapidly in humans sensory irritation or disabling physical effects which disappear within a short time following termination of exposure,”¹¹⁹ and it permits their use for “law enforcement including domestic riot control purposes,”¹²⁰ but prohibits them “as a method of warfare.”¹²¹ Thus, it seems that while chemical counter-personnel NLW are permitted for law enforcement purposes, they are banned from the battlefield.

Interestingly, the CWC contains no definition for “methods of warfare” and while it undeniably bans counter-personnel NLW during inter-state conflicts, the legitimacy of their employment during Military Operations other Than War (MOOTW) – peacekeeping operation, counter-terror operations, hostage rescue operations, etc. – is debatable. For example, the position of both the U.S and Russia is that during MOOTW the use of RCA, and therefore counter-personnel chemical NLW, is unaffected by the CWC.¹²²

Biological NLW and International Arms Control Regimes

While the same 1925 Geneva Protocol generally prohibited “bacteriological methods of warfare,”¹²³ the contemporary 1972 Biological and Toxin Weapons Convention (BTWC) bans developing, producing, stockpiling, acquiring, retaining or using biological weapons – “microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes.”¹²⁴

Unlike CWC, BTWC does not distinguish between different groups of biological weapons and its ban is absolute. Consequently, despite the promising potential of biological NLW described above, International Law unconditionally prohibits their development and employment in any circumstances.

¹¹⁹ Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, Article II (7).

¹²⁰ Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, Article II (9).

¹²¹ Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, (adopted 13 January 1993, entered into force 29 April 1997), 32 ILM 800, Article I (5).

¹²² See Julian Robinson, ‘Non Lethal Warfare ...’.

¹²³ Protocol for the Prohibition of the Use in War Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare.

¹²⁴ Convention on the Prohibition of the Development, Production, and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, (adopted 10 April 1972 and entered into force on 26 March 1975), 11 ILM 309, Article 1.

Conventional NLW and International Arms Control Regimes

In an addition to CWC and BTWC, both of which restrict or ban the Chemical and Biological weapons, LoAC include the 1980 UN Conventional Weapons Convention¹²⁵ with its four Protocols. Protocol I that prohibits the use of “any weapon the primary effect of which is to injure by fragments which in the human body escape detection by X-rays.”¹²⁶ Protocol II that prohibits use of land mines, body-traps and other devices that are designed “to kill, injure or damage and which are actuated by remote control or automatically after a lapse of time”¹²⁷ (This field is also regulated by the 1997 Land Mine Convention, which bans anti-personnel mines designed “to be exploded by the presence, proximity or contact of a person and that will incapacitate, injure or kill one or more persons”).¹²⁸ Protocol III that prohibits making civilian population the object of attack by incendiary weapons (“any weapon or munition which is primary designed to set fire to object or to cause burn injury to persons”).¹²⁹ And Protocol IV that bans the employment of “laser weapons specifically designed ... to cause permanent blindness.”¹³⁰

These international legal regulations, written to regulate, restrict or prohibit certain military technologies, concern the development and employment of NLW in various ways. For example, Protocol I has to be considered in the development of different kinetic counter-personnel NLW (this is one of the reasons for the metal core of many rubber, plastic and other bullets and rounds); and Protocol IV had vast influence on the development of “dazzling” lasers.¹³¹

While these treaties refer only to very specific military technologies (including non-lethal ones), all others remain generally permitted for use. For example, there are no

¹²⁵ The full name is - Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects (adopted 10 October 1980 and entered into force 2 December 1983), 19 ILM 1523.

¹²⁶ Protocol on Non-Detectable Fragments (Protocol I), (adopted 10 October 1980 entered into force 2 December 1983), 19 ILM 1529.

¹²⁷ Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices (Protocol II), (initially adopted 10 October 1980 entered into force 2 December 1983, review adopted in 3 May 1996 entered into force 3 December 1998), 35 ILM 1206.

¹²⁸ Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction, (adopted 18 September 1997 entered into force 1 March 1999) 36 I.L.M 1507.

¹²⁹ Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III), (adopted 10 October 1980 entered into force 2 December 1983), 19 ILM 1535.

¹³⁰ Protocol on Blinding Laser Weapons (Protocol IV), (adopted 13 October 1995 entered into force 30 July 1998), 35 ILM 1218.

¹³¹ See David Fidler, ‘The International Legal Implications...’, pp. 68-69; Neil Davison, ‘Non-Lethal’ Weapons, pp. 149-154.

prohibitions on Electrical, Acoustic, Optical, and Electromagnetic NLW.¹³² The employment, however, of all these permitted or regulated NLW (exactly as their lethal counterparts), has to be done in accordance with International Humanitarian Law.

NLW and Humanitarian Law

In addition to Arms Control Regimes, as mentioned above, there are three additional principles of LoAC: discrimination, military necessity, and proportionality. These principles regulate the ways in which military force can be employed and are defined by different international treaties, conventions and protocols.¹³³ These documents, however, do not distinguish between different types of weapons, but set concrete principles, by which any weapon can be employed. Consequently, NLW are subject to these international laws, just as any other lethal weapon or military device or platform.

Although there is no international law that directly uses the terms “proportionality”, and “indiscriminate harm of civilians,” the 1977 Additional Protocol I to the 1949 Geneva Convention is considered as the main reference to the legal debate in this area.¹³⁴ The protocol states that:

those who plan or decide upon an attack shall ... take all feasible precautions in the choice of means and methods of attack with a view to avoiding, and ... minimizing, incidental loss of civil life ... [and] refrain from deciding to launch any attack which may be expected to cause incidental loss of civilian life ... which would be excessive in relation to the concrete ... military advantage anticipated.¹³⁵

While this statement can be interpreted in different ways,¹³⁶ it is clear that it argues against the unnecessary harming of civilians caused by indiscriminate military activity or disproportional use of force even in the case when there is a legitimate military necessity. In other words, anything beyond the minimum required force directed exclusively toward military objectives in a way that best minimises possible damage to civilians, will be unnecessary, disproportional or indiscriminate, or all of the above.

¹³² Interestingly enough, already in 1994 there were calls for the development of specific new protocols covering electromagnetic weapons. See Barbara Rosenberg, “Non-Lethal” Weapons May Violate Treaties’, *The Bulletin of the Atomic Scientists*, Vol. 50, No. 5, 1994, pp. 44-45.

¹³³ For example see 1907 Hague Convention IV Respecting the Laws and Customs of War on Land; 1949 Geneva Conventions I, II, III and IV with 1977 Additional Protocols I and II.

¹³⁴ Michael Gross, ‘The Second Lebanon War: The Question of Proportionality and the Prospect of Non-Lethal Warfare’, *Journal of Military Ethics*, Vol. 7, No. 1, 2008, p. 1-22.

¹³⁵ 1977 Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), (adopted 8 June 1977 entered into force 7 December 1978), 16 ILM 1391 (1977), Article 57(2/A/II-III).

¹³⁶ Michael Gross, ‘The Second Lebanon War...’.

In fact, NLW seem to have no contradictions with these International Humanitarian Law principles, as they offer a solution placed somewhere “between bullhorns and bullets.”¹³⁷ By their definition and essence, NLW are designed as weapons that minimise “fatalities, permanent injury to personnel, and undesired damage to property, facilities, materiel, and the environment.”¹³⁸ And, while there are understandable legal problems with the indiscriminate characteristics of chemical NLW¹³⁹ (usage of which is anyway regulated by CWC); all other legitimate families of NLW seem to offer the required solutions to the demands of Humanitarian Law for selective and proportional attacks directed toward legitimate targets, according to legitimate military necessity.

The impact of LoAC on the employment NLW

While it seems that NLW are “new weapons [that] coming in scope with the law of war,”¹⁴⁰ in fact, some of them have become the victims of this law. Indeed, “it is more human to incapacitate enemy than kill him,”¹⁴¹ however a legitimate enemy can be legitimately killed.¹⁴² The main purpose of NLW is not to prevent the legitimate killing of a legitimate enemy (although they are able to); their main purpose is to offer a flexibility of action in situations where lethal alternatives are less suitable for legal, military, economic or political reasons. On the one hand, NLW are designed to minimise civilian casualties and property losses, especially in combat situations, where it is difficult to distinguish between combatants and non-combatants (e.g., urban warfare),¹⁴³ or in MOOTW, where the objectives contradict the harming people that the military was sent to protect.¹⁴⁴ On the other hand, minimising collateral damage, NLW “deliberately target civilian non-combatants”¹⁴⁵ and, thus, are automatically exposed to LoAC criticism.

¹³⁷ David Koplow, *Death by Moderation...*, p. 190.

¹³⁸ US Department of Defence, *Policy for Non-Lethal Weapons, Directive 3000.3E*, Washington, 25 April 2013.

¹³⁹ See Stephen Coleman, ‘Discrimination and Non-Lethal Weapons: Issues for the Future Military’, in David Lovell, Igor Primoratz, (ed.), *Protecting Civilians During Violent Conflict: Theoretical and Practical Issues for the 21st Century*, (Surrey: Ashgate Publishing Limited, 2012), pp. 215-229; David Fidler, ‘The Meaning of Moscow...’.

¹⁴⁰ Robin Coupland, Dominique Loye, ‘Legal and Health Issues: International Humanitarian Law and the Lethality or Non-Lethality of Weapons’, in Malcolm Dando, (ed.), *Non-Lethal Weapons: Technological and Operational Prospects*, Jane’s Special Report, November 2000, p 62.

¹⁴¹ David Fidler, ‘The International Legal Implications ...’, p. 59.

¹⁴² Chris Jochnik, Roger Normand, ‘The Legitimation of Violence: A Critical History of Laws of War’, *Harvard International Law Journal*, Vol. 35, No. 1, 1994, pp. 49-95.

¹⁴³ David Koplow, *Death by Moderation...*, p. 202; Jez Littlewood, ‘NLWs and Urban Warfare: Aspects of US Thinking’, in Malcolm Dando (ed.), *Non-Lethal Weapons...*, pp. 21-31.

¹⁴⁴ Charles Heal, ‘The Quest for the Magic Bullet’, in Malcolm Dando, (ed.), *Non-Lethal Weapons...*, pp. 32-42.

¹⁴⁵ Michael Gross, ‘The Second Lebanon War...’, p.15.

The legal paradox of NLW was best formulated by former U.S. Secretary of Defence Donald Rumsfeld, who complained to the House Armed Service Committee that “in many instances our forces are allowed to shoot somebody and kill them, but they’re not allowed to use a non-lethal riot control agent.”¹⁴⁶ Although his argument regards non-lethal Riot Control Agents, the military employment of which is banned by CWC, it emphasises the main legal problem of NLW: from the legal perspective it is sometimes simpler to wait for a situation that will allow the use of lethal force and legitimately kill combatants, as well as a number of non-combatants, then to employ NLW from the onset and accidentally injure or kill a single non-combatant. There are many explanations for this awkward and paradox relations between LoAC and NLW,¹⁴⁷ and there are certain scholars in this field who advocate radical changes in the existing system concerning NLW.¹⁴⁸ Until, these changes will occur, however, the development and employment of NLW have to comply with the existing laws, or find a way to bypass them by the implementation of new technologies that are not regulated (e.g., electromagnetic), or by fully utilizing gaps in the current legislation (e.g., the fact that CWC has no definition for “methods of warfare” and, de facto, legitimises¹⁴⁹ the usage of chemical counter-personnel NLW during MOOTW). In other words, the development of NLW have to concentrate on the range of technologies that are not prohibited by International Arms Control Regimes, such as Kinetic, Electrical, Acoustic, Optical and Electromagnetic, as well as Chemical (during MOOTW only). As it will be discussed during the examination of the American, Russian and Israeli cases, defence industries of these countries already introduced enhanced NLW (e.g., tank shells, aerial bomb, artillery shells, etc.) that answer the requirements of International Law, and the fact that these NLW are not employed is not LoAC to blame.

Part Two: The Revolution in Military Affairs of NLW (that did not occur)

While the main purpose of this research is to explain the reasons behind the absence of the RMA of NLW, it is essential to understand what this RMA could or should be. In other words, it is important to create a general picture of the potential RMA of NLW as a reference for the analysis of its absence. This theoretical manipulation, however, might attract extensive

¹⁴⁶ Quoted in Brad Knickerbocker, ‘The Fuzzy Ethics of Nonlethal Weapons’, *Christian Science Monitor*, 14 February 2003, <http://www.csmonitor.com/2003/0214/p02s01-usmi.html>, [accessed: 07 August 2014].

¹⁴⁷ Frederic Merget, ‘Non-Lethal Weapons...’.

¹⁴⁸ See David Fidler, ‘Non-Lethal Weapons...’; Frederic Merget, ‘Non-Lethal Weapons...’.

¹⁴⁹ Although with extensive explanatory efforts. see Julian Robinson, ‘Non Lethal Warfare ...’.

criticism, as it attempts to portray phenomenon that did not occur. To avoid this criticism, the construction of this hypothetical RMA of NLW has to be based on three main pillars: the existing knowledge about the RMA process;¹⁵⁰ extensive literature, written mainly in the late 1990s, that explicitly predicted the RMA of NLW and its characteristics;¹⁵¹ and other, mainly official, documents that define a possible future military employment of NLW. Although these three allow creating a more or less detailed portrait of the RMA of NLW, it is important to keep it in very general lines to avoid the discussion, unnecessarily and unproductively, sliding into fiction.

As discussed in Chapter 1, RMA phenomenon consists of changes in three dimensions – military technology, military organisation, and the concept of operations. Each of these dimensions is “a necessary, but not a sufficient, condition”¹⁵² for an RMA, because only changes in all three have a potential to revolutionise military affairs. Thus, the portraying of the theoretical RMA of NLW has to concentrate on these three dimensions.

The Concepts of Operations (CONOP)

CONOP is a general, but clear and concise, statement that expresses what the military intends to accomplish and how it will be done.¹⁵³ From the historical analysis of past RMAs it seems right to argue that the development of a new CONOP, and not the military technology in itself, is the first main step toward the RMA’s implementation. For example, as it was discussed in the previous chapter, the tank initially appeared during the First World War, however, it was the theory of the armoured warfare that propelled the tank towards the RMA.

While the theoretical and conceptual debate within the U.S. military circles started in the early 1990s,¹⁵⁴ the first official military document that attempted to define the CONOP of NLW was, probably, the U.S. Army’s “Concept for Nonlethal Capabilities in Army

¹⁵⁰ See Chapters 1.

¹⁵¹ Steve Metz, ‘Non-Lethality and the Revolution in Military Affairs’, pp. 10-20; Nick Lewer, Steven Schofield, *Non-Lethal Weapons: A Fatal Attraction?*, p.17; Gerrard Quille, ‘The Revolution in Military Affairs Debate and Non-Lethal Weapons’, in Nick Lewer, (ed.), *The Future of Non-Lethal Weapons: Technologies, Operations, Ethics and Law*, (London: Frank Cass Publishers, 2002); Douglas Lovelace, Steven Metz, *Nonlethality and American Land Power: Strategic Context and Operational Concepts*, (Carlisle: Strategic Studies Institute, 1998); Joseph Siniscalchi, ‘Non-Lethal Technologies: Implications for Military Strategy’, *Center for Strategy and Technology Occasional Paper*, No. 3, 1998.

¹⁵² Andrew Krepinevich, ‘Cavalry to Computer: The Pattern of Military Revolutions’, *National Interest*, no. 37, 1994, pp. 30-42.

¹⁵³ US Joint Chiefs of Staff, *Joint Publication 1-02, Department of Defense Dictionary...*, p. 51.

¹⁵⁴ See Charles Swett, *Strategic Assessment: Non-Lethal Weapons...*; Neil Davison, ‘Non-Lethal’ Weapons..., p. 52.

Operations”, published in 1996.¹⁵⁵ The main force behind this quest, for new non-lethal technologies and the concepts of their employment, was the emerging understanding that Post-Cold War security environment would demand military solutions that lie between diplomacy and force¹⁵⁶ “where the destructiveness of conventional weaponry is too much and diplomacy is not enough.”¹⁵⁷ In other words, due to the changes in global security and the political system the military “must be capable of attaining its objectives and be politically usable”, and therefore “armed forces equipped with both lethal and nonlethal weapons [have] greater political utility than those which only have lethal means”.¹⁵⁸

Defining the CONOP of NLW, the literature of the 1990s and early 2000s explicitly emphasised that NLW are equally applicable in MOOTW and Major Theatre Wars, and they are capable in fulfilling a spectrum of missions, minimising civilian casualties and collateral damage. This early literature clearly stated that while the military would intend to accomplish its mission avoiding any unnecessary damage (minimising unacceptable political costs and pressures), NLW would offer a solution that is operationally attractive, legally defensible, ethically and morally favourable, technically feasible, and economically affordable.¹⁵⁹

Organisation

An analysis of past RMA suggests two possible ways in which militaries fundamentally change their organisations. The first is the way of “reorganisation”, a process that reshapes the existing forces building their capabilities according to the new CONOP. For example, the RMA of Fortification, discussed in the previous chapter, did not demand a creation of entirely new type of forces, but reorganisation of the existing infantry, artillery, cavalry, etc., according to the new military realities created by the comeback of the siege operations. The second way emphasises the establishment of a new type of forces that, according to the new CONOP, are

¹⁵⁵ Department of the Army Headquarters, United States Army, *Concept for Nonlethal Capabilities in Army Operations: TRADOC Pamphlet 525-73*, Fort Monroe VA, 1 December 1996; Joseph Siniscalchi, *Non-Lethal Technologies: Implications for Military Strategy...*

¹⁵⁶ See John Barry, Michael Everett, Allen Peck, ‘Nonlethal Military Means: New Leverage for a New Era’, *Harvard University, John F. Kennedy School of Government, National Security Program Policy Analysis Paper*, No. 94-01, 1994; Douglas Lovelace, Steven Metz, *Nonlethality and American Land Power...*; John Alexander, *Future War...*, pp. 9-56; Nick Lewer, Steven Schofield, *Non-Lethal Weapons: A Fatal Attraction?*, pp. 5-23.

¹⁵⁷ Department of the Army Headquarters, United States Army, *AirLand Operations: A concept for the Evolution of AirLand Battle for the Strategic Army of the 1990s and Beyond: TRADOC Pamphlet 525-5*, Fort Monroe, 4 August 1991.

¹⁵⁸ Douglas Lovelace, Steven Metz, *Nonlethality and American Land Power...*, p. 6.

¹⁵⁹ See Douglas Lovelace, Steven Metz, *Nonlethality and American Land Power...*; Mark Thomas, *Non-Lethal Weaponry: A Framework for Future Integration*, (Maxwell Air Force Base: Air Command and Staff College, 1998); Joseph Siniscalchi, *Non-Lethal Technologies: Implications for Military Strategy*; Charles Swett, *Strategic Assessment: Non-Lethal Weapons*; Department of the Army Headquarters, United States Army, *Concept for Nonlethal Capabilities...*

intended to fight on their own, fulfilling specific missions on the main battlefield, or fighting within an independent dimension. The best examples are the establishment of the Panzer Division, in the process of the RMA of armour warfare,¹⁶⁰ the establishment of Nuclear Strategic Forces in the U.S. and the U.S.S.R., as an outcome of the Nuclear RMA,¹⁶¹ and the very recent establishment of new special cyber units in the U.S., as a part of the American Cyber Warfare RMA.¹⁶²

Consequently, these two ways suggest two different possible changes in the organisation of the military that implements the RMA of NLW: (1) the reorganisation of the existing forces that integrate non-lethal capacities, and (2) the establishment of a new branch of non-lethal forces. While it is obvious that the new military organisation depends very much on the nature of military technology, the new CONOP plays a significantly greater role, as it defines how this technology is going to be employed. Consequently, the answer to the required change in military organisation lies in the CONOP of NLW.

Early architects of the CONOP of NLW formulated two main characteristics that suggest the way in which military forces, that intend to employ NLW successfully, should be organised. The first is the fact that “nonlethal capabilities do not replace or diminish the role of lethal capabilities for the force ... [they] simply provide the commander additional options for applying military force”.¹⁶³ The second is the expectation from NLW to be employed by military forces simultaneously with their lethal counterparts, especially in such tactically challenging scenarios as Urban Warfare in Major Theatre Wars.¹⁶⁴

Consequently, it seems right to assume that the new military organisation demanded by the RMA of NLW is not the establishment of independent Non-Lethal Forces, but an integration of non-lethal capabilities within existing conventional forces. After the implementation of the RMA of NLW, military units should be able to accomplish their stated or directed objectives exploiting the minimum required, but maximum necessary, force from the whole available arsenal of capabilities (from non-lethal to lethal).

¹⁶⁰ Williamson Murray, ‘May 1940: Contingency and Fragility of the German RMA’, pp. 154-174.

¹⁶¹ Colin Gray, *Strategy for Chaos: Revolution in Military Affairs and the Evidence of History*, (London: Francis and Taylor Publishers, 2002), p. 236.

¹⁶² Gregory Rattray, *Strategic Warfare in Cyberspace* (Boston: MIT Press, 2001); Kamal Jabbour, ‘CyberVision and Cyber Force Development’, *Strategic Studies Quarterly*, Vol. 4, No. 1, 2010, pp. 63-73.

¹⁶³ Department of the Army Headquarters, United States Army, *Concept for Nonlethal Capabilities in Army Operations...*, p. 3.

¹⁶⁴ Douglas Lovelace, Steven Metz, *Nonlethality and American Land Power...*, pp. 25-27; Jez Littlewood, ‘NLWs and Urban Warfare...’; Joseph Siniscalchi, *Non-Lethal Technologies: Implications for Military Strategy*.

Technology

As discussed, the technology that lied at the core of any RMA, usually was around for many years, and it was a new CONOP that ignited the process of changes. The analysis of past RMAs shows that with the implementation of a new CONOP and a new organisational structure, the technology also experienced significant transformation, adopting and improving according to the challenges created by the conceptual and the organisational changes. This process of technological change is understandable, as the specific characteristic of the new CONOP and the organisational challenges direct the R&D efforts of the existing technology.

The previous discussion on the non-lethal technologies focused not on the specific existing weapons system employed (or not) by the military but rather on the technological nature of NLW and their capabilities. It is interesting, however, how the presented CONOP of NLW and the integrated organisation (that suits that CONOP) could influence these technologies. The best vision of these new generation NLW is, in fact, provided by the 2008 U.S. Army TRADOC Pamphlet “Force Operating Capabilities”: “[the military] must be provided with organic nonlethal capabilities ... with multifunctional/multirole lethality options in integrated multipurpose system configurations.”¹⁶⁵ In other words, the implementation of the RMA of NLW will demand integrated weapons and weapon systems that are capable of creating inbuilt lethal as well as non-lethal effects. While the potential integration of non-lethal capabilities within existing fire supports conventional platforms, such as aircrafts,¹⁶⁶ artillery¹⁶⁷ and precision-guided munitions,¹⁶⁸ has been vastly debated during the last decade; the RMA of NLW demand more comprehensive integration of non-lethal capabilities, even within the weapon systems and firearms used by combatants on the ground (i.e., assault rifles).¹⁶⁹

¹⁶⁵ Department of the Army Headquarters, United States Army, *Force Operating Capabilities: TRADOC Pamphlet 525-66*, Fort Monroe, 7 March 2008, p. 88.

¹⁶⁶ Justin Bobb, *Non-Lethal Weaponry: Applications to AC-130 Gunships*, (Maxwell Air Force Base, Alabama: Air University, 2002).

¹⁶⁷ Frank Siltman, John Frisbie, ‘Fire Support Just Got Harder: Adding Nonlethal Fires as a Core Competency’, *Fires Bulletin*, No. 6, July-September 2008, pp. 6-8.

¹⁶⁸ Joseph Siniscalchi, *Non-Lethal Technologies: Implications for Military Strategy*, p. 10.

¹⁶⁹ The combination of simultaneously available non-lethal and lethal capabilities in assault rifles is not only technologically feasible, but has been already demonstrated by defence industries and even employed by the U.S. Military. The two best examples are: (1) The M26 Modular Accessory Shotgun System (MASS) – under-barrel shotgun attachment for the M16/M4 assault rifles that offers simultaneous capability of the non-lethal 12ga munitions and 5.56 mm lethal one (see Joint Non-Lethal Weapons Directorate, *Annual Report 2012: Non-Lethal Weapons for Complex Environments*, 2012, p.9); (2) The FN 303 Mount – under-barrel compressed-air powered launcher attachment for the M16/M4 assault rifles that offers capability of the non-lethal 0.68 calibre, 8.5 gram, fin-stabilised, non-lethal projectiles and the simultaneous lethal capability of the 5.56 mm service rifle (see Joint Non-Lethal Weapons Directorate, *Non-Lethal Weapons(NLW): Reference Book*, pp. 13-14).

Part Three: The Absence of RMA of NLW: The Framework for the Analysis

While technological determinism would immediately suggest that it is the immature technology of NLW that holds the RMA back, this argument can be easily fended off for two reasons. First, the process of taking a military technology and making it a revolutionary one is not a matter of science alone and it involves a wide range of factors. As it was shown in the previous chapter, the tank technology of the 1920s was also immature for the RMA of Armoured Warfare, and it was a combination of the German military culture, German national-cultural context and Adolf Hitler who “recognised the potential of tank warfare more rapidly than some other national leaders of the day”¹⁷⁰ and pressed its military and industry to raise the tank into its adulthood. The second reason is that, as it will be shown in the following chapters, military industries have already demonstrated several developments that can answer the CONOP and organisation of the RMA of NLW – the fact that this weaponry is not employed has not technology to blame. Therefore, the technological immaturity of NLW seems to be a consequential factor and it appears that there is something much more fundamental that has led to the failure of the RMA of NLW.

While the conceptual framework developed in the previous chapter suggests three main questions that should be asked during the analysis of a failed RMA in a “certain affair,” it is important to understand first the nature and character of this “certain affair.” In other words, it is important to define the character of the challenge that the political leadership put (or did not) in front of its military. For example, in the case of the discussed RMA of Fortification the challenge was the enemy’s siege artillery, and in the case of the RMA of Armoured Warfare the challenge was the increased role of firepower that had created a defensive stalemate occurred during the First World War. Consequently, the first step in the analysis of the RMA of NLW has to be the definition of the challenge that this RMA supposedly is intended to overcome. According to the definition of NLW, these weapons are intended to minimise civilian casualties, therefore the challenge that these weapons are intended to deal with is *a minimisation of enemy civilian casualties*. Following the conceptual logic of the RMA’s occurrence, or absence thereof, presented at the end of the previous chapter, it seems right to assume that the RMA of NLW would occur when:

¹⁷⁰ Robert Citino, *The Quest for Decisive Victory: From Stalemate to Blitzkrieg in Europe 1899-1940*, (Lawrence: University Press of Kansas, 2002), p. 204.

- (1) a political leadership, shaped by certain socio-cultural circumstances, defines *the minimisation of enemy civilian casualties during military operations* as a significant challenge.
- (2) the military, shaped by its military culture, interprets this challenge as unmet and dealing with it requires the RMA of NLW.
- (3) in return, political leadership decides to support the fundamental military transformation.

Keeping this understanding in mind, each one of the following analyses of the RMAs of NLW will be divided into three parts. The first part will analyse the status of NLW in each military determining whether the RMA of NLW occurred or not. Only when the absence of this RMA will be determined, the analysis will be able to focus on the factors that had led to its absence.

The second part will focus on the political leadership and national socio-cultural predispositions that shaped the political attitude towards enemy civilian casualties. This part will consist of two different but highly interconnected areas: national foreign policy, and national character. In an attempt to analyse whether the political leadership defines *the minimisation of enemy civilian casualties during military operations* as a significant challenge or not, it is important to understand the degree to which this leadership is pressed to do so. In other words, to what degree the political leadership is pressed (internationally as well as domestically) to demand from its military a significant reduction of civilian casualties and collateral damage. While there is broad agreement among scholars that international political pressure presents a crucial factor that leads to the reduction of killed or injured civilians and destroyed civil infrastructure,¹⁷¹ an analysis of the existence of this pressure, its strength and roots is beyond the scope of this research and therefore it will assume its existence, yet not delve into it. It seems very important, however, to understand how policy-makers comply with or fend this pressure off. In other words, to understand whether political leadership defines *the minimisation of enemy civilian casualties during military operations* as a significant challenge, it is vital to understand how foreign policy is crafted within the context of international criticism, in general and the criticism regarding civilian casualties during military operation, in particular.

An additional factor that influences political leadership in its decision-making process is, obviously, domestic political factors. Existing research clearly shows that each nation has its own “way of war” or “strategic culture” and that a nation’s cultural context affects the

¹⁷¹For example see: Gil Merom, *How Democracies Lose Small Wars*, (Cambridge: Cambridge University Press, 2003); Ivan Arreguin-Toft, *How the Weak Win Wars: A Theory of Asymmetric Conflict*, (Cambridge: Cambridge University Press, 2005); Michael Gross, *Moral Dilemmas of Modern War: Torture, Assassination, and Blackmail in an Age of Asymmetrical Conflict*, (New York: Cambridge Press, 2010); Eric Patterson, *Just War Thinking: Morality and Pragmatism in the Struggle against Contemporary Threats*, (Lanham: Lexington Books, 2007); David Koplow, *Death by moderation...*

political decision-making process.¹⁷² An understanding of “what people think about war and enemy civilian casualties” will shed a light on the level of domestic political pressure (or lack thereof) to minimise collateral damage during military operations, consequently endorsing (or not) the political leadership to define *the minimisation of enemy civilian casualties during military operations* as a significant challenge. While the analysis of this cultural context will focus on several narratives relevant to the idea of reducing violence applied toward enemy population; it is important to note that this research analyses a general national cultural character, i.e., the cohesive complex of specific social-physiological aspects of a given nation, rather than specific characters of individual groups or elites in each nation.

The third and the last part of the analysis will focus on military culture and the idea of NLW. The analysis of past RMAs shows that one of the major factors that produces an actual innovation is the extent to which militaries recognise and exploit the opportunities inherent in new tools of war.¹⁷³ Consequently, military approach toward NLW seems to be an important factor in the analysis of the RMA of NLW or its absence.

Part Four: Conclusions

The purpose of the first part of this chapter was to shed light on the perplexing nature and history of NLW. It aimed to provide a general perspective on the idea of NLW and their technological roots, as well as on the legal implications and complications concerning their employment on the battlefield. While this historical, technical and legal background was essential for the general understanding of NLW, the second and third parts were critical for the further analysis of the absence of RMA of NLW in the U.S, Russia and Israel.

The theoretical construction of the RMA of NLW (i.e., the RMA of NLW that could be) is crucial as a reference for the further analysis of its absence. Since the main objective of this research is to explain the failure of this RMA in the U.S., Russia and Israel, the first step

¹⁷²See Beatrice Heuser, *Nuclear Mentalities? Strategies and beliefs in Britain, France and the FRG*, (London: Macmillan Press, 1998); Lawrence Sondhaus, *Strategic Culture and Ways of War*, (New York: Routledge, 2006); Jeremy Black, *War and the Cultural Turn*, (Cambridge: Polity Press, 2012); Theo Farrell, Terry Terriff, (ed.), *The Sources of Military Change: Culture, Politics, Technology*, (London: Lynne Rienner Publishers, 2002); Dima Adamsky, *The Culture of Military Innovation: The Impact of Cultural Factors on the Revolution in Military Affairs in Russia, the US, and Israel*, (Stanford: Stanford University Press, 2010); Emilio Willems, *A Way of Life and Death: Three Centuries of Prussian-German Militarism – An Anthropological Approach*, (Nashville: Vanderbilt University Press, 1986); Colin Gray, *Modern Strategy*, (Oxford: Oxford University Press, 1999), Chapter 5.

¹⁷³Max Boot, *War Made New: Technology, Warfare and the Course of History, 1500 to Today*, (New York: Gotham Books, 2006), p.10.

in the analysis of each one of the cases is to establish that the RMA of NLW indeed did not occur. The CONOP, technology and organisation of the RMA of NLW, generated in this chapter, make the argument that the RMA of NLW did not occur as methodologically possible.

The last part of this chapter paved the methodological way for the analysis of the absence of the RMA of NLW. This process highlighted three main elements that are relevant for the implementation of the RMA of NLW: (1) foreign policy and its attitude towards international criticism regarding collateral damage and civilian casualties; (2) domestic national cultural attitudes toward enemy civilian population; (3) the military culture concerning novel technologies in general, and NLW in particular. These three elements are vital to the creation of the required causal chain that could lead to the RMA of NLW, as only their combination directed toward the minimisation of civilian enemy casualties during armed conflicts can create a required process that will ignite the RMA of NLW. In other words, only in the case where (1) *the state complies with the international criticism that requires to reduce civilian casualties during conflicts*; (2) *domestic society demands to reduce enemy civilian casualties*; and (3) *the military of this state has a culture that is able to promote the idea of NLW* – the RMA of NLW can be implemented.

CHAPTER 3

THE (ABSENCE OF THE) RMA OF NLW IN THE U.S.

Introduction

As it was discussed in the previous chapter, the contemporary understanding of NLW is a fruit of American military thought of the early 1990s. During this time, American military was mesmerized by theorizing Revolution in Military Affairs (RMA), an implementation of new military technologies combined with fundamental shifts in military doctrine and organization. Speculations about new military technologies that have revolutionary potential did not overstep NLW; for example, the Washington based Center for Strategic and International Studies held in 1993 that: “If U.S. forces were able... to incapacitate or render ineffective enemy forces without destroying or killing them, the U.S. conduct of war would be revolutionized.”¹

In 2009, however, almost two decades after the initial rise of NLW, the United States Government Accountability Office (GAO) stated that “The joint non-lethal weapons program has conducted more than 50 research and development efforts and spent at least \$386 million since 1997, but it has not developed any new weapon.”² This difference, between the initial enthusiasm and inability to deliver results, is striking and it is not surprising that the GAO’s report points at the Department of Defense (DOD) vain management as the main reason to its failure to successfully develop and employ NLW within the U.S. military. While the employment of NLW, undoubtedly, demands a paradigm shift in military affairs; the GAO’s accusation of the DOD’s mismanagement seems to be a too simplistic explanation of the detrimental situation with NLW in the U.S. military. As it was discussed before, a successful implementation of fundamentally new military technologies requires particular political and cultural environment that promotes and supports the development and employment of these weapon systems. Subsequently, it seems that the roots of this astonishing gap between early expectations from NLW and their actual deployment are much deeper than a simple financial misconduct of the American military establishment.

¹ Michael Mazarr, *The Military Technical Revolution: A Structural Framework. Final Report of the CSIS Study Group on the MTR*, (Washington: Center for Strategic and International Studies, 1993), p. 43.

² United States Government Accountability Office (GAO), *DOD Needs to Improve Program Management, Policy, and Testing to Enhance Ability to Field Operationally Useful Non-Lethal Weapons: Report to Congressional Requesters*, Washington, April 2009, p.18.

Following this introduction, the discussion will be divided into five parts. The first part analyses the current status of NLW in the U.S. military. It discusses the state of technology offered by the American manufacturers and the level of the actual employment of NLW by the U.S. military forces. While this part shows quite a detrimental situation, the following parts make an attempt to explain the political, sociological and cultural roots of it. The second part focuses on aspects of the American foreign policy.

As it was discussed previously, one of the main aspects, which has a potential to increase the employment of NLW, is the international political pressure and criticism that demands to minimise collateral damage and civilian casualties during military operations. American military operations in Iraq and Afghanistan have been vastly criticised by different NGOs for harming civilian population. For example, Amnesty International (AI) stated that in Iraq “scores of civilians were killed apparently as a result of excessive use of force by US troops”³ and “both, the US-led Multinational Force (MNF) and Iraqi security forces, committed grave human rights violations, including ... excessive use of force resulting in civilian deaths.”⁴ Regarding Afghanistan, Amnesty International stated in its 2009 Annual Report that “civilian casualties have been increasing since 2001 and 2008 proved to be the bloodiest year yet” expressing “serious concerns about the indiscriminate and disproportionate use of [American] air strikes were raised following several grave incidents.”⁵ Moreover, several types of weapons used by the US in Iraq and Afghanistan drew vast criticism not only from NGOs, but also from governments and intergovernmental organisations. For example, criticising the American usage of cluster bombs, the European Parliament called for “immediate moratorium” on cluster bombs, saying that “they pose a serious long-term threat to the civil populations.”⁶ Facing international criticism, however, it seems that Washington has been very successful in defending its actions. This part discusses different mechanisms of the American foreign policy intended to withstand this pressure.

The third part concentrates on cultural aspects of American society. More specifically, in an attempt to explain the existence (or a lack thereof) of internal political pressure for the wider employment of NLW, this part offers insight into American general cultural attitudes toward wars and enemy civilian casualties. The fourth part analyses the attitudes of American

³ Amnesty International, *Annual Report*, 2004, London, p. 282.

⁴ Amnesty International, *Report 2006: the state of the world's human rights*, 2006, London, p. 143

⁵ Amnesty International, *Report 2009: the state of the world's human rights*, 2009, London, p. 56

⁶ Human Rights Watch, *Fatally Flawed: Cluster Bombs and Their Use by the United States in Afghanistan*, 2002, New York, p. 17

military culture toward technological innovations in general and NLW in particular. It follows the development of American military thought in this field and its influence on the employment of NLW. The final part integrates the four previous parts in an attempt to explain the reasons behind the failure of the RMA of NLW in the U.S. Based on political and cultural aspects, it clarifies why despite the fact that the concept of NLW was born in the U.S., American military still holds back from using them.

Part One: The Status of Non-Lethal Weapons in the U.S.

As it was discussed in the previous chapter, the U.S. military had been employing NLW (mainly chemical) significantly before the concept of NLW was born in the early 1990s. However, due to the international criticism that followed the vast employment of chemical NLW in Vietnam⁷ and the Cold War oriented military planning, which left little space to such niche technologies as NLW,⁸ the development of these technologies was mainly done by, and for, law enforcement agencies.⁹

The U.S. military started to pay more coherent attention toward NLW in 1995, during the operation “United Shield”, the U.S. assistance with withdrawing UN peacekeepers from Somalia. General Anthony Zinni, who commanded the mission, became the prime advocate for the development and employment of these weapons, clearly stating that he “would never field a peace-support operation again without them.”¹⁰ The process of the institutionalisation of NLW in the DOD was led by a Non-Lethal Weapons Steering Committee (NLWSC), established in 1994, and the Council on Foreign Relation. This process was finalised in 1996 with the establishment of the Joint Non-Lethal Weapons Program (JNLWP)¹¹ and the DOD Directive 3000.3, *Policy for Non-Lethal Weapons* that defined NLW as:

Weapons that are explicitly designed and primarily employed so as to incapacitate personnel or materiel, while minimizing fatalities, permanent injury to personnel, and undesired damage to property and the environment.¹²

⁷ Malcolm Dando, *A New Form of Warfare: The Rise of Non-Lethal Weapons*, (London: Brassey’s Ltd, 1996), pp. 76-77.

⁸ Nick Lewer, Steven Schofield, *Non-Lethal Weapons: A Fatal Attraction?*, (London: Zed Books, 1997), p. 34.

⁹ John Alexander, ‘Shoot, But Not to Kill – Non-Lethal Weapons Have Yet to Establish a Military Niche’, *Jane’s International Defense Review*, 1 June 1996; David Boyd, ‘The Search for Low Hanging Fruit: Recent Developments in Non-Lethal Technologies’, Malcolm Dando, (ed.), *Non-Lethal Weapons: Technological and Operational Prospects*, Jane’s Special Report, November 2000.

¹⁰ Quoted in John Alexander, ‘Shoot, But Not to Kill...’, p. 219.

¹¹ Neil Davison, *Non-Lethal Weapons*, (Basingstoke: Palgrave MacMillan, 2009), p.52.

¹² US Department of Defence, *Policy for Non-Lethal Weapons, Directive 3000.3*, Washington DC, 9 July 1996.

While, since 1996, JNLWP has been responsible for identifying and developing NLW into operationally suitable and effective solutions and for facilitating the acquisition and fielding of NLW,¹³ it seems that very little innovation has been done.¹⁴ Most of the NLW approved by JNLWP and employed within different American forces are based on the existing solutions previously developed for law enforcement, such as small arms kinetic, electric and chemical weapons.¹⁵ The only state-of-art technology, development of which has been led by JNLWP, is the Active Denial System (Directed Energy weapons that produce microwave beams).¹⁶ Despite the fact that several systems were shipped for deployment in Afghanistan,¹⁷ due to operational difficulties and fear from the mischaracterisation of the system as a “microwave” weapon that “fries,” “cooks,” or sterilise its targets, this flagship of the JNLWP’s activity and investment, has never been used.¹⁸

Interestingly enough, the military theoretical interest in NLW has never faded since the late 1990s, the peak of the NLW enthusiasm. During the last decade, American officers conducted a vast amount of research considering NLW, their possible implications and ways of deployment.¹⁹ Nevertheless, it is very hard to say that anything from what was suggested in this purely academic research has ever been materialised. For example, on the one hand the US Air Force (USAF) had expressed its initial interest in NLW already in 1999, when Major General Norton Schwartz, then the USAF Director of Strategic Planning, said: “We have yet

¹³ Joint Non-Lethal Weapons Program, *Purpose*, <http://jnlwp.defense.gov/about/purpose.html>, [accessed: 26 August 2015].

¹⁴ United States Government Accountability Office (GAO), *DOD Needs to Improve...*

¹⁵ Joint Non-Lethal Weapons Directorate, *Non-Lethal Weapons Reference Book*, 30 June 2011.

¹⁶ David Koplow, *Death by Moderation: The U.S. Military’s Quest for Usable Weapons*, (New York: Cambridge University Press, 2010), p.196.

¹⁷ Shane McGlaun, ‘U.S. Military Demonstrates “Active Denial System” Non-Lethal Weapon’, *DAILYTECH*, 12 March 2012, <http://www.dailytech.com/US+Military+Demonstrates+Active+Denial+System%20m+NonLethal+Weapon+/article24208.htm>, [accessed: 10 September 2015].

¹⁸ Tracy Tafolla, David Trachtenberg, John Aho, ‘From Niche to Necessity: Integrating Non-Lethal Weapons into Essential Enabling Capabilities’, *Joint Force Quarterly*, Vol. 66, 2012, pp. 71-79; United States Government Accountability Office (GAO), *DOD Needs to Improve ...*, p. 25.

¹⁹ For example, see: James Ogawa, *Evaluating the U.S. Military’s Development of Strategic And Operational Doctrine for Non-Lethal Weapons in a Complex Security Environment*, (Fort Leavenworth: Command and General Staff College, 2003); Richard Scott, *Conflict Without Casualties: Non-Lethal Weapons in Irregular Warfare* (Monterey: Naval Postgraduate School, 2007); Jeffrey Voetberg, *Non-Lethal Weapons: Considerations for the Joint Force Commander*, (Newport: Naval War College, 2007); Ryan Whitemore, *Air-delivered Non-Lethal Weapons in Counterinsurgency Operations*, (Maxwell Air Force Base: Air Command and Staff College, 2008); Timothy Cullen, *Lethality, Legality, and Reality: Non-Lethal Weapons for Offensive Air Support*, (Maxwell Air Force Base: Air Command and Staff College, 2008); Dewey Granger, *Integration of Lethal and Nonlethal Fires: The Future of the Joint Fires Cell*, (Fort Leavenworth: Command and General Staff College, 2009); Team Bravo/Cohort 19, *Viable Short-Term Directed Energy Weapon Naval Solutions: A Systems Analysis of Current Prototypes*, (Monterey: Naval Postgraduate School, 2013).

to explore non-lethals from the air. This is the next logical step.”²⁰ Consequently, it is not surprising that, in the following years, a vast research was conducted by military officers investigating the implications of air-delivered NLW.²¹ On the other, the only airborne NLW that has since been discussed by JNLWP is an Airborne Active Denial System – a system that was not taken further from the stage of concept.²²

From very beginning, the role of NLW has been understood by the American military establishment as a tool to answer the blurring line between “law enforcement – with its restraint on the use of force – and the military”²³ – approach that explains well the reason why JNLWP has concentrated mainly on the existing law enforcement solution. In 1991, the very beginning of the NLW debate, a research survey done by the Policy Planning Staff at the U.S. Department of State reported that NLW “will have to be carefully integrated with currently-existing technologies and systems to achieve their maximum potential.”²⁴ More than 20 years later, it seems that very little has been done, as most of the NLW listed in the JNLWP’s “Non-Lethal Weapons Reference Book” are still purely law enforcement weapons and munitions.²⁵ Moreover, Lieutenant General Richard Tryon, the Deputy Commander of the Marine Corp and the Chairman of the JNLWP Integrated Product Team, repeated, in 2012 (20 years after the Policy Planning Staff), the very same narrative: “Non-Lethal Weapons should be compatible with existing [military] weapons/platforms.”²⁶

Though some integrated (lethal and non-lethal) platforms have been introduced recently, they still remain in the area of infantry weapons only. The best example is the M26 Modular Accessory Shotgun System (MASS). It is an under-barrel shotgun attachment for the M16 rifle that, while preserving the lethal capability of the main rifle, simultaneously provides a

²⁰ Quoted in Bryan Bender, ‘USAF Seeks Air-Dropped Non-Lethal Weapons’, *Jane’s Defence Weekly*, 24 March 1999.

²¹ Timothy Cullen, *Lethality, Legality, and Reality: Non-Lethal Weapons...*; Ryan Whittemore, *Air-delivered Non-Lethal Weapons...*

²² Joint Non-Lethal Weapons Directorate, *Non-Lethal Weapons Reference Book...*, p. 60.

²³ Steven Metz, ‘Non-Lethal Weapons: A Progress Report’, *Joint Force Quarterly*, Vol. 28, 2001, pp. 18-22; Also see: Douglas Lovelace, Steven Metz, *Nonlethality and American Land Power: Strategic Context and Operational Concepts*, (Carlisle: Strategic Studies Institute, 1998); Joseph Siniscalchi, ‘Non-Lethal Technologies: Implications for Military Strategy’, *Center for Strategy and Technology Occasional Paper*, No. 3, 1998; Gerald Norbut, *Non-Lethal Weapons: Force Enabler for the Operational Commander Conducting Peace Operations*, (Newport: Naval War College, 2001).

²⁴ U.S. Department of State, Policy Planning Staff, *Non-Lethal and Discriminate Weapons and Technologies*, Washington, 1991.

²⁵ Joint Non-Lethal Weapons Directorate, *Non-Lethal Weapons Reference Book...*

²⁶ *Interview with Lieutenant General Tryon*, published in Joint Non-Lethal Weapons Program, *Annual Report*, 2012, p.7.

warfighter with an additional capability of 12ga non-lethal ammunition.²⁷ Interestingly enough, this integrations was not a fruit of JNLWP activity, but a product of the U.S. Army Program Executive Office Soldier.²⁸

To summarise the current NLW situation in the U.S., it is important to emphasis two main factors. The first one is the nature of the employed NLW and the level of their employment. The range of the NLW employed by the U.S. military does not much differ from the law enforcement technologies that have been available for the last four decades.²⁹ Excluding the Active Denial technology (that, in fact, has yet to be deployed), the JNLWP has been concentrating on existing commercially available NLW developed for law enforcement purpose,³⁰ or on developing munitions with enhanced effects for these existing systems.³¹ The operational use of these available NLW has been limited to specific out-of-battlefield missions, such as crowd and riots control, security patrols, check points, etc.

The second factor is the technological status. Since the Second World War, the U.S. military has been a technological leader in military affairs, and the American military industrial complex has been able to deal with all technological challenges posed in front of it, but “without concepts for the use of Non-Lethal Weapons, developers will not be successful in focusing ideas and programs.”³² The example of the M26 MASS shows that facing a right definition of the desired capabilities, which focus research and development efforts, American manufactures are able to produce effective military-oriented NLW weapons. Taking NLW out of their law enforcement niche and creating technologies that will answer military requirements should not pose an enormous technological gap; it is mainly a question of political pressure put on the military establishment to make things right – i.e. minimise civilian casualties to a maximum possible minimum.

²⁷ Dan Parsons, ‘Army, Marine Corps Succeed in Rapidly Fielding Specialized Individual Weapons (UPDATED)’, *National Defence*, January 2013.

²⁸ The U.S. Army Program Executive Office Soldier, *Equipment Portfolio*, 2014; Joint Non-Lethal Weapons Program, *Annual Report*, 2012, p.9.

²⁹ See Security Planning Corporation, *Non-Lethal weapons for Law Enforcement: Research Needs and Priorities: A Report to the National Science Foundation*, (Washington: Security Planning Corporation, 1972).

³⁰ United States Government Accountability Office (GAO), *DOD Needs to Improve ...*

³¹ Joint Non-Lethal Weapons Directorate, *Current Non-Lethal Weapons*, <http://jnlwp.defense.gov/CurrentNonLethalWeapons.aspx>, [accessed: 27 August 15]; Joint Non-Lethal Weapons Directorate, *Developing Non-Lethal Weapons*, <http://jnlwp.defense.gov/DevelopingNonLethalWeapons.aspx>, [accessed: 27 August 15].

³² National Security Council, *An Assessment of Non-Lethal Weapons Science and Technology*, (Washington: National Academies Press, 2003), p.99.

Part Two: American Foreign Policy and International Criticism

It has been much thought and written about the U.S. foreign policy. Different scholars have discussed it from different perspectives developing different ways of analysis. Some decided to divide the history and development of the American foreign policy by administrations, analysing the approach of specific presidents,³³ or comparing between them,³⁴ others examined different persistent narratives of the U.S. foreign policy through history.³⁵ Some focused more on the relations between the U.S. and its main allies;³⁶ and others focused on the American foreign policy and its main foes.³⁷ Some of these researchers generally praised American performance³⁸ and some others were more critical.³⁹ The main purpose of this research, however, is not to take a side in this highly intellectual debate, but rather to focus on the main inherent mechanisms of the U.S. foreign policy intended to deal with international criticism, in general, and regarding civilian casualties caused by the American military, in particular.

Though the main emphasis of this chapter is on current affairs and how the U.S. policymakers deal with international criticism, in the second decade of the 21st century, it seems important to begin this analysis with different trends and narratives developed during the period

³³ For example see: James Giglio, *The Presidency of John F. Kennedy*, (Lawrence: University Press of Kansas, 1991); Laurence Barrett, *Gambling with History: Ronald Reagan in the White House*, (Garden City: Doubleday, 1983); Stephen Cimbala, (ed.), *The George W. Bush Defense Program: Policy, Strategy & War*, (Washington: Potomac Books, 2010).

³⁴ For example see: Richard Melanson, *American Foreign Policy since the Vietnam War: The Search for Consensus from Richard Nixon to George W. Bush*, 4th edition, (New York: M.E. Sharpe, 2005); Cecil Crabb, Jr., *The Doctrines of American Foreign Policy*, (Baton Rouge: Louisiana State University Press, 1982); John Spanier, Steven Hook, *American Foreign Policy since World War II*, 13th edition, (Washington: Congressional Quarterly Inc, 1995).

³⁵ For example see: Michael Hunt, *Ideology and the U.S. Foreign Policy*, (New Haven: Yale University Press, 1987); James Meernik, *The Political Use of Military Force in US Foreign Policy*, (Aldershot: Ashgate Publishing Limited, 2004).

³⁶ For example see: Philip Gordon, Jeremy Shapiro, *Allies at War: America Europe and the Crisis over Iraq*, (New York: McGraw-Hill, 2004); John Peterson, Mark Pollack, (ed.), *Europe, America, Bush: Transatlantic Relations in the Twenty-First Century*, (London: Routledge, 2003); Robert Kagan, *Paradise & Power: America and Europe in the New World Order*, Revised and Expanded Edition, (London: Atlantic Books, 2004).

³⁷ See for example: Gordon Chang, *Friends and Enemies: The United States, China, and the Soviet Union, 1948-1972*, (Stanford: Stanford University Press, 1990); Norman Graebner, Richard Burns, and Joseph Siracusa. *Reagan, Bush, Gorbachev: revisiting the end of the Cold War*, (Westport: Greenwood Publishing Group, 2008); Donette Murray, *US foreign policy and Iran: American-Iranian relations since the Islamic revolution*, (New York: Routledge, 2009).

³⁸ For example see: Andrew Bacevich, (ed.), *The Imperial Tense: Prospects and Problems of American Empire*, (Chicago: Ivan R. Dee, 2003).

³⁹ For example see: Robert Kagan, William Kristol, (ed.), *Present Dangers: Crisis and Opportunity in American Foreign and Defense Policy*, (San Francisco: Encounter Books, 2000).

of the Cold War, as an understanding of these trends is vital to the analysis of contemporary American behaviour on the international arena.⁴⁰

At the end of Second World War, while the European countries, the Soviet Union and Japan – the great powers of the Second World War – were devastated, America emerged from the war relatively unscathed finding itself as the dominant political, economic and military power.⁴¹ The relations between the former allies – the U.S. and the U.S.S.R. – rapidly deteriorated. Influenced by the American foremost expert on the Soviet Union, George Kennan, President Harry Truman, on 12 March 1947, not only revealed the main American enemy: “totalitarian regimes imposed on free people [i.e. the Soviet Union] undermine the foundation of international peace and hence the security of the United States,” but also articulated the narrative that will shape the American foreign policy for decades to come: “I believe that we must assist free peoples to work out their own destinies.”⁴² The American-Soviet rivalry of the Cold War and the American sense of manifest destiny “to support free peoples who are resisting attempted subjugation by armed minorities or by outside pressures”⁴³ dominated world politics for nearly half a century and was at the centre of American foreign policy not only directly *vis-à-vis* Moscow, but all around the world.

Since then, the combination of these two narratives – America as *the protector of the free world* against *a great evil* – have shaped American foreign policy, as President Dwight D. Eisenhower put it at the dawn of the Vietnam War: “We must maintain a common worldwide defense against the menace of International Communism [i.e., *great evil*] And we must demonstrate and spread the blessing of liberty [i.e., *protecting freedom*]”⁴⁴ As these two narratives remained at the focus of American foreign policy for the entire period of the Cold War, each one of these deserves a more detailed discussion.

In his famous article “The Sources of Soviet Conduct” Kennan suggested two main directions for American foreign policy regarding the Soviet Union: (1) “the main element of any United States policy toward the Soviet Union must be that of a long-term, patient but firm

⁴⁰ Richard Betts, *American Force: Dangers, Delusions, and Dilemmas in National Security*, (New York: Columbia University Press, 2013), Chapters 1-4.

⁴¹ John Spanier, Steven Hook, *American Foreign Policy...*, p. 21.

⁴² Harry Truman, *Special Message to the Congress on Greece and Turkey*, Washington, 12 March 1947, <http://www.presidency.ucsb.edu/ws/index.php?pid=12846&st=truman&st1=special+message>, [accessed: 21 June 2015].

⁴³ Harry Truman, *Special Message to the Congress...*

⁴⁴ Dwight Eisenhower, *Radio and Television Address to the American People on the Need for Mutual Security in Waging the Peace*, Washington, 21 May 1957, <http://www.presidency.ucsb.edu/ws/index.php?pid=11042&st=&st1>, [accessed: 21 June 2015].

and vigilant containment of Russian expansive tendencies,” and (2) “American people ... accepting the responsibilities of moral and political leadership that history plainly intended them to bear.”⁴⁵ These two were highly emphasised by Truman and Eisenhower and continued to dominate American foreign policy for the rest of the Cold War.

President Kennedy was defending “the entire Western Hemisphere” from the “Soviet threat to world peace”⁴⁶ and was ready to “pay any price, bear any burden, meet any hardship, support any friend, oppose any foe to assure the survival and the success of liberty.”⁴⁷ President Johnson was “concerned with threats to the peace and security of the peoples of southeast Asia” coming from “the Communist government of North Viet-Nam”⁴⁸ as “there is no one else who can do the job. Our [American] power alone in the final test can stand between expanding communism and independent Asian nations.”⁴⁹ President Nixon believed that although “the defense and progress of other countries must be first their responsibility” facing “the emerging polycentrism of the Communist” the role of the U.S. “remains indispensable,”⁵⁰ and President Ford promised that “the United States will fulfil its responsibilities as a leader among nations.”⁵¹ While President Carter famously stated that he has “no fear of communism and no inordinate concern about communism,” he saw the “inherent strength of the United States... [as] superior to that of the Soviet Union” and was ready “to act promptly and decisively to help countries whose security is threatened by external forces [i.e., Communism].”⁵² President Reagan, was concerned about “becoming powerless to deter or counter Soviet aggression around the world” and had been unable to “assist friendly

⁴⁵ “X” [George Kennan], ‘The Sources of Soviet Conduct’, *Foreign Affairs*, Vol. 25, No. 4, 1947, pp. 566-582.

⁴⁶ John Kennedy, *Radio and Television Report to the American People on the Soviet Arms Buildup in Cuba*, Washington, October 22, 1962, http://www.jfklibrary.org/Research/Research-Aids/JFK-Speeches/Cuba-Radio-and-Television-Report_19621022.aspx, [accessed: 22 June 15].

⁴⁷ John Kennedy, *Inaugural Address*, Washington, 20 January 1961, <http://www.presidency.ucsb.edu/ws/?pid=8032>, [accessed: 23 June 2015].

⁴⁸ Lyndon Johnson, *Remarks at Syracuse University on the Communist Challenge in Southeast Asia*, New York, 5 August 1964, <http://www.presidency.ucsb.edu/ws/?pid=26419>, [accessed: 22 June 2015].

⁴⁹ Lyndon Johnson, *Remarks to Committee Members on the Need for Additional Appropriations for Military Purposes in Viet-Nam and the Dominican Republic*, Washington, 4 May 1965, <http://www.presidency.ucsb.edu/ws/?pid=26938>, [accessed: 22 June 2015].

⁵⁰ Richard Nixon, *Second Annual Report to the Congress on United States Foreign Policy*, Washington, 25 February 1971, <http://www.presidency.ucsb.edu/ws/?pid=3324>, [accessed: 22 June 2015].

⁵¹ Gerald Ford, *Address Before a Joint Session of the Congress Reporting on the State of the Union*, Washington, 15 January 1975, <http://www.presidency.ucsb.edu/ws/?pid=4938>, [accessed: 22 June 2015].

⁵² Jimmy Carter, *The President's News Conference*, Chicago, 25 May 1978, <http://www.presidency.ucsb.edu/ws/?pid=30852>, [accessed: 22 June 2015].

governments facing threats from the Soviet Union, its surrogates, and from other radical regimes.”⁵³

And then the Cold War came to an end. Already at the end of 1989, in his final message, President Reagan was “confident that relations between our two countries [the U.S. and the U.S.S.R.] will continue on the positive” and that “we have been able to find some common ground.”⁵⁴ His successor, President Bush, observing the collapse of the Soviet Empire cautiously stated that the “whole policy for the United States ... will be to watch for those changes and try to facilitate them and work with those who are willing to move towards freedom and democracy.”⁵⁵ Bush, whose political views were shaped by the strategy of containment, felt very uncomfortable trying to design a new strategy for the rapidly changing world. His main problem was best formulated by an American commentator, Norman Ornstein: “What does a superpower do in a world no longer dominated by superpower conflict?”⁵⁶ With the disappearance of the communist *great evil*, the Bush team of closest advisers, who by themselves were a product of the Cold War and, in fact, were more prepared to contain the non-existent Soviet Union, rather than reshape America’s international agenda in the new world,⁵⁷ tried to stick to the Cold War dogma. Dealing with the Persian Gulf Crisis in 1991, the Iraqi President Saddam Hussein was described as the “worldwide threat to democracy” against whom America was “ready to use force to defend a new order emerging among the nations of the world – a world of sovereign nations living in peace.”⁵⁸

An attempt to define a new *great evil*, however, was not an easy task. While the case of Iraq eventually corresponded with both of the traditional narratives of American foreign policy, in other cases the Bush administration had to compensate the lack of *an evil enemy*, by amplifying the second narrative of the U.S. as *the protector* of freedom and peace: “in a world where we are the only remaining superpower, it is the role of the United States to marshal its moral and material resources to promote a democratic peace. It is our responsibility, it is our

⁵³ Ronald Reagan, *Message to the Congress Transmitting the Fiscal Year 1984 Budget*, Washington, 31 January 1983, <http://www.presidency.ucsb.edu/ws/?pid=40539>, [accessed: 22 June 2015].

⁵⁴ Ronald Reagan, *New Year's Messages of President Reagan and President Mikhail Gorbachev of the Soviet Union*, Washington, 1 January 1989, <http://www.presidency.ucsb.edu/ws/?pid=35313>, [accessed: 22 June 2015].

⁵⁵ George Bush, *The President's News Conference Following the North Atlantic Treaty Organization Summit Meeting in Brussels*, Brussels, 30 May 1989, <http://www.presidency.ucsb.edu/ws/?pid=17077>, [accessed: 22 June 2015].

⁵⁶ Norman Ornstein, ‘Foreign Policy and the 1992 Elections’, *Foreign Affairs*, Vol. 72, No. 3, 1992, pp. 1-16.

⁵⁷ Richard Melanson, *American Foreign Policy since the Vietnam War...*, pp. 200-222.

⁵⁸ George Bush, *Radio Address to the Nation on the Persian Gulf Crisis*, Washington, 5 January 1991, <http://www.presidency.ucsb.edu/ws/?pid=19193>, [accessed: 22 June 2015].

opportunity to lead. There is no one else.”⁵⁹ This amplification is best demonstrated by the American involvement in the 1989 Philippine coup attempt, which was described as a move “to safeguard democracy in the Philippines;” the 1989 Invasion of Panama that was advocated as the protection of “the security of the Canal;” and the 1992 U.S. involvement in Somalia that was an attempt to “stem this human tragedy of Somalia.”⁶⁰

The outcome of the 1992 elections symbolised George Bush’s failure to read the American voters’ hearts in a world without a Soviet threat. Americans decided to give a chance to Bill Clinton, not because of his (mostly lacking) experience in foreign affairs, but because it seemed that he, unlike Bush, knew how to deal with American problems at home.⁶¹ And, though, it was interpreted as if the U.S. had lost its “missionary zeal”, the narratives of Clinton’s foreign policy did not differ much from his predecessor. Clinton, indeed, put much effort to make the U.S. economic agenda as a centrepiece of his foreign policy successfully promoting the North American Free Trade Agreement (NAFTA), the Asia-Pacific Economic Cooperation (APEC) and the General Agreement on Tariffs and Trade (GATT).⁶² American military involvement during the Clinton presidency, however, proved that America had no intentions of abandoning the world. Clinton was the first American president in a truly post-Cold War world and the narrative of *the great evil* definitely did not suit any more. In the absence of other alternatives, the Clinton administration had to persist with the maintaining of the remaining Cold War narrative of America as *the protector of free people and democracy*.

Clinton inherited the conflict in Somalia from George Bush and could not immediately withdraw American forces from this troubled intervention, therefore, he continued to explain that “we went to Somalia because without us a million people would have died. We, uniquely, were in a position to save them.”⁶³ The following American reaction in 1999 to the conflict in the Balkans persisted to promote this narrative: “We act to protect thousands of innocent people in Kosovo from a mounting military offensive. We act to prevent a wider war, to diffuse a powder keg at the heart of Europe that has exploded twice before in this century with

⁵⁹ George Bush, *Remarks at the United States Military Academy in West Point*, New York, West Point, 5 January 1993, <http://www.presidency.ucsb.edu/ws/?pid=20414>, [accessed: 22 June 2015].

⁶⁰ George Bush, *Remarks at the United States Military Academy in West Point...*

⁶¹ Michael Cox, *US Foreign Policy after the Cold War: Superpower Without a Mission?*, (London: Royal Institute of Foreign Affairs, 1995), p. 12.

⁶² Michael Cox, *US Foreign Policy after the Cold War...*, pp. 29-36; John Spanier, Steven Hook, *American Foreign Policy...*, p. 265 – 268.

⁶³ William Clinton, *Message to the Congress Transmitting a Report on Somalia*, Washington, 13 October, 1993, <http://www.presidency.ucsb.edu/ws/?pid=47197>, [accessed: 22 June 2015].

catastrophic results.”⁶⁴ Unlike Bush who rushed to title Saddam as “an unusual and extraordinary threat,”⁶⁵ Clinton was very cautious in playing the narrative of *a great evil* – describing Milošević’s activity in Kosovo he hesitated to use the term “genocide”.⁶⁶ It did not stop him, however, from emphasising the narrative of America as *the protector of free people and democracy*, as “ending this tragedy is a moral imperative” and “America has a responsibility ... to save innocent lives and preserve peace, freedom, and stability in Europe.”⁶⁷

The arrival of the new millennium did not forecast any significant changes for American foreign policy. Bush Junior, like Clinton before him, struggled to find a proper *great evil* at a time when Eurasia’s greatest powers that had a potential to challenge “the peace” that America had sought – China was only a “competitor” and the U.S., in fact, was “Russia’s ally in self-reform.”⁶⁸ Consequently, it is not surprising that from the beginning of his presidential campaign, his vision of American foreign policy was shaped mainly by America’s success as *the protector (and promoter) of free people and democracy*:

Our world, shaped by American courage, power and wisdom, now echoes with American ideals. We won a victory, not just for a nation, but for a vision. A vision of freedom and individual dignity – defended by democracy, nurtured by free markets, spread by information technology, carried to the world by free trade. The advance of freedom – from Asia to Latin America to East and Central Europe – is creating the conditions for peace.⁶⁹

Then, on the morning of 11 September 2001, the presidency of George W. Bush, as well as American foreign policy, were turned upside down by two hijacked airplanes that brought down the World Trade Centre in Manhattan and a third that seriously damaged the Pentagon. Later that day, in his Address to the Nation, Bush stressed that “today our Nation saw evil, the very worst of human nature” but “we go forward to defend freedom and all that is good and just in our world.”⁷⁰ In this speech he emphasised that America is not any more *the protector of free people and democracy* against no enemy, as it was in the previous decade; but

⁶⁴ William Clinton, *Address to the Nation on Airstrikes Against Serbian Targets in the Federal Republic of Yugoslavia (Serbia and Montenegro)*, Washington, 24 March 1999, <http://www.presidency.ucsb.edu/ws/?pid=57305>, [accessed: 23 June 2015].

⁶⁵ George Bush, *Letter to Congressional Leaders Reporting on the National Emergency With Respect to Iraq*, Washington, 11 February 1991, <http://www.presidency.ucsb.edu/ws/?pid=19295>, [accessed: 23 June 2015].

⁶⁶ William Clinton, *Interview With Dan Rather of CBS News*, Washington, 31 March 1999, <http://www.presidency.ucsb.edu/ws/?pid=57340>, [accessed: 23 June 2015].

⁶⁷ William Clinton, *Address to the Nation on Airstrikes Against Serbian Targets...*

⁶⁸ George Bush, *A Distinctly American Internationalism*, Simi Valley, 19 November, 1999, <http://fas.org/news/usa/1999/11/991119-bush-foreignpolicy.htm>, [accessed: 23 June 2015].

⁶⁹ George Bush, *A Period of Consequences*, Charleston, 23 September 1999, http://fas.org/spp/starwars/program/news99/92399_defense.htm, [accessed: 23 June 2015].

⁷⁰ George Bush, *Address to the Nation on the Terrorist Attacks*, Washington, 11 September 2001, <http://www.presidency.ucsb.edu/ws/?pid=58057>, [accessed: 23 June 2015].

there is a *great evil* – “terrorists who committed these acts and those who harbour them.”⁷¹ After 9/11, the Bush Administration rediscovered the two main foreign policy narratives of the Cold War - America is *the protector of the free world against a great evil*, with the only difference that Soviet Communism was replaced by International Terrorism. Both narratives of the Cold War foreign policy were, undoubtedly, brought back by Bush after 9/11 as the declared Global War on Terror was to “lift a dark threat of violence ... [and] rally the world ... by our efforts, by our courage.”⁷²

Moreover, in an addition to the Cold War legacy in the American foreign policy, after the devastating attacks on American soil, Bush enjoyed the same unlimited freedom of action as Franklin D. Roosevelt did after the Pearl Harbour attack 60 years earlier. But, while Roosevelt’s *evils* were just “arrogant rulers whose selfish purpose is to destroy free institutions”⁷³ (i.e., Japan, Germany and Italy), Bush’s *great evils* were infused by the Cold War heritage:⁷⁴ on a general level there was the Islamic radicalism that “like the ideology of communism ... is dismissive of free peoples,”⁷⁵ and on a personal level there was Saddam Hussein who was “a student of Stalin, using murder as a tool of terror and control.”⁷⁶

The following American interventions, in Afghanistan in 2001 and Iraq in 2003, were presented not only as “monumental struggle of good versus evil,”⁷⁷ but, maximising the narrative of *protector of freedom and democracy*, Afghan people were promised help “in this time of confusion and crisis in their country,”⁷⁸ and the Iraqi people, once “freed from the weight of oppression,” were assured of “help [to] rebuild their economy and create the institutions of liberty in a unified Iraq at peace with its neighbours.”⁷⁹ Consequently, it is not surprising that the intervention in Afghanistan was quickly renamed from initial “Operation Infinite Justice” to a one more suitable with foreign policy goals “Operation Enduring

⁷¹ George Bush, *Address to the Nation...*

⁷² George Bush, *Address Before a Joint Session of the Congress on the United States Response to the Terrorist Attacks of September 11*, Washington, 20 September 2001, <http://www.presidency.ucsb.edu/ws/?pid=64731>, [accessed: 23 June 2015].

⁷³ Franklin Roosevelt, *Christmas Eve Message to the Nation*, Washington, 24 December 1941, <http://www.presidency.ucsb.edu/ws/?pid=16073>, [accessed: 24 June 2015].

⁷⁴ Martin Shaw, *The New Western Way of War*, (Cambridge: Polity Press, 2005), pp.24-25.

⁷⁵ George Bush, *Remarks to the National Endowment for Democracy*, New York, 6 October 2005, <http://www.presidency.ucsb.edu/ws/?pid=73821>, [accessed: 24 June 2015].

⁷⁶ George Bush, *Address to the Nation on Iraq From Cincinnati, Ohio*, Cincinnati, 7 October 2002, <http://www.presidency.ucsb.edu/ws/?pid=73139>, [accessed: 24 June 2015].

⁷⁷ George Bush, *Remarks Following a Meeting with the National Security Team*, Washington, 12 September 2001, <http://www.presidency.ucsb.edu/ws/?pid=58058>, [accessed: 24 June 2015].

⁷⁸ George Bush, *The President's Radio Address*, Washington, 6 October 2001, <http://www.presidency.ucsb.edu/ws/?pid=24998>, [accessed: 24 June 2015].

⁷⁹ George W. Bush, *Address to the Nation on Iraq From Cincinnati...*

Freedom” (though the given reason for the change was to sidestep the objections in the Muslim world to the first title),⁸⁰ and the intervention in Iraq from the very beginning was dubbed “Operation Iraqi Freedom”. Despite the rising opposition to the lengthening interventions in Iraq and Afghanistan,⁸¹ in 2004, Bush was re-elected for the second term, persisting with the narratives of American fight against a *great evil* to *protect the free world*: “Our military has brought justice to the enemy and honor to America. Our Nation has defended itself and served the freedom of all mankind.”⁸²

Undoubtedly, the maintenance of these two narratives played an important role assisting in fending off criticism of American policies. One of the best examples is the case of the Guantanamo Bay Detention Camp – “a safe and secure location to detain and interrogate enemy combatants”⁸³ established after the beginning of the Iraqi and Afghani campaigns. Almost immediately after its establishment, the Guantanamo Camp fell under extensive criticism from the international community. For example, German Chancellor Angela Merkel said in 2006 that “an institution like Guantanamo in its present form cannot and must not exist ... We must find different ways of dealing with prisoners,”⁸⁴ and Irene Khan, the Secretary General of Amnesty International, stated in the foreword to the 2005 Annual Report that “the detention facility at Guantanamo Bay has become the gulag of our times, entrenching the practice of arbitrary and indefinite detention in violation of international law.”⁸⁵ To fend off the rising international criticism that protested the legal status and physical condition of detainees at Guantanamo Camp, American leadership firmly persisted with the narratives of fighting the *great evil* to *protect the free world*. Defending the existence of the detention camp, Bush stated in 2006 that the people, who were held at Guantanamo, “aren't common criminals or bystanders accidentally swept up on the battlefield, [but] suspected bombmakers, terrorist trainers, recruiters and facilitators, and potential suicide bombers ... and individuals involved

⁸⁰ ‘Infinite Justice, out - Enduring Freedom, in’, *BBCNews*, 25 September 2001, <http://news.bbc.co.uk/1/hi/world/americas/1563722.stm>, [accessed: 24 June 2015].

⁸¹ For example see: John Newhouse, *Imperial America: The Bush Assault on the World Order*, (New York: Vintage Books, 2004); Howard Zinn, *The Unravelling of the Bush Presidency*, (New York: Seven Stories Press, 2007); Melvyn Leffler, Jeffrey Lergo (ed.), *To Lead the World: American Strategy after the Bush Doctrine*, (Oxford: Oxford University Press, 2008).

⁸² George Bush, *Remarks in a Victory Celebration*, Washington, 4 November 2004, <http://www.presidency.ucsb.edu/ws/index.php?pid=62664>, [accessed: 24 June 2015].

⁸³ Donald Rumsfeld, *DoD News Briefing with Secretary Rumsfeld and General Pace*, Washington, 14 June 2005, <http://archive.defense.gov/Transcripts/Transcript.aspx?TranscriptID=3854>, [accessed: 24 June 2015].

⁸⁴ ‘SPIEGEL Interview: Merkel: Guantanamo Mustn't Exist in Long Term’, *Spiegel International Online*, January 09, 2006, <http://www.spiegel.de/international/spiegel-interview-merkel-guantanamo-mustn-t-exist-in-long-term-a-394180.html>, [accessed: 24 June 2015].

⁸⁵ Amnesty International, *Amnesty International Report 2005*, <http://web.amnesty.org/report2005/index-eng>, [accessed: 24 June 2015].

in other attacks that have taken the lives of innocent civilians across the world” and that keeping them there and questioning them “has given us information that has saved innocent lives by helping us stop new attacks, here in the United States and across the world.”⁸⁶

President Barak Obama, who replaced Bush in 2008, had already during his election campaign described the Guantanamo Camp as a "sad chapter in American history" and promised to close it.⁸⁷ The real reason behind this attempt, however, probably was an outcome of internal political sparring, rather than the result of international pressure. Newly elected, Obama was looking for an opportunity to criticise Bush and advocated the closure of the camp because “our [previous] government made a series of hasty decisions ... based upon fear rather than foresight, and all too often trimmed facts and evidence to fit ideological predispositions.”⁸⁸ Though Obama’s vision of foreign policy was seen by many as a U-turn away from the core principles of Bush’s worldview, he was not a “non-interventionist calling for a retreat to Fortress America.”⁸⁹ On the one hand, Obama, unlike Bush, demonstrated high reluctance to embrace physical humanitarian intervention facing different crises (e.g., the Arab Spring events in 2011 and the following lengthening Syrian Civil War; the rise of the Islamic State of Iraq and the Levant (ISIL) on the territories of Iraq and Syria; the Ukrainian Revolution in 2014 and the following Russian annexation of Crimea). On the other hand, in many ways the relationship between Bush’s and Obama’s foreign policy rhetoric is marked more by continuity, rather than change. After all, the *great evil* was still there:

Russian aggression in Europe recalls the days when large nations trampled small ones in pursuit of territorial ambition. The brutality of terrorists in Syria and Iraq forces us to look into the heart of darkness.⁹⁰

As well as the American duty to *protect the free world*:

I can promise you that the United States of America will not be distracted or deterred from what must be done. We are heirs to a proud legacy of freedom, and we’re prepared to do what is necessary to secure that legacy for generations to come.⁹¹

⁸⁶ George Bush, *Remarks on the War on Terror*, Washington, 6 September 2006, <http://www.presidency.ucsb.edu/ws/index.php?pid=779>, [accessed: 24 June 2015].

⁸⁷ Alex Spillius, ‘Barack Obama 'proposes to move terrorists suspects from Guantanamo Bay’’, *The Telegraph*, 10 Nov 2008, <http://www.telegraph.co.uk/news/worldnews/northamerica/usa/3417913/Barack-Obama-proposes-to-move-terrorists-suspects-from-Guantanamo-Bay.html>, [accessed: 24 June 2015].

⁸⁸ Barack Obama, *Remarks at the National Archives and Records Administration*, Washington, May 21 2009, <http://www.presidency.ucsb.edu/ws/?pid=86166>, [accessed: 24 June 2015].

⁸⁹ James M. Lindsay, ‘George W. Bush, Barack Obama and the future of US global leadership’, *International Affairs*, Vol. 87, No. 4, 2011, pp. 765–779.

⁹⁰ Barack Obama, *Remarks to the United Nations General Assembly in New York City*, New York, September 24 2014, <http://www.presidency.ucsb.edu/ws/index.php?pid=107615>, [accessed: 24 June 2015].

⁹¹ Barack Obama, *Remarks to the United Nations General Assembly...*

Since the end of the Second World War, and especially since the end of the Cold War, the U.S. has been enjoying a position of unprecedented economic, technological, political, and above all military power. While many scholars accuse the Americans of imperial ambitions, the establishment of a unipolar world and becoming a “New Rome”,⁹² others argue that the U.S. enjoys the position of leadership, rather than autocracy, and it has to work hard to preserve it.⁹³ Since the mid-20th century the United States has considered itself as “the leader of European-American civilization against upstart challengers to that civilization,”⁹⁴ first Nazi Germany and Imperial Japan, then Soviet Communism and, finally, Global Terrorism. Consequently, it is not surprising that American leaders continuously have addressed their country as *the protector of the free world against the great evil*. While this demonstration of good will, undoubtedly, helped Americans to fend off some of the international criticism, especially the one originating outside the “free world”, it was not enough to create a politically acceptable environment for American military operation. The additional mechanism that helped American leadership to facilitate hostile international opinion has always been their ability to create alliances and coalitions as a part of their strategy, thus minimising the pool of possible criticsers and spreading the remaining criticism among as many players as possible.⁹⁵

In the American view of the international relations, alliances have a special place as they not only “presumably transcend and subordinate separate national interests,” but also “represent indigenous harmony and initiative”⁹⁶ allowing the United States to be the first amongst several “equal” partners. While in both World Wars the U.S. was a latecomer and naturally joined the existent alliances, since the beginning of the Cold War, the American leadership have paid great efforts to attract as many potential partners as possible to support American actions in any possible way: militarily, materially or just verbally.

An interesting point is that since Korea and Vietnam, through to the Gulf War, and up to the wars in Afghanistan and Iraq (with probably one exception, Kosovo)⁹⁷ the United States overwhelmingly dominated its allies not only in terms of military power, but also in the

⁹² John Ikenberry, ‘America’s Imperial Ambitions’, *Foreign Affairs*, Vol. 81, No. 5, 2002, pp. 44-60; Andrew Bacevich, (ed.), *The Imperial Tense...*

⁹³ Melvyn Leffler, Jeffrey Lergo (ed.), *To Lead the World...*

⁹⁴ Samuel Huntington, ‘The Erosion of American National Interests’, *Foreign Affairs*, Vol. 76, No. 5, 1997, p. 30.

⁹⁵ Eliot Cohen, ‘Kosovo and the New American Way of War’, in Andrew Bacevich, Eliot Cohen, (ed.), *War over Kosovo*, (New York: Columbia University Press, 2001), p.51.

⁹⁶ Robert Osgood, *Alliances and American Foreign Policy*, (Baltimore: The John Hopkins Press, 1968), p. 2.

⁹⁷ Andrew Bacevich, Eliot Cohen, (ed.), *War over Kosovo...*

decision-making process regarding the direction of the war.⁹⁸ It is not the military forces that the U.S. wanted most from their allies, but their politically visible support, as President Johnson told the British Prime Minister Wilson in 1966, after the U.K. declined to send troops to Vietnam: “a platoon of bagpipers would be sufficient; it was the British flag that was wanted.”⁹⁹ From the American viewpoint, the major role of the “coalition of willing” is sharing the political burden of the military action, rather than the physical one. American leadership, on the one hand, has always desired to preserve its freedom of action, while, on the other, it wanted to enjoy the political benefits of collective actions dispersing the political responsibility and potential consequential liability. For that reason, the American first choice of action was not working through formal institutions and alliances (e.g., NATO) that consists of players who do not necessarily share the American desire and tend to bargain for their political support, but to establish an ad-hoc multinational cooperation with international players, who were ready, due to their own interests, to comply with the American subduing leadership.¹⁰⁰ The American interventions in Afghanistan in 2001, and in Iraq in 2003, are very good examples (the first was very successful, the second almost a failure) of this mechanism to minimise international political pressure.

In the aftermath of the 9/11 attacks, the international community expressed a strong solidarity with the U.S. While immediately after the attacks NATO invoked Article 5 and offered assistance, the American reaction was lukewarm. Bush’s administration, enjoying an overwhelming international support,¹⁰¹ desired immediate action and did not want to complicate decision-making process with NATO bureaucratic procedures and slow the pace of operation. The American determination to act outside the NATO framework, taking aboard only partners that were ready to abide to American leadership, was best demonstrated by Donald Rumsfeld, the U.S. Secretary of Defence, who stated in September 2001: “The mission determines the coalition. And the coalition must not be permitted to determinate the mission.”¹⁰² Only in 2003, when U.S. leadership started to attract too much criticism over its uncompromising decision to invade Iraq, Washington began to consider a larger NATO role in

⁹⁸ Eliot Cohen, ‘Kosovo and the New American Way of War’, p. 51; Stanley Sloan, *Permanent Alliance? – NATO and the Transatlantic Bargain from Truman to Obama*, (London: Bloomsbury Publishing, 2010), Chapters 9-11.

⁹⁹ Quoted in Rhiannon Vickers, ‘Harold Wilson, the British Labour Party, and the War in Vietnam’, *Journal of Cold War Studies*, Vol. 10, No. 2, 2008, p.56.

¹⁰⁰ Bruce Jentleson, *American Foreign Policy: The Dynamics of Choice in the 21st Century*, 3rd edition, (New York: W.W. Norton & Company, 2007), pp. 368-369; Philip Gordon, Jeremy Shapiro, *Allies at War...*

¹⁰¹ Martin Shaw, *The New Western Way of War...* p. 25.

¹⁰² Quoted in Stanley Sloan, *Permanent Alliance?...*, p. 187.

Afghanistan, officially transferring the command to the alliance in August 2003.¹⁰³ The main purpose of the Coalition's operational involvement in Afghanistan was not only to lessen the burden of war on the United States, but also to provide the required legitimacy for military activity.¹⁰⁴ In this way, despite the fact that the U.S. remained the main contributor to the International Security Assistance Force (ISAF) in Afghanistan, the political responsibility for the consequences of the military activity was formally shifted to NATO.

The attack on Iraq was a completely different story. Unlike Afghanistan, there was no direct linkage between the 9/11 attacks and Saddam Hussein did nothing (at least in the terms of an immediate threat) to provoke international intervention in his country. Moreover, while the American attack on Afghanistan materialised within 4 weeks after 9/11 (the bombing of Taliban positions and al-Qaeda bases had already begun on 6 October 2001),¹⁰⁵ the idea of attacking Iraq was treading water for a year and half. It is not surprising that many NATO members, such as France, Germany and Turkey, as well as other countries, such as Russia and China, which had backed the U.S. actions in Afghanistan, withdrew their support for the Iraqi campaign.¹⁰⁶ Despite the hollow claim of the U.S. that it had a coalition of some 44 members, in reality, the Washington "coalition of the willing" consisted of the U.S., Britain and Spain, on the political front, and of the U.S., Britain and Australia, who contributed their forces for the action.¹⁰⁷ Compared with Afghanistan, the American attempt to share the burden of political responsibility in the Iraqi War was a complete fiasco. Despite the fact that the British went all the way with Americans come hell or high water, due to their traditional belief in "Special Relationship" with the U.S.,¹⁰⁸ it was mainly Washington, which had to deal with the political consequences on the international arena.¹⁰⁹

The main purpose of this chapter is to understand why the American military does not employ NLW. One of the main assumptions of this research is that international political criticism can be one of the main drivers that would force political leadership to press their military to significantly decrease civilian casualties, i.e., employ NLW. The analysis of the

¹⁰³ Stanley Sloan, *Permanent Alliance?...*, p. 189.

¹⁰⁴ G. K. Herring, 'The War in Afghanistan: A Strategic Analysis', in Williamson Murray (ed.), *National Security Challenges for the 21st Century*, (Carlisle: US Army War College, 2003), p. 178.

¹⁰⁵ Martin Shaw, *The New Western Way of War...* p. 26.

¹⁰⁶ David Malone, *The International Struggle Over Iraq: Politics and the UN Security Council 1980-2005*, (Oxford: Oxford University Press, 2006), Chapter 7.

¹⁰⁷ Michael Clarke, 'The Diplomacy that Led to War in Iraq', in Paul Cornish, (ed.), *The Conflict in Iraq, 2003*, (New York: Palgrave Macmillan, 2004).

¹⁰⁸ Jane Sharp, 'The US-UK 'Special Relationship' after Iraq', in Paul Cornish, (ed.), *The Conflict in Iraq...*

¹⁰⁹ Samantha Power, 'Legitimacy and Competence', in Melvyn Leffler, Jeffrey Lergo (ed.), *To Lead the World...*

different mechanisms of American foreign policy presented above, and the ways in which Washington fends international criticism off, clearly shows the independence of American military activity from international pressure.

American political-military decision-makers are not meaningfully preoccupied by international public opinion for several major reasons. First, there are structural conditions that improve the U.S. ability to act without the political approval of the rest of the world: the size and vitality of the American economy and its military might; the lack of political unity within Europe; and Russia that still struggles to recover its positions in the global arena.¹¹⁰ Referring to the Bush decision to go to war in Iraq without explicit UN backing, UN Secretary General Kofi Annan accused Washington of “proliferation of the unilateral and lawless use of force, with or without justification.”¹¹¹ Even this unambiguous criticism, however, did not stop the U.S. from invading Iraq.

The second reason is the fact that after World War II the United States defined itself as the leader of the democratic free world. As it was discussed above, the narrative of the U.S. as *the protector of the free world* against *the great evil* has dominated the American foreign policy from the Cold War until today. While at the end of the Cold War, Gorbachev's adviser Georgiy Arbatov said that: "We are doing something really terrible to you – we are depriving you of an enemy;"¹¹² new great evils have been continuously reinvented – Soviet Communism was replaced by Global Terrorism, and Global Terrorism seems to have been replaced by ISIL and, probably, Putin's Russia. The success of American leadership to maintain the principle that “we are good”¹¹³ significantly eased international pressure on American political decision-makers. From 2002 to 2006 only, approximately 200,000 people were killed as a result of the

¹¹⁰ Robert Jervis, *American Foreign Policy in a New Era*, (New York: Routledge, 2005).

¹¹¹ Quoted in Dana Milbank, ‘At UN, Bush Is Criticised over Iraq’, *The Washington Post*, 24 September 2003, <http://www.washingtonpost.com/archive/politics/2003/09/24/at-un-bush-is-criticized-over-iraq/a8b7d7eb-15be-4b47-a197-6275867a26e7/>, [accessed: 24 June 2015].

¹¹² Quoted in Samuel P. Huntington, ‘The Erosion of American National Interests...’.

¹¹³ Noam Chomsky, *Interventions*, (London: Penguin Group, 2007), pp.101-103.

violence of the war that began with the U.S. invasion of Iraq¹¹⁴ - it seems that the U.S. has emerged relatively clear from any significant political consequences.¹¹⁵

The third and final reason is the success of Washington to recruit other countries, even if only by flying their flags, sharing the political responsibility and minimising international pressure. Avoiding the slow negotiation within existing bureaucratic alliances and utilising the national interests of independent nations, which try to cash in the coin of their own political advantages from supporting the U.S., Washington succeeds to defuse international criticism and continue with the course of its military actions.

The combination of these three narratives of the American foreign policy allows American decision-makers to be relatively relaxed about their military performance regarding enemy civilian casualties and they feel no need for fundamental changes to make their military less lethal. With this absence of significant external political need, the only factor that has the potential to influence American leadership to change its mind is political pressure from home, in other words, domestic opposition that values enemy's population. To understand the prospects (or lack of them) of such internal political pressure, it is important to analyse the American cultural perspective on war and the extent to which American people appreciate human life – their own, as well as the lives of their enemies.

Part Three: American Culture and Civilian Casualties

Defining the American Mind, Henry Steele Commager famously stated that it is “the product of an interplay of [the American] inheritance and environment, both varied and complex.”¹¹⁶ In other words, the American character is a brew of a cramped Europe with its values rooted in Ancient Greece and Rome and the American environment - “the sense of

¹¹⁴ This number is based on a “safe” estimation of the author, as is difficult to estimate the exact number of civilian casualties and various scientific surveys offer different numbers between 150,000 to over one million Iraqis died as a result of conflict during this time. Consequently, the estimation of 200,000 seems to be “safe” enough. See Gilbert Burnham, et al., *The Human Cost of the War in Iraq: A Mortality Study, 2002-2006*, (Baltimore: Johns Hopkins University, 2006); Amir Alkhuzai, et al., ‘Violence-Related Mortality in Iraq from 2002 to 2006’, *New England Journal of Medicine*, Vol. 358, No. 2, 2008, pp. 484–93; ‘More than 1,000,000 Iraqis Murdered’, *Opinion Research Business*, September 2007. For the methodological problems related to calculating civilian casualties during military operations see: Taylor Seybolt, Jay Aronson, Baruch Fischhoff, (ed.), *Counting Civilian Casualties: An Introduction to Recording and Estimating Nonmilitary Deaths in Conflict*, (Oxford: Oxford University Press, 2013).

¹¹⁵ Carl Boggs, ‘Outlaw Nation: The Legacy of U.S. War Crimes’, in Carl Boggs, (ed.), *Masters of War: Militarism and Blowback in the Era of American Empire*, (New York: Routledge, 2003).

¹¹⁶ Henry Commager, *The American Mind: An Interpretation of American Thought and Character Since the 1880's*, (New York: Yale University Press, 1950), p. 3.

spaciousness, the invitation to mobility, the atmosphere of independence, the encouragement to enterprise and to optimism.”¹¹⁷ An analysis of the American cultural context demands an understanding of the fundamental influence of the so called “free land” phenomenon on the minds of European immigrants and how modified inherited institutions and values shaped the “American Way”, “American Dream” and “American Mind”.

The significance of the “free land” concept in shaping American character was highly advanced by renowned American historian Frederic Jackson Turner in his famous paper on “The Significance of the Frontier in American History” that he read before the Chicago meeting of the American Historical Association in 1893. Since then his thesis that “the existence of an area of free land, its continuous recession, and the advance of American settlement westwards, explain American development”¹¹⁸ has been at the centre of a vast discourse among American historians, attracting many supporters, as well as detractors.¹¹⁹ And while it is not the place of this work to take a side in this discourse, the Turner’s thesis seems to have a vital contribution to the understanding of the American culture as “the frontier is the line of most rapid and effective Americanisation.”¹²⁰

The following analysis does not intend to produce the whole picture of the American cultural context, this mission is beyond this work, its narrow purpose is to understand how American history and cultural predispositions have shaped what Americans think about war and enemy civilian casualties. Those who are interested in a broader discussion of the distinctive American way of thought and its influence on the American conduct of war, are advised to focus more on the principal works of American historians that rest at the core of this analysis, such as Henry Steele Commager,¹²¹ Stow Persons,¹²² Daniel Boorstin,¹²³ and Russell Weigley.¹²⁴ In an addition to these classic titles, the following analysis is also based on more

¹¹⁷ Henry Commager, *The American Mind...*, pp. 4-5.

¹¹⁸ Frederic Turner, ‘The Significance of the Frontier in American History’, in George Taylor, (ed.), *The Turner Thesis: Concerning the Role of the Frontier in American History*, (Lexington: D.C. Heath and Company, 1972), p. 3.

¹¹⁹ For example see: Ray Billington (ed.), *The Frontier Thesis: Valid Interpretation of American History?*, (New York: Holt, Rinehart and Winston, 1966); George Taylor, (ed.), *The Turner Thesis...*

¹²⁰ Frederic Turner, ‘The Significance of the Frontier...’, p. 5.

¹²¹ Henry Commager, *The Empire of Reason: How Europe Imagined and America Realized the Enlightenment*, (Garden City: Anchor Press, 1977); Allan Nevins, Henry S. Commager, *America: The Story of Free People*, (Oxford: Clarendon Press, 1966); Henry Commager, *The American Mind...*

¹²² Stow Person, *American Minds. A History of Ideas*, (New York: Henry Holt and Company, 1958).

¹²³ Daniel Boorstin, *The Americans: The Colonial Experience*, (New York: Vintage Books, 1958); Daniel Boorstin, *The Americans: The National Experience*, (New York: Vintage Books, 1965); Daniel Boorstin, *The Americans: The Democratic Experience*, (New York: Vintage Books, 1973).

¹²⁴ Russell Weigley, *The American Way of War*, (Bloomington: Indiana University Press, 1973).

contemporary scholars dealing with the cultural-socio-political context of American history, such as John Grenier,¹²⁵ John Mueller,¹²⁶ Thomas Mahnken¹²⁷ and John Tirman.¹²⁸

Thus, American character is an outcome of the impact of a wilderness environment upon an old established European culture. Although America was settled by immigrants who transplanted cultures centuries old, the New World was genuinely new and different from the Old. And, yet, an understanding of this newness requires a comprehensive knowledge of the cultural baggage brought by first settlers and then waves of immigrants across the Atlantic. Unfortunately, given constraints of space, this research will merely focus on the final product of this “most ambition experiment ever undertaken in the intermingling of peoples”¹²⁹ – the American character.

American Character and the Value of Human Life

The story of America is very much a story of a conquest. In contrast to the European understanding of conquest, when it is a successful outcome of a violent struggle between two counterparts, the conquest that shaped American character was a subjugation of ferity and the darkness of wilderness on behalf of progress and enlightenment. And the most essential and influential part of this expansion was the frontier – “the meeting point between savagery and civilization”¹³⁰ that was “one of the forces which did most to shape American life from the beginning.”¹³¹

With their arrival in North America, Europeans found a continent with a very healthy climate that demanded neither acclimatisation, nor a painful process of adjustment. Moreover, the local inhabitants, were too few and too primitive to imperil the colonisation. With the establishment of the first significant foothold it was quickly acknowledged that life in the New World might be not only prosperous, but it can be obtained by anyone, as it offered a boundless,

¹²⁵ John Grenier, *The First Way of War: American War Making on the Frontier, 1607-1814*, (Cambridge: Cambridge University Press, 2005).

¹²⁶ John Mueller, ‘Public Opinion as a Constrain on U.S. Foreign Policy: Assessing the Perceived Value of American and Foreign Lives’, *unpublished text prepared for presentation at National Convention of International Studies Association at Los-Angeles, California*, 14-18 March, 2000.

¹²⁷ Thomas Mahnken, *Technology and the American Way of War Since 1945*, (New York: Columbia University Press, 2010); Thomas Mahnken, *United States Strategic Culture*, (Washington: Science Applications International Corp, 2006); Thomas Mahnken, ‘The American Way of War in the Twenty-first Century’, *The Review of International Affairs*, Vol. 2, No. 3, 2003, pp.73-84.

¹²⁸ John Tirman, *The Deaths of Others: The Fate of Civilians in America’s Wars*, (Oxford: Oxford University Press, 2011).

¹²⁹ Allan Nevins, Henry Commager, *America: The Story of Free People*, p. VI.

¹³⁰ Frederic Turner, ‘The Significance of the Frontier...’, p. 4.

¹³¹ Allan Nevins, Henry Commager, *America: The Story of Free People*, p. 184.

almost ungraspable for the European mind, “free to take” land.¹³² Since the mid-17th century America acquired the image of a New World, “a potential New Eden in the West,”¹³³ with unlimited wilderness that was just waiting to be conquered. And while this New World offered opportunities, new hopes and potential success for the European immigrant, its main appeal was its limitless resources. In contrast to the Old World that was full of political, social and economic restrictions, built and maintained through centuries, America offered free land, and “so long as free land exists, the opportunity for a competency exists, and economic power secures political power.”¹³⁴

The most important factor in the American conquest of the wilderness was the fact that even with the establishment and the development of the East coast, the promised opportunity of the New World did not stop there – the prospect of free land areas continually existed on the western border of the settled parts of the United States until the end of the 19th century, when “the year 1890 is usually taken to mark the date when there was no more frontier available.”¹³⁵ Undoubtedly, the slow conquest of the West brought with it social and economic limitations to the settled areas, however “whenever capital tended to press upon labour or political restrains to impede the freedom of mass, there was this gate of escape to the free conditions of the frontier.”¹³⁶ The possibility of escaping this burden, the chance of restarting from the beginning – whether from the Old World to the New, or from the established New to the wilderness – exemplifies better than anything else one of the most important characteristics of the American character shaped by the frontier phenomenon – indefinite optimism. One’s past, his mistakes and errors do not bind him irretrievably – “fresh starts could be made, tomorrow promised to be better than today, and progress always seemed to be possible.”¹³⁷

The main source of this optimism was the fact that this progress was a part of the frontier experience. A frontiersman witnessed it daily, he was a part of the transformation of the wilderness into farms, villages into towns and cities. As the past was left behind, the Americans were dreaming of the future and they were used to seeing their visionary plans become reality.¹³⁸ The conquest of the wilderness was not an easy labour, but being an American meant to have “dreams and behold visions ... to have faith in man, [and] an

¹³² Allan Nevins, Henry Commager, *America: The Story of Free People*, pp. 1-23.

¹³³ Robert Fossum, John Roth, *The American Dream*, (South Shields: Peterson Printers, 1981), p.7

¹³⁴ Frederic Turner, ‘Later Explanations and Developments’, in Ray Billington, (ed.), *The Frontier Thesis.*, p. 24.

¹³⁵ Walter Webb, ‘The Frontier and the 400 Year Boom’, in George Taylor, (ed.), *The Turner Thesis...*, p. 131.

¹³⁶ Frederic Turner, ‘Later Explanations ...’, p. 24.

¹³⁷ Robert Fossum, John Roth, *The American Dream*, p. 6.

¹³⁸ Henry Commager, *The American Mind...*, p. 5.

unbounded confidence in his ability to make his dreams come true.”¹³⁹ This leads to the next characteristic that the frontier sculpted within the American mind, as it transformed the European immigrant into an American – with boundless self-confidence and belief in America’s destiny. Hence, an essential part of the American character is an engraved presumption that an American can solve any problem. A strong belief in the “can do” and a predisposition to “get on with it” have characterised the American psychological mind-set since the conquest of the frontier.¹⁴⁰ In fact, the famous 2008 victory speech of the first African-American president “Yes, We Can!”¹⁴¹ demonstrates, better than anything, the actuality of this narrative in the beginning of the 21st century. Moreover, based on the Puritan heritage of first settlers, Americans deeply believe in the American exceptionalism and that the United States is inherently different from all other nations. Since the times of Puritan John Winthrop, who, in 1630, still aboard the ship *Arbella*, admonished the future Massachusetts Bay colonists that their new community would be “as a City upon a Hill,”¹⁴² American mind-set has been predisposed to believe that, as President Reagan put it, “Americans [are] awed by what has gone before, proud of what for them is still...a shining city on a hill.”¹⁴³

Little by little the wilderness transformed the European germs brought from the Old World into a new product that was purely American. Spacious and boundless land did not only beget spacious ideas, it magnified two very European ideals that were restricted by the European realities – individualism and personal freedom. Limitation of resources, especially land, engraved within the European mindset the necessity to quest for more efficient ways of exploiting natural resources, ultimately leading to the strong narratives of individualism, on the one hand, and personal freedom, on the other. Both of these characteristics found a flourishing ground on American soil that was free from the Old World’s boundaries – “out of his [frontiersman’s] wilderness experience, out of the freedom of his opportunities, he fashioned a formula to social regeneration – the freedom of individual to seek its own.”¹⁴⁴

Free land promoted individualism. The conquest of the wilderness was driven by individuals seeking their own benefits, rather than a well planned activity led by the authorities or great enterprises. The first was the individual pioneer, then the settler and only then the men

¹³⁹ Frederic Turner, ‘Later Explanations...’, p. 24.

¹⁴⁰ Robert Fossum, John Roth, *The American Dream*, p. 21.

¹⁴¹ ‘Full text: Obama’s victory speech’, *BBC News*, 5 November 2008, http://news.bbc.co.uk/1/hi/world/americas/us_elections_2008/7710038.stm, [accessed: 13 June 2015].

¹⁴² Daniel Boorstin, *The Americans: The Colonial Experience...*, pp. 3-4.

¹⁴³ Ronald Reagan, *Election Eve Address "A Vision for America"*, Washington, 3 November 1980, <http://www.presidency.ucsb.edu/ws/?pid=85199>, [accessed: 13 June 2015].

¹⁴⁴ Frederic Jackson Turner, ‘Later Explanations...’, p. 23.

of capital and enterprise. Each one was driven by his own dreams and ambitions, stimulated by his individualistic aim to build a better tomorrow.¹⁴⁵ This social flexibility of the American life, so different from the over-crowded Europe, predisposed the American character towards a very strong sense of individualism. It does not mean that the frontiersman preferred social isolation, as pioneers and, obviously, settlers could definitely appreciate the benefits of community. However, the membership in the community (*company*) was secondary to the individual's aims – “it was not unusual at all for people to leave one company to join a second or third, abandoning each when it no longer served their purpose.”¹⁴⁶ The European social boundaries of a complex society did not withstand the limitlessness of opportunities offered by free land, the frontier's influence was to some degree anti-social, admiring individualism and producing “antipathy to control, and particularly to any direct control.”¹⁴⁷

This strong sense of individualism, ultimately led to a very keen relations of the American character with personal freedom. The concept of free land and endless opportunities magnified the inherent traditions of the Magna Carta, brought by the first waves of British immigrants. Americans, as nowhere else, even in Britain, were able to exercise personal liberty and dared to contend any attempt of the authorities to limit it. The frontier, “where individual liberty was something confused with the absence of all effective government,”¹⁴⁸ and new generations raised into this reality played a significant role in shaping the cultural predispositions that explain the relations between Americans and their state.

Due to the inherent individualism, independence and personal freedom, “American's attitude toward authority, rules, and regulations was the despair of bureaucrats and disciplinarians.”¹⁴⁹ The initial communities, and then villages and towns, were organised by people who not only personally chose to join them, but essentially helped to build them. The conquest of the Western wilderness was a business of Americans rather than the state, and frontiersmen, facing an absence of legal authority, had to developed ways to preserve the order. Consequently, it is not surprising that in the reality, when the individual was not ready to limit his freedom by complex legal regulation, “a crime was more an offence against the victim, than a violation of the law of the land.”¹⁵⁰

¹⁴⁵ Frederic Jackson Turner, ‘The Significance of the Frontier...’, pp. 15-16.

¹⁴⁶ Daniel Boorstin, *The Americans: The National Experience*, p. 69.

¹⁴⁷ Frederic Jackson Turner, ‘The Significance of the Frontier...’, p. 22.

¹⁴⁸ Frederic Jackson Turner, ‘The Significance of the Frontier...’, p. 23.

¹⁴⁹ Henry S. Commager, *The American Mind...*, p. 19.

¹⁵⁰ Frederic Jackson Turner, ‘Later Explanations...’, p. 23.

Raised and bred in the wilderness, “the American was always taking a short cut to freedom, a short cut to fortune, a short cut to learning, and a short cut to heaven”¹⁵¹ and he was always eager to protect his freedom of making his short cuts. This avidity of the American character to safeguard his freedom ultimately led to a kind of built-in resistance to any type of governmental invasion of privacy and general assumption that an excessive conformity with authority is “akin to cancer.”¹⁵² While the strong senses of individualism and personal freedom, mixed with the narrative of strong resistance to any attempts to restrict these qualities of the American character, explain the widely discussed American predisposition towards lawlessness,¹⁵³ they are also one of the main reasons behind the American tendency towards violence. The conquest of the American wilderness was a violent affair and this experience that lasted for nearly three centuries undoubtedly played a role in shaping the American character. It is important to note, however, that the violent origins of the frontier stem from the people, rather than the rough environment. From the very beginning of the colonies the Anglo-American settlers were violent. Free from the European socio-cultural restrictions that had limited violence in the Old World, on top of being continuously involved in violent struggles against the indigenous Indians, as well as against other colonies, “the Anglo-American colonial people were prone to violence.”¹⁵⁴

So it seems that an American attitude towards violence is an outcome not only of American freedom created by the frontier, but an inherent right, even a duty, to protect it at any cost. The fact that American individualism led to a general distrust of authorities played an essential role in shaping the American violent nature. In the American mind, one’s freedom and privacy are the most precious values that have to be protected and, as one does not trust the authorities providing this protection, or wants to (as such protection will limit his freedom), one would preserve this task for oneself. In other words, in an American’s eyes, the protection of his life and his property is first and foremost his own duty and right, rather than the responsibility of the state. And American people, raised on the traditions of the frontier, value

¹⁵¹ Henry S. Commager, *The American Mind...*, p. 21.

¹⁵² Robert Fossum, John Roth, *The American Dream*, p. 25.

¹⁵³ For example see: Peter Lupsha, ‘American Values and Organized Crime: Suckers and Wiseguys’, in Sam Girgus, (ed.), *The American Self: Myth, Ideology, and Popular Culture*, (Albuquerque: University of New Mexico Press, 1981); Daniel Boorstin, *The Americans: The Democratic Experience*, chapter 8; Henry Commager, *The American Mind...*

¹⁵⁴ Marshall Smelser, ‘An Understanding of the American Revolution’, in Walter Nicgorski, Ronald Weber, (ed.), *An Almost Chosen People: The Moral Aspirations of Americans*, (Notre Dame: The University of Notre Dame Press, 1976).

the use of violence as an effective method not only to protect, but also to solve any disagreement or conflict.¹⁵⁵

This fundamental belief in the legitimacy of each citizen to apply violence explains best not only the fact that “Americans, more than any other people in the world, are able to own destructive weapons for private use,”¹⁵⁶ but also the reason why Americans interpret the Second Amendment to the Constitution of the United States as a constitutional right to own these weapons. In fact, the amendment states that: “A well regulated militia being necessary to the security of a free State, the right of the people to keep and bear arms shall not be infringed” – and the interpretation of this amendment as a right to possess firearms in contemporary America proves that the violence of the frontier, and the amendment that represents it, is still deep in the heart of American society.¹⁵⁷

Another evidence that the frontier’s violent experience is still influential in the American mind is the prevalence of capital punishment in law and practice. The straightforward violence of the frontier created lynching as “a punishment for anyone accused of an offence which outraged the community.”¹⁵⁸ Effectively, during the years, with the empowerment of the state and the rule of law, the tradition of lynching transformed into legalised capital punishment, which is still practised by most of the states in the U.S. When capital punishment was largely abolished by the rest of the modern Western World, in the U.S., in 2015, it still enjoys a vast public support, with 60% of the population considering it as morally acceptable.¹⁵⁹

While these narratives generally describe the inherent motifs of violence engraved in the American character, they also point to the general attitude towards value of life. Americans appreciate first and foremost American lives (as individual and as whole) and anyone who endangers their lives, property and freedoms deserves a violent and decisive response. The experience of the American frontier beget the European individualism into extreme, and, therefore, Americans value human life in a more individualistic and selfish manner than any other nation. This very self-centred value of life, based on the American traditional self-reliance, have shaped American social life for generations and anyone (whether a fellow

¹⁵⁵ See Alphonso Pinkney, *The American Way of Violence*, (New York: Random House, 1972), chapter VI; John Tirman, *The Deaths of Others...*, chapter 2.

¹⁵⁶ Alphonso Pinkney, *The American Way of Violence*, p. 169.

¹⁵⁷ Alphonso Pinkney, *The American Way of Violence*, pp. 168-171.

¹⁵⁸ Alphonso Pinkney, *The American Way of Violence*, pp. 79.

¹⁵⁹ Poll completed by Gallup, <http://www.gallup.com/poll/1606/death-penalty.aspx>, [accessed: 16 June 2015].

American, American authority or a reckless and uncouth non-American) who dared to stand between an American and his “dream” – “that dream of land in which life should be better and richer and fuller for every man, with opportunity for each”¹⁶⁰ – deserved to experience American violence to its full capacity.

War and the American Character

The experience of the frontier, and the previously discussed narratives, implanted into the American character have an exceptional explanatory power in an attempt to understand the American attitude towards wars in general and toward others’ suffering in particular.¹⁶¹ While the constructive perspective (strategy, tactics, etc.) of what is called the “American Way of War” has been widely discussed,¹⁶² the main focus of this work is the cultural dimensions of this phenomenon. It is, however, important to understand the historical process that has designed the contemporary American public attitudes about war.

The historiography of the “American Way of War” generally divides this phenomenon into three main periods: “The First American Way of War” (from the beginning of the colonies until the War of 1812), “The American Way of War” (from the War of 1812 until the end of the Cold War) and “The New American Way of War” (since the end of the Cold War until today).¹⁶³ And while all these three are highly interconnected and the characteristics of the previous periods ultimately shaped the following ones, each one of these periods played its own cultural, social and military role designing the American unique understanding of the war phenomenon and, therefore, deserves a short introduction.

As discussed, the impact of the frontier on the European germs shaped the American character creating its own specific cultural narratives. It also played a vital role in shaping what is characterised as “The First American Way of War”.¹⁶⁴ As many historians already pointed to the fact that the encounter between European military culture and the wilderness with its inhabitants (i.e., native Americans) and their military culture created something very distinctive

¹⁶⁰ James Adams, *The Epic of America*, (London: George Routledge & Sons Ltd., 1940), p. 415.

¹⁶¹ John Tirman, *The Deaths of Others...*, chapter 2.

¹⁶² For example see: Benjamin Buley, *The New American Way of War: Military Culture and the Political Utility of Force*, (New York: Routledge, 2008); Colin Gray, *Irregular Enemies and the Essence of Strategy: Can the American Way of War Adapt?*, (Carlisle: Strategic Studies Institute, 2006); Russell Weigley, *The American Way of War...*; John Grenier, *The First Way of War...*;

¹⁶³ ‘The First American Way of War’ generally corresponds with the phenomenon defined in John Grenier, *The First Way of War...*; ‘The American Way of War’ generally corresponds with the phenomenon defined in Russell Weigley, *The American Way of War...*; and ‘The New American Way of War’ generally corresponds with the phenomenon defined in Benjamin Buley, *The New American Way of War...*

¹⁶⁴ John Grenier, *The First Way of War...*

from the European practice of war¹⁶⁵ - “the interaction of military cultures in New England ... produced a compound more toxic than either of its elements”¹⁶⁶ While both, the European colonists and the native Americans used to have unwritten codes of warfare that regulated and restricted violence predominantly to battlefields, their encounters produced a startling wanton outcome. The frontier freed the European mind not only from the social restrictions discussed above, it unleashed the European-style warfare from the formalised European practice of war, where “armed conflict remained a ritualised activity, regulated by a code of honour and fought between armies, not entire population.”¹⁶⁷ From the very beginning the military experience of the New World was characterised by a violent style of what the 18th century writers called *la petite guerre* – early Americans understood war not as a clash between military organisations, but rather as: “disrupting enemy troops, supply, and support networks ... ambushing and destroying enemy detachments ... and, most important, destroying enemy villages and fields and killing and intimidating non-combatant population.”¹⁶⁸

The American Revolution was a culminating point of the “First American Way of War” on both strategic and tactical levels. While the struggle against British forces were managed more or less according to the old European traditions, the military operations on the frontier, against the indigenous Indians, between 1774 and 1783 emphasised the extravagant violence of the American *petite guerre* tactics.¹⁶⁹ In other words, in terms of fighting against native Americans, the goal was their subjugation through violence; in terms of fighting Britain, it was a mild revolution “staged by reluctant rebels for limited goals, which were well within their reach.”¹⁷⁰ From this perspective, the American Revolution is the best example of what today’s American military calls *asymmetric irregular warfare*¹⁷¹ – “to win, the British army had to destroy the Continental Army. The Continental Army had only to survive.”¹⁷²

¹⁶⁵ For example see: Ian Steele, *Warpaths: Invasions of North America*, (New York: Oxford University Press, 1994); John Ferling, *A Wilderness of Miseries: War and Warriors in Early America*, (Westport: Greenwood Press, 1980); Adam Hirsch, ‘The Collision of Military Cultures in Seventeenth-Century New England’, *Journal of American History*, Vol. 74, No. 4, 1988, pp. 1187-1212; Ronald Karr, “‘Why Should You Be So Furious?’: The Violence of the Pequot War”, *Journal of American History*, Vol. 85, No. 2, 1998, pp. 876-909; John Grenier, *The First Way of War...*

¹⁶⁶ Adam Hirsch, ‘The Collision of Military Cultures...’, p. 1204.

¹⁶⁷ Adam Hirsch, ‘The Collision of Military Cultures...’, p. 1188.

¹⁶⁸ John Grenier, *The First Way of War...*, p. 1.

¹⁶⁹ John Grenier, *The First Way of War...*, chapter 5.

¹⁷⁰ Marshall Smelser, ‘An Understanding of the American Revolution...’, p. 17.

¹⁷¹ Asymmetric – “In military operations the application of dissimilar strategies, tactics, capabilities, and methods to circumvent or negate an opponent’s strengths while exploiting his weaknesses”; Irregular Warfare is “a violent struggle among state and non-state actors for legitimacy and influence over the relevant population(s).” US Department of Defence, *The Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms*, Washington, 8 November 2010(As Amended Through 15 March 2015).

¹⁷² Marshall Smelser, ‘An Understanding of the American Revolution...’, p. 13.

It is important to note, however, that the war on the frontier, rather than the civilised battles with the British, were those which shaped the “First American Way of War” and its brutality. Moreover, the conquest of the wilderness from its natives engraved in the American mind the two main ways to justify war. The European *jus ad bellum*, based on the Christian traditions, generally justified wars when “military actions [were] undertaken by lawful sovereigns for legitimate causes, such as self-defence or avenging the wrong.”¹⁷³ The frontier, lacking “lawful sovereigns” by its definition, simplified this concept to pure vengeance and a strong belief that through facing the primitive and heathen population with violence, Americans do God’s work.¹⁷⁴ While the first justification of war as vengeance derives from human nature that is not unique to Americans, the second one deserves a more detailed discussion.

The origins of the beliefs that war against native Americans, those “savage beasts or evil instruments of the devil,”¹⁷⁵ is God’s work are based on the Christian traditions of the Puritans, who were the first to wage these wars on the frontier and held a “strong hostility towards cultures unlike their own.”¹⁷⁶ During over four centuries of American history, the sense of promotion of God’s Will, as a justification of war, has been transformed into a narrative of rightness of war fought against a savage enemy. The “First American Way of War” engraved in the American mind that war is about “the righteous cause, ... the brutish enemy, ... and the cold indifference to the suffering of the natives.”¹⁷⁷

The successful end of the Revolution and the establishment of the U.S. Army in 1784 opened a new chapter in American military history. The 19th century, and especially the Civil War, shaped what Russell Weigley considers as “The American Way of War”. Based on the traditions of the *petite guerre* against native Americans, rather than on restricted war against the British, Americans encouraged the belief that “the object of war is nothing less than the enemy’s destruction.”¹⁷⁸ This belief helped in shaping one of the most distinctive American qualities of conducting wars – extreme aggressiveness “at all levels of conflict, from tactical (the conduct of individual fights) to operational (the orchestration of battles in time and space) to the strategic (the planning out of campaigns to achieve the objectives of war).”¹⁷⁹ The “American Way of War” moulded by the Civil War and tuned through the First World War,

¹⁷³ Ronald Karr, “Why Should You Be So Furious?”...’, p. 880.

¹⁷⁴ Ronald Karr, “Why Should You Be So Furious?”...’.

¹⁷⁵ Adam Hirsch, ‘The Collision of Military Cultures...’, p. 1206.

¹⁷⁶ Ronald Karr, “Why Should You Be So Furious?”...’, p. 888.

¹⁷⁷ John Tirman, *The Deaths of Others...*, p.18.

¹⁷⁸ Russell Weigley, *The American Way of War...*, p. XXI.

¹⁷⁹ Eliot Cohen, ‘Kosovo and the New American Way of War’, in Andrew Bacevich, Eliot Cohen, (ed.), *War over Kosovo...*, pp. 40-41.

triumphed in the Second World War.¹⁸⁰ Describing the four main characteristics of this “American Way of War”, Eliot Cohen emphasised – excessive aggressiveness, decisiveness, lack of constraints (political or material) and “bright” lines between politicians and military;¹⁸¹ it is important, nonetheless, to understand the socio-cultural roots of these narratives embedded in the American character.

Constructed by the frontier philosophy and decisive, as well as destructive, wars with the native Americans, waged with the purpose of a pure military defeat, rather than political resolution or compromise,¹⁸² American military minds tended to give “little regard to the non-military consequences of what they were doing.”¹⁸³ Unlike the classic Clausewitzian view that “war is a mere continuation of policy by other means”,¹⁸⁴ the “American Way of War” is built on the assumption that “[an] inter-state war [is] not a continuation of political intercourse, but a symptom of its failure.”¹⁸⁵ The U.S. Army’s textbook on strategy, published in 1936, simply stated that:

Politics and strategy are radically and fundamentally things apart. Strategy begins where politics end. All that soldiers ask is that once policy settled, strategy and command shall regarded as being in a sphere apart from politics.¹⁸⁶

From that perspective, in the American mind, a war is an unfortunate obstacle that stands between them and achieving their “dream”, and, as it was discussed above, it has to be overcome as soon as possible. As Colin Gray put it: “Americans have approached warfare as regrettable occasional evil that has to be concluded as decisively and rapidly as possible.”¹⁸⁷ This predisposition, quite an apolitical one, towards war offers a possible explanation of an interesting and, to some degree, contradicting aspect about “The American Way of War”. While the American character is built on the sense of opportunity and exploiting available prospects for one’s own benefits, through their history Americans generally failed to utilise the political opportunities created by wars and too often the U.S. military efforts “have not been suitably cashed in the coin of political advantage.”¹⁸⁸

¹⁸⁰ Russell Weigley, *The American Way of War...*

¹⁸¹ Eliot Cohen, ‘Kosovo and the New American Way of War...’, pp. 40-46.

¹⁸² Ronald Karr, “Why Should You Be So Furious?”...’.

¹⁸³ Russell Weigley, *The American Way of War...*, p. xviii.

¹⁸⁴ Carl Von Clausewitz, *On War*, edited and translated by Michael Howard and Peter Paret, (Princeton: Princeton University Press, 1989), p. 87.

¹⁸⁵ Benjamin Buley, *The New American Way of War...*, p. 2.

¹⁸⁶ The Command and General Staff School, *Principles of Strategy for an Independent Corps or Army in a Theater Of Operations*, (Fort Leavenworth: The Command and General Staff School Press, 1936), p. 19.

¹⁸⁷ Colin Gray, *Irregular Enemies and the Essence of Strategy...*, p. 44.

¹⁸⁸ Colin Gray, *Irregular Enemies and the Essence of Strategy...*, p. 30.

While many scholars would argue that this “American Way of War” is still prevalent in the American way of conducting wars in the beginning of the 21st century,¹⁸⁹ others argue that since the end of the Cold War, a “New American Way of War” has been developing.¹⁹⁰ The main argument in favour of this new approach is that in the era of a proactive exercise in the policing of the so called *Pax Americana*, the American way of war has been adopting itself to the use of warfare as a political instrument.¹⁹¹ Regardless of this theoretical discourse, the realities of the American armed confrontations in the last decades clearly show that American cultural predispositions, which originated from the previous two periods, are still in the heart of the American military activity.

The American mind-set still considers war as a temporary unfortunate disruption and, fuelled by historical inherent violence it believes that the most moral approach to wage war is “at the highest possible intensity in order to finish it as soon as possible.”¹⁹² Moreover, based on the narrative of the “First American Way of War” that Americanised the wilderness, Americans still justify war as a right act of vengeance and as a rightful act intended to “free” or “protect” local population, promoting (American) democracy, (American) freedom and (American) rule of law. On the one hand, the extreme sense of vengeance can be clearly seen in the request of a mourning father, who had lost his son in the 9/11 attack, “to put his [son’s] name on some piece of armament in the Iraq War.”¹⁹³ On the other, the intense sense of the right cause is emphasised by another father, who, meeting his son coming back from almost 5 years in the Taliban’s captivity, said “he was proud how far his son was willing to go to help the Afghan people.”¹⁹⁴ Addressing these two vital narratives of the American cultural ways to justify war, President Bush told Congress and the public, just days after the 9/11 attack that,

Tonight we are a country awakened to danger and called to defend freedom. Our grief has turned to anger, and anger to resolution. Whether we bring our enemies to justice, or bring justice to our enemies, justice will be done.¹⁹⁵

¹⁸⁹ For example see: See Colin Gray, *Irregular Enemies and the Essence of Strategy...*; John Tirman, *The Deaths of Others...*

¹⁹⁰ For example see: Max Boot, ‘The New American Way of War’, *Foreign Affairs*, Vol. 82, No. 4, 2003, pp. 41-58; Benjamin Buley, *The New American Way of War...*; Eliot Cohen, *Kosovo and the New American Way of War...*

¹⁹¹ Benjamin Buley, *The New American Way of War...*, pp. 6-15.

¹⁹² Benjamin Buley, *The New American Way of War...*, p. 20.

¹⁹³ Eugene Jarecki, *Why We Fight*, (Axiom Films, 2005).

¹⁹⁴ ‘Bowe Bergdahl release: US parties clash on Afghan deal’, *BBC New*, 2 June 2014, <http://www.bbc.co.uk/news/world-asia-27658821>, [accessed: 18 June 2015].

¹⁹⁵ ‘Text of George Bush’s speech’, *TheGuardian*, <http://www.theguardian.com/world/2001/sep/21/september11.usa13>, [accessed: 18 June 2015].

This chapter explores the reasons behind the fact that the American military has failed to employ NLW. American political decision-makers are, undoubtedly, very sensitive to public attitudes regarding their (and American military as well) performance. Facing domestic political pressure to decrease civilian casualties during American military operations, the American leadership would definitely look for a way to solve this problem. The main question, however, is whether the American public cultural attitudes, based on their inherent violence, aggressiveness, justification of revenge and an excessive belief in the rightness of everything American, are predisposed towards valuing the lives of the enemy's population.

The analysis of the "First American Way of War" clearly shows that the roots of the American approach to conduct warfare are everything but an appreciation of enemy population, "the European settlement of America was a violent affair, arguably genocide ... [and] that experience, lasting nearly three centuries, shaped Americans' attitudes toward war, particularly the depiction of the enemy."¹⁹⁶ The different ways (against native Americans and against the British) in which Americans fought during the Revolution engraved in the American mind that rules of war apply differently on somebody who does not share the same race, religion and culture.¹⁹⁷ The Civil War was definitely a crucial turning point in designing American cultural attitudes towards war, however, it seems that the then established "American Way of War" changed very little, if at all, in the American attitude towards the enemy's population – "of all the enemies the United States has fought in its history, the enemy population most intensely hated was probably the Japanese in World War II"¹⁹⁸ – the culminating point of the "American Way of War". Analysing American public attitudes from the Second World War, through Korea, Vietnam and the rest of American military operations up to Kosovo, John Mueller concluded that "[Americans] seem to be remarkably insensitive to casualties suffered by foreigners including essentially uninvolved – that is, innocent – civilians."¹⁹⁹ Although, an analysis of American views about the use of nuclear weapons, at Hiroshima and Nagasaki in 1945 that targeted civilian population, shows that the approval of the bombing has been diminishing over time – from 85% in 1945 to 55% in 1994 – it still remains very high.²⁰⁰ More contemporary surveys show that this tendency has not changed much, as in 2015 "the share of

¹⁹⁶ John Tirman, *The Deaths of Others...*, p. 22.

¹⁹⁷ Carl Boggs, 'Owltlaw Nation...', pp. 191-194.

¹⁹⁸ John Mueller, 'Public Opinion...', p.1.

¹⁹⁹ John Mueller, 'Public Opinion...', p.1.

²⁰⁰ Sadao Asada, 'The Mushroom cloud and national psyches', in Laura Hein, Mark Selden, (ed.), *Living with the Bomb: American and Japanese Cultural Conflicts in the Nuclear Age*, (Armonk: M.E. Sharpe, 1997), pp. 177-179; see also Beatrice Heuser, *The Bomb: Nuclear Weapons in their Historical, Strategic and Ethical Context*, (London: Longman, 2000), chapter 4.

Americans who believe the use of nuclear weapons [against civilian population] was justified is 56%”.²⁰¹

If something has changed in the American attitude towards war that can be related to the so called “New American Way of War” is sensitiveness to friendly casualties, especially when war discords with the American inherent cultural perceptions of war – decisive aggressiveness with a fast resolution. The experiences of the Korean War and, especially the War in Vietnam, proved that “Americans don’t like to see their fathers and sons dying, especially in long wars fought over unclear limited objectives.”²⁰² Moreover, since the evolution of a high-technology way in warfare, this understandable sensitivity to friendly casualties in wars has been fuelled by an expectation for an exceedingly low casualty rate, due to the fact that new technologies allow minimising mortal danger, to which American soldiers are exposed.²⁰³

It is important to note that even this increasing value of Americans’ lives is very relative. When a war is congruent with the American cultural predispositions, they are ready to tolerate casualties. As polls showed, in October 2001, directly after the 9/11 attacks, “anywhere from about 60 to 75 percent expressed a tolerance for ‘substantial’ casualties ... and said they still would consider the war to be worth its costs.”²⁰⁴ Moreover, the following wars, in Afghanistan and Iraq, proved again that the American public shows “relatively little concern about civilian casualties incurred in the war.”²⁰⁵ Even after high profile incidents with a high number of enemy civilian casualties, such as the Wedding Party Incident in Afghanistan in 2002,²⁰⁶ or the Marketplace Incident in Iraq in 2003,²⁰⁷ the American public showed an astonishing obtuseness, continuing to support “brave American soldiers” fighting against a

²⁰¹ Bruce Stokes, ‘70 Years after Hiroshima, Opinions Have Shifted on Use of Atomic Bomb’, *PewResearchCenter*, 4 August 2015, <http://www.pewresearch.org/fact-tank/2015/08/04/70-years-after-hiroshima-opinions-have-shifted-on-use-of-atomic-bomb/>, [accessed: 19 December 2015].

²⁰² Mark Lorell, Charles Kelly, *Casualties, Public Opinion, and Presidential Policy during Vietnam War*, (Santa Monica: The RAND Corporation, 1985), p. 28.

²⁰³ Colin Gray, *Irregular Enemies and the Essence of Strategy*..., pp. 47-49.

²⁰⁴ Eric Larson, Bogdan Savych, *American Public Support for U.S. Military Operations from Mogadishu to Baghdad*, (Santa Monica: The RAND Corporation, 2005), p. 121.

²⁰⁵ Eric Larson, Bogdan Savych, *Misfortunes of War: Press and Public Reaction to Civilian Deaths in Wartime*, (Santa Monica: The RAND Corporation, 2006), p. 157.

²⁰⁶ On July 1, 2002, U.S. aircraft attacked six sites in an Afghan village where a wedding was being celebrated reportedly killing 48 people and wounding another 117. See Alissa Rubin, ‘The Conflict in Iraq: 40 Killed in U.S. Attack on Iraqi Border Village’, *Los Angeles Times*, May 20, 2004, <http://articles.latimes.com/2004/may/20/world/fg-iraq20>, [accessed: 18 June 15].

²⁰⁷ On March 26, 2003, Iraqi officials claimed that a coalition missile fell on a Baghdad marketplace killing 14 and injuring more than 30 civilians (later the toll of dead was raised to more than 36). See “36 killed” in raids on Baghdad’, *TheGuardian*, 27 March 2003, <http://www.theguardian.com/world/2003/mar/27/iraq.sallybolton>, [accessed: 18 June 2015].

“brutish enemy”. Despite vast and mainly negative coverage of these incidents in the domestic and foreign media outlets: after the first incident, official polls showed that about 83% of Americans still approved the U.S. military action in Afghanistan;²⁰⁸ and after the second incident this approval was even raised from 75% to 77%.²⁰⁹

Table 1: Public Approval of the US campaign in Afghanistan After the July 1 Wedding Party Incident

Question and Survey	Period of the Surveys	Approval (%)
“Do you approve or disapprove of U.S. military action in Afghanistan?” (Gallup/CNN/ USA Today)	9/2–4/2002	83
“Do you approve or disapprove of the (George W. Bush) is handling the U.S. campaign against terrorism?” (ABC News/The Washington Post)	7/11–15/2002	82
“Do you approve or disapprove of the job President Bush is doing on the following issues: handling terrorism?” (Fox News/ Opinion Dynamics)	7/23–24/2002	77
“When it comes to dealing with the war on terrorism, do you approve or disapprove the job George W. Bush is doing?” (The Wall Street Journal/Hart and Teeter)	7/19–21/2002	73
“Do you approve or disapprove of the way George W. Bush is handling the campaign against terrorism?” (CBS News)	7/8–9/2002	77

Source: Eric Larson, Bogdan Savych, *Misfortunes of War: Press and Public Reaction to Civilian Deaths in Wartime*, (Santa Monica: The RAND Corporation, 2006), p. 155

Table 2: Public Approval of the US campaign in Iraq Approval Before and After March 26 Marketplace Incident

Question and Survey	Before	After	Change
“Do you approve or disapprove of the United States taking military action against Iraq to try to remove Saddam Hussein from power?” (CBS News/The New York Times)	N = 427 3/24/2003 75%	N= 868 3/26–27/2003 77%	+2%
“Do you support or oppose the United States taking military action to disarm Iraq and remove Iraqi President Saddam Hussein? (If Support/Oppose, ask:) Is that strongly support/oppose or only somewhat support/oppose?” (Fox News/ Opinion Dynamics)	N= 900 3/25–26/2003 78%	N = 900 4/8–9/2003 81%	+3%

Source: Eric Larson, Bogdan Savych, *Misfortunes of War: Press and Public Reaction to Civilian Deaths in Wartime*, (Santa Monica: The RAND Corporation, 2006), p. 195

An analysis of the American public reaction to civilian deaths caused by the U.S. military in the last two decades (Iraq, 1991; Kosovo, 1999, Afghanistan 2001; Iraq, 2003) stated that “very large majorities [of Americans] consistently stated their belief that civilian casualties in these wars were unavoidable accidents of war.”²¹⁰ Even during the peak of the American anti-war protests, during the Vietnam War, the argument that American military causing the deaths of innocent civilians was extremely marginal – in 1967, only 6 percent of

²⁰⁸ Eric Larson, Bogdan Savych, *Misfortunes of War...*, p. 155.

²⁰⁹ Eric Larson, Bogdan Savych, *Misfortunes of War...*, p. 195.

²¹⁰ Eric Larson, Bogdan Savych, *Misfortunes of War...*, p. xx.

responses to the question “What two or three things about the war in Vietnam most trouble you personally?” referred to civilian casualties.²¹¹

Table 3: Troubling Aspects of the Vietnam War - July 1967

Question: "What are two or three thing about war in Vietnam most you personally?"	
Aspects	Percent of Total Responses
Loss of our young men/casualties/loss of lives/killing	31
Family separated/destroyed	7
Killing innocent people/women and children	6
Sending our boys over there/sending them so young	6
Boys not trained well/not supplied properly/undergoing needless suffering	5
Bombing/terrorism	2

Source: Mark Lorell, Charles Kelly, *Casualties, Public Opinion, and Presidential Policy during Vietnam War*, (Santa Monica: The RAND Corporation, 1985), p. 25.

American public opinion, based on the inherent American attitudes towards war is far from pressuring political and defence decision-makers to minimise enemy civilian casualties in wars. In the light of this American cultural context, it is difficult to disagree with Ralph Peters, who stated in his very controversial book “Fighting for the Future: Will America Triumph?” that:

The citizenry of the United States, in fact, will tolerate the killing of enormous numbers of foreigners, so long as that killing does not take too long, victory is clear-cut, friendly casualties are comparatively low, and the enemy dead do not have names, faces, and families.²¹²

Part Four: American Military Culture and NLW

The existent research clearly shows that many of the previously discussed features of the American character have shaped American military culture, as Colin Gray concluded: “American strategic culture ... [is] the product of the significantly unique American historical experience.”²¹³ For example, researchers often interpret the U.S. interventions in Iraq as a continuation of the American frontier,²¹⁴ or point to the fact that American traditional apolitical strategy (i.e., the separation between politics and military activity)²¹⁵ leads the U.S. “to fight

²¹¹ Mark Lorell, Charles Kelly, *Casualties, Public Opinion...*, p. 25.

²¹² Ralph Peters, *Fighting for the Future: Will America Triumph?*, (Mechanicsburg: Stackpole Books, 2001), p. 105.

²¹³ Colin Gray, ‘National Style in Strategy: The American Experience’, *International Security*, Vol. 6, No.2, 1981, p. 44.

²¹⁴ John Tirman, *The Deaths of Others...*

²¹⁵ Jeffrey Record, *Beating Goliath*, (Washington: Potomac Books, 2009), Chapter 5; Colin Gray, *Irregular Enemies...*, pp. 30-32.

the wars as if they were battles ...[confusing] the winning of campaigns ... with the winning of wars.”²¹⁶

This research focuses on the failure of the American military to successfully employ NLW, i.e., combine military technology with accordingly formulated concepts of operations and military organisation. Consequently, it seems important to analyse the role of technology in the American military culture in general and what the American military thought has to say about NLW in particular.

American Military Culture and Technology.

One of the most prominent features of American military culture is a great emphasis on technology. Reflecting the growth of American industrialism and consequent capitalism in the 19th century and the American pioneering of mass production process in the early 20th century, American military culture has been shaped around the concept of overwhelming the enemy by logistic superiority and state-of-the-art technology.²¹⁷ While some argue that the American way of war can be more often described as logistic, rather strategic,²¹⁸ the majority agree that “reliance on advance technology has been a central pillar of the American way of war... [and] no nation in recent history has placed greater emphasis upon the role of technology in planning and waging war than the United States.”²¹⁹

The military fascination with technology is deeply rooted in the American culture itself. In the 19th century, America’s productivity powered by European immigrants suffered from a shortage of skilled craftsmen, who preferred to stay in Europe, and Americans were forced to “invent and use machines as substitutes for human skill and muscle.”²²⁰ This technological enthusiasm and general faith in technological solutions have been successfully adopted by the American military culture that started to seek refuge from difficult problems of strategy in technology.²²¹ Moreover, America’s geographical position in the world created a drive for technological means to project power. While European armies (except for the British) could

²¹⁶ Antulio Echevarria, *Towards an American Way of War*, (Carlisle: Strategic Studies Institute, 2004), p. 10.

²¹⁷ Richard Lock-Pullan, ‘U.S. Military Strategy, Strategic Culture, and the “War on Terror”’, in John Owens, John Dumbrell, (ed.), *America’s “War on Terrorism”: New Dimensions in U.S. Government and National Security*, (Lanham: Lexington Books, 2008), p.161.

²¹⁸ Thomas Kane, *Military Logistics and Strategic Performance*, (London: Frank Cass, 2001); Colin Gray, *Irregular Enemies...* pp. 45-47.

²¹⁹ Thomas Mahnken, *Technology and the American Way ...*, p. 5.

²²⁰ Colin Gray, *Irregular Enemies...*, pp. 35-36.

²²¹ Russell Weigley, *The American Way ...*, p. 416.

just march into battle, Americans historically developed and emphasised technologically based abilities: first of all, the navy, then the air force and then missile based nuclear power.²²²

In the American mind, as already mentioned, war is an unfortunate, but temporary, trouble that has to be solved as quickly and decisively, as possible. This approach to war combined with the traditional pro-technological orientation created almost an instinctive reliance of American strategists on technology.²²³ Despite the fact that the experience of Vietnam created certain scepticism of technological omnipotence, the general techno-craze and the trust of technology – a “silver bullet” promising a decisive victory – have never been abandoned.²²⁴ American military has always been preoccupied by the application of technological solutions to strategic problems, thus driven (and usually capable of) to acquire exceedingly expensive state-of-the-art technology, often unable to comprehend that technical sophistication does not guarantee success in conflicts.²²⁵

The experience of the First Gulf War reinforced the American technological romanticism in military affairs putting an end to the scepticism of the Vietnam generation. In the wake of the overwhelming victory, the American trust in technology has never been stronger creating vast debate whether the world had witnessed a Revolution in Military Affairs.²²⁶ Mesmerised by their technological triumph, American military signified the revolutionary technology itself as a driving change, refusing to understand that operational concepts and organisational adaptations are “more important than either new technology or getting it fielded in a significant number of systems.”²²⁷

The extended irregular warfare in Iraq and Afghanistan, so similar to Vietnam, shook the American reliance on advanced technology as a key solution to any military puzzle. It seems, however, that despite the desperate battle of the American strategists to argue for true RMA, American culture struggles to accept that war is not simply a matter of applying technology correctly.²²⁸ In the American military mind, the best (if not the only) way to improve the performance of the military is by an amelioration of technology, rather than the

²²² Williamson Murray, ‘The Future of American Military Culture: Does Military Culture Matter?’, *Orbis*, Vol. 43, Issue 1, 1999, pp. 27-42; Richard Lock-Pullan, ‘U.S. Military Strategy...’, p.161.

²²³ Dima Adamsky, *The Culture of Military Innovation: The Impact of Cultural Factors on the Revolution in Military Affairs in Russia, the US, and Israel*, (Stanford: Stanford University Press, 2010), pp. 85-87.

²²⁴ Williamson Murray, ‘The Future of American Military Culture...’.

²²⁵ Colin Gray, *Irregular Enemies...*, pp. 35-36.

²²⁶ Theodor Galdi, *Revolution in Military Affairs? - Competing Concepts, Organizational Responses, Outstanding Issues*, Congressional Research Service Report to the Congress, (CRS 951170F, 11 December 1995).

²²⁷ Barry Watts, *Six Decades of Guided Munitions and Battle Networks: Progress and Prospects*, (Washington: Center for Strategic and Budgetary Assessments, 2007), p. 77.

²²⁸ Richard Lock-Pullan, ‘U.S. Military Strategy...’, p. 177; Colin Gray, *Irregular Enemies...*, pp. 35-36.

way it is used, or misused, through overuse. In other words, to put it simply: if the performance is poor, it is the fault of the gadget, rather than the way it is used.

Consequently, this techno-utopia in military affairs leads American military to embrace new technologies first, speculating about their revolutionary promises, and think about their conceptual and organisational requirements later. The best example is the early-1990s information-technology-led transformation that integrated precision-guided munitions, novel command and control technologies, and advance reconnaissance capabilities.²²⁹ Fascinated by the overwhelming success of American technology in the Gulf War, Admiral William A. Owens stated in 1995, that “we have decided to build what some of us call the system of systems; namely, interactions that will give us dominant battlespace knowledge and the ability to take full military advantage of it.”²³⁰ Eight years later, the United States, which was “the first nation to emerge in the post-revolutionary era” and was “equipped with proficiencies” that promised “change the character of warfare as it has been known for centuries,”²³¹ found itself in Iraq, realising that many military problems just cannot be solved purely in technical terms.²³² It seems, however, that this disappointment has not changed the American way of thinking about technology. For example, a document published in 2013, “Capstone Concept for Joint Operations: Joint Force 2020”, providing general guides to future force development and transformation, is awash with prudent words on the future security environment; at its core, however, lie carefully crafted requirements for the next generation of technological capabilities.²³³

American military history, undoubtedly, is full of technological marvels. Moreover, the American mind considers technology as the lodestone of military success. Americans are easily enthralled by novel technologies, but facing operational disappointment, they, similarly, easily accept their delusion. Yet, due to their cultural predispositions, when they hit their fingers, Americans will always seek to improve the hammer, rather than the way they hold the nail.

²²⁹ Dima Adamsky, *The Culture of Military Innovation...*, p. 2.

²³⁰ William Owens, ‘The American Revolution in Military Affairs’, *Joint Force Quarterly*, Vol. 10, 1996, p. 37.

²³¹ William Owens, ‘The American Revolution in Military Affairs’, p. 38.

²³² Richard Lock-Pullan, ‘U.S. Military Strategy...’, p. 177.

²³³ U.S. Joint Chiefs of Staff, *Capstone Concept for Joint Operations: Joint Force 2020*, Washington, 10 September 2012.

American Military Thought and NLW

As Americans have approached warfare as the regrettable occasional evil, and a war as a temporary affair, it is not surprising that scholars report a strong preference of American military tradition to value practice rather than theory, and neglect the importance of professional military education, required for the constant preparation for a future conflict.²³⁴ Americans traditionally believe in their technological and logistical superiority, and take for granted that it will enable them to concentrate enough forces and firepower, achieving what they consider as the main objective of war – “the complete overthrow of the enemy, [and] the destruction of his military.”²³⁵ Consequently, it is not surprising that scholars report that historically the U.S. did not develop excellence in strategy and comprehensive military thought – it simply did not have to.²³⁶

The presence and the quality of professional military education have been considered by scholars as an important factor in the analysis of the strategic thinking and conceptual military thought.²³⁷ While the American military has an extensive network of professional education institutions intended to tutor officers’ corps at different levels, the view prevails that “education is a luxury for the American military rather than a necessity.”²³⁸ Professional education has never been considered by the American military establishment as a career-enhancing experience.²³⁹ In other words, as Williamson Murray concludes: “[the military] failed to enunciate a clear vision of why it believes professional military education to be important.”²⁴⁰

The American military mind, trapped in the industrial age, tends to reduce strategic problems to technical equations and undervalue (if not even scorn) the ability of systematic conceptualisation and theorising.²⁴¹ Moreover, significant cultural differences between

²³⁴ Williamson Murray, ‘The Future of American Military Culture...’.

²³⁵ Russell Weigley, *The American Way of War*, p. xxi; Thomas Mahnken, *United States Strategic Culture...*, pp. 10-12.

²³⁶ Richard Lock-Pullan, *US Intervention Policy and Army Innovation: From Vietnam to Iraq*, (London: Routledge, 2006), p. 13; Dima Adamsky, *The Culture of Military Innovation...*, p. 80.

²³⁷ Williamson Murray, ‘Transformation and Professional Military Education: Past as Prologue to the Future’, in Williamson Murray, (ed.), *National Security Challenges for the 21st Century*, (Carlisle: US Army War College, 2003); Williamson Murray, ‘The Future of American Military Culture...’; Dima Adamsky, *The Culture of Military Innovation...*

²³⁸ Williamson Murray, ‘Transformation and Professional Military Education...’, pp. 10-11.

²³⁹ Williamson Murray, ‘Introduction’, in Williamson Murray, (ed.), *The Emerging Strategic Environment: Challenges of the Twenty-first Century*, (Westport: Greenwood Publishing Group, 1999), p. XXVI-XXVII.

²⁴⁰ Williamson Murray, ‘Transformation and Professional Military Education...’, p. 11.

²⁴¹ Dima Adamsky, *The Culture of Military Innovation...*, pp. 79-82.

different Services (Air Force, Army, Navy, and Marines),²⁴² combined with a strong sense of inter-rivalry and the fact that traditionally the Joint Chiefs of Staff (JCS) have only advisory power²⁴³ – all have led to a situation where no single institution in the American military possess an integral grasp of the strategic environment enabling the development of all-inclusive theoretical concepts. For example, in the 1990s, when different Services had their own conceptual understanding of the information-technology-led RMA, and the JCS produced concepts that were “lack of any significant intellectual content” with “interminable laundry lists of bureaucratic concerns” that were “best suited to insomniacs,”²⁴⁴ the American military was just unable to realise the revolutionary implications of the novel technology – technological seeds preceded the maturation of the conceptual ones.²⁴⁵

Consequently, it is not surprising that an analysis of the American official documents, conceptualising development and employment of NLW, shows very similar situation – a convoluted nexus of advisory, consultative and coordinating policies unable to produce one clear comprehensive concept that will define the required technological capabilities of NLW and the conceptually novel ways of their employment.

For example, according to the Department of Defense NLW policy, NLW have the potential to enhance the commander’s ability to:

- (1) Deter, discourage, delay, or prevent hostile and threatening actions;
- (2) Deny access to and move, disable, and suppress individuals;
- (3) Stop, disable, divert, and deny access to vehicles and vessels;
- (4) Adapt and tailor escalation of force options to the operational environment;
- (5) Employ capabilities that temporarily incapacitate personnel and materiel while minimizing the likelihood of casualties and damage to critical infrastructure;
- (6) De-escalate situations to preclude lethal force;
- (7) Precisely engage targets;
- (8) Enhance the effectiveness and efficiency of lethal weapons;
- (9) Capture or incapacitate high value targets;
- (10) Protect the force.²⁴⁶

But, according to the Joint Non-Lethal Weapons Program (JNLWP), a directorate that “stimulates and coordinates” NLW requirements of all U.S. Armed Services, yet is, in fact, located under the Commandant of the Marine Corps,²⁴⁷ NLW are supposed to be able to:

²⁴² Carl Builder, *The Masks of War: American Military Styles in Strategy and Analysis*, (Baltimore: John Hopkins University Press, 1989).

²⁴³ Dima Adamsky, *The Culture of Military Innovation...*, pp. 83-85.

²⁴⁴ Williamson Murray, ‘The Future of American Military Culture...’, p. 40.

²⁴⁵ Dima Adamsky, *The Culture of Military Innovation...*, p. 88.

²⁴⁶ US Department of Defence, *Policy for Non-Lethal Weapons...*

²⁴⁷ Joint Non-Lethal Weapons Program, *Organization*, <http://jnlwp.defense.gov/About/Organization.aspx>, [accessed: 24 June 2015].

(1) Deny access into/out of an area to individuals (open/confined) (single/few/many); (2) Disable individuals (open/confined) (single/few/many); (3) Move individuals through an area (open/confined) (single/few/many); (4) Suppress individuals (open/confined) (single/few/many); (5) Stop small vehicle; (6) Stop medium vehicle; (7) Stop large vehicle; (8) Disable vehicle/many vehicles; (9) Stop small vessel; (10) Stop large vessel; (11) Disable vessel/many vessels; (12) Stop fixed-wing aircraft on the ground; (13) Disable aircraft on the ground; (14) Divert aircraft in the air; (15) Deny access to facility.²⁴⁸

While, facing these differences, one can argue that DOD defines more conceptual aspects and JNLWP translates them into more technical requirements, the U.S. Army has produced its own list, entirely different from these two, according to which NLW should enhance the capability of a Joint Force in the accomplishment of the following objectives:

(1) Discourage, delay, or prevent hostile actions; (2) Limit escalation; (3) Take military action in situations where the use of lethal force is either not the preferred option, or is not permitted under the established Rules of Engagement (ROE); (4) Better protect our forces; (5) Disable equipment, facilities, and enemy personnel; (6) Engage and control people through civil affairs operations and Psychological Operations (PSYOP); (7) Dislodge enemy from positions without causing extensive collateral damage; (8) Separate combatants from noncombatants; (9) Deny terrain to the enemy.²⁴⁹

It seems that the story of NLW in the U.S. military detrimentally follows the traditional narrative of the American military culture – the inability to produce and coordinate comprehensive concepts for conceptually new technologies. While JSC argue that “minor lapses in conduct or application of fires could seriously damage the international reputation of the United States”²⁵⁰ and the DOD Defense Science Board claims that “with respect to the human toll on innocent civilians, the U.S. strategy is to reduce collateral damage,”²⁵¹ only the U.S. Army successfully addresses this true demand from NLW: to “dislodge enemy from positions without causing extensive collateral damage” and “separate combatants from noncombatants.”²⁵² Moreover, the Army goes further in its conceptualization, trying to suggest a required organisational change that will accommodate NLW:

The future Modular Force, specifically, must be provided with organic nonlethal capabilities to disrupt, dislocate, disorganize, disintegrate, fix, isolate, suppress, and destroy enemy functions. Joint force commanders (JFCs), furthermore, must

²⁴⁸Joint Non-Lethal Weapons Program, *Non-Lethal Weapons Requirement Fact Sheet*, <http://jnlwp.defense.gov/pdf/pressroom/NLW%20Requirements%20Fact%20Sheet%20Oct%202011.pdf>, [accessed: 24 June 2015].

²⁴⁹ Department of the Army Headquarters, United States Army, *Force Operating Capabilities: TRADOC Pamphlet 525-66*, Fort Monroe, 7 March 2008, p. 88.

²⁵⁰ U.S. Joint Chiefs of Staff, *Capstone Concept for Joint Operations...*

²⁵¹ Defence Science Board, Department of Defense, *Challenges to Military Operations in Support of U.S. Interests*, Volume II, Main Report, Washington DC, December 2008, p. 9.

²⁵² Department of the Army Headquarters, United States Army, *Force Operating Capabilities...*, p. 88.

be provided with multifunctional/multirole lethality options in integrated multipurpose system configurations ... The future Modular Force Soldier must have the ability to employ a wide array of lethal and nonlethal munitions based upon mission need and force protection.²⁵³

It seems that the U.S. Army is the one oasis in the desert that is the theoretical conceptualisation of NLW. Nevertheless, it is important to state that similar to the case of the information RMA of the 1990s, where academic strategists, such as Andrew Marshall, Williamson Murray, Andrew Krepinevich and many others, tried to put the U.S. military on the right track, NLW are also not parentless. On the academic forefront of the NLW debate, a special place is reserved for Douglas Lovelace Jr. and Steven Metz,²⁵⁴ director and the director of research at the U.S. Army War College Strategic Studies Institute, as well as David Koplow,²⁵⁵ a professor of law at the Georgetown University, who has held a variety of senior defence-related positions in the U.S. government. Since the late 1990s, these scholars theorised and anticipated changes that NLW might bring to the way the U.S. military fights its war, however, it seems that the military has been able neither to develop an appropriate philosophy, nor to find leaders willing to bridge the gap between these theories and practise.

In the very beginning, following its traditional techno-utopia and tendency to seek for a “silver bullet” solution, American military thought embraced NLW as the next big thing. In 1998, Lieutenant Colonel James C. Duncan reported:

General Zinni’s decision to equip the Marines of I Marine Expeditionary Force with non-lethal weapons was revolutionary. Without question, his decision has had a tremendous impact on all U.S. military forces by providing the stimulus to change the perception of non-lethal weapons. In addition, Operation United Shield prepared the groundwork for the development of a new concept for the employment of nonlethal weapons and moved the U.S. military toward a new age of warfare.²⁵⁶

But the first users and main NLW advocates, General Zinni, Colonel Lorenz and Lieutenant Colonel Stanton, after their return from Somalia generally labelled NLW as tools of “peace operations and armed interventions short of war”²⁵⁷ that “broaden the scope of

²⁵³ Department of the Army Headquarters, United States Army, *Force Operating Capabilities...*, p. 88

²⁵⁴ Douglas Lovelace, Steven Metz, *Nonlethality and American Land Power...*; Steven Metz, ‘Non-Lethality and the Revolution in Military Affairs’, in Malcolm Dando, (ed.), *Non-Lethal Weapons: Technological and Operational Prospects...*; Steven Metz, ‘Non-Lethal Weapons: A Progress Report...’.

²⁵⁵ David Koplow, *Non-Lethal Weapons: The Law and policy of Revolutionary Technologies for the Military and Law Enforcement*, (New-York: Cambridge Press, 2006); David Koplow, ‘Red-Teaming NLW: A Top Ten List of Criticisms about Non-Lethal Weapons’, *Case Western Reserve Journal of International Law*, Vol. 47, Issue 1, 2015, pp. 229-238; David Koplow, *Death by moderation...*

²⁵⁶ James Duncan, ‘A Primer on the Employment of Non-Lethal Weapons’, *Naval Law Review*, Vol. 45, 1998, p. 1.

²⁵⁷ F. M. Lorenz, ‘Non-Lethal Force: The Slippery Slope to War?’, *Parameters*, Vol. XXVI, No. 3, 1996, pp. 52-62.

possible responses to riots and other low-intensity tactical situations.”²⁵⁸ Despite some enthusiasts, who tried to promote NLW as systems that “have broad application across the entire spectrum of conflict” including armed conflicts, as “battlefields may be shaped through operations which employ non-lethal weapons;”²⁵⁹ this vision has never been materialised. Two decades after their first employment in Somalia, NLW remain to be considered by the American military thought as means for law enforcement activity only – the *2012 Non-Lethal Weapons Training and Readiness Manual*, published by the Marine Corp, speaks about performing riot control formations and deploying civil disturbance units, rather than an employment of NLW on the battlefield.²⁶⁰

The case of NLW in the U.S. military perfectly demonstrates that, as per usual with the American military culture, American military thought struggles to produce and implement a comprehensive theoretical and conceptual basis for new technologies. Despite the warning of the early NLW users that “Tools are not the problem. The solution [...] is not to produce more nonlethal technology; it is to set clear policy goals and objectives,”²⁶¹ due to its cultural characteristics, the American military has failed to produce these goals and policies and take NLW out of their niche of strictly law enforcement purposes.

Part Five: Conclusions

Analysing the history of NLW in the U.S., it is important to highlight that the peak of American interest in NLW coincided with the employment of other revolutionary technologies related to the information-led RMA, in general, and precision-guided munitions, in particular. During that time, the mainstream discussion was that the major purpose of these technologies was to provide the U.S. military with higher precision, faster reaction and, more importantly, higher lethality. Thus, it is not surprising that the role of NLW remained at the periphery of American thinking at that time.²⁶²

Moreover, since then, the American military establishment has never felt stressed by its political leadership to reduce civilian casualties from the politically acceptable level to the

²⁵⁸ Martin Stanton, ‘What Price Sticky Foam?’, *Parameters*, Vol. XXVI, No. 3, 1996, pp. 63-68.

²⁵⁹ James Duncan, ‘A Primer on the Employment...’, p.33; Also see Timothy Lamb, *Emerging Non-Lethal Weapons Technology and Strategic Policy Implications for 21st Century Warfare*, (Carlisle Barracks: U.S. Army War College, 1998); Douglas Lovelace, Steven Metz, *Nonlethality and American Land Power...*

²⁶⁰ United States Marine Corp, *Non-Lethal Weapons (NLW) Training and Readiness (T&R) Manual*, Washington, 2012.

²⁶¹ Martin Stanton, ‘What Price Sticky Foam?’.

²⁶² Steven Metz, ‘Non-Lethality and the Revolution in Military Affairs...’.

minimum possible – the war in Iraq proved that American political tolerance of the enemy civilian casualties is very high. While in Iraq there were no the Second World War-style city bombing like in Hamburg, Dresden or Tokyo, or the carpet bombing of the 1960s in Vietnam,²⁶³ after four years of war, the American public opinion expressed very little concern about 200,000 Iraqi civilian deaths.

While the frontier officially disappeared at the end of the 19th century, it has never disappeared from the American military culture that has continued to maintain the myth of the “First American Way of War”. Analysing the linguistic and practical discourses of the U.S. military in Iraq, anthropologists highlight that on the metaphorical level the “Wild West” is very much alive and kicking within the American military.²⁶⁴ During the Iraqi War, statements like “Anbar [a province of Iraq] has the savagery, lawlessness and violence of America’s Wild West” or “We refer to our base as ‘Fort Apache’ because its right in the middle of Indian Country” had become a norm, representing not only an attempt to “recapitulate the presumed success of the U.S. military against Native Americans,”²⁶⁵ but also the relevance of the violent approach of the “First American Way of War” towards the local “savage and uncivilised” population.

On the international arena, Washington has succeeded to maintain the “good” intentions of the U.S. military activity. Shaped by the inherent belief in American destiny as *a City upon the Hill*, American politicians have successfully projected this image onto international arena, as President Bush put it in 2004:

Like generations before us, we have a calling from beyond the stars to stand for freedom. This is the everlasting dream of America ... we go forward, grateful for our freedom, faithful to our cause, and confident in the future of the greatest nation on Earth.²⁶⁶

The “we are good” image of America – as *the protector of the free world* against *a great evil*, two main narratives of the Cold War era foreign policy – has been successfully utilised to minimise the influence of international criticism, as well as to improve the already high domestic support. In addition, the strategy of “collations of the willing” (when it was

²⁶³ Howard Zinn, *Vietnam: The Logic of Withdrawal*, (Boston: Beacon Press, 1967), Chapter 6.

²⁶⁴ See for example: Daniel Bolger, *Savage Peace: Americans at War in the 1990s*, (New York, Presidio, 1995); Robert Kaplan, *Imperial Grunts: The American Military on the Ground*, (New York: Random House, 2005); Stephen Silliman, ‘The “Old West” in the Middle East: U.S. Military Metaphors in Real and Imagined Indian Country’, *American Anthropologist*, Vol. 110, Issue 2, 2008, pp. 237-247.

²⁶⁵ Stephen Silliman, ‘The “Old West” in the Middle East...’.

²⁶⁶ George Bush, *Remarks Accepting the Presidential Nomination at the Republican National Convention in New York City*, New York, 2 September 2004, <http://www.presidency.ucsb.edu/ws/index.php?pid=72727&>, [accessed: 28 August 2015].

implemented) successfully eliminated American unilateral political responsibility for the consequences of U.S. military activity, helping to spread the criticism among as many players as possible.

One of the main reasons for the lack of progress with NLW, is the fact that in the context of American culture, the idea of non-lethality sounds like an oxymoron. As discussed, the American mind, bred on the violence and the sense of vengeance of the frontier, perceives war as a temporary unfortunate phenomenon that has to be resolved as quickly and aggressively as possible – this approach leaves very little space for the appreciation of enemy population. Furthermore, American military culture, predisposed towards projection of excessive firepower, combined with a view that the military activity is temporary, leaves even less room for weapons that are not intended to improve the range, accuracy, speed or lethality of the forces. Despite the fact that the wars in Iraq and Afghanistan were anything but short, due to the inability of American military culture to deal with prolonged conflicts, these interventions were, in fact, “truly long wars fought one year at a time.”²⁶⁷

While the American military cultural context paid very little respect for the enemy’s population, it will be incorrect to claim that the U.S. military did not try to reduce civilian casualties in Iraq and Afghanistan. U.S. Army Lieutenant General Curtis Scapaaotti, the former commander of ISAF Joint Command in Afghanistan, stated in his foreword to the handbook titled “Afghanistan Civilian Casualties Prevention” that:

Lethal force is part of war, and we must ensure our soldiers can protect themselves at all times. However, we must take measures to mitigate the impact on the civilian populace we are protecting. Through deliberate planning, training, tactical patience, and effective mission execution, the number of civilian casualty incidents can be significantly decreased and these negative effects minimized.²⁶⁸

Interestingly enough, neither his address, nor the handbook itself, paid attention to the technological way to reduce civil casualties. While the handbook has a very small chapter dedicated to NLW that, in fact, is no more than just a list of available weapons, the main emphasis of the handbook is on the use of lethal force in a way that will try to reduce civilian casualties, by force training, planning considerations and consequence management.

²⁶⁷ Command Sergeant Major Robert Rush quoted in Thomas Ricks, ‘Rotation Policy: Iraq & Afghanistan Were Really the Wars We Fought 1 Year at a Time’, *Foreign Policy*, 27 May 2015, <http://foreignpolicy.com/2015/05/27/rotation-policy-iraq-afghanistan-were-really-the-wars-we-fought-1-year-at-a-time/>, [accessed: 28 August 15].

²⁶⁸ Center for Army Lessons Learned (CALL), *Afghanistan Civilian Casualties Prevention*, Handbook 12-16, June 2012, p. IV.

On the one hand, as was discussed above, in the American military mind-set technology is a lodestar of military success. On the other hand, facing the problem of civilian casualties, the U.S. military decided to adapt the application of lethal forces, rather than utilise NLW – the most prompting technological solution. The explanation of this contradictory behaviour is simple. A full implementation of the RMA of NLW demands significant political pressure, in the case of NLW – political pressure to minimise civilian casualties. Collateral damage, civilian casualties and even “small massacres” are considered by American mind as unfortunate, accidental, but an inevitable, outcome of war,²⁶⁹ and therefore politically defensible. It is important to note that after a decade of American involvement in Iraq and Afghanistan the U.S. military began to understand that “the impact of CIVCAS [civil casualties] has increased to the point that single tactical actions can have strategic consequences and limit overall freedom of action.”²⁷⁰ Consequently, it will be wrong to claim that there was no political pressure at all, it was definitely there, just not powerful enough to demand radical changes that are required for the implementation of revolutionary technologies.

This lack of political pressure, however, was not the only reason for the failure of the RMA of NLW in the U.S. Due to traditional military style and culture, American military was unable to produce a clear and comprehensive vision of what is required from NLW. Based on the early assumption that NLW have merely law enforcement role, due to its cultural, structural and historical contexts, American military thought was incapable of developing the conceptual basis required for the RMA of NLW. Without clear military concept regarding NLW, and without extensive political pressure that will require maximum possible minimisation of civilian casualties, NLW are condemned to remain a marginal and oxymoronic phenomenon in the history of the technological adventures of the U.S. military.

²⁶⁹ Martin Shaw, *The New Western Way of War...* pp. 84-87.

²⁷⁰ Center for Army Lessons Learned (CALL), *Afghanistan Civilian Casualties...*, p. 1.

CHAPTER 4

THE (ABSENCE OF THE) RMA OF NLW IN RUSSIA

Introduction

The development and use of Non-Lethal Weapons for law enforcement purposes in the former U.S.S.R. was more or less similar to the developments in the West. Different chemical, kinetic and acoustical special munitions have been employed by both the Ministry of Interior (MVD) Forces and the Russian Ministry of Defence. The MVD has employed NLW at least since the 1970s.¹ However, it is important to note that until today it uses the term *special'nie sredstva* (special means) that has no generic definition, but represents a list of different means, tools, and other equipment, including NLW, which police officers have the right to use in specific situations for specific purposes. The list of equipment, as well as when and how it can be used, is regulated by Russian Criminal Law.² The Russian Ministry of Defence, interestingly enough, employs a different term – *orug'ie neleta'nogo de'stviya* (weapon with non-lethal action),³ which is closer to the Western approach.

The difference between these two terms is not only semantic. While the first is a part of federal legislation and represents a very concrete list of means and weapons approved for police use, the second one presents a more abstract concept, mainly based on Western approaches.⁴ Despite the fact that the Russian Ministry of Defence made an attempt to

¹The Ministry of Interior of the U.S.S.R., *Ob utverzhdenii Nastavleniya po primeneniyu spetsial'nykh sredstv "Cheremukha"*, [Decree to Approve the Manual for the Use of Special Means "Cheremukha"], Moscow, 24 September 1970; The Ministry of Interior of the U.S.S.R., *Ob utverzhdenii Instruksii po primeneniyu spetsial'nykh sredstv individual'noy zashchity Lichnogo sostava i drugikh mer bezopasnosti v organakh vnutrennikh del i Podrazdeleniya vnutrennikh voysk SSSR*, [Decree to Approve the Instructions for the Use of Special Means for the Individual Self-Defence of the Personnel and Other Security Measures by the Law Enforcement Agencies and Internal Forces of the Ministry of Interior of the U.S.S.R.], Moscow, 26 December 1978; The Ministry of Interior of the U.S.S.R., *Ob utverzhdenii Instruksii o poryadke primeneniya rabotnikami militsii khimicheskogo Sredstva spetsial'nogo naznacheniya "Cheremukha-10"*, [Decree to Approve the Instructions for the Use of Chemical Special Mean "Cheremukha-10" by Police Officers], Moscow, 19 November 1981.

²The Federal Law of the Russian Federation № 3-Φ3, *O Politsii*, [About Police], Moscow, 1 March 2011, Articles 21 – 22.

³The Ministry of Defence of the Russian Federation, *Kontseptsiya sozdaniya i primeneniya oruzhiya neletal'nogo deystviya v Vooruzhennykh Silakh Rossiyskoy Federatsii*, [The Conception to the Development and Employment of Weapons with Non-Lethal Action in the Armed Forces of the Russian Federation], Moscow, 2009.

⁴V. Selivanov, 'Oruzhiye neletal'nogo deystviya kak sredstvo bor'by s terrorizmom, obespecheniya mirotvorcheskikh operatsiy i operatsiy po pravoprinuzhdeniyu', ['Non-Lethal Weapons as Means for Struggle against Terrorism, Provision on Peacekeeping and Law Enforcement Operations'], *Vestnik Rossii'skoi Akademii Estestvennih Nauk*, No. 4, 2005, pp.1-11; V. Selivanov, D. Levin, S. Lyuwin, 'Arkhitektura i realizatsiya bazy dannykh "Oruzhiye Neletal'nogo Deystviya"', ['The Architecture and Realisation of the data-base "Weapons with Non-Lethal Action"'], *Voprosi Oboronoj Tehniki – Seriya 16*, No. 7-8, 2012, pp. 63-76; V. Lyaschenko, *Torgovlya Oruzhiem: oruzhiye neletal'nogo deystviya, sozdaniye, proizvodstvo, primeneniye, operatsii na*

formalise the status of NLW in the Russian Military Forces, by publishing in 2009 “The Conception to the Development and Employment of Weapons with Non-Lethal Action in the Armed Forces of the Russian Federation”; it seems that this attempt has not been so successful.⁵

Following this introduction, the discussion will be divided into five parts. The first part analyses the current situation with NLW in Russia. It discusses the state of technology offered by the Russian manufacturers and the level of the actual employment of NLW by Russian military forces. The second part focuses on the aspects of Russian foreign policy. As it was discussed previously, one of the main aspects, which has a potential to increase the employment of NLW, is the international political pressure and criticism that calls for the reduction of collateral damage and civilian deaths during military operations. During the Second Chechen War (1999-2009) and the Russo-Georgian War (2008) Russian armed forces were vastly criticised for harming civilian population and causing intensive collateral damage. For example, in 2000, the New York-based Human Rights Watch criticised the large number of civilian casualties caused by what it called "the widespread and often indiscriminate bombing and shelling by Russian forces" in Grozny and elsewhere.⁶ In 2008, Amnesty International criticised Russian aerial attacks in Georgia, in which “civilians were killed or injured” as the attacks “failed to distinguish between military objectives and civilians.”⁷ In an addition to the NGOs, different international actors have constantly criticised Russian armed forces for causing civilian casualties. Criticism for causing civilian casualties. For example, in 2000, American Secretary of State Madeleine Albright criticised Russia for “the persistent, credible reports of human rights violations by Russian forces in Chechnya, including extrajudicial killings.”⁸ This part will discuss the “political will” of Russian policy-makers to withstand this pressure and the reasons behind their resistance, or compliance. It is important to note that an

mirovom rynke, [Trade in Weapons: Weapons with Non-Lethal Action, Development, Production, Employment, Operations on the World Market], (Moscow: Ekonomika, 2011).

⁵ This document is classified, so it is difficult to say what its goals and definitions are, however the analysis of the situation with NLW prior this policy and during 5 years after shows that there is no much difference. See also: V. Selivanov, D. Levin, I. Ilyin, ‘Metodicheskiye osnovy programmno-tselevogo upravleniya razvitiyem oruzhiya neletal'nogo deystviya’, [‘Methodological Basics of Management by Objectives of Non-Lethal Weapons Development’], *Voprosy Oboronnoy Tekhniki, Seriya 16*, No. 3-4 (69-70), 2014, pp. 36-50.

⁶ Jonathan Marcus, ‘Russians urged to stop 'vacuum' bombings’, *BBCNews*, 15 February 2000, <http://news.bbc.co.uk/1/hi/world/europe/644087.stm>, [accessed: 14 March 2016].

⁷ Amnesty International, *Georgia-Russia conflict: Protection of civilians and accountability for abuses should be a priority for all*, Public Statement, 1 October 2008, <https://web.archive.org/web/20081111011924/http://www.amnesty.org/en/library/asset/EUR04/004/2008/en/3b540f63-8ef1-11dd-8d03-3f760a3cc4a3/eur040042008en.pdf>, [accessed: 14 March 2016].

⁸ U.S. Mission Geneva, *U.S. Response to Human Rights Commission Resolution on Chechnya*, 26 April 2000, Geneva, <https://web.archive.org/web/20080906094913/http://geneva.usmission.gov/press2000/0427chechnya.html>, [accessed: 14 March 2016].

analysis of Russia's "political will" and Moscow's attitude toward international pressure in the second decade of 21st century has to focus on the Russia's interpretation of their own political history, rather than try to establish an objective understanding of their political decisions. In other words, it is important to analyse how Russian political decision-makers interpret their current and former foreign policies, how they explain their activity on the international arena today and how they cope with international criticism. Consequently, this part will be based solely on Russian sources, combining academic articles and books, opinions of Russian political analysts, and official speeches or published interviews with Russian politicians.

The third part concentrates on cultural aspects of Russian society. More specifically, in an attempt to explain the existence (or lack of it) of internal political pressure for the wider employment of NLW, this part offers insight into the Russian cultural understanding of war and the value of human life. The fourth part analyses the attitudes of Russian military cultural attitudes toward technological innovations in general, and NLW in particular. It is important to note that while this part follows the development of Russian military thought in this field and its influence on the employment of NLW, due to the fact that most of the official Russian documents on NLW are still classified, this analysis is limited to open source publications.

The final fifth part integrates the previous four in an attempt to explain the reasons behind the failure of the RMA of NLW in Russia. Based on political and cultural aspects, it clarifies why despite the range of available NLW and well defined military concepts for their employment, Russian military still holds back from using them.

Part One: The Status of Non-Lethal Weapons in Russia

While, as discussed above, the development and employment of NLW by Soviet and later Russian law enforcement agencies were independent but followed similar lines to those of the West; the growth of interest toward these weapons in the Russian military has been directly influenced⁹ by the Western (especially American) military attitudes emerged in the

⁹This influence can be easily traced in the Russian publications about military employment of NLW. See: V. Selivanov, 'Oruzhiye neletal'nogo deystviya...'; S. Savrasov, 'Kontseptsiya primeneniya oruzhiya neletal'nogo deystviya v boyevykh operatsiyakh sukhoputnykh voysk VS SSHA', ['The Policy of the U.S. Army's Employment of NLWs in Combat Operations'], *Zarubezhnoe voennoe obozrenie*, No. 10, 2009, pp. 37-44; V. Antipov, S. Novichkov, 'K voprosu o razrabotke i primeneniі neletal'nykh sredstv porazheniya na khimicheskoy osnove', ['Regarding the Question about the Development and Employment of Non-Lethal Means Based on Chemicals'], *Voennaya Misl'*, No. 9, 2009, pp. 54-61; V. Vladimirov, G. Chernikh, 'Sostoyaniye i osnovnyye napravleniya razvitiya oruzhiya neletal'nogo deystviya, sredstv i sposobov zashchity ot nego', ['The Current

mid-1990s.¹⁰ The analysis of Western policies and views on the future of NLW brought the Russian decision-makers to the understanding of the important potential of these technologies for future military operations. This understanding culminated in the second part of the 2000s with the publication of two pivotal documents: “The Conception to the Development and Employment of Weapons with Non-Lethal Action” (*Kontseptsiya sozdaniya i primeneniya oruzhiya neletal'nogo deystviya*) published by the Military-Industrial Committee of the Government of the Russian Federation in 2005, and “The Conception to the Development and Employment of Weapons with Non-Lethal Action in the Armed Forces of the Russian Federation” (*Kontseptsiya sozdaniya i primeneniya oruzhiya neletal'nogo deystviya v Vooruzhennykh Silakh Rossiyskoy Federatsii*) approved by the Russian Minister of Defence in 2009.¹¹

This apparent enthusiasm emanating from the highest level of political-military decision-makers was swiftly accepted by different defence industries. In an attempt to answer this new fashion for NLW, main weapon developers and manufacturers directed their efforts in two different directions. The first one was the adjustment of the existing lethal ordnance with non-lethal (mainly chemical) effects. This led to the development and demonstration of a spectrum of non-lethal munition filled with chemical irritant-action pyrotechnic composition, such as: 105mm munition for RPG grenade launcher, 120mm mortar projectile, Helicopter Container Dispenser, and even 500 kg Air Cluster Bomb.¹² The second direction was the development of new weapons specifically designed as NLW. Although none of the manufacturers has demonstrated functioning prototypes, records in open literature indicate at least two main fields of research and development activities: Directed Energy weapons¹³ and Electrical weapons for significant distances.¹⁴

Situation and Main Directions for the Development of NLW, the Means and Ways of Protection against Them’], *Strategiya Grazhdanskoy Zashchity': Problemy i Issledovaniya*, Volume 2, No. 1(2), 2012, pp. 13-22.

¹⁰The development of the American military approach in 1990s discussed in Chapter 3.

¹¹Both documents are still classified, however both of them are widely discussed in the open publications.

¹²*The XXI Century Encyclopaedia – Russian Arms and Technologies, Volume XII: Ordnance and Munition*, (Moscow: Arms and Technologies, 2006), pp. 754-765, (Russian/English).

¹³I. Petrov, ‘Oruzhiye nesmertel'nogo deystviya’, [‘Weapons with Non-Lethal Action’], *Vecherniaia Moskva*, No. 190, October 08, 2004; D. Zaitsev, A. Kudrjashov, D. Maystruk, et al., ‘Perspektivy primeneniya kompleksov oruzhiya neletal'nogo deystviya na osnove KVCH-izlucheniya v spetsial'nykh operatsiyakh po presecheniyu masovykh besporyadkov’ [‘The Prospects for the Application of Millimeter-Wave NLW in Operations for the Suppression of Mass Riots’], *Strategicheskaya Stabil'nost'*, No. 2(55), 2011, pp. 54-59.

¹⁴E. Stupitskiy, L. Kuznetsova, ‘Issledovaniye vozmozhnosti sozdaniya sredstv elektroshokovogo neletal'nogo vozdeystviya na bioob"yekty na bol'shikh rasstoyaniyakh’, [‘The Research of the Possibility to Create Means for Non-Lethal Electroshock Impact on Biological Objects from Significant Distance’], *Voenaya Misl'*, No. 4, 2013, pp. 38-46.

The military force, chosen to be the test-bed for the employment of NLW, was the Collective Rapid Reaction Force (CRRF) from the Russian-led Collective Security Treaty Organization (CSTO). This unit, rather than the ordinary contingent from the Russian military, was selected due to “its primarily tasks, as well as political-military, economic and social-demographic conditions, in which these tasks have to be accomplished”.¹⁵ In other words, as CRRF is intended to operate exclusively on the territory of the CSTO countries,¹⁶ within friendly population, the reduction of collateral damage and civilian casualties seemed to be important. The introduction of NLW to CRRF occurred in 2010 during the large training operation “Vzaimodeystviye-2010” (Cooperation-2010) in Russia. During the training, a company from the Russian 98th Guards Airborne Division and a unit from the Kyrgyz Special Forces "Ilbirs" brigade, with the assistance of NLW, performed three followed missions: (1) counteracting an enemy ambush, (2) securing the free movement of military convoys through the roadblocks organised by a violent civil population, and (3) liberating a village captured by irregular forces.¹⁷ While this could be a good start for the military usage of NLW in Russia, the reality was completely the opposite. Firstly, this training did not involve any NLW developed specifically for military use, but was based on existing weapons currently employed by the Russian MVD forces, such as irritant and flash-bang hand grenades, 40mm non-lethal munition, multipurpose non-lethal pistols, etc.¹⁸ Secondly, despite the positive demonstration of the role of NLW in future military operations, their further employment has not been initiated.

The initial enthusiasm has been successfully buried by the Russian bureaucracy machine. Without any integrating systematic mechanism that organises, regulates and focuses the development and employment of NLW, each main governmental service (i.e. MVD, Federal Security Service (FSB), and Armed Forces) has developed its own approach, and any attempts to coordinate inter-departmental committees were initially doomed to fail due to

¹⁵A. Nagovitsyn, A. Grudzinskii, A. Sporykhin, ‘Oruzhiye neletal'nogo deystviya i perspektivy yego ispol'zovaniya v interesakh sil Organizatsii Dogovora o kollektivnoy bezopasnosti’, [‘Weapons with Non-Lethal Action and the Perspectives of Their Employment in the Interest of Collective Security Treaty Organization’], *Voenaya Misl'*, No.3, 2011, pp. 51-59.

¹⁶Collective Security Treaty Organization (CSTO), *Soglasheniye o Kollektivnykh silakh operativnogo reagirovaniya Organizatsii Dogovora o kollektivnoy bezopasnosti*, [Agreement on the Collective Rapid Response Forces of the Collective Security Treaty], Moscow, 14 June, 2009, Article 2.

¹⁷A. Nagovitsyn, A. Grudzinskii, A. Sporykhin, ‘Oruzhiye neletal'nogo deystviya ...’; A. Nagovitsyn, ‘Ispol'zovaniye oruzhiya neletal'nogo deystviya kollektivnymi silami ODKB’, [‘The Employment of Weapons with Non-Lethal Action by CSTO Forces’], *Zashchita i Bezopasnost'*, No. 3(58), 2011, pp. 2-3.

¹⁸A. Nagovitsyn, A. Grudzinskii, A. Sporykhin, ‘Oruzhiye neletal'nogo deystviya ...’; A. Nagovitsyn, ‘Ispol'zovaniye oruzhiya neletal'nogo deystviya ...’.

traditional rivalry between these organisations.¹⁹ In light of this bureaucratic uncertainty, it is not surprising that NLW projects have suffered from insufficient governmental funding,²⁰ and without visible potential contracts, the industries have reduced their investments to the minimum. Moreover, it is important to state that despite the fact that CRRF is built, mainly, from pure military units, it is designated to operate inside the country – a task that is the traditional responsibility of MVD internal armed forces. This contradiction has played an additional role in the process of the general stagnation regarding NLW after the optimistic training in 2010. On the one hand, MVD forces have already had a satisfying arsenal of NLW (for their own purposes),²¹ hence this military employment was a mere adaptation of the existing law enforcement weapons and tactics. On the other hand, due to the domestic nature of the CRRF's operational scenarios, the Ministry of Defence and Armed Forces saw no reason to expand the experience achieved by CRRF to their regular forces, intended to fight on conventional battlefields.

To summarise the current situation with NLW in Russia it is important to focus on two main factors. The first one is the technological status. As noted before, Russian defence industries have the required technological potential to supply efficient NLW to the military forces. While some of these weapons, apparently, will be based on the existing solutions for law enforcement agencies,²² Russian manufacturers have the necessary capabilities to produce NLW intended specifically for military use (and already demonstrated that).²³ The second factor is the actual employment of NLW within Russian Armed Forces. It seems that the CRRF experience with NLW was a very limited one-time experiment, rather than a test-bed for the possible expansion of NLW future employment. In an addition to CRRF, the only other military unit that employs NLW is the Russian Military Police,²⁴ which uses these weapons to fulfil its security missions, rather than on the battlefield.

¹⁹V. Selivanov, D. Levin, I. Ilyin, 'Metodicheskiye osnovy ...'.

²⁰V. Korchak, S. Smirnov, 'Regulirovaniye normativno-pravovyykh otnosheniy pri sozdanii oruzhiya neletal'nogo deystviya', ['The Legislative Regulation Regarding the Development of Weapons with Non-Lethal Action'], *Kompetentnost'*, No. 4-5 (45-46), 2007, pp. 3-10.

²¹A. Silnikov, 'Vidy spetsial'nykh sredstv sostoyashchikh na vooruzhenii OVD, i ikh klassifikatsiya', ['Types and Classification of Special Equipment Adopted by the Russian Interior Ministry Units'], *Vestnik Sankt-Peterburgskogo universiteta MVD Rossii*, No. 3(51), 2011, pp. 66-70.

²²*The XXI Century Encyclopaedia – Russian Arms and Technologies, Volume XV: Security and Law Enforcement Facilities*, (Moscow: Arms and Technologies, 2007), pp. 117-140, (Russian/English).

²³*The XXI Century Encyclopaedia – Russian Arms and Technologies, Volume XII...*, pp. 754-765.

²⁴ 'Voyennaya politsiya VVO poluchila partiyu travmaticheskikh pistol'etov "Osa"', [Military Police Received Traumatic Pistols "OSA"], *RiaNovosti*, 13 February 2014, http://ria.ru/defense_safety/20140213/994703801.html, [accessed: 12 July 2014].

While there are no visible substantial plans to expand this situation to the regular Armed Forces, it seems important to understand the nature of the main obstacles that prevent the further development of NLW. The following two parts discuss the reasons behind the general impotence of political decision-makers to coordinate activity in the field of NLW and provide substantial funding.

Part Two: Russian Foreign Policy

The foundations of Russian foreign policy in the second decade of the 21st century lie in Russia's political and economic transformation processes since the dissolution of the Soviet Union. Russian scholars divide this 25 year period into three main parts, waves or generations: "Blind" Westernisation (first part of 1990s), Selective Partnership (from mid-1990s to mid-2000s), and Revitalization of Russia (since mid-2000s).²⁵ While this research is mainly interested in the nature of the last generation of Russian foreign policy, a brief discussion of the previous two seems vital as they provide a key to the understanding of the current "revitalization" concept and its role in Russian response to international criticism.

According to Professor Alexei Bogaturov, with the dissolution of the U.S.S.R., Russian political decision-makers sincerely believed that the Western community was looking for an opportunity for political and economic integration with Russia, similarly to the processes started with other post-Soviet countries in East Europe.²⁶ The end of the Cold War symbolised the unconditional victory of democracy, and the foreign policy of the new-born democratic Russia was based on two main concepts: (1) securing favourable international conditions for the building of democracy in Russia, and (2) that the main and universal value is the democratization of the World.²⁷ The political notion, in the early 1990s, was that Russian domestic and international success had to be based, not only on a Russian attempt to be more similar to the West, but, in fact, on the Russian effort to be a part of the West. The best example of Russian attempts to be integrated with the West was the 1992 Charter for American-Russian

²⁵A. Bogaturov, 'Tri pokoleniya vneshnepoliticheskikh doktrin Rossii', ['The three generations of the Russian Foreign Policy Doctrines'], *Mezhdunarodnyye Protsessy*, Vol. 5, No. 1(3), 2007, pp. 54-69; N. Rabotyazhev, E. Solov'yev, 'Ot "Vozvrashcheniya v Mirovuyu Tsivilizatsiyu" k "Suverennoy Demokratii": Evolyutsiya vneshnepoliticheskikh kontseptsiy Rossiyskikh "Partiy Vlasti"', ['From the "Comeback to the World Civilization" to the "Sovereign Democracy": An Evolution of the Foreign Policy Conceptions of the Russian "Parties in Power"'], *Politiya*, No. 1(68), 2013, pp. 36-54.

²⁶Interview with K. Kosachev, the Chairman of the State Duma Committee on Foreign Affairs, published in *Mezhdunarodnaya Zhizn'*, No. 4, 2010, pp. 4-9, (Russian).

²⁷A. Bogaturov, 'Tri pokoleniya ...'.

Partnership and Friendship. It was the first time in Russian history that an agreement, which was signed with another state, defined Russian internal politics, where, from the Russian perspective, Moscow accepted the U.S. as an external referee of Russian internal reforms.²⁸ The Russian leadership of the early 1990s avoided any clear indication of their national interests in foreign policy, yet identified these interests with the interests of the democratic countries, the so called "global community of democracies". Moscow strongly urged foreign partners to recognize that the support of the Western initiatives was, in fact, the main goal of Russian foreign policy. The best example of this logic of universal "democratic solidarity" was Russian political behaviour in the initial period of the Yugoslavian crisis, when Moscow unconditionally supported the creation of new independent states in the territory of the former federation. It declared its diplomatic recognition of the new governments of the former Yugoslavia at the same time as the European Union, and before the United States. The Kremlin's refusal to support the central government in Belgrade against separatists Croatia and Slovenia was a surprise to many Western diplomats and many Russian citizens, as well.²⁹

Russian political analysts and scholars have claimed that not only this policy of "Blind" Westernization had no success, domestically or internationally, but in fact, it was a complete failure. Domestically, years of economic crisis and process of political decentralisation almost tore Russia apart, delegitimising the Kremlin in the eyes of regional leaders and the general population. Internationally, the first part of 1990s was a period of rapid contraction of Russian influence. Economic inability to maintain relations, established during the Soviet era, and absolute adaptation of Western policies at the expense of the Kremlin's interests, not only stopped Russia from preserving its interests in former socialist European countries, but they also led the Kremlin to abandon its partners in the Middle East, South Asia, Africa, and Latin America. The conclusion of Russian political observers was that in less than 5 years, Russian political status was reduced from a self-confident Global Power to a politically irrelevant appendage of the West.³⁰ This self-effacing policy started to change during the mid-1990s due to two main reasons. The first one was domestic. Internal pro-Western decentralisation policies, formulated in an attempt to be admired by the West, created economic chaos, notions of separatism and danger of additional secession. The second reason was the Western reaction to

²⁸A. Bogaturov, 'Tri pokoleniya ...'.

²⁹A. Bogaturov, 'Tri pokoleniya ...'.

³⁰A. Bogaturov, 'Tri pokoleniya ...'; V. Zhurkin, M. Nosov, D. Danilov, 'Voprosy mezhdunarodnoy bezopasnosti', ['Questions of International Security'], in N. Shmelev, (ed.), *Rossiya v mnogoobrazii tsivilizatsiy*, [*Russia in the Diversity of Civilizations*], (Moscow: Ves' Mir, 2011), p. 175.

the Russian attempt to westernise itself. The West showed little appreciation for Russian solidarity and did not show any desire for integration with an economically struggling, politically unstable state that until recently was its number one enemy. As a reaction to these developments, the Kremlin started to shift its foreign policy doctrine from unconditional compliance to the so called “Selective Partnership”.³¹

While the course of the Russian foreign policy, in the second half of the 1990s, generally preserved its pro-Western narratives, the main emphasis of Moscow’s new doctrine changed from an unequivocal agreement to political bargaining. Utilising the political advantages of being the only successor to the U.S.S.R., i.e., the biggest nuclear power and a permanent member of the UN Security Council, Moscow started to replace the “romanticism” of the early 1990s by a more pragmatic approach.³² According to Bogaturov, the Kremlin carefully began to demonstrate and defend its interests. The best example of this transformation was Moscow’s reaction to the Kosovo crisis. The Kremlin’s ginger support for NATO-led peacekeeping operations in 1995 and 1996 (mainly due to the fact that Russia was a part of the solution) was replaced by strong opposition to the NATO intervention in 1999.³³

The Kremlin was very disappointed by the inability of the Western countries to accept the idea that Russian historical ambitions to be a leading actor on the geopolitical arena did not disappear with the collapse of the U.S.S.R. In 2015, in a famous documentary *President*, Putin recalled:

I served in the KGB, in foreign intelligence, for almost 20 years, and even I thought that with the collapse of this ideological obstacle, in the shape of the Communist Party’s monopoly on power, everything will cardinaly change. No... it did not change in essence, because, as it turned out, ... there are geopolitical interests that are completely disconnected from any ideology. This is where our partners [the West] were required to understand that Russia is a country that has, and it cannot be without, its own geopolitical interests. And it is required to respect each other, while searching for balances and mutually accepted resolutions.³⁴

In the beginning of the 21st century, the Russian position in the international arena was very selective and non-partisan. On the one hand, the Kremlin finally accepted NATO’s expansion into East Europe, and, following the 9/11 events, unconditionally supported the NATO-led

³¹A. Bogaturov, ‘Tri pokoleniya ...’.

³²O. Shishkina, ‘Post-Soviet Foreign Policy Foundations: State Interests vs. Identities’, *Moscow State Institute of International Relations (MGIMO) Blog - Govoryat Eksperty MGIMO*, 9 June 2014, <http://www.mgimo.ru/news/experts/document253273.phtml>, [accessed: 07 August 2014].

³³A. Bogaturov, ‘Tri pokoleniya ...’.

³⁴Vladimir Putin in Vladimir Solov'yev, *President*, (Masterskaya Movie Company, 2015), (Russian).

anti-terror coalition, created in 2002.³⁵ On the other hand, Russia signed the 2001 Sino-Russian Treaty of Friendship and refused to provide support to the 2003 US-led invasion of Iraq.³⁶

Meanwhile the prices of fossil fuels had remained high, and heavily based on their export, the Russian economy started to recover. Building on rising oil and gas revenues the Russian economic growth of the first part of 2000s was not only substantial; it was unprecedentedly high and fast.³⁷ This success has had an immediate influence on domestic public opinion that considered Putin as “saviour of the nation”, “restorer of order”, and “distributor of the wealth”.³⁸ Consequently, it was not surprising that on the wave of the economic success and domestic support, the Kremlin started to revalue its position in global affairs.³⁹ The culminating point of this revaluation was the President Putin’s 2006 Speech at the Meeting with the Ambassadors and Permanent Representatives of the Russian Federation, where, for the first time, Russia clearly formulated its political ambitions. This speech symbolised the beginning of a new approach in Russian foreign policy, an approach that stated that the Russian role and its influence on global affairs have to be proportioned to and based on its geo-political history and growing economic capabilities.⁴⁰ While this speech was mainly aimed at Russian internal audience, its “international twin” was the 2007 President Putin’s Speech at the Munich Security Conference: “Russia – [is] a country with more than a thousand years of history, and it has almost always exercised the privilege to conduct an independent foreign policy. We are not going to change this tradition today.”⁴¹

Building on its economic success, the Kremlin finally stopped knocking on the firmly closed Western door, and sent a clear message to its Western partners that they did not need to pretend any more that they liked the “new-style democratic Russia” and believed in “its bright future”.⁴² The combination of economic growth, the Soviet legacy in foreign policy, and the international, mainly non-Western, demand for alternative solutions to world crises,

³⁵T. Shakleina, *Rossiia i SSHA v mirovoy politike*, [Russia and the USA in the World’s Politics], (Moscow: Aspekt Press, 2012), pp. 160-161.

³⁶A. Bogaturov, ‘Tri pokoleniya ...’.

³⁷Åslund Anders, ‘An Assessment of Putin’s Economic Policy’, *CESifo Forum*, No. 9 (2), pp. 16-21, 2008.

³⁸K. Rogov, ‘Sverkhbol’shinstvo dlya sverkhprezidentstva’, [‘Supermajority for Superpresidency’], *Pro et Contra*, Vol. 17, Issue 3-4, 2013, p.107.

³⁹A. Bogaturov, ‘Tri pokoleniya ...’.

⁴⁰Vladimir Putin, *2006 Speech at Meeting with the Ambassadors and Permanent Representatives of the Russian Federation*, http://archive.kremlin.ru/eng/speeches/2006/06/27/2040_type82912type82913type84779_107818.shtml, [accessed: 08 August 2014], (Russian); A. Bogaturov, ‘Tri pokoleniya ...’.

⁴¹Vladimir Putin, *2007 Speech at the Munich Security Conference*, <http://www.stringer-news.com/publication.mhtml?Part=50&PubID=7070>, [accessed: 08 August 2014], (Russian).

⁴²T. Shakleina, ‘Obshchnost’ i razlichiya v strategiyakh Rossii i SSHA’, [‘Common Ground and Divergences in the Strategies of Russia and the U.S.A.’], *Mezhdunarodnyye Protsessy*, Volume 11, No. 2(33), 2013, pp. 6-19.

transformed Russia back into one of the most significant international players.⁴³ It was the beginning of a new period in Russian foreign affairs – a period of Russian Revitalisation based on segregation from the West (especially the U.S.), allegations of double standards and the claim that Western politicised decisions are based on out-dated Cold War prejudices.⁴⁴

The “blind” compliance with the West in the 1990s and walking a fine line between Western and Russian interests since the mid-2000s have been replaced by an uncompromising defence of national interests and an open criticism of the West,⁴⁵ as President Medvedev put it in 2009:

Russia, remaining one of the leading economies, a nuclear power and a permanent member of the UN Security Council, must speak openly and directly about its position, defend it at all places. Do not play up and adapt. And in the case of threat to its own interests - decisively defend them.⁴⁶

The best representation of this transformation can be seen in a comparative analysis of Russian self-definition in the sequential Foreign Policy Concepts.⁴⁷ While the 2000 Concept gingerly stated that “The Russian Federation has a real potential for ensuring itself a worthy place in the world;”⁴⁸ the 2008 Concept proclaimed Russia as “the largest Euro-Asian power ... one of the leading States of the world and a permanent member of the UN Security Council;”⁴⁹ and the 2013 Concept concluded this transformation clarifying that “Russia's foreign policy ... reflects the unique role our country has been playing over centuries as a counterbalance in international affairs and the development of global civilisation.”⁵⁰

⁴³O. Shishkina, ‘Post-Soviet Foreign Policy Foundations...’.

⁴⁴Interview with S. Ryabkov, the Deputy Foreign Minister of the Russian Federation, published in *Mezhdunarodnaya Zhizn'*, No. 1, 2014, pp. 4-16, (Russian); Vladimir Putin, 2014 *Speech at Meeting the Ambassadors and Permanent Representatives of the Russian Federation*, published in *Mezhdunarodnaya Zhizn'*, No. 7, 2014, pp. 3-12, (Russian); Vladimir Putin, 2006 *Speech at Meeting with the Ambassadors ...*; Sergey Lavrov, ‘Kak okonchatel'no zavershit' kholodnuyu voynu?’, [‘How to finally end the Cold War?’], *Mezhdunarodnaya Zhizn'*, No. 5, 2009, pp. 3-12.

⁴⁵E. Primakov, ‘Vneshnyaya politika vo vse bol'shey stepeni napravlyayetsya na vosstanovleniye Rossii v kachestve derzhavy mirovogo klassa’, [‘Foreign Policy is More Directed to the Restoration of Russia as a World-class Power’], *Mezhdunarodnaya Zhizn'*, No. 1-2, 2008, pp. 48-51.

⁴⁶Dmitry Medvedev, *Russia Forward!*, 2009, <http://www.kremlin.ru/transcripts/5413>, [accessed: 08 August 2014], (Russian).

⁴⁷A. Smirnov, ‘Kontseptsii vneshney politiki Rossiyskoy Federatsii: sravnitel'nyy analiz’, [‘The Foreign Policy Concept of the Russian Federation – Comparative Analysis’], in S. Smul'skii, O. Abramova, V. Buyanov (ed.), *Vneshnyaya politika Rossii: teoriya i praktika*, [The Foreign Policy of Russia: Theory and Practice], (Moscow: Kniga i Biznes, 2013), pp. 58-83.

⁴⁸Ministry of Foreign Affairs of the Russian Federation, *The Foreign Policy Concept of the Russian Federation-2000*, Moscow, 2000, (Russian).

⁴⁹Ministry of Foreign Affairs of the Russian Federation, *The Foreign Policy Concept of the Russian Federation-2008*, Moscow, 2008, (Russian).

⁵⁰Ministry of Foreign Affairs of the Russian Federation, *The Foreign Policy Concept of the Russian Federation-2013*, Moscow, 2013, (Russian).

Since his comeback to the presidential chair in 2012, Vladimir Putin, surrounded by a team of his most loyal politicians, has paid special attention to the implementation of the Russian Revitalisation concepts in foreign policy that were first formulated before his leave.⁵¹ It was not an aggressive change of course, but an amplification of several major narratives that have underlain Russian foreign policy since the mid-2000s. The first one was the argument that “the independence of Russian foreign policy is based on [Russia’s] geographical sizes, unique geopolitical position, centuries-old historical tradition, culture and the self-consciousness of our nation.”⁵² After the desperate attempts of the 1990s to define Russia as part of European Civilisation (a view that was shared neither by European, nor by most of the Russians themselves),⁵³ at the beginning of the 21st century the Kremlin started to present Russia as an independent (Slavic/Orthodox) civilisation, highlighting its historical and cultural richness. The best examples of this new narrative can be found amongst highest-level politicians, quoting Orthodox-patriotic ideas of Aleksandr Solzhenitsy;⁵⁴ reinforcing their views on foreign policy by citing historical figures, such as Alexander Nevsky⁵⁵ or Alexander III;⁵⁶ and backing the ideas of Ivan Ilyin – the mid-20th-century political philosopher, Slavophile, conservative monarchist and defender of Orthodox-Slavic civilisation.⁵⁷

This self-identification based on a narrative of independence was a direct answer to the 1990s’ illusions of Westernisation, which, according to the Russian politicians, was destroyed by Western antagonism that was driven by Cold-War perceptions.⁵⁸ While Putin says “Russian foreign policy was, is and will be substantive and independent,”⁵⁹ the Western attempts to intervene in Russian internal affairs, in the early 1990s, were not forgotten even 20 years later: “we cannot consider, even hypothetically, an option of a ‘warped’ Russia as a player

⁵¹V. Averkov, ‘Prinyatiye vneshnepoliticheskikh resheniy v Rossii’, [‘Foreign Policy Decision-Making in Russia’], *Mezhdunarodnyye Protsessy*, Volume 10, No. 2(29), 2012, pp. 59-70.

⁵²Sergey Lavrov, ‘Vneshnepoliticheskaya filosofiya Rossii’, [‘Russian Foreign Policy Philosophy’], *Mezhdunarodnaya Zhizn’*, No. 4, 2013, p. 2.

⁵³V. Zhurkin, M. Nosov, D. Danilov, ‘Voprosy mezhdunarodnoy bezopasnosti’, p. 175.

⁵⁴Vladimir Putin, *2012 Address to the Federal Assembly*, <http://news.kremlin.ru/video/1344>, [Accessed: 08 August 2014], (Russian).

⁵⁵*Interview with Sergey Lavrov, the Foreign Minister of the Russian Federation*, published in *Mezhdunarodnaya Zhizn’*, No. 9, 2012, p. 20, (Russian).

⁵⁶Sergey Lavrov, ‘Vneshnepoliticheskaya filosofiya ...’, p. 2.

⁵⁷For example: in 2005, Vladimir Putin described Ivan Ilyin as great Russian philosopher (see Vladimir Putin, *2005 The State of Nation Speech*, <http://archive.kremlin.ru/text/appears/2005/04/87049.shtml>, [accessed: 18 August, 2014], (Russian)) and Dmitry Medvedev wrote a foreword to Ivan Ilyin, *Puti Rossii*, [Russian Ways], (Moscow: Vagrius, 2007).

⁵⁸Sergey Lavrov, ‘Kak okonchatel’no zavershit ...’; T. Shakleina, *Rossiya i SSHA ...*, pp. 134-198.

⁵⁹Vladimir Putin, *2012 Speech at Meeting of Ambassadors and Permanent Representatives of the Russian Federation to the International Organizations*, published in *Mezhdunarodnaya Zhizn’*, No. 7, 2012, p. 4, (Russian).

manipulated by some other superior player on the international arena.”⁶⁰ This determination to keep the West out of Russian internal affairs, on the one hand, and, the desire, based on Soviet legacy, to restore the Russian traditional role as a “counterbalancing factor in international affairs,”⁶¹ on the other, emphasise the second narrative of modern Russian foreign policy – multi-polarity at the expense of Western hegemony.

On the one hand, the policy of multi-polarity has come to enforce Russian positions by supporting different new international organisations (e.g., the Group of Twenty, the Shanghai Cooperation Organisation, BRICS and others) and therefore counterbalancing the Western traditional union between the U.S. and Europe.⁶² On the other hand, the Russian promotion of multi-polarity in international affairs is intended to cool down American ambitions as “ruler-of-the-world”, as Sergey Lavrov, the Russian Minister of Foreign Affairs, put it:

Now it is possible to speak, not of preserving [Western] domination, which is impossible under the conditions of the rapidly increasing influence of cultural-civilisational diversity on the World’s destiny, but of confirming European civilisation’s claim for [just another] place among the team of leaders.⁶³

This opposition to the West dictating the line in global affairs has led to the next Russian foreign policy narrative – criticism of the West (mainly the U.S.) of double standards.⁶⁴ Building on the tractable nature of the international legal system the Kremlin has continuously promoted the idea that its “Western partners, headed by the United States of America, in their practical policy, prefer to be guided not by the rule of international law, but by the rule of the strongest.”⁶⁵ This idea is supported by Russian claim of Western illegal behaviour in Kosovo in 1999, in Iraq in 2003, in Libya in 2011, and other occasions.⁶⁶

⁶⁰Sergey Lavrov, ‘Vneshnepoliticheskaya filosofiya ...’, p. 2.

⁶¹Sergey Lavrov, ‘Vneshnepoliticheskaya filosofiya ...’, p. 7. This narrative of ‘counterbalancing power’ is based on Russian Imperial history (mainly the period between 1815 and 1914), rather than on Soviet legacy, see Ivan Ilyin, *Natsional'naya Rossiya, nashi zadachi*, [National Russia, Our Goals], (Moscow: Eskimo Algorithm, 2011), pp. 84-95.

⁶²V. Baranovskii, ‘Osnovnyye parametry sovremennoy sistemy mezhdunarodnykh otnosheniy – chast’ III’, [‘The Major Parameters of the Modern System of International Relations – Part III’], *Polis: Politicheskii Issledovaniya*, No. 5, 2012, pp. 148-156; V. Buyanov, ‘Rossiya v globaliziruyushchemsya mire: politicheskii aspekt’, [‘Russia in the Globalizing World: Political Aspect’], in S. Smul’skii, O. Abramova, V. Buyanov, (ed.), *Vneshnyaya politika Rossii ...*, pp. 106-129; *Interview with Sergey Lavrov ...*

⁶³Sergey Lavrov, ‘Kak okonchatel'no zavershit ...’, p. 6.

⁶⁴T. Shakleina, *Rossiya i SSHA ...*, p. 174.

⁶⁵Vladimir Putin, *Speech of the President of the Russian Federation, 18 March 2014*, <http://kremlin.ru/events/president/news/20603/videos>, [accessed: 08 August 2014], (Russian).

⁶⁶E. Voronin, ‘Problema legitimnosti vooruzhennogo vmeshatel'stva. Liviyskiy Casus Belli’, [‘The Problem of Legitimacy of Armed Intervention. Libyan Casus Belli’], *Mezhdunarodnaya Zhizn'*, No. 8, 2012, pp. 107-118; V. Kotlyar, ‘“Otvetsvennost’ pri zashchite” i “Arabskaya Vesna”’, [‘“The Responsibility to Protect” and the “Arab Spring”’], *Mezhdunarodnaya Zhizn'*, No. 9, 2012, pp. 99-114; S. Chernichenko, ‘Dvoynnye Standarty’, [‘Double Standarts’], *Mezhdunarodnaya Zhizn'*, No. 12, 2008, pp. 63-71; *Interview with Sergey Lavrov ...*; Vladimir Putin, *Speech of the President of the Russian Federation, 18 March 2014...*

This leads to the final major narrative of Russian foreign policy – the intensification of the UN positions, in general, and the role of the UN Security Council, in particular.⁶⁷ While this narrative generally supports the previously discussed concept of multi-polarity, as, according to Sergey Lavrov, the “Charter of the United Nations is ‘programmed’ as a regulator of the multi-polar world;” it emphasises the importance of the international legal system in the eyes of the Russian leaders. Built on the amendable nature of the international law, the message from the Kremlin is that “We can guarantee that we will never violate our international obligations.”⁶⁸

There is no doubt that all these narratives come first and foremost to defend Russian national interests and reinforce its position in the international arena.⁶⁹ Their understanding, however, allows an identification of two major ways in which the Kremlin resists international pressure (mainly from the Western community) that criticises Russian political decisions. While the first one is framing its activity within the context of international law, the second one is the repudiation of Western criticism because “[they] themselves are not perfect in many senses.”⁷⁰ In other words, facing international criticism Russian leaders powerfully dismiss it, arguing that their activities comply with international law, at least with the same degree as Western actions do. The best examples are two cases in which Russian leadership had to deal with intensive Western criticism: the recognition of Abkhazia and South Ossetia in 2008 and the accession of Crimea to Russia in 2014.

On 26 August 2008, after a short military conflict with Georgia, Russia recognised the Republic of Abkhazia and the Republic of South Ossetia as independent states.⁷¹ Despite the immediate wave of criticism from Western governments and accusations of the illegality of this move, the Kremlin presented firm legal ground to its decision, claiming that it was “guided by the provisions of the UN Charter, the 1970 Declaration on the Principles of International Law Governing Friendly Relations Between States, the CSCE Helsinki Final Act of 1975 and

⁶⁷A. Gromyko, ‘Mirovoy poryadok i pravoporyadok’, [‘World Order and the Rule of Law’], *Mezhdunarodnaya Zhizn*, No. 3, 2012, pp. 18-31; *Interview with Sergey Lavrov ...* ; Vladimir Putin, *2012 Speech at Meeting of Ambassadors ...* p. 4.

⁶⁸ *Interview with Sergey Lavrov ...*, pp. 4, 16.

⁶⁹ *Interview with S. Ryabkov, The Deputy Minister of Foreign Affairs of the Russian Federation*, published in *Mezhdunarodnaya Zhizn*, No. 8, 2014, pp. 2-12, (Russian).

⁷⁰ *Press-conference with Sergey Lavrov, Russian Foreign Minister*, published in *Mezhdunarodnaya Zhizn*, No. 2, 2013, p.11, (Russian).

⁷¹The Office of the President of the Russian Federation, *Decree N 1260 "About Recognition of the Republic of Abkhazia"*, Moscow, 26 August 2008, (Russian); The Office of the President of the Russian Federation, *Decree N 1261 "About Recognition of the Republic of North Ossetia"*, Moscow, 26 August 2008, (Russian).

other fundamental international instruments.⁷² Furthermore, Moscow's response also included other typical narratives of the Russian modern foreign policy, such as the accusation of double standards:⁷³

[while] Western countries rushed to recognise Kosovo's illegal declaration of independence from Serbia. We argued consistently that it would be impossible, after that, to tell the Abkhazians and Ossetians ... that what was good for Kosovo-Albanians was not good for them. In international relations, you cannot have one rule for some and another rule for others.⁷⁴

The second example is the accession of Crimea to Russia following the political crisis in Ukraine, in the winter of 2014. While most of the international community did not recognise this move, labelling it an illegal annexation,⁷⁵ according to the Russian view, every detail of the process was in complete compliance with international law.⁷⁶ Despite the fact that Putin acknowledged the deployment of Russian Special Forces to Crimea, according to him, everything was legal:

I did not even have to use the permission of the [Russian] Federal Council to deploy Russian troops in Ukraine. And I did not even bend the truth, as under the related international treaty, we had the right to have 20,000 men in our base in Crimea, even slightly more. But even with the troops that we had added, as I have mentioned, we were still under 20,000. As we did not exceed the number of our troops in Crimea, strictly speaking, we did nothing wrong.⁷⁷

In addition, the election of a new pro-Russian Prime Minister of Crimea, according to Putin, was an entirely lawful outcome of the events:

The Crimea's Parliament was an absolutely legitimate, fully fledged representative body in Crimea that was formed long before any of these difficult and tragic events. So these representatives convened a meeting, held a vote and elected a new Prime Minister of Crimea, Sergey Aksyonov. And de jure President Yanukovich approved his appointment. In terms of the Ukrainian law, everything was honoured and respected. Of course, it is possible to throw words around and interpret these events in a variety of ways. But, if you look from the legal perspective, you cannot pick a hole in it.⁷⁸

⁷²Dmitry Medvedev, *Statement in Relation to the Recognition of the Independence of Abkhazia and South Ossetia*, Moscow, 26 August 2008, <http://news.kremlin.ru/news/1223>, [accessed: 08 August 2014], (Russian).

⁷³T. Shakleina, *Rossiya i SSHA ...*, p. 196.

⁷⁴Dmitry Medvedev, 'Why I had to Recognise Georgia's Breakaway Regions', *Financial Times*, 26 August 2008, <http://www.ft.com/cms/s/0/9c7ad792-7395-11dd-8a66-0000779fd18c.html#axzz3HubZT8RA>, [Accessed: 08 August 2014].

⁷⁵Vladimir Putin, *Speech of the President of the Russian Federation, 18 March 2014*....

⁷⁶A. Moiseev, 'O nekotorykh mezhdunarodno-pravovykh pozitsiyakh po ukrainskomu voprosu', ['About Some International Law Positions on the Ukrainian Issue'], *Mezhdunarodnaya Zhizn'*, No. 5, 2014, pp. 53-65; Vladimir Putin, *Speech of the President of the Russian Federation, 18 March 2014* ...

⁷⁷Vladimir Putin in Andrey Kondrashev, *Krim. Put' na Rodinu*, [*Crimea. The Way Home*], (Vserossiyskaya Gosudarstvennaya Televizionnaya i Radioveshchatel'naya Kompaniya, 2015), (Russian).

⁷⁸Vladimir Putin in Andrey Kondrashev, *Krim. Put' na Rodinu*...

The Kremlin's figurative response to Western accusations of incompliance with international law was best expressed by Sergey Lavrov: "It is good that they [the Western countries] at least have recalled the existence of international law. Thanks for nothing! But it is better late than never." Again, Russian reaction to Western pressure was the accurately explained (although still unaccepted by the West) foundation of Russian actions in the international legal system, and the already discussed comparison to past and present Western actions, which are considered by Moscow as illegal, or, at least immoral, in their protecting pure Western political interests.⁷⁹

While the narratives of Russian foreign policy outlined above offer a general explanation of Russian reaction to international pressure and criticism, Russia clearly has a very powerful "political will" in the international arena. Building on its status as a nuclear power and permanent member of the UN Security Council, its growing economy and broad domestic political support, the Kremlin, without any doubt, is able to withstand international criticism and accusations of the violations of international law, in general, as well as during military operations, in particular. An analysis of the previously discussed case of the Russian 2008 Operation to Force Georgia to Peace,⁸⁰ clearly shows how the Kremlin successfully fended off the allegations of disproportional use of force.⁸¹ Moscow's reaction followed the general pattern of Russian foreign policy: a demonstration of a powerful and independent Russia in the multi-polar international environment – a "Russia to be reckoned with;"⁸² a utilisation of the tractable nature of the international legal system – posing the question: "Who did define the criteria of the proportionality of the use of force?"⁸³ and a comparison between Russian actions and similar Western activities in favour of the first.⁸⁴

⁷⁹Sergey Lavrov, *Speech at the First Forum of Young Diplomats*, 25 April 2014, published in *Mezhdunarodnaya Zhizn'*, No. 5, 2014, pp. 5-20, (Russian); Vladimir Putin, *Speech of the President of the Russian Federation, 18 March 2014* ...

⁸⁰Operation to Force Georgia to Peace – is the Russian official name for the 2008 Russo-Georgian War that support the Russian legal argument for Russian 'Jus ad bellum'. See The Independent International Fact-Finding Mission on the Conflict in Georgia, *Report*, Volume II, 2009, p. 188.

⁸¹See the replies of the Russian side to the questions about the Humanitarian Law in The Independent International Fact-Finding Mission on the Conflict in Georgia, *Report*, 2009.

⁸²Dmitry Medvedev, *Press conference after a meeting with French President Nicolas Sarkozy*, 8 September 2008, <http://kremlin.ru/video/172>, [accessed: 09 August 2014], (Russian).

⁸³Sergey Lavrov quoted in A. Zemlyanko, V. Rozhkov, 'Poteri v lokal'nykh boyevykh deystviyakh', ['Losses in Local Armed Operations'], *Zashchita i Bezopasnost'*, No. 4(47), 2008, p.18.

⁸⁴V. Ovchinnikov, 'Lokal'nyye vooruzhennyye konflikty i bezopasnost' Rossii', ['Local Armed Conflicts and the Security of Russia'], *Zashchita i Bezopasnost'*, No. 4(47), 2008, pp. 9-11; *Interview with A. Starunskii, Former Deputy Commander of the Joint Group of Forces in the North Caucasus (2002-2003)*, published in , *Zashchita i Bezopasnost'*, No. 4(47), 2008, pp. 6-8, (Russian); A. Zemlyanko, V. Rozhkov, 'Poteri v lokal'nykh ...'.

The main purpose of this chapter is to understand why NLW are not employed by the Russian military. As it was discussed before, international political pressure can be one of the main drivers behind the increasing employment of NLW in an attempt to decrease civilian casualties and thus international criticism. The analysis of the Russian foreign policy presented above, and the ways in which the Kremlin fends criticism off clearly show Russian forceful (even brawny) reaction to international (mainly Western) pressure. Answering the question whether the readiness of Russian nuclear forces during the Crimea crisis was raised to the highest alert, Putin replied:

We were ready to do so. But I was already speaking with my colleagues [Western leaders], and I was saying it directly ... and openly that this is our historical territory, and Russian people are living there, they came under a threat and we cannot abandon them. It was not us who staged the coup [in Ukraine], it was the nationalists and people with extreme views. You supported them. But where are you? Thousands of kilometres from here! And we are here and this is our land. What do you want to fight for? You don't know? But we know and we are ready for it!⁸⁵

In light of this effective defensive foreign policy, there is no doubt that Russian decision-makers feel no need to demand fundamental changes in their military forces in an attempt to make them less lethal than their Western counterparts. The lack of this political need is based on three main conditions: Russian economic strength; Western military performance, which provides comparable cases for Russian criticism (i.e., the lethality of Western military forces); and the lack of a domestic opposition that cares about the enemy's population.

Interestingly enough, the first condition creates a sort of paradox as economic strength is necessary not only for a strong foreign policy but also for military transformation (i.e., economic decline will weaken Russian foreign policy, but it will make the military NLW transformation economically impossible). The level of lethality of the Western (American – the most important in the Russian eyes) military and its attitudes toward NLW were discussed in the previous chapter and it does not seem that NLW are going to be employed widely in the near future. Consequently, the only remaining influential factor on the political desire to decrease lethality on the battlefield (i.e. employ NLW) is domestic public attitude toward enemy civilian casualties.

⁸⁵ Andrey Kondrashev, *Krim. Put' na Rodinu...*

Part Three: Russian Culture and Civil Casualties

In an attempt to understand Russian historical and cultural background it is important to remember that “in the national body of Russia, there are islands and oases of Europe and Asia as well.”⁸⁶ In other words, due to Russia’s intermediate geo-political and cultural position between the West and the East, “Russian people had to solve problems that demanded a special strategy.”⁸⁷ Russian historical-cultural place between European civilisation in the West and Islamic, Confucian and Indus civilisations in the East combined with its geographical and climate conditions have played an instrumental role in the designing the Russian character throughout the whole of Russian history.⁸⁸

In 1944, Ivan Ilyin, one of the greatest authors on Russian political, historical, social and spiritual issues, wrote: “Russia, as a nation and culture, still appears to Western Europe as a hidden world, as a problem that cannot be understood, a kind of Sphinx ...”⁸⁹ Consequently, analysing Russian cultural context, it seems right to focus, first and foremost, on Russian authentic sources and materials, rather than on their existing Western interpretation.⁹⁰ In other words, in an attempt to understand “what Russian people think about war and civilian casualties”, this research will focus on the writing of traditional Russian political philosophers and anthropologists, such as Ivan Ilyin, Nikolay Lossky, Ivan Solonevich and Nikolai Berdyaev.⁹¹ Most of these thinkers, who wrote about Russian cultural mind-set in the first part

⁸⁶Georgii Florovskii, ‘Yevraziyskiy soblazn’, [‘Eurasian Temptation’], in L. Novikova, I. Sizemskaya, (ed.), *Mir Rossii - Yevraziya: Antologiya*, [The World of Russia - Eurasia: An Anthology], (Moscow: Vysshaya shkola, 1995).

⁸⁷Alexander Panarin, *Rossiya v tsivilizatsionnom protsesse: (mezhdru atlantizmom i yevraziystvom)*, [Russia in the civilisation process (between Atlanticism and Eurasianism)], (Moscow: Institut filosofii RAN, 1995), pp. 27-28.

⁸⁸Vladimir Pantin, ‘Istoricheskaya rol’ rossii mezhdru zapadom i vostokom’, [‘The Historical Role of Russia between the West and the East’], *Istoriya i sovremennost’*, No. 2, 2012, pp. 93-112.

⁸⁹Ivan Ilyin, *Sushchnost’ i svoyeobraziye Russkoy kul’tury*, [Essence and peculiarity of Russian culture], (Moscow: Russkaya Kniga-XXI Vek, 2007), p. 15.

⁹⁰For those who are interested in publications in English see for example: Oleg Kharkhordin, *The Collective and the Individual in Russia*, (Berkeley: University of California Press, 1999); Yale Richmond, *From Nyet to Da: Understanding the Russians*, (Yarmouth, ME: Intercultural Press, 1996); Isaiah Berlin, *The Soviet Mind: Russian Culture under Communism*, (Washington, DC: Brookings Institution Press, 2004); Richard Harrison, *The Russian Way of War: Operational Art, 1904-1940*, (Lawrence, KS: University Press of Kansas, 2001); Jack Snyder, *The Soviet Strategic Culture: Implications for Limited Nuclear Operations*, (Santa Monica, CA: The RAND Corporation, 1977); Dima Adamsky, *The Culture of Military Innovation: The Impact of Cultural Factors on the Revolution in Military Affairs in Russia, the US and Israel*, (Stanford: Stanford University Press, 2010).

⁹¹For example: Ivan Ilyin, *Sushchnost’ i svoyeobraziye ...*; Ivan Ilyin, *Natsional’naya Rossiya nashi zadachi*, [National Russia: Our Goals], (Moscow: Algoritm, 2007); Nikolay Lossky, *Kharakter Russkogo naroda – Kniga 1*, [The Character of the Russian people- Book 1], (Frankfurt Main: Possev-Velrlag, 1957); Ivan Solonevich, *Narodnaya Monarkhiya*, [People’s Monarchy], (Moscow: Algoritm, 2011); Nikolai Berdyaev, *Novoye Srednevekov’ye - Razmyshleniya o sud’be Rossii i Yevropy*, [New Middle Ages: Reflections on the Destiny of Russia and Europe], (Moscow: Feniks-HDS Press, 1991); Nikolai Berdyaev, *Sud’ba Rossii*, [The Destiny of Russia], reprint edition from 1918 publication, (Moscow: Filosofskoye Obshchestvo SSSR, 1990).

of the 20th century, had to escape or were expelled from the U.S.S.R. due to their anti-Bolshevik views and their publications were banned by Soviet censorship. Although the restrictions on their work were annulled with the dissolution of the Soviet Union and their books were finally published in Russia, their real success came only in the 2000s, when they were widely embraced by Russian political leaders. It is not surprising that national conservative views of Ivan Ilyin, Ivan Solonevich and others have been heavily used by Vladimir Putin, Dmitry Medvedev⁹² and other leading politicians to enforce their policy of Russian revitalisation:

The problems of Russia, its history, and the ways for the social and spiritual revival of the Motherland have a central place in Ilyin's thoughts. The search for national self-identification and the protection of moral and spiritual values – all these goals are actual today no less than in the first part of the previous century.⁹³

To avoid possible criticism that the validity of these thinkers is outdated and their reputation is artificially recreated due to political reasons of the Kremlin's leaders, this research will be complemented by the work of various Russian contemporary scholars, who specialise in the identification of Russian mentality and its roots, such as Alexander Panarin, Vladimir Pantin, Vladimir Lapkin and Vyacheslav Gubanov.⁹⁴

Russian Culture and the Value of Human Life

Ivan Ilyin famously claimed that “the history of Russia is akin to the history of a besieged fortress.”⁹⁵ While it is hard to imagine a way in which the enormous Russia can be besieged, its people have been beleaguered during the entirety of Russian history, surviving in extreme climatic conditions and cultivation a barren land, braving repetitive invasions from the East and the West and an uncompromising, almost tyrannical, treatment by their own rulers. It, indeed, seems accurate to agree with the claim of the Russian philosophers that the history of the Russian people reads like the history of a besieged people.

The extreme Russian climate and boundless territories are seen by Russians as the main reasons behind many major aspects of the Russian character, such as: collectivism, absolute

⁹² For example: in 2005, Vladimir Putin described Ivan Ilyin as great Russian philosopher (see Vladimir Putin, *2005 The State of Nation Speech...*), and in 2007 Dmitry Medvedev wrote a foreword to Ivan Ilyin, *Puti Rossii...*

⁹³ The foreword of Dmitry Medvedev to Ivan Ilyin, *Puti Rossii...*

⁹⁴ For example: Alexander Panarin, *Rossiya v tsivilizatsionnom protsesse ...*; Vladimir Pantin, ‘Istoricheskaya rol’ rossii ...’; V. Lapkin, V. Pantin, ‘Dinamika obraza Rossii i tsikly reform-kontreform’, [‘The Dynamics of Russia and the reform/counter-reform cycles’], *Rossiya i musul'manskiy mir*, No.5, 2008, pp. 15-22; V. Gubanov, *Russkiy natsional'nyy kharakter v kontekste politicheskoy zhizni Rossii*, [Russian National Character in the Context of the Russian Political Life], (Sent-Petersburg: Izdatel'skiy Tsentr SPbGMGU, 1999).

⁹⁵ Ivan Ilyin, *Sushchnost' i svoyeobraziye ...*, p. 112.

conformity with political centralism, and strong emphasis on endurance and patience.⁹⁶ Owing to its agricultural heritage, Russian philosophers define the Russian character in terms of communality. Subsequently, and as any other agricultural society, the rural commune in Russia was created to allow labour cooperation in the conditions of high-risk farming. While definitely not the only country with extreme seasons and barren land that made cooperation vital for survival, Russia was the only one with an unlimited amount of this land. And while in other (Western) countries the limitation of sources (land, water, labour, etc.) led to the quest for more efficient ways to exploit natural resources, Russia's way to increase productivity was always based on the conquest of additional lands, involving additional resources and additional labour. This Western race for better efficiency, which was the core reason for the development of individualism and private property, was never a part of Russian culture, where the one's contribution to the collective interest was always prevalent over his private life.⁹⁷

The Russian character and culture, similar to the American experience of the frontier, is an outcome of the conquest of the boundless wilderness, though the process of the Russian conquest was entirely different from the American one, as was its influence on the Russian mind. In both cases it was about "civilising" the wilderness. But, while the conquest of America was led by individuals seeking their own destiny and benefits, the conquest of Russia was led by the state. In the American frontier experience, the development of villages into towns and into cities was set in the hands of the community – in Russian history it was always the responsibility of the authorities. While American cities were built by businessmen, who, in the pursuit of their own benefits, established themselves as community leaders and propelled small towns into large cities, such as William Ogden in Chicago or William Larimer in Denver,⁹⁸ the development and prosperity of Russian Ekaterinburg,⁹⁹ Samara¹⁰⁰ or Novosibirsk¹⁰¹ were the outcome of governmental policy. When the frontier concept of "free land" was responsible for the American individualism, in the Russian case, the state-led expansions, based on the state's

⁹⁶Ivan Sikorskii, *Cherty iz psikhologii slavyan - rech' na torzhestvennom zasedanii Slavyanskogo blagotvoritel'nogo obshchestva 14 maya 1895 goda*, [Lines from the Psychology of Slavs- A Speech at the Ceremonial Meeting of the Slavic Charitable Society on 14 May 1895], (Kiev: Tipografiya imeni Chokolova, 1895); V. Gubanov, *Russkiy natsional'nyy kharakter ...*, pp. 39- 58; Ivan Ilyin, *Sushchnost' i svoeobraziye ...*, pp. 17-22.

⁹⁷V. Gubanov, *Russkiy natsional'nyy kharakter ...*, pp. 42-47.

⁹⁸ Daniel Boorstin, *The Americans: The National Experience*, (New York, Vintage books, 1965), pp.115-123.

⁹⁹ Veniamin Alekseyev, 'Ekaterinburg', *Rodina*, No.8, 2003, pp. 100-145, (Russian).

¹⁰⁰ Peter Alabin, *Trekhvekovaya godovshchina goroda Samary*, [Three-Century-Old Anniversary of the City of Samara], (Samara: Gubernskaya Zemskaya Tipografiya, 1887).

¹⁰¹ K. Umbrashko, 'Istoricheskiy obzor: "novonikolayevskaya guberniya – novosibirskaya oblast": lyudi, sobytiya, fakty"', [Historical Overview: "Novonikolayevsk Province - Novosibirsk Region: People, Events, Facts"', published in the proceedings to the 2nd Russian Scientific-Practical Conference Dedicated to the 90th Anniversary of the Novonikolayevsk Province, Part 1, Novosibirsk, 25 October 2011 pp. 6-28.

ownership of the land, concomitantly shaped in the Russian mind the importance of the collective.

The collectivistic characteristics of Russian culture were significantly fuelled by the enduring serfdom in the 17th and 18th centuries (the period when in Europe it was already abandoned). The history of serfdom is seen as having obvious and major influences on the cultural character of the Russian people. An increasing oppression of individualism led to the lack of feeling of responsibility for land, family and life, which, in turn, led to the absolute conformity with the representative of the authorities, as a famous Russian proverb says: ‘[the] Master will come – [and the] master will judge us’ (*Vot priyedet barin — barin nas rassudit*).¹⁰² While the Emancipation Reform of 1861, under the reign of Alexander II of Russia (who was also known as Alexander the Liberator), officially liquidated the serfdom, it had a small impact on the established cultural environment because, in fact, it gave former serfs neither independence, nor full responsibility. After the reform, the peasants remained under the supervision of the rural commune that had a power to re-distribute the land among its members.¹⁰³

This undeveloped sense of personal self-realisation led to one of the most paradoxical phenomena in Russian culture: anarchical behaviour on the one hand, and a full political submissiveness on the other.¹⁰⁴ Interestingly enough, these two characteristics succeeded in coexisting, being, in fact, interdependent – understanding their own anarchical predispositions, Russian people demanded strong and even ruthless treatment. The best example of this characteristic is provided by Nikolay Lossky:

In St. Petersburg in the spring, when the ice on the Niva River started to melt, the ice-crossing of the river became unsafe. The mayor ordered to place policemen on the bank of the river, who will stop the ice-crossers. A peasant, despite warning shouts from a policeman, went on the ice, fell and began to drown. The policeman saved him from death, but the peasant, instead of being grateful, started to criticise him: “Where have you been?” The policeman answered him: “But I shouted out a warning” – “Shouted?! You had to sock me in the face!”¹⁰⁵

On the one hand, lack of the responsibility for one’s land and life generated a feeling of unlimited personal freedom in the Russian cultural environment, creating a strong narrative that probably (*avos’*), supposedly (*nebos’*) or somehow (*kak-nibud’*) problems would be

¹⁰²In fact, this proverb is originated from the short poem ‘Zabytaya derevnya’ by Nikolay Nekrasov.

¹⁰³This power of the rural commune was abolished only in 1906, see Ivan Ilyin, *Sushchnost' i svoyeobraziye ...*, pp. 47-48.

¹⁰⁴Nikolai Berdyaev, *Sud'ba Rossii ...*, pp. 4-5.

¹⁰⁵Nikolay Lossky, *Kharakter Russkogo naroda...*, p. 48.

resolved. On the other hand, it created a strong belief in, even demand for, a powerful authority that would guide the people and protect them from their own carelessness.¹⁰⁶ While American individualism and the cultural predisposition that an American can solve any problem, led the American mind to lock down upon bureaucrats and the authorities that they represented, the Russian concept of personal freedom from responsibility led to a higher dependency on the state.

Flourishing throughout the Soviet era, this under-developed sense of personal responsibility and self-realisation remains relevant in the beginning of the 21st century. In 2009, President Medvedev described one of the main social weaknesses of the Russian people as:

Confidence that all problems should be resolved by the state. By somebody else, but not by each one in his place. The desire to "make yourself", to achieve personal success, step by step, is not our national habit.¹⁰⁷

When Russian political philosophers emphasised a natural freedom inhered within the "Russian Soul",¹⁰⁸ they did not mean the Western understanding of freedom (i.e., human rights based on cultural individualism), but an "entirely Russian" interpretation of freedom: "freedom from earthly worries."¹⁰⁹ This understanding of freedom explains two very important cultural narratives in the Russian character: political submissiveness and a rejection of the idea of formal human rights and freedoms. The Russian character underlines the prevalence of spirituality over materialism and pragmatism, and therefore the idea of spiritual freedom, rather than of a physical-material one, was always at the core of the Russian character – "Our people are not materialistic ... they are contented spiritually."¹¹⁰ The way to achieve this freedom was by an utter transfer of political responsibility to an authority (master/monarch/government), ultimately accepting powerful, even totalitarian rule as a required precondition to organise a stable society. While an American values the material achievements of a person, the Russian mind appreciates more the spiritual: "a person achieves his social status according to his communion with the prevalent system of ideological values, the Slavic-orthodox values in pre-revolutionary Russia, or communism in the U.S.S.R.." ¹¹¹

¹⁰⁶Nikolai Berdyaev, *Sud'ba Rossii* ..., pp.14-15; Ivan Ilyin, *Sushchnost' i svoeobrazie* ..., pp. 45-47; Nikolay Lossky, *Kharakter Russkogo naroda*... ; V. Gubanov, *Russkiy natsional'nyy kharakter* ..., pp.46-57.

¹⁰⁷Dmitry Medvedev, *Russia Forward!*...

¹⁰⁸Ivan Ilyin, *Sushchnost' i svoeobrazie* ...; Nikolay Lossky, *Kharakter Russkogo naroda* ...; Ivan Solonevich, *Narodnaya Monarkhiya* ...; Nikolai Berdyaev, *Sud'ba Rossii* ...

¹⁰⁹Nikolai Berdyaev, *Sud'ba Rossii* ... p. 5.

¹¹⁰Fyodor Dostoyevsky, *Dnevnik pisatelya*, [A *Writer's Diary*], (Kaliningrad: Yantarnii Rasskaz, 2005), p. 28.

¹¹¹V. Gubanov, *Russkiy natsional'nyy kharakter* ..., pp .44-45.

Interestingly enough, this narrative of an overwhelming desire for spiritual freedom and unwillingness to deal with material problems (because dealing with the material fetters one's spirit), on the one hand; and a long history of ruthless governance, which fully exploited this unmaterialistic nature of their people, on the other, led to this general disbelief in the idea of formal human rights and freedoms bestowed upon a people by their political authority. According to Ivan Ilyin, "a Russian is characterized by internal freedom [and] there are no artificially invented bans for him"¹¹² – and therefore there is no need for formal (artificial) freedoms. While for Americans, their material rights and freedoms (e.g., speech, movement, security, etc.) are integral parts of their self-determination, for the Russian mind these rights are something outlandish and unwarranted by spiritual happiness or earthly existence, something unnecessary "that had been awarded by the generous fatherland or a kind master and, at any given moment, can be taken away without reasonable explanations."¹¹³

There is no doubt that political and ideological limitations of the Soviet era did not contribute to the development of individuality and a more Western understanding of freedom and human rights. In fact, more than 20 years after the fall of the Soviet Union and hasty attempts to democratise (or Westernise) Russia, the Russian masses, in general, continue to uphold their historical cultural preferences for strong authority, at the expense of formal human rights. For example, several surveys conducted in 2014 show that between 18 different merits, Russian people placed "human rights" only at the 5th place, preferring "order", "security", "peace" and "rule of law". Placing "private property" (9th) and "democracy" (12th) after such merits as "stability" (7th) and "patriotism" (8th) – Russian people had articulated their true mentality based on their unique history and experience.¹¹⁴

This reliance on authority, which secures peace and the rule of law, combined with the traditional sense of collectivism, shaped the Russian cultural appreciation of human life. While American culture values human life due to very individualistic, even selfish, reasons, the Russian appreciation of the community comes before the individual and, therefore, his life should be dedicated to the collective.¹¹⁵ The Russian character, shaped by the idea of collective

¹¹²Ivan Ilyin, *Sushchnost' i svoeobraziye ...* p. 29.

¹¹³I. Dzyaloshinskiy, 'Kul'tura, zhurnalistika, tolerantnost', ['Culture, Journalism, Tolerance'], in I. Dzyaloshinskiy, M. Dzyaloshinskaya, (ed.), *Rossiyskiye SMI: kak sozdayetsya obraz vraga*, [*Russian Mass Media: How the image of enemy is created*], (Moscow: Moskovskoe Byuro po Pravam Cheloveka "Academia", 2008), pp. 24-25.

¹¹⁴E. Shetopal, 'Tsennostnyye kharakteristiki rossiyskogo politicheskogo protsessa i strategiya razvitiya strany', ['The characteristics of Values of the Russian Political Process and the Country's Development Strategy'], *Polis: Politicheskii Issledovaniya*, No. 2, 2014, pp. 61-71.

¹¹⁵ V. Gubanov, *Russkiy natsional'nyy kharakter ...*, pp. 47-52.

responsibility and punishment (*krugovaya poruka*), which was a part of the domestic law until the 20th century,¹¹⁶ promotes the responsibility of an individual for the whole collective, and vice versa. While this Russian cultural naive readiness to serve the common good was vastly exploited by the Russian totalitarian governments,¹¹⁷ it also projected on the Russian cultural perspective on war and the readiness of the Russian people to pay unprecedented costs to protect their land and state.¹¹⁸

War and the Russian Character

One of the most prevalent Russian historical narratives is the traditional assumption that Russia has always enjoyed from the access to a massive territory and, as Ivan Ilyin put it, that the lack of natural geographical borders, such as seas or mountain massifs, left this enormous flatland unprotected and exposed to invasions.¹¹⁹ This geo-political “podium” of Russian history had one of the most significant influences on the composition of the Russian character. Geographically unprotected and placed between the centres of two different civilisations – the Western and the Asian (Mongols and Chinese) – Russia suffered repetitive massive invasions through its history: in 1236, the Mongol Empire (Golden Horde) conquered most of Kievan Rus’ establishing more than 200 years of Tatar-Mongol Yoke; in 1571, the Crimean Khan Devlet I Giray raided the Tsardom of Russia setting capital Moscow on fire; in 1610, the Polish King Sigismund III occupied most of the western part of the Tsardom of Russia putting his son Wladyslaw IV Vasa on the Russian throne (although the son never actually ruled); in 1812, Napoleon invaded Russia, defeating the Russian army and conquering Moscow; and finally, in 1942, German forces occupied most of the European part of the U.S.S.R., besieging Leningrad (St. Petersburg), Moscow and Stalingrad (Volgograd).¹²⁰

According to Vyacheslav Gubanov, Russian mind-set perceives Russia’s people as the defenders of Europe, as an outpost of Western Civilisation that protects it from the barbaric East. In return, instead of giving the Russians gratitude and support, European countries took advantage of Russian backwardness, the price that the Russian nation had to pay to stop the Mongols and allow the Renaissance.¹²¹ This ruthless military experience predetermined the

¹¹⁶ *Brockhaus and Efron Encyclopedic Dictionary*, Petersburg, 1907, Vol. XVI, pp. 836-839, (Russian).

¹¹⁷ V. Gubanov, *Russkiy natsional'nyy kharakter ...*, pp.172-173.

¹¹⁸ Ivan Ilyin, *Sushchnost' i svoeobraziye ...* pp. 115-116.

¹¹⁹ Ivan Ilyin, *Sushchnost' i svoeobraziye ...* pp.17-19.

¹²⁰ Levon Petrosyan, ‘Konflikt mentalitetov kak osnovaniye protivostoyaniya politicheskikh kul'tur (Rossiya i severoatlanticheskiy soyuz v mire posle kholodnoy voyny)’, [‘The Conflict of Mentalities as a Basis for the Political Cultures Stand-Off: Russia and The North Atlantic Treaty Organization in the Post-Cold War World’], (PhD thesis, Moscow State Pedagogical University, 2003), pp. 26-27.

¹²¹ V. Gubanov, *Russkiy natsional'nyy kharakter ...*, pp.146-147.

Russian mind “to defence without support, to rely only on your own forces, to live on an open flatland, to create and wait for the danger of a new invasion or attack that can come at any time.”¹²²

Without any doubt, not all Russian wars were defensive or even were justified as such. Since the late 18th century and until the Bolshevik Revolution in 1917, the Russian Empire was “The Gendarme of Europe”, saving Austria in the War of the Second Coalition in 1799-1800, helping to defeat Napoleon in 1813-1814 by invading Prussia and going all the way to Paris, in the War of the Sixth Coalition, and rescuing the Austrian Empire from the Hungarian Revolution in 1849.¹²³ But these were not the wars that influenced Russian mentality, as above all, it had been marked by the tragic experience of the Tatar-Mongol Yoke, the Patriotic War against the French Invasion in 1812¹²⁴ and the Great Patriotic War against the Nazi-German Invasion in 1941 (the title of “patriotic” was awarded to these wars for a reason).

While in English the last two were titled as patriotic, their original Russian name is *otechestvennyye* (Fatherland’s). Russian language has two different words for the English term ‘motherland’ – *Rodina* (motherland) and *Otechestvo* (fatherland). These two symbolise the female and male characteristics of the Russian character:

Motherland [and] motherhood are associated with the language, with the folklore, with the national character and the undefined, but powerful domain of unconsciousness. Fatherland [and] fatherhood – [are associated] with duty and citizenship, with the social-political, conscious life.¹²⁵

While *rodina* symbolises a more spiritual connection with *zemlya-mat'* (earth-mother), *otechestvo* (the land of fathers) is associated with the harsh reality of the real world as “father leads the son to the economic and political world: makes him a worker, a citizen, a soldier.”¹²⁶ Consequently, a Fatherland’s war is not an ordinary war, it is a war in which every son sees his duty and right to participate, defending his Fatherland at any cost.

In the Russian mind, Russian history is “the history of defence, struggle and sacrifice: from the first attacks of nomads on Kiev in 1037 until today. Accessible from all flanks, completely unprotected, Russia was a kind of ‘sweet booty’ for the nomadic East, as well as

¹²²Ivan Ilyin, *Sushchnost' i svoeobrazie ...* pp.108.

¹²³Ivan Ilyin, *Natsional'naya Rossiya ...*, pp. 86-87.

¹²⁴The Russian historiography firmly separates between the Great Patriotic War of 1812 and the Russian invasion into Europe as a part of the War of Sixth Coalition in 1812-1814.

¹²⁵ Georgii Fedotov, *Sud'ba i grekhi Rossii*, [*The fate and the sins of Russia*], Volume II, (Saint-Petersburg: Sofiya, 1991), pp. 324-325.

¹²⁶ Georgii Fedotov, *Sud'ba i grekhi Rossii ...*, p. 252.

for the settled West.”¹²⁷ One of the main outcomes of this reality is the fact that, historically, Russian warfare had always been a national affair. Since the first regular units (*strel'tsy*) established by Ivan the Terrible, through more systemised recruiting systems created by Peter the Great and up to the truly national armies (first the Imperial and then the Soviet) of the 20th century, the Russian military had always a very national character built on the “obligation of every Russian person to protect its Fatherland.”¹²⁸ Russian military history, unlike the Western one, did not know the phenomenon of mercenaries. And despite the fact that during some periods, the Russian army recruited foreign officers, the process of their enlistment was similar to that of Russian subjects and included taking an oath to protect Russia. While the Western term *soldier* originated from the Old French *souled* – soldier’s pay that was paid by *solidus* (Latin - golden coin issued in the Late Roman Empire),¹²⁹ the Russian *voin* has completely different origins.¹³⁰ The roots of the word *voin* are in old-Russian *vói* – people’s militiaman (*narodnyy opolchenets*) – the major defender of the Fatherland.¹³¹ Therefore, *voyná* (war in Russian) is an activity done by *voinami* (people’s soldiers) to protect the Fatherland.

All major wars that shaped the Russian character (the Mongol Yoke, the 1812 Patriotic War and the Great Patriotic War) occurred on Russian territory, extensively involving the Russian population and encoding in the Russian mind that war is a choice between fighting or being destroyed: “to wage a war or be turned into slaves and disappear.”¹³² Obviously, the general Russian reaction to war involves more generic and universal merits, such as protection of the nation, religion, state, etc.; but as a result of the historically established belief that war is a people’s affair (rather than a state’s), the most fundamental reason of war in Russian mentality is the protection of one’s life and one’s family. While a Westerner fights to make world better, a Russian fights to survive.¹³³

While this state of a constant fight for survival has been described by famous Russian philosopher Ivan Solonevich as a the major reason behind the Russian cultural predisposition

¹²⁷Ivan Ilyin, *Sushchnost' i svoeobraziye ...* pp. 110.

¹²⁸V. Gubanov, *Russkiy natsional'nyy kharakter ...*, p. 167.

¹²⁹Clifford Rogers, “As if a New Sun Had Arisen”: England’s Fourteenth-Century RMA’, in Williamson Murray, Macgregor Knox, (ed.), *The Dynamics of Military Revolution 1300-2050*, (Cambridge: Cambridge University Press, 2001), p. 24.

¹³⁰Despite the fact that in modern Russian language ‘*soldier*’ (soldat) is more prevalent, it was introduced only in the 17th century during the military reforms of Peter the Great. Today, ‘*voin*’ is still in use, although it has higher and poetic meaning.

¹³¹V. Gubanov, *Russkiy natsional'nyy kharakter ...*, p. 167-170.

¹³²Ivan Ilyin, *Sushchnost' i svoeobraziye ...* pp.109.

¹³³Ivan Solonevich, *Zagadka i razgadka Rossii*, [*The Riddle and the Key of Russia*], (Moscow: “FondIV”, 2008), p. 295.

towards strong and decisive authority, rather than democracy,¹³⁴ an additional outcome of this state has been the increased importance of war in Russian mentality:

The whole history of the Russian state is an extreme struggle for its security against external and internal threats, a struggle that has left a recognisable trace on the consciousness of the Russian people.¹³⁵

Consequently, it is not surprising that this permanent state of war (in an addition to its extreme climate and ruthless governance) created in the Russian character a general worship for suffering, as Feodor Dostoyevsky put it, “it seems that the Russian people enjoy their suffering” as “the most important, the most fundamental spiritual need of the Russian people is a need for suffering.”¹³⁶

It seems that the narratives of war, permanent struggle and suffering have played constructing roles in the Russian cultural context throughout all of its history. Interestingly enough, the history of the 20th century contributed to this phenomenon not less, but, if anything, more than any other period in the Russian history. The first reason for this was the ideology enforced by Soviet leadership that glorified the idea of class conflict.¹³⁷ It was, after all, the political-ideological environment of the Soviet Union that was responsible for the absence of conceptual-philosophical and practical development of the ideas of non-violence and peacemaking.¹³⁸

The second reason was the Great Patriotic War. Without any doubt, this war was one of the most noteworthy events in Russian history; its contribution to the Russian cultural context, however, was significantly increased by the fact that the victory in this war has been, in fact, the only positive point of reference in the national self-identification of the late-Soviet and then post-Soviet Russian society.¹³⁹ Even at the beginning of the 21st century, the importance of the victory in this war has remained overwhelmingly high for Russian society. For example, in 2003, surveys showed that 87% of the Russian people, thinking about the

¹³⁴Ivan Solonevich, ‘Tak chto zhe yest’ demokratiya?’, [‘So, What is Democracy?’], *Nasha Strana*, No. 35 (p. 1-2), No. 36 (p.1-2), No. 38 (p. 1-2), 1950; Ivan Solonevich, ‘Doklad o mezhdunarodnom polozhenii’, [‘Report about the International Situation’], *Nasha Strana*, No. 60, 1950, p. 1-2.

¹³⁵V. Gubanov, *Russkiy natsional’nyy kharakter ...*, p. 147.

¹³⁶Fyodor Dostoyevsky, ‘Vlas’, *Polnoye sobraniye sochineniy v 30 tomakh. Tom 21- Dnevnik pisatelya 1873 god*, [The Omnibus in Thirty Volumes. Volume 21 – Writer’s Diary 1873], (Leningrad: Nauka, 1980), p. 36.

¹³⁷Vladimir Lenin, *Sotsializm i voyna*, [Socialism and War], (Moscow: Partizdat TsK VKPb, 1937).

¹³⁸E. Rudnitskaya, N. Lisovoi, ‘Mirotvorcheskaya paradigma russkoy mysli’, [‘The Peacemaking Paradigm of the Russian Thought’], in E. Rudnitskaya, (ed.), *Mirotvorchestvo v Rossii - Tserkov’, Politika, Mysliteli, ot rannego srednevekov’ya do rubezha XIX-XX stoletiy*, [Peacemaking in Russia: The Church, Politics, Thinkers: from the early Middle Ages to the Boundary between the 19th and 20th Centuries], (Moscow: Nauka, 2003), p. 4.

¹³⁹Lev Gudkov, ‘Pamyat’ o voyne i massovaya identichnost’ rossiyan’, [‘Memory of War and the Russian Identity’], *Neprikosnovennyy Zapas*, No. 2-3 (40-41), 2005.

whole of Russian history, believe that the victory in the Great Patriotic War is an event that makes them the most proud.¹⁴⁰ The notion of war is deep within the Russian character and its

Table 4: Russian Public Opinion on Just War (2005)

Question: Do you agree with the statement?	
Statements	Percent of Total Responses
War is just when it is waged against aggressor (when people protect their houses, relatives and family, and their country)	68
War is just when it is waged by people who try to free themselves from foreign influence	21
War is just when it is waged by people who try to free themselves from social injustice	20
War is just when it is waged against those who try to destroy or split the country, against those who endanger the country's integrity	18
War is just when it is a preventive war	12
War is just when it is waged for exalted goals and ideals, religious principles or for national honour and glory	6
Any War is unjust as it is accompanied by violence and cruelty applied by both sides	29

Source: Lev Gudkov, 'Tsinizm "neperekhodnogo" obshchestva', ['Cynicism of "Non-transitional" Society'], *Vestnik obshchestvennogo mneniya. Dannyye. Analiz. Diskussii*, Vol. 2 [76], 2005, p.55.

modern perspective on war is not far away from the Russian traditional explanation of war, described above. The Russian historical narrative of war – protecting one’s life and one’s family, fighting to survive rather bettering the world – seems to be as concrete as never at the beginning of the 21st century. The 2005 surveys about the justification of war showed that 68% of the population call a war just when people protect their houses, relatives and family, and their country; and only 6% call a war just when it is waged for exalted goals and ideals, religious principles or for national honour and glory.¹⁴¹ Most interestingly, these surveys also show that only one-fifth of the population actually use ethical or humanitarian aspects in their justification of war, and for all the rest – territorial and population protection are justifiable factors by themselves.¹⁴²

While the American mind perceives war as a temporary and unfortunate phenomenon and, therefore, approaches war as apolitical problem that has to be solved as quickly as possible, Russians see it as a part of their *esse*, and waging wars is always a matter of internal politics. Moreover, due to the discussed Russian cultural predisposition towards a strong leadership,

¹⁴⁰Lev Gudkov, 'Pamyat' o voyne...'.
¹⁴¹Aleksey Levinson, 'Voyna, voyny, voyne...', ['War, Wars, to War...'], *Neprikosnovenny Zapas*, no. 2-3 (40-41), 2005; Lev Gudkov, 'Tsinizm "neperekhodnogo" obshchestva', ['Cynicism of "Non-transitional" Society'], *Vestnik obshchestvennogo mneniya. Dannyye. Analiz. Diskussii*, Vol. 2 [76], 2005, p.55.
¹⁴²Aleksey Levinson, 'Voyna, voyny, voyne...'; Lev Gudkov, 'Tsinizm "neperekhodnogo" obshchestva'.

Russian people justify war only when they are led by powerful leaders. Russians were always ready to defend their Fatherland facing a foreign enemy. From the 13th century's Tatar-Mongol Yoke, and through to Napoleon's and Hitler's campaigns, Russian people have always demonstrated exceptionally high levels of patriotism and readiness to fight the adversary and suffer the consequences of protecting their country. Russian history, however, suggests that people are ready to suffer war not only because they think it is just, but mostly, because they expect their leaders to stand firm and lead them to victory. The Tsarist government during the First World War, or the Soviet leaders during the Afghanistan War, did not prove themselves as strong leadership that deserve to be followed, and as a proof of that, Nikolai II was the last Tsar and Mikhail Gorbachev – the last Soviet leader.¹⁴³

Moreover, the readiness of the Russian people to fight war depends more on leadership than on the nature of the conflict itself. The best example is the Russian involvement in Chechnya in the 1990s. During the first Chechen campaign from 1994 to 1996, Yeltsin's government was associated with a high level of corruption, economic failure and an inability to project central power on to the regions.¹⁴⁴ In light of this weak leadership, Russians saw this war as Boris Yeltsin's attempt to prove his power, rather than defend Russian land, and the Russian public wanted "to get rid of both its hapless president and his Caucasian adventure."¹⁴⁵ Lacking strong leadership, Russians were not ready to fight: in 1995, the surveys coined out that 40% of the population preferred peaceful solution with an additional 24% who rejected any military involvement, asking to withdraw forces from Chechnya. Moreover, in June 1995, another survey showed that in answering the question "What, in your opinion, is necessary to do in relation to Chechnya?" about 38% of the population approved its exit from the Russian Federation.¹⁴⁶

This approach to the very same conflict changed entirely in 1999 with the arrival of Putin, who was seen as an energetic, decisive and strong leader on his way to power. Putin not only took the full responsibility for the war's prosecution, but also produced an image of a determined and capable leader. In 1999, directly after his appointment as Prime Minister,

¹⁴³ Dmitri Trenin, 'Putin's Biggest Challenge Is Public Support', *Carnegie Moscow Center*, 15 January 2015, <http://carnegie.ru/2015/01/15/putin-s-biggest-challenge-is-public-support/hzl5>, [accessed: 2 September 2015].

¹⁴⁴ Anatol Lieven, *Chechnya: Tombstone of Russian Power*, (New Haven: Yale University Press, 1999), pp.169-171.

¹⁴⁵ Dmitri Trenin, Aleksei Malashenko, *Russia's Restless Frontier: The Chechnya Factor in Post-Soviet Russia*, (Washington: Carnegie Endowment for International Peace, 2004), p. 50.

¹⁴⁶ Lev Gudkov, 'God chechenskoy voyny v obshchestvennom mnenii Rossii', ['A Year of Chechen War in the Russian Public Opinion'], *Druzhba Narodov*, No. 2, 1996.

during a briefing with the Russian generals in Chechnya, Putin paid tribute to the fallen soldiers, which had a very ordinary beginning:

I would like, according to Russian tradition, ... to raise this glass and drink it for the memory of those who have fallen ... We have no right to allow ourselves any moment of weakness, because if we will, then those, who have fallen, died with no reason.

But, then again, had a completely unexpected end:

This is why, I suggest, to put this glass away today. We definitely will drink for them [fallen soldiers], but we will drink later, when the immediate goals of principal character will be solved. This is why, I suggest to have a bite and start working.¹⁴⁷

This act, of firmly putting the glass back on the table, symbolises in Russian cultural interpretation the decisiveness and power of a leader that deserve to be followed. It is not surprising then that under the Putin leadership the readiness of the Russian people to fight cardinally changed: in 1999, 70% of the respondents approved the second campaign in Chechnya that begun that year, with 62.5% wanting the war to go on to “final victory”.¹⁴⁸

Russian people, led by a strong leader, demonstrate levels of endurance and sacrifice that cannot be grasped by the Western mind. But, without powerful leadership, the same people, who had successfully defended their Fatherland against the all powerful Napoleon and Hitler, managed to bring down their own state twice within a single century: in 1917 and again in 1991.¹⁴⁹

This chapter explores the reasons behind the fact that the Russian military does not employ NLW. Public opinion can influence decision-makers in favour of these weapons by applying domestic political pressure to decrease civilian casualties during military operations. The main question, however, is whether the cultural context that lies in the roots of public opinion is predisposed towards valuing the lives of the enemy’s population.

As discussed above, due to their historical and cultural background, Russians see human rights quite differently from their American counterparts. While an American demands and protects his rights from his government; a Russian sees no need for that. The nature of the Russian people is characterized by a predisposition towards internal-spiritual freedom, and, consequently, they do not value formal (artificially created) rights and freedoms given by strong (even totalitarian) authority, to which they zealously transfer their materialistic troubles.

¹⁴⁷ Vladimir Putin in Vladimir Solov'yev, *President...*

¹⁴⁸ Dmitri V. Trenin, Aleksei V. Malashenko, *Russia's Restless Frontier: ...*, p. 50.

¹⁴⁹ Dmitri Trenin, 'Putin's Biggest Challenge...'

On the level of the unconscious cultural context, Russian people are ready to suffer and make sacrifices to sustain their internal-spiritual freedom. While in the West, the struggle for human rights has been translated into an increasing valuing of human life, Russians always have preferred to leave these materialistic worries to the authorities. This situation has not differed much from the reigns of Ivan the Terrible, Peter the Great or Alexander the Liberator through the rules of Stalin, Khrushchev or Brezhnev, up to Putin's regime in the beginning of the 21st century.

The narratives of constant war and eternal struggle are an integrated part of Russian mentality. Major General (ret.) Alexander Vladimirov, a Russian contemporary military theoretician and author of the imperative monograph titled *Fundamentals of General Theory of War*, argues that “an eternal war – this is what the history of humanity offers instead of eternal peace, which philosophers and moralists have dreamt about.”¹⁵⁰ Russian people are ready to suffer and sacrifice fighting a just (according to their interpretation) war, a war that is intended to protect their lands and families, rather than promote an ideology or a high moral standard. Moreover, as it was discussed, Russians traditionally support wars when they are led by strong and decisive leaders, who, historically, were not only ruthless with Russia's enemies, but also with the Russians themselves. The paradox of the Russian character is that when it comes to fighting just wars (i.e. just causes and strong authority), the Russian people are ready to pay any price. The best example of their readiness for sacrifice is shown in surveys done after the 2002 Nord-Ost siege in Moscow, in an attempt to analyse people's tolerance of victims in counter-terror operation involving hostages. Interestingly enough, the surveys showed that more than 40% of the population define an operation's outcome as a successful one, when 10 to 20 hostages out of 100 are killed.¹⁵¹ Furthermore, despite the 125 hostages who had died during the law enforcement operation in the Nord-Ost crisis, a month after the siege, 23% of respondents thought that the operation was successful and 55% approved it as satisfying.¹⁵²

¹⁵⁰ Alexander Vladimirov, *Osnovy Obshchey Teorii Voyny*, [Fundamentals of General Theory of War], (Moscow: Moskovskiy Finansovo-Promyshlennyy Universitet “Sinergiya,” 2013), Volume 1, p.163.

¹⁵¹ V. Selivanov, V. Leonov, N. Bagdasaryan, ‘Social Aspects of NLW Development’, in *Proceeding to the 3rd European Symposium on Non-Lethal Weapons*, (Ettlingen: Fraunhofer-Institut für Chemische Technologie ICT, 2005).

¹⁵² Oleg Khlobustov, ‘Chechnya, Terrorizm i Kontrterroristicheskiye Operatsii v Zerkale Obshchestvennogo Mneniya’ [‘Chechnya, Terrorism and Counter-Terrorism Operations in the Mirror of Public Opinion’], *Vlast*, No. 5, 2003, pp. 54-59.

This example perfectly demonstrates the readiness of the Russian people, due to their cultural predispositions described above, to suffer and sacrifice in the fight for a just war. And if the readiness for such self-victimisation is so high, it, subsequently, leaves no place for the concern for enemy civilian casualties. In other words, the suffering (and casualties) of the enemy’s population during military operation is generally approved in the Russian cultural context, as Russians are ready to suffer themselves. Moreover, the Russian cultural collectivism and the idea of collective responsibility is relevant not only for the Russian community, it is also projected on the enemy. To the Russian mind, the community is responsible for its members’ actions, and therefore the enemy’s population is frequently considered as responsible for the actions of its military. For example, in 2002, surveys of Russian public opinion showed that 36% of respondents believed that the Chechen population was responsible for its own troubles and Chechens got what they deserved, 67% believed that it was impossible to negotiate with Chechens as equals as “they understand only the language of force,” and 47% of respondents denied the right to be equal citizens of the Russian Federation to the Chechen population.¹⁵³

Table 5: Russian Public Opinion on Acceptable Number of Victims during Hostage Operations

Judgement	less than 10 victims	less than 20 victims	less than 50 victims	less than 75 victims	All Killed
Excellent	84%	11.8%	≈1%	≈1%	≈1%
Successful	51.40%	41.0%	6.1%	≈1%	≈1%
Normal	29.7%	42.9%	22.6%	3.3%	≈1%
Acceptable	23.1%	33.5%	31.1%	9.4	≈1%

Public Approval of the law enforcement operation in the 2002 Nord-Ost Crisis (125 victims)

Category	Percentage
satisfying	55%
successful	23%
unsatisfying	19%
no answer	3%

Source: V. Selivanov, V. Leonov, N. Bagdasaryan, ‘Social Aspects of NLW Development’, in *Proceeding to the 3rd European Symposium on Non-Lethal Weapons*, (Ettlingen: Fraunhofer-Institut für Chemische Technologie ICT, 2005).

Consequently, in light of this cultural context and mentality, it seems right to argue that Russian public opinion is far from pressuring politicians and defence decision-makers to consider the minimisation of civilian casualties as a decisive factor in their strategies.

¹⁵³ Oleg Khlobustov, ‘Chechnya, Terrorism...’.

Part Four: Russian Military Thought and NLW

Previous research on Russian military thought undoubtedly shows deep interconnections between Russian mentality, national cultural context and Russian military culture.¹⁵⁴ Consequently, many of the arguments presented and discussed in the following part will be based on the Russian cultural factors analysed previously.

According to Russian tradition, a war is an integral part of the human conditions (*esse*), and, therefore, it is not surprising that in analysing Russian military culture, scholars state that Soviet and then Russian military thinkers “interpreted each event as a sign signalling a change in the whole and ... saw problems as interrelated and requiring a generalised frame of reference to determine their meaning.” This inherent Russian cultural ability to see the big picture has been, undoubtedly, reflected in Russian military theory conceptualisation. In Russian tradition “military science is an all-encompassing discipline ... that regulates professional practice from strategy and doctrine, on the national level, to tactics on the battlefield”.¹⁵⁵ While, in American tradition, military experience is the predominant ingredient of military professionalism, in Russian military culture, it is the ability of systematic military thinking that enjoys the status of an essential and highly valued skill.

Unlike their American counterparts, Russian military thinkers never considered advanced technologies as means to fight better with fewer numbers. Russians have never denigrated the relevance and importance of technology; when faced with a problem, however, they do not instinctively seek a technological solution.¹⁵⁶ This might explain how the tendency of concentrating on big abstract ideas often led Russian military thinkers to develop state-of-the-art doctrines and concepts that were incompatible with the material capacity of the Russian military establishment.

This research, however, follows the development of NLW and their conceptualisation by Russian military thought. Consequently, as NLW is a military technology, it focuses on the relation between Russian military culture and technological developments in general, and NLW in particular.

¹⁵⁴ For example see: Christopher Donnelly, *Red Banner: The Soviet Military System in Peace and War*, (London: Jane’s Information Group, 1988); Dima Adamsky, *The Culture of Military Innovation...*

¹⁵⁵ Dima Adamsky, *The Culture of Military Innovation...*, pp. 41, 47.

¹⁵⁶ Christopher Donnelly, *Red Banner...*, pp. 61-65, 125-134.

Russian Military Thought and Technology

The Industrial revolution – which essentially occurred in Russia during the 20th century – with its stressful and strenuous influence on people, was an antithesis of the Russian desire for spiritual calmness and freedom. The Russian peasant mistrusted machines that “seemed [to him] as something anti-natural, a fruit of worthless thinking, which was invented in Europe and is entirely unsuitable for Russians.”¹⁵⁷ It is important to note, however, that this technological scepticism was based on a cultural predisposition, rather than on the lack of technological imagination or skills. Due to their unmaterialistic mind-set, Russian people saw technology as something tedious and worthless; however, under the pressure of necessity (coming mainly from the authorities), Russian minds were able to produce technological wonders. As an old Russian proverb states: “[If you] beat a Russian – [he] would even make you a clock” (*pokoloti russkogo - on tebe i chasy sdelayet*).¹⁵⁸ This, generally unfavourable, perception of technology in general, and military technology in particular, has been part of the Russian military reality since Peter the Great (the first tsar who actively tried to reform the Russian military through technological modernisation). Technology has always been the Achilles heel of the Russian military, which was usually compensated for by a heavy reliance on the enormous human resources. And while it could be seen that the Russian military tradition is simple outnumbering the enemies, “first and foremost it was concerned with overcoming the enemy qualitatively – morally.”¹⁵⁹

Notwithstanding, the major characteristics of the Russian mentality – collectivism, endurance and patience – have all lain at the core of the perception of the moral superiority of the Russian forces over their counterparts throughout Russian history. While the notion of collectivism was translated into mutual help and assistance between soldiers, to a level that could barely be understood by their European counterparts; the endurance and patience were transformed into a heroic readiness to withstand unbearable conditions and make enormous sacrifices.¹⁶⁰ Consequently, it is not surprising that Russian military culture considered new military technologies an important, but not obligatory, supplements to its military power, which was fundamentally based on spiritually superior “flesh”, rather than sophisticated “war machines”.¹⁶¹ When an American, hitting his fingers, will seek a way to improve the hammer,

¹⁵⁷Ivan Ilyin, *Sushchnost' i svoeobraziye ...* p. 29.

¹⁵⁸Ivan Ilyin, *Sushchnost' i svoeobraziye ...* pp. 29-30.

¹⁵⁹Dima Adamsky, *The Culture of Military Innovation...*, p. 43.

¹⁶⁰V. Gubanov, *Russkiy natsional'nyy kharakter ...*, p. 169.

¹⁶¹Dima Adamsky, *The Culture of Military Innovation...*, pp. 44-45.

a Russian will discuss intangible theories of a better way to strike the nail, but, in practice, is able neither to produce a better hammer, nor change the way he holds the nail – he will endure the pain and continue striking.

In addition to the cultural technological drawback, the Soviet centralised economy and authoritarian conservative military tradition shielded the Soviet military from technological adventures and from Western tech-euphoria concepts. Building on the cultural fact that faced with a problem, the Russian instinct does not immediately seek a technological solution, Soviet military decision-makers approved technology that was considered as the minimum required, significantly compensating for technological inferiority through operational and conceptual creativity. Soviet technological achievements were mainly used for *pokazuha* (literally – show-off; a staged event for officials, international observers and also for internal propaganda),¹⁶² rather than for actual employment. Interestingly enough, this tendency has survived the Soviet Union’s dissolution, being transferred to contemporary Russian forces. The 2008-2020 Plan for the Reorganisation of the Armed Forces of Russia is intended, by its definition, to give “a new image” to the Armed Forces, rather than deal with the core problems and defining characteristics.¹⁶³

Russian Military Thought and NLW

The Russian approach to waging wars has always been different from the Western one. Built on different cultural predispositions, Russian generals repeatedly produced solutions that were considered as not only impossible, but even unthinkable: Suvorov's march across the Alps in 1799 or Kutuzov’s decision to abandon Moscow in 1812. Although, directly after the Bolshevik Revolution, the Soviets struggled to separate political ideology and military professionalism,¹⁶⁴ early Soviet military theoreticians commonly believed that “scientifically” developed military thought was a required foundation for crafting strategy and executing tactics.¹⁶⁵

Even though it has been more than 20 years since the dissolution of the Soviet Union, it seems right to argue that contemporary Russian military thought is deeply rooted in the Soviet

¹⁶²Dima Adamsky, *The Culture of Military Innovation...*, p. 45-48, 51.

¹⁶³A. Arbatov, V. Dvorkin, ‘Voyennaya reforma: proshchety i puti ikh ispravleniya’, [‘Military Reform: Miscalculations and the Ways to Their Correction’], in M. Lipman, (ed.), *Povestka dnya dlya novogo prezidentstva*, [Agenda for the New Presidency], (Moscow: Moscow Carnegie Centre, Rossiyskaya Politicheskaya Entsiklopediya, 2012), pp. 41-52; P. Baev, ‘Trayektoriya voyennoy reformy v Rossii’, [‘The Trajectory of the Military Reform in Russia’], *Pro et Contra*, Vol. 16, Issue 4-5, 2012, pp. 171-184.

¹⁶⁴Andrei Kokoshin, *Soviet Strategic Thought, 1917-91*, (Cambridge, MA: MIT Press, 1998), pp.11-39.

¹⁶⁵Dima Adamsky, *The Culture of Military Innovation...*, p. 47.

“scientific” approach, constructed after the Great Patriotic War, and it has preserved the ability to produce ideas and concepts “outside the box” that characterised the Soviet military “scientific” thinking. Moreover, while observing their Western counterparts and understanding their own technological inferiority, Russian military thinkers have always known to produce innovative and creative strategies and tactics. The main secret of their intellectual success was that, due to purely Russian cultural predispositions, Russian military thinkers were never deterred by “the gap between the theoretical and feasible.”¹⁶⁶ In other words, Russian military thought has never been restricted by the framework of feasibility, allowing them to produce strategic and tactical concepts, despite their impracticability.

As with many other technologies, the story of Russian military thinking about NLW began with the observation of emerging technologies and concepts in the West. The first Russian publications on pure military implementation of NLW appeared in mid-2000s and always began with an analysis of the Western experience as the major point of reference for the following discussion.¹⁶⁷ These publications cautiously advocated for the possible usefulness of NLW for Russian military as “unlike Russia, several NATO members already employ or very close to employ such high-technological weapons as NLW.”¹⁶⁸

An examination of Russian military publications on NLW shows that “The Conception to the Development and Employment of Weapons with Non-Lethal Action in the Armed Forces of the Russian Federation”, approved by the Russian Minister of Defence in 2009, served as an important milestone in the process of the conceptualisation of military employment of NLW. Since 2009, the Russian major military publication, *Voennaia Mysl'* (Military Thought), has been flooded with articles theorising and conceptualising the present and the future of NLW on the battlefield.¹⁶⁹ These articles, in addition to many other published in more professional

¹⁶⁶Dima Adamsky, *The Culture of Military Innovation...*, pp. 52-53.

¹⁶⁷For example see: V. Burenok, V. Korchak, S. Smirnov, ‘Oruzhiye neletal'nogo deystviya - sostavnaya chast' sistemy vooruzheniya budushchego’, [‘Weapons with Non-Lethal Action – The Constitutive Part of the Future Weaponry System’], *Vestnik Akademii Voyennykh Nauk*, No. 4, 2007, pp. 117-127; S. Savrasov, ‘Kontseptsiya primeneniya oruzhiya...’; V. Antipov, S. Novichkov, ‘K voprosu o razrabotke...’; V. Selivanov, ‘Oruzhiye neletal'nogo deystviya...’.

¹⁶⁸V. Burenok, V. Korchak, S. Smirnov, ‘Oruzhiye neletal'nogo deystviya ...’, p.119.

¹⁶⁹For example see: V. Moiseev, V. Orlyanskii, ‘Oruzhiye neletal'nogo deystviya i printsipy taktiki’, [‘Weapons with Non-Lethal Action and the Principles of Tactics’], *Voennaia Misl'*, No. 6, 2011, pp. 26-33; E. Efremov, ‘Matematicheskoye modelirovaniye primeneniya oruzhiya neletal'nogo deystviya v mirotvorcheskikh operatsiyakh’, [‘The Mathematical Simulation of the Employment of Weapons with Non-Lethal Action during Peacemaking Operations’], *Voennaia Misl'*, No. 4, 2012, pp. 39-43; S. Panteleev, ‘Attraktory vrazhduyushchikh storon v lokal'nykh konfliktakh s primeneniyyem sredstv neletal'nogo vozdeystviya’, [‘Attractors of the Sides Fighting in Local Conflicts with the employment of Weapons with Non-Lethal Action’], *Voennaia Misl'*, No. 4, 2012, pp. 11-16; A. Pronin, A. Leonov, L. Kaplyarchuk, ‘Osnovnyye kriterii voyenno-ekonomicheskoy otsenki oruzhiya neletal'nogo deystviya’, [‘The Major Criteria of Military-Economic Evaluation of Weapons with Non-Lethal Action’], *Voennaia Misl'*, No.10, 2012, pp. 43-50; D. Zaytsev, D. Soskov, A. Foteev,

journals, such as *Strategicheskaya Stabil'nost'* (Strategic Stability),¹⁷⁰ *Zashchita i Bezopatnost'* (Protection and Security),¹⁷¹ *Voprosi Oboronnoi Tekhniki* (Questions of Defence Technology)¹⁷² and others, systematically discussed the potential strategic and tactic implementations of NLW on the battlefield. Similar to the American case, this theoretical discussion has been led by military, as well as academic, scholars and thinkers. On the academic forefront of the NLW discourse, a special place is reserved for Victor Selivanov, the head of the High-Precision Airborne Devices Department at the Bauman Moscow State Technical University (BMSTU) and member of the Russian Academy of Rocket and Artillery Sciences, and Denis Levin, an Associate Professor at BMSTU. On the military side of the debate, the main contributors are Colonel General Anatoliy Nagovitsyn, Major General Vasiliy Burenok and Colonels Vladimir Moiseev and Dmitri Zaitsev. All parts of the Russian military-science apparatus have been actively engaged in the analysis of NLW – from central military research institutes to military academies – sorting through NLW and producing a very comprehensive vision of the their possible military employment. According to the affiliations of the authors, the centres of the military thinking and conceptualisation about NLW have been: the 12th Central Scientific Research Institute of the Ministry of Defence of the Russian Federation (the 12th CSRI), the 46th Central Scientific Research Institute of the Ministry of Defence of the Russian Federation (the 46th CSRI), the Combined Arms Academy of the Armed Forces of the Russian Federation (CAAAF), and the Military Academy of the General Staff of Armed Forces of the Russian Federation (MAGS). Interestingly enough, as the first two are responsible for the research and development of new military technologies, and the latter two

‘Oruzhiye neletal'nogo deystviya na osnove izlucheniya - fizicheskiye osobennosti i perspektivy primeneniya’, [‘Weapons with Non-Lethal Action Based on Radiation: Physical Characteristics and Employment Perspective’], *Voennaia Misl'*, No. 4, 2013, pp. 30-37; L. Ilyin, V. Rikhlin, ‘Inkapsitany kak oruzhiye neletal'nogo deystviya’, [‘Incapacitants as Weapons with Non-Lethal Action’], *Voennaia Misl'*, No. 9, 2014, pp. 37-42; E. Stupitskiy, L. Kuznetsova, ‘Issledovaniye vozmozhnosti sozdaniya...’; A. Nagovitsyn, A. Grudzinskiy, A. Sporykhin, ‘Oruzhiye neletal'nogo deystviya...’.

¹⁷⁰For example see: A. Burutin, D. Zaitsev, D. Mastruk, et al., ‘Sistematizatsiya tipovykh skhem primeneniya oruzhiya neletal'nogo deystviya’, [‘The Systematisation of Typical Scenarios of the Implementation of Weapons with Non-Lethal Action’], *Strategicheskaya Stabil'nost'*, No. 2 (51), 2010, pp. 18-26; D. Zaitsev, A. Kozlov, V. Moiseev, et al., ‘Rol' i mesto oruzhiya neletal'nogo deystviya v konfliktakh nizkoy intensivnosti’, [‘The Role and the Place of Weapons with Non-Lethal Action in the Low-Intensity Conflicts’], *Strategicheskaya Stabil'nost'*, No. 4(61), 2012, pp. 27-35; D. Zaitsev, S. Martishev, S. Sergeev, et al., ‘Porazhayushchiye faktory oruzhiya neletal'nogo deystviya - fizicheskiye osobennosti, biologicheskkiye efekty i taktika primeneniya’, [‘The Hitting Factors of Weapons with Non-Lethal Action: Physiological Features, Biological Effects and Employment Tactics’], *Strategicheskaya Stabil'nost'*, No. 3(64), 2013, pp. 2-11; A. Harvardt, D. Zaitsev, V. Moiseev, et al., ‘Perspektivy primeneniya oruzhiya neletal'nogo deystviya v urbanizirovannom rayone’, [‘The Perspectives of the Employment of Weapons with Non-Lethal Action in Urban Area’], *Strategicheskaya Stabil'nost'*, No. 1(61), 2014, pp. 64-71.

¹⁷¹A. Nagovitsyn, ‘Ispol'zovaniye oruzhiya neletal'nogo deystviya ...’.

¹⁷²V. Selivanov, D. Levin, S. Lyuwin, ‘Arkhitektura i realizatsiya...’; V. Selivanov, D. Levin, I. Ilyin, ‘Metodicheskiye osnovy ...’.

are the centres of military thinking, the combination of the research produced by them has covered the whole picture of the NLW possibilities.

According to the group of Russian military officers led by Major General Vasili Burenok, head of the 46th CSRI, NLW are characterised by:

(1) high effectiveness of affecting factors on man-power, equipment and infrastructure; (2) ability to incapacitate targets for a period of time, required by special forces to accomplish their missions; (3) high level of information-psychological impact on the enemy; (4) selectiveness in affecting parts of the chosen targets; (5) ability to provide the required time before the realisation of the chosen affecting factor and the regulation of its impact according to the operational and tactical situation; (6) compatibility and feasibility of integration with existent and future armament.¹⁷³

The systematic methodology of Russian military science to identify the role of NLW on the future battlefield included mathematical simulations of the possible contribution of NLW to military success. Analysing the possible implementations of NLW, Colonel Evgeni Efremov from the 12th CSRI, an institution that is responsible for the development of the requirements from military technologies, reported:

The experience of local wars and armed conflicts shows that a mathematical modulation of combat activity is a required condition for the scientific forecast of the process and the outcome of military activity... [and] the development of relevant requirements from tactical-technical weapons' characteristics ... including Weapons with Non-Lethal Action.¹⁷⁴

Interestingly enough, one of the main conclusions of these very mathematical simulations is that employment of NLW, intended to minimise civilian casualties, thus decreasing the enemy's reinforcement from civilian population, will lead to a decrease of casualties of military personnel that employ these NLW.¹⁷⁵

On the conceptual forefront of debate, the Russian military thinkers also delved deeper into possible concepts of operations and employment of NLW. As Colonels Vladimir Moiseev and Vladimir Orliyanskii reported in their imperative article "Weapons with Non-Lethal Action and the Principles of Tactics":

Rapid and massive employment of a variety of Weapons with Non-Lethal Action can allow the neutralisation of entire enemy units, as they lack the information

¹⁷³ V. Burenok, A. Leonov., A. Pronin, *Voyenno-Ekonomicheskiye i Innovatsionnyye Aspekty Integratsii Netraditsionnykh Vidov Oruzhiya v Sostav Sistemy Vooruzheniya*, [Military-Economic and Innovative Aspects of the Integration of Non-traditional Weapons], (Moscow: Izdatel'skaya Gruppya Granitsa, 2014), pp. 44-45.

¹⁷⁴E. Efremov, 'Matematicheskoye modelirovaniye ...', p. 39.

¹⁷⁵S. Panteleev, 'Attraktory vrazhduyushchikh storon ...', p.16.

about the characteristics of these weapons, scales of their employment, damaging factors and ways of protection.¹⁷⁶

While similarly to their American counterparts, Russian military thinkers predetermining the suitability of NLW more to law enforcement types of military missions (e.g., counter-terror or peacekeeping operations), they also delved into the pure tactical role of NLW during these type of conflicts suggesting that properly employed NLW can provide a force with significant tactical advantages. The major possible advantage of NLW on the battlefield, according to Russian publications, is a tactical surprise that can be achieved “not by the fact of the employment of the new weapons, but by skilful ways of their employment and avoiding repetitive patterns.”¹⁷⁷

In an attempt to organise the existing knowledge, emerging technologies and the experience of their employment, different data bases were created¹⁷⁸ and comprehensive plans of future development were discussed.¹⁷⁹ Economic perceptiveness,¹⁸⁰ legal aspects¹⁸¹ and even measures to protect friendly civilian population against NLW employed by enemy forces¹⁸² – all these aspects were extensively discussed in the Russian military literature.

The most interesting part of their research, however, is their discussions of examples of the real events involving Russian Armed Forces in Chechnya and how the employment of NLW could have brought a better tactical solution, secure troops on the ground and save enemy’s civilian’s lives.¹⁸³ There are two main conclusions, to which these examinations brought Russian researchers. The first is that “arming the troops with different kinds of NLW significantly enhances their ability to impact the enemy in the place and time, where and when he expects it least.”¹⁸⁴ And the second is that:

¹⁷⁶ V. Moiseev, V. Orlyanskii, ‘Oruzhiye neletal’nogo deystviya ...’, p. 29-30.

¹⁷⁷ V. Moiseev, V. Orlyanskii, ‘Oruzhiye neletal’nogo deystviya ...’, pp. 29-30.

¹⁷⁸ V. Selivanov, D. Levin, S. Lyuwin, ‘Arkhitektura i realizatsiya ...’.

¹⁷⁹ V. Selivanov, D. Levin, I. Ilyin, ‘Metodicheskiye osnovy ...’.

¹⁸⁰ A. Pronin, A. Leonov, L. Kaplyarchuk, ‘Osnovnyye kriterii ...’.

¹⁸¹ V. Korchak, S. Smirnov, ‘Regulirovaniye normativno-pravovyykh otnosheniy...’; Artem Muranov, ‘Administrativno-pravovoy rezhim oruzhiya neletal’nogo deystviya: problemy formirovaniya i realizatsii’, [‘The Regulatory System of Weapons with Non-Lethal Action: Problems of Formulation and Implementation’], (PhD thesis, The All-Russian Research Institute of the Ministry of Internal Affairs of the Russian Federation, 2008).

¹⁸² V. Vladimirov, ‘Sovremennaya voyna i grazhdanskaya oborona’, [‘Contemporary War and Civilian Defence’], *Strategiya Grazhdanskoy Zashchity: Problemy i Issledovaniya*, Vol. 2, No. 1, 2012, pp. 471-481; V. Vladimirov, G. Chernikh, ‘Sostoyaniye i osnovnyye napravleniya ...’.

¹⁸³ V. Burenok, V. Korchak, S. Smirnov, ‘Oruzhiye neletal’nogo deystviya ...’; D. Zaitsev, A. Kozlov, V. Moiseev, et al., ‘Rol’ i mesto oruzhiya ...’; A. Harvardt, D. Zaitsev, V. Moiseev, et al., ‘Perspektivy primeneniya oruzhiya ...’; A. Burutin, D. Zaitsev, D. Mastruk, et al., ‘Sistematizatsiya tipovyykh skhem ...’.

¹⁸⁴ V. Moiseev, V. Orlyanskii, ‘Oruzhiye neletal’nogo deystviya ...’, p. 30.

Arming the troops with the most advanced types of NLW, and their decisive and extensive employment in combination with lethal weapons – will allow forcing the enemy to stop the armed struggle and will create conditions for the peaceful resolution of the existent conflict.¹⁸⁵

Due to different cultural and historical predispositions, technological virtuosity has never been the centre of gravity of the Russian military tradition. Same cultural aspects, however, have released Russian military thinkers and strategy crafters from the burden of being immediately relevant, allowing them to grasp distant, unfeasible and unthinkable concepts.¹⁸⁶ Modelling themselves on the Soviet-built methodology of military science, contemporary Russian military researchers have produced analyses of NLW that is significantly more comprehensive than the product of their American counterparts. The extensive spectrum of the analysis, the different perspectives and assessments, offer a very detailed proposal for the military employment of NLW. Interestingly enough, according to the Russian point of view, NLW are intended to be employed during law enforcement operations, not because of political concerns to avoid civilian casualties, but because, as several Russian military thinkers claimed, the massive employment of lethal weapons “will promote the growth of the population’s aggressiveness, the destruction of economic and social infrastructures, and ultimately will lead to a further escalation of the conflict.”¹⁸⁷ This understanding of the initial role of NLW corresponds to an even more significant breakthrough of Russian military conceptualising: NLW have a potential to complement lethal means on conventional battlefield against conventional enemies’ forces. According to Russian military thinkers, non-lethal capabilities have to be integrated within conventional lethal weapons, thus increasing their effectiveness:

Variations of Weapons with Non-Lethal Action have to be compatible with the existing ordinary weaponry and compliment its capabilities. It is important that the standard existing means of delivery (firearms, artillery, aircrafts, missiles, etc.) are used as means of the delivery [of non-lethal effects], and oversized systems are mounted on the standard already employed military transport platforms. The technical maintenance and resupply of the combat employment of different Weapons with Non-Lethal Action have to be a part of the existing system of the technical maintenance and resupply of the Armed Forces of the Russian Federation.¹⁸⁸

Subsequently, according to Russian understanding, NLW can “minimise the enemy’s capabilities to manoeuvre its reserves and second echelons” as well as “disorganise the

¹⁸⁵ D. Zaitsev, A. Kozlov, V. Moiseev, et al., ‘Rol’ i mesto oruzhiya ...’, p. 35.

¹⁸⁶ Dima Adamsky, *The Culture of Military Innovation...*, pp. 50-52.

¹⁸⁷ D. Zaitsev, A. Kozlov, V. Moiseev, et al., ‘Rol’ i mesto oruzhiya ...’, p. 31.

¹⁸⁸ A. Pronin, A. Leonov, L. Kaplyarchuk, ‘Osnovnyye kriterii...’, pp. 48-49.

coordination of command, control, intelligence and information.”¹⁸⁹ This shows that, as per usual with the Russian military science, the fact that current NLW are far away from being able to fulfil these far-seeing visions does not stop Russian military thinkers from conceptualising their potential influence on the future of warfare.

Part Five: Conclusions

While the peak of Russian enthusiasm for NLW occurred more than a decade after the outset of the military revision of these weapons in the U.S. in the early 1990s, the current employment of NLW within the Russian military does not much differ from its American counterpart, presented in the previous chapter. It seems that the Russian military concepts approved in 2009 served as a trigger for the Russian military community to start engaging the topic of NLW, but without a powerful leadership this eagerness rapidly attenuated, burying NLW within the Russian bureaucracy machine.

The history of Russian political and military reforms and modernisations offers a logical explanation of the sudden rise and fall of interest in NLW in the Russian political-military discourse. Historically, all Russian political, economic, and, especially, military reforms were inspired by the West. Intuitively Russian strategy decision-makers closely observe Western military technological and conceptual developments in an attempt to Russianise them.¹⁹⁰ Consequently, it is not surprising that after a decade since its development in the U.S., the idea of NLW migrated to Russia creating a sudden vast interest to these weapons. It is also not surprising that this interest was short-lived. Russian historical and cultural predispositions demand a strong personality to lead any reform or modernisation: “there’s moderniser – there’s modernisation, there’s no moderniser – do not expect even attempts to organise changes.”¹⁹¹ And, as it was discussed, Russian politicians have neither international, nor domestic political pressures to reduce the lethality of their Armed Forces and demand military reform that will lead to the employment of NLW.

Since the mid-2000s, the Kremlin has implemented a very effective defensive foreign policy, built on the Russian growing economic status and the revitalisation of the Russian role in international affairs, by providing a critical interpretation of Western actions. To the Russian

¹⁸⁹V. Moiseev, V. Orlyanskii, ‘Oruzhiye neletal’ nogo deystviya ...’, p. 32.

¹⁹⁰Vladislav Inosemzev, *Poteryannoye desyatiletie*, [*The Lost Decade*], (Moscow: Moskovskaya shkola politicheskikh issledovaniy, 2013), pp. 553-569; V. Lapkin, V. Pantin, ‘Dinamika obraza Rossii ...’.

¹⁹¹Vladislav Inosemzev, *Poteryannoye desyatiletie ...*, p. 556.

mind, as long as Western militaries provide enough cases of brutal lethality during their military activity and do not employ NLW, Russian politicians see no reason to invest resources in the development of military operationally-useful NLW. In other words, as long as the Kremlin will be able to justify enemy civilian casualties by referring to the level of lethality caused during U.S.-led operations, there will be no pressure to decrease the lethality of the Russian troops and consequently employ NLW. Moreover, the Russian cultural attitudes towards war and the Russian true belief that the main purpose of war is pure survival of one's own nation, rather than an attempt to defend values or high-moral standards, prevent the formation of any domestic political pressure to decrease civilian casualties in conflicts.

Russian military thought traditionally has tended to concentrate on the big abstract ideas that often led Russian military thinkers to develop state-of-the-art doctrines and concepts that were incompatible with the material capacity of the Russian military establishment, and NLW are not an exception. In 2012, in his famous article "Being strong: National security guarantees for Russia", Vladimir Putin advocated the importance of the development of the so called "Weapons Based on New Physical Principles" (*oruzhiya na novykh fizicheskikh printsipakh*).¹⁹² While, in the beginning, the meaning of the term was unclear, later, the Russian Ministry of Defence clarified that the "Weapons Based on New Physical Principles" (also called Non-Traditional Types of Weapons) are "new types of weapons with assaulting factors based on processes and phenomena that were not previously used for military purposes" and listed six types of these weapons: Directed Energy Weapons, Electromagnetic Weapons, Geophysical Weapons, Radiological Weapons, Genetic Weapons, as well as Non-Lethal Weapons.¹⁹³

This very ambition and abstract concept of a whole set of entirely new weaponry demonstrates best the paradoxical gap between the ability of Russian military thought to produce sophisticated concepts and the feasibility of their implementation. On the one hand, Putin himself advocated these weapons stating in 2012 that: "in the long term ... the Weapons Based on New Physical Principles ... alongside nuclear weapons, will allow to obtain

¹⁹² Vladimir Putin, 'Byt' sil'nymi: garantii natsional'noy bezopasnosti dlya Rossii', ['Being strong: National security guarantees for Russia'], *Rossiyskaya gazeta*, No. 5708, 17 February 2012.

¹⁹³ The Ministry of Defence of the Russian Federation, The Online Version of the Encyclopaedia of the Strategic Missile Troops (*Entsiklopediya Raketnykh Voysk Strategicheskogo Naznacheniya*), http://encyclopedia.mil.ru/encyclopedia/dictionary/details_rvsn.htm?id=13770@morfDictionary; also The Online Version of the Military Encyclopaedic Dictionary (*Voyennyi Entsiklopedicheskiy Slovar'*), <http://encyclopedia.mil.ru/encyclopedia/dictionary/details.htm?id=7781@morfDictionary>, [accessed: 4 September 2015].

imperatively new instruments to achieve political and strategic goals,”¹⁹⁴ and General Lieutenant Stanislav Suvorov, the Head of the Military-Scientific Committee of the Armed Forces, stated three years later, during the International Military-Technical Forum “Army 2015”, that some new developments in this field were demonstrated as “a separate part of the exhibition was designated for the Non-Traditional Types of Weapons.”¹⁹⁵ On the other hand, the definition of these weapons undermines the very feasibility of this new weaponry, clearly stating that “many types of these weapons fall under 1978 Environmental Modification Convention and other international treaties,”¹⁹⁶ and “given the unpredictability of the consequences of the use of certain types of these weapons ... the international community is trying to prevent their testing or employment.”¹⁹⁷

While, the inability of American military thought to produce a comprehensive operational concept for NLW, limited their development and employment, the Russian military traditional way developed an overwhelming and unfeasible conception that is just impossible to materialise. Consequently, it is not surprising that the employment of NLW was limited to the Collective Rapid Reaction Force. The 2010 training operation “Vzaimodeystviye-2010” was the best example of Russian *pokazuha* – a good staged demonstration of technological achievement (in this case of NLW) to produce an image of fulfilment and please the high command. It seems that this experimentation with NLW was a reaction to the sudden attention from the strategy-makers and policy-designers. Once this pressure to present non-lethal capabilities satisfied and was consequently debilitated, the military, as well as industries, lost their interest. Notwithstanding the loss of official interest, Russian military thought has not ceased to exert itself, developing a comprehensive tactic and strategic understanding of the possible employment of NLW. Lack of technological feasibility has never stopped Russian military thinkers from further conceptualising and theorising.

While analysing the published products of their activities it is important to highlight two main aspects. The first one is an interesting, but not surprising, fact – a full compliance with the political course of the complete and firm respect for the international law system. While some Western researchers gingerly suggest changes in the modern international

¹⁹⁴ Vladimir Putin, ‘Byt’ sil’nyimi: ...’.

¹⁹⁵ Quoted in ‘Minoborony: Na Forume "Armiya-2015" Pokazhut Netraditsionnyye Vidy Oruzhiya’, [‘Ministry of Defence: Non-Traditional Types of Weapons Will be Demonstrated at “Army-2020” Show’], *RiaNovosti*, 21 April, 2015, http://ria.ru/defense_safety/20150421/1059915256.html, [accessed: 4 September 2015].

¹⁹⁶ The Ministry of Defence of the Russian Federation, The Online Version of the Military Encyclopaedic Dictionary.

¹⁹⁷ The Ministry of Defence of the Russian Federation, The Online Version of the Encyclopaedia of the Strategic Missile Troops.

LoAC,¹⁹⁸ such actions have never been proposed in Russia, neither by military thinkers, nor by scholars. In the eyes of Russian specialists, the very conceptualisation of future warfare (with or without NLW) has to be legally defensible within the existing system of international laws, as the international legal system is one of the major practicalities of the Russian foreign policy and Russia has no intention (or power) to change them.

The second aspect of the Russian NLW theoretical debate that should be highlighted is the conceptual idea of the employment of NLW on conventional battlefields. While the general discourse in Russian military literature is generally similar to the American appreciation of the advantageous characteristics of NLW during law enforcement operations, several Russian military theoreticians analyse the tactical usefulness of NLW against a conventional enemy.¹⁹⁹ While neither Russia, nor the U.S., or any other country, have fully developed NLW that can suit this theory, it does not stop Russian military thought from developing novel concepts for waging future wars.

Unfortunately, despite very progressive tactical and strategic concepts for the possible employment of NLW, and the fact that Russian military thinkers believe that “the creation of Weapons with Non-Lethal Action is an extremely important task for Russia,”²⁰⁰ it seems that the Russian military is not going to lead in this field in the visible future. A powerful political will is required to lift-off an employment of a novel military technology within the context of the unmaterialistic Russian military culture, especially if it is not employed by the Western military first. As long as NLW do not pass this test of political necessity, they are doomed to remain a thought-provoking, yet idle tool in the Russian military arsenal.

¹⁹⁸For example see: Frederic Merget, ‘Non-Lethal Weapons and the Possibility of Radical New Horizons for the Laws of War: Why Kill, Wound and Hurt (Combatants) at All?’, *Social Science Research Network*, July 1, 2008, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1295348, [accessed: 1/12/2013]; David Fidler, ‘Non-Lethal’ Weapons and International Law: Three Perspectives on The Future’, in Nick Lewer (ed.), *The Future of Non-Lethal Weapons: Technologies, Operations, Ethics and Law*, (London: Frank Cass Publishers, 2002), pp. 26-38.

¹⁹⁹For example: V. Moiseev, V. Orlyanskii, ‘Oruzhiye neletal’ nogo deystviya ...’.

²⁰⁰V. Burenok, V. Korchak, S. Smirnov, ‘Oruzhiye neletal’ nogo deystviya...’, p. 124.

CHAPTER 5

THE (ABSENCE OF THE) RMA OF NLW IN ISRAEL

Introduction

Following the American discourse on NLW, the current academic and professional literature on NLW in Israel employs similar terminology, calling NLW *neshek al-hereg* (non-killing weapons)¹ or *neshek pahot katlani* (less-lethal weapons).² Yet the official term used by the Israeli Defence Forces (IDF) for NLW is *emtzaim le-pizur hafganot* (crowd dispersal means).³ One of the most prominent explanations for this term is the fact that NLW has been employed by the IDF as riot control weapons long before the contemporary understanding of NLW was formed.

The first employment of NLW by the Israeli military was during the 1970s, encountering disturbances and other forms of civilian violence, generally organised by youths and students in towns and cities in the Territories (Judea, Samaria and Gaza). This employment, however, was limited in scale and restricted to tear gas and rubber bullets, usually employed by the Border Police under the command of IDF officers, rather than military units themselves.⁴ The first significant peak of the IDF's interest in NLW, as a law enforcement tool to deal with riots and civilian disobedience, occurred during the First Intifada (December 1987 – September 1993). The problem of the “gap between verbal warning and deadly force”⁵ that the U.S. military encountered in Somalia in 1995, the IDF had to deal with as early as 1988, when the then Defence Minister Yitzhak Rabin had stated that “soldiers found themselves in a position of either fire or do nothing.”⁶ In an attempt to bridge this gap, the IDF had to employ a vast variety of NLW to fulfil its law enforcement missions in the Territories.⁷

The second major peak of interest in NLW occurred during the Second Intifada (Al-Aqsa Intifada, September 2000 – February 2005). The IDF had found itself, yet again, encountering massive riots and the quest for new improved NLW was given high priority.⁸

¹ For example, the Hebrew version of Roi Ben-Horin, ‘Non-Lethal Weapons: Theory, Practice, and what Lies Between’, *Strategic Assessment*, Vol. 2, No. 4, January 2001, pp.21-27 was titled as ‘Neshek Al-Hereg: Ha'alaha, Hama'ase ve-mashebenehem’ and published in *Idkun Astrategi*, Vol. 4, No.1, 2001, pp. 18-24.

² For example, see Guy-Zahar Shtultz, ‘Haf'alat koah medureget be'imutim besviva ezrahit’, [The Employment of Graduate Force in Conflicts within Civilian Environment], *Ma'arachot*, Vol. 438, 2011, pp. 8-17.

³ State Comptroller of Israel, *Annual Report 54A for 2003 Year*, Jerusalem, 2003, pp.89-90, (Hebrew).

⁴ Aryeh Shalev, *The Intifada: Causes and Effects*, (Jerusalem: Jerusalem Post, 1991), pp. 56-62.

⁵ F.M. Lorenz, ‘Non-Lethal Force: The Slippery Slope to War?’, *Parameters*, Vol. XXVI, No. 3, 1996, p. 52.

⁶ *Interview with Defence Minister Yitzhak Rabin*, published in *Jerusalem Post*, February 16, 1989.

⁷ Aryeh Shalev, *The Intifada...*, pp. 106-111.

⁸ State Comptroller of Israel, *Annual Report 54A...*, pp. 87-88.

Since then, the IDF's interest in NLW dwindled and intensified according to the political situation in the West Bank. Consequently, it seems right to argue that the IDF employs NLW on a much larger scale and has a much richer experience than its American or Russian counterparts due to its intensive involvement in law enforcement missions in the Territories.

Interestingly enough, despite this vast employment of NLW and the fact that the problem of civilian casualties during military operations has been at the core of the IDF's professional discourse for many years,⁹ the IDF has always thought of NLW as a tool for riot and crowd control only, and the idea of their employment on the battlefield has never been considered as a viable option. While it is easy to criticise the IDF for its lack of vision,¹⁰ it seems that the reasons for the very limited employment of NLW in the Israeli military, similar to the American and Russian cases, are rooted more in political and cultural contexts, rather than in the IDF's professional misconduct.

Following this introduction, this chapter consists of five parts. The first part focuses on the status of NLW in the IDF and briefly discusses the history of NLW employment in Israel, the state of technology offered by Israeli manufacturers and the level of the actual employment of NLW by the IDF. The second part focuses on the aspects of Israeli foreign policy and international criticism of IDF for harming enemy civilian population. On the one hand, since the moment of its establishment, Israel has constantly had to deal with severe international criticism. On the other, the IDF's military operations during the last decade were specifically criticised for disproportional use of force. The IDF's operations in Gaza were followed by international investigations that focused on civilian casualties and collateral damage, specifically criticising the IDF's conduct (e.g., the United Nations Fact Finding Mission on the Gaza Conflict and the United Nations Fact Finding Mission on the 2014 Israel–Gaza conflict.)¹¹ This part focuses on the different mechanisms and narratives of the Israeli foreign policy intended to withstand international political pressure that calls to minimise collateral damage and civilian deaths during military operations.

⁹ See Gidon Avidor, (ed.), *Hamashmauyot haben 'leumiyot, hamishpatiyot vehamusriyot belehima bekerev uh'lusiya ezrahit*, [The International, Legal and Moral Consequences of Warfare in Civil Environment], The (Latrun: Zvi Meitar Institute for Land Warfare Studies, 2010).

¹⁰ Guy-Zahar Shultz, 'Haf'alat koah medureget...'.

¹¹ UN Human Rights Council, *Human Rights in Palestine and Other Occupied Arab Territories: Report of the United Nations Fact-Finding Mission on the Gaza Conflict*, 25 September 2009; UN Human Rights Council, *Report of the Independent Commission of Inquiry Established Pursuant to Human Rights Council Resolution*, 24 June 2015.

The third part concentrates on the cultural aspects of Israeli society, in a more specific attempt to explain the existence (or a lack thereof) of internal political pressure to minimise civilian casualties (and, therefore, more extensively employ NLW). This part offers an insight into Israeli cultural attitudes toward wars in general, and civilian casualties in particular. The fourth part analyses the attitudes of Israeli military culture toward technology, it follows the development of Israeli military thought and its influence on the ways in which NLW are employed.

The final part integrates the four previous parts in an attempt to explain the reasons behind the failure of the RMA of NLW in Israel. Based on political and cultural aspects, it clarifies why despite the fact that the IDF employs NLW on an unprecedented scale for riot control missions, it still refrains from using them on the battlefield.

Part One: The Status of Non-Lethal Weapons in Israel

With the end of the Six-Day War and the establishment of Military Government in the Territories, the IDF found itself dealing with local civilian disobedience in the form of stone-throwing, of tire-burning and of road-blocking. As Major General Shlomo Gazit, the first IDF coordinator of government activities in the Territories, noted: “civil disobedience in the West Bank broke out at an extremely early stage, within weeks of the cessation of hostilities in the Six-Day War.”¹² Unlike the Jordanians, who controlled Judea and Samaria before 1967, and who did not hesitate using live ammunition against rioters,¹³ the IDF, dealing with the protesters, started to experiment with NLW. These sporadic outbreaks of violence were regarded as typical “current security” (*Bitachon Shotef*, or *Batash*) problems and were solved decisively and by relatively limited measures, as “in the aftermath of the 1967 war, the IDF enjoyed a significant deterrent profile in the Territories and the local population ... was reluctant to take personal risks.”¹⁴ When the employment of NLW was required, it was limited to rubber bullets and tear gas, and it was mainly executed by the Border Police (*Mishmar Hagvul*, or *Magav*) under the close supervision of IDF commanders.¹⁵

¹² Shlomo Gazit, *Hamakel vehagezer: hamimshal haisraeli be'yehuda veshomron*, [The Stick and the Carrot: The Israeli Government in Judea and Samaria], (Tel-Aviv: Zmora-Bitan, 1985), p. 269.

¹³ Aryeh Shalev, *The Intifada...*, p. 56.

¹⁴ Aryeh Shalev, *The Intifada...*, p. 62.

¹⁵ Aryeh Shalev, *The Intifada...*, pp. 56-62.

The outbreak of the First Intifada in December 1987 created an entirely different situation, when “Palestinian residents of the West Bank and the Gaza Strip attacked any Israeli who crossed their path ... with rocks, knives, home-made firebombs and, eventually, gunfire.”¹⁶ The IDF found itself completely unprepared to face civilian violence on a large scale, accompanied by massive riots and demonstrations. Ehud Barak, the IDF Deputy Chief of Staff at that time, assessed that the new situation left the soldiers “with only two possibilities: to run away or to shoot. Both possibilities were bad ... We were not technically prepared to deal with the violent popular riot on this scale.”¹⁷

This technological gap was bridged by the IDF in two different ways. The first one was a vast employment of “off-the-shelf” law enforcement NLW – riot batons, rubber bullets and tear gas. The second one was the rapid research and development process to improve the effectivity of the existing NLW and introduce new ones according to the new challenges posted by rioters. For example, when the existing rubber bullets proved ineffective at a distance of more than 20 meters, the IDF quickly introduced an improved version containing a quantity of lead.¹⁸ When the effectiveness of this improvement also diminished, as the local population had learnt how to offset its effects (mainly by maintaining further distance from the forces), the IDF introduced plastic bullets. Yitzhak Rabin, then the Defence Minister, explained the purpose of this new NLW:¹⁹

It was demonstrated that the use of clubs, tear gas and rubber bullets was insufficient when confronting stone-throwers at ranges of 30-50 meters ... Therefore we added plastic bullets, which are intended to reach the stone throwers, organizers and agitators.

While the newly introduced plastic bullets were intended to be used against point targets (stone throwers, organisers, etc.), the IDF was keen to introduce a weapon that would be more effective against a big mass of demonstrators. The first such attempt was made when the IDF introduced *Hatzatzit* (from *hatzatz* – gravel) – a system that produced a torrent of small size gravel and was carried by a small truck.²⁰ The second, when the Israeli Air Force, in a very

¹⁶ Chaim Herzog, *The Arab-Israeli Wars: War and Peace in the Middle East*, 3rd edition, revised and updated by Shlomo Gazit, (Barnsley: Frontline Books, 2010), pp. 397-398.

¹⁷ Ehud Barak quoted in Ahron Bregman, Jihan El-Tahri, *The Fifty Years War: Israel and Arabs*, (London: Penguin Books & BBC Worldwide, 1998), p.189.

¹⁸ Aryeh Shalev, *The Intifada...*, pp. 106-111.

¹⁹ Yitzhak Rabin quoted in *Ha'aratz*, October 5, 1988.

²⁰ Efraim Lapid, ‘Haintifada harishona, ha’avanit she’banu et heskem Oslo’, [‘The First Intifada, the Stones that Built the Oslo Agreements’], *Israel Defense*, 8 December, 2013, <http://www.israeldefense.co.il/he/content/%D7%94%D7%90%D7%99%D7%A0%D7%AA%D7%99%D7%A4%D7%90%D7%93%D7%94-%D7%94%D7%A8%D7%90%D7%A9%D7%95%D7%A0%D7%94-%D7%94%D7%90%D7%91%D7%A0%D7%99%D7%9D-%D7%A9%D7%91%D7%A0%D7%95->

short time, introduced several systems for massive employment of non-lethal means (tear gas and smoke grenades, lachrymatory and/or painting liquids, and even gravel) carried and dispersed by helicopters.²¹

With the end of the First Intifada, and especially after 1994, the same year the Oslo Agreements were signed, the IDF's interest in NLW dwindled. The plastic bullets were rejected, as they proved as significantly more lethal than expected – i.e., during the first 18 months of the Intifada the number of fatalities caused by plastic bullets stood at 82.²² The *Hatzatzit* systems, which were regarded as odd, bizarre and not “sophisticated” enough weapons, were completely abandoned. As Deputy Commissioner Alexander (Alik) Ron stated during the Or Commission (commission of inquiry into the clashes between law enforcement forces and Israeli citizens, in October 2000): “these systems have been rotting somewhere for many years, since the Intifada we have not used them.”²³

The IDF's interest in NLW was reignited in 2000. Despite the experience of the First Intifada, the Israeli military found itself unprepared and the quantitative and qualitative lacks in NLW were first experienced during the withdrawal from Lebanon, when the IDF found itself encountering massive demonstrations led by Hezbollah fighters. This shortage became to be more significant with the start of the Second (Al-Aqsa) Intifada and following operation Defensive Shield that reinforced the need for more effective NLW.²⁴

The main reason why the Al-Aqsa Intifada required NLW that were different from the previously employed systems is the fact that at that time the Israeli activity in the Territories had a military, rather than law enforcement, nature. While Israeli infantry units, tanks, armoured personnel carriers (APCs) were deployed to fight terrorists, they frequently found themselves encountering stone-throwers and unarmed rioters. Without NLW, the Israeli troops faced the difficult choice between shooting the rioters (usually children and youths) and doing

[%D7%90%D7%AA-%D7%94%D7%A1%D7%9B%D7%9D-%D7%90%D7%95%D7%A1%D7%9C%D7%95](#), [accessed: 28 September 15].

²¹ Dror Merom, ‘ Hamasokim neged hafganot hamoniyot’, [Helicopters against Massive Demonstrations], *Bit’aon Hel’ Avir*, No. 67 (168), 1989, pp. 14-15.

²² State Comptroller of Israel, *Annual Report 54A...*, p. 101; Aryeh Shalev, *The Intifada...*, p. 109.

²³ Alexander (Alik) Ron in ‘Eduto shel’ nitzav Alik Ron bephnei va’adat Or, 3 september 2001, helek shlishi’, [‘The Testimony of Major General Alik Ron to the Or Commission, 3 September 2001, Part 6’], *Ha’aretz Online*, 4 September 2001, <http://www.haaretz.co.il/misc/1.1555776>, [accessed: 24 September 2015].

²⁴ State Comptroller of Israel, *Annual Report 54A...*, pp. 88-89.

nothing – decisions that several times led to situations when military equipment (including machine-guns) was stolen from manned tanks and APCs.²⁵

Desperate to bridge this gap, the IDF introduced non-lethal flash-bang shells for tanks²⁶ – the first and, so far, unique NLW intended to be fired from the tank’s main cannon. Another, newly developed NLW, was *Bo’esh* (Skunk) – a sticky liquid produced from an organic and non-toxic blend of baking powder, yeast, and other ingredients, which leaves a powerful odour similar to rot or sewage.²⁷ In 2002, during the Siege of the Church of the Nativity in Bethlehem (2 April – 10 May) and the series of sieges of the Arafat compound in the Mukataa in Ramallah, *Bo’esh* was considered by the IDF, and rejected, as a possible non-lethal tool to resolve the siege situations.²⁸ Despite these very innovative technologies, with the end of the Al-Aqsa Intifada in 2005, similarly to the end of the First Intifada, the IDF’s interest in NLW dwindled again. The non-lethal tanks’ shells were taken out of service,²⁹ and *Bo’esh* was in the development process for three more years and was operationally employed for the first time only in 2008, against demonstrators in Na’alin village in the West Bank.³⁰

Since the end of the Second Intifada, the IDF’s interest in the employment of NLW changed according to political developments in the region. On the one hand, due to the frequent violent demonstrations and riots organised by Palestinians and Israeli ultra-left movements against the Israeli West Bank Wall (“Separation Wall” or “Security Barrier”), most of IDF units have been trained to fulfil crowd control missions and went through NLW basic training.³¹

²⁵ ‘Yaladim palestiniim ganvu tziyud tzvai mitank’, [‘Palestinian Children Stole Military Equipment from a Tank’], *Yedioth Ahronoth*, 2 January, 2002, <http://www.ynet.co.il/articles/0,7340,L-1489428,00.html>, [accessed: 28 September 2015].

²⁶ Amos Ha’rel, ‘Tzal inase lefazer hafganot hamoniyot bepagazei tankim im k’liey plastik sh’osim rak ra’ash’, [‘The IDF Will Try to Disperse Massive Riots with Tanks’ Shells with Plastic Warheads that Make Noise Only’], *Ha’aretz Online*, 28 February, 2005, <http://www.haaretz.co.il/misc/1.1505848>, [accessed: 28 September 2015].

²⁷ Kobi Ben-Simhon, ‘Hatargil hamasriah; hamafginim mi’Na’alin tzrihim liknot deodorant’, [‘A Stinky Hoax; The Rioters from Na’alin Have to Buy Deodorant’], *Ha’aretz Online*, 4 September 2008, <http://www.haaretz.co.il/misc/1.1347475>, [accessed: 28 September 2015].

²⁸ Amir Oren, ‘Nishkal shigur “Bo’esh” leknesiyat hamolad’, [‘It was considered to deploy “Skunk” to the Church of the Nativity’], *Ha’aretz*, 12 April 2002, <http://news.walla.co.il/item/208321>, [accessed: 28 September 2015].

²⁹ Amir Rapaport, ‘Metach gavoha’, [‘High Tension’], *Israel Defense*, 26 April 2011, <http://www.israeldefense.co.il/he/content/%D7%9E%D7%AA%D7%97-%D7%92%D7%91%D7%95%D7%94>, [accessed: 28 September 2015].

³⁰ Efrat Vais, ‘Lerishona: Magav Pizer Mafginei Smol’ betotah sirahon’, [‘For the First Time: The Border Police Dispersed Leftist Demonstrators with a Stinky Cannon’], *Yedioth Ahronoth*, 10 August 2008, <http://www.ynet.co.il/articles/0,7340,L-3580288,00.html>, [accessed: 28 September 2015].

³¹ See Idan Seger, ‘Ei’n makom letaiyot: kah tzal’ metkonen lemehumot’, [‘There Is No Place for Mistakes: This Is the Way, in which the IDF Prepares itself for the Riots’], *Mako*, 20 September 2011, <http://www.mako.co.il/pzm-magazine/Article-c7ddcfef4e18231006.htm>, [accessed: 28 September 2015]; Yuval Azulai, ‘Technologiya hal-herog: haim hayah nitan limnoa hasa’ara be”marmara”?’ [Non-Lethal Technology: Whether Was It Possible to Prevent the “Marmara” Storm?], *Globes*, 20 September 2011, <http://www.globes.co.il/news/article.aspx?did=1000683960>, [accessed: 28 September 2015].

On the other, facing political-military turbulences, which required other than lethal resolution, the IDF found itself unprepared. For example, the lethal outcome of the military operation against the Gaza Freedom Flotilla, on 31 May 2010, resulted with vast criticism, reigniting the interest in NLW and exposing a detrimental gap in the IDF's employment of NLW.³² Another example was in 2011, when anticipating the Palestinian unilateral declaration of independence in the UN, and a possible "Third Intifada" that would come afterwards, the IDF found itself desperately searching for new NLW and investing about NIS75 million to purchase mainly off-the-shelf weapons.³³

Interestingly enough, despite its vast experience and technological novelty, the IDF has never formed a persisting professional institution responsible for the development and employment of NLW and their operational concepts. During the First Intifada, it was the Deputy Chief of Staff Major General Ehud Barak, who was leading the development of NLW and their fielding.³⁴ During the Al-Aqsa Intifada, the IDF established a short-lived Forum of Brigadier-Generals to define the operational gaps versus the threats. This forum had already been disbanded by mid 2001, and the responsibility for NLW was relocated to the Head of the IDF Operations Directorate.³⁵ In 2006, after the end of the Second Intifada, the operational and conceptual development of NLW was in the hands of a specially established committee, "The NLW Forum at the General Officer Commanding Army Headquarters," which was responsible for the evaluation of NLW and writing operational concepts for their employment. While this committee was disbanded in 2009, just three years after its establishment, one of its main achievements was the establishment of the Department of Riot Control at the main training base of the IDF Central Command. This accomplishment, however, was limited, as the responsibilities of this department were mainly restricted to the supervision of the riot control

³² Shai Levy, 'Neshek (Hal) Hereg', [(Non) Lethal Weapons'], *Mako*, <http://www.mako.co.il/pzm-magazine/Article-c4b5b1a6475a531006.htm>, [accessed: 28 September 2015]; Yuval Azulai, 'Technologiya hal-hereg...?'

³³ Ofer Shelah, 'Mekavim letov, mitkonenim le r'a', ['Hoping for Good, Preparing for Bad'], *NRG*, 17 September 2011, <http://www.nrg.co.il/online/1/ART2/286/345.html>, [accessed 29 September 2015]; Moriya Ben-Yosef, 'Muetzet Hait'tztaidut Beneshek Pahot Katlani', ['The Employment of Non-Lethal Weapons is Speeding Up'], *Israel Defense*, 5 June 2011, <http://www.israeldefense.co.il/he/content/%D7%9E%D7%95%D7%90%D7%A6%D7%AA-%D7%94%D7%94%D7%A6%D7%98%D7%99%D7%99%D7%93%D7%95%D7%AA-%D7%91%D7%A0%D7%A9%D7%A7-%D7%A4%D7%97%D7%95%D7%AA-%D7%A7%D7%98%D7%9C%D7%A0%D7%99>, [accessed: 29 September 2015]; Amir Rapaport, 'Metach gavoha...?'; Yuval Azulai, 'Technologiya hal-hereg...?'

³⁴ Efraim Lapid, 'Haintifada harishona...?'; Dror Merom, 'Hamaskim neged hafganot...?'

³⁵ State Comptroller of Israel, *Annual Report 54A...*, pp. 88-89.

training of the IDF units before their deployment in the Territories and did not include the development of operational concepts for NLW or their technological requirements.³⁶

To summarise the current NLW situation in the IDF, it is important to emphasise two main factors. The first one is the technological level of the employed NLW and the scale of their employment. On the one hand, the range of the routinely employed NLW within the IDF does not differ much from the NLW employed by its American and Russian counterparts, and mainly consists of different means to employ tear gas and kinetic rubber bullets.³⁷ On the other, during the peaks of civil unrests in the Territories, the IDF introduced several out-of-the-box non-lethal technologies, such as *Hatzatzit*, *Bo'esh* and non-lethal shells for tanks. Moreover, due to the constant deployment of Israeli military units in the Territories as law enforcement forces, they have extensive experience in riot control missions, and, thus, the employment of NLW.

The second is the IDF's conceptual perspective on NLW. Despite the vast employment of NLW, and despite significant NLW technological innovations, the IDF has never considered their possible employment on the battlefield as a tool to minimise civilian casualties during military operations.³⁸ NLW have been continuously considered by the IDF as less prestigious weapon systems intended for riot control during *Batash* missions ("current security" – i.e., law enforcement deployment in the Territories and along Israel's borders), rather than military operations. Moreover, NLW were frequently conceptualised as systems that "might harm the [IDF's] ability to prepare for a [future] battle, and even sabotage the ability to achieve victory in it."³⁹ While it seems easy to criticise the IDF for its lack of vision, will or ability to re-evaluate its assessment of NLW,⁴⁰ it seems that the reasons for the IDF's denial to employ NLW during military operations, similar to the American and Russian cases, are rooted more in the political and cultural contexts, rather than in the IDF's professional misconduct.

³⁶ Guy-Zahar Shtultz, 'Haf' alat koah medureget... '.

³⁷ Sarit Michaeli, *Crowd Control: Israel's Use of Crowd Control Weapons in the West Bank*, (Jerusalem: B'tselem, 2013).

³⁸ Guy-Zahar Shtultz, 'Haf' alat koah medureget... '.

³⁹ Uzi Ben-Shalom, "'Faser lematzav ham'em": mah'shevot al neshek pahot katlani be'sde hakrav', ["'Faser switched to Shock": Thoughts on Less Lethal Weapons on the Battlefield'], *Be'yabasha*, No. 15, September 2010.

⁴⁰ Guy-Zahar Shultz, 'Haf' alat koah medureget... '; Uzi Ben-Shalom, "'Faser lematzav ham'em": mah'shevot... '.

Part Two: Israeli Foreign Policy and International Criticism

When the Israeli government appointed in 1968 the freshly retired Lieutenant General Yitzhak Rabin as Israel's ambassador to the U.S., Rabin asked the foreign ministry: "What does the government expect Israel's Ambassador to the United States to achieve?" He was then told: "Diplomatic Objectives? We have no idea."⁴¹ This anecdote provides a hint of the Israeli approach to its foreign policy, suggesting that either Israel does not care about its foreign affairs or the Israeli foreign policy aims are so solid that they are obvious. Indeed, to outsiders, the Israeli foreign policy decision-making may seem reactionary and quite irrational. The best example of this was the visit of the U.S. Vice-President Joe Biden to Jerusalem in March 2010, who in an attempt to re-launch peace negotiations requested to freeze construction in the West Bank. When he landed in Tel-Aviv, he was taken aback by Israel's announcement of 1,600 new apartments to be built in east Jerusalem – a move that led to what was reported as one of the most serious rows between the two allies in recent decades.⁴²

Israelis, however, have a clear view of their foreign policy behaviour, which is firmly based on their different cultural codes – "existential anxiety; upright defiance; a *dugri* (frank) speech culture and a fear of seeming to be a *fraier* (sucker)."⁴³ While some of these characteristics will be discussed in the second part of this chapter, the main focus here is on foreign policy mechanisms that assist Israel's political leadership to withstand international criticism. In other words, how this cultural code has been translated into foreign policy narratives intended to fend off international criticism regarding Israel's military activities and their outcomes (especially in terms of civilian casualties).

There is a general agreement between scholars that Israel's foreign policy is deeply rooted in numerous Jewish traditions, and its analysis has to start, at the very least, from the beginning of modern Zionism and the work of Benjamin Ze'ev Herzl.⁴⁴ This comprehensive examination, however, is beyond this research, and it seems reasonable to begin the following

⁴¹ Sasson Sofer, 'Towards distant frontiers: the course of Israeli diplomacy', *Israel Affairs*, Vol. 10, No. 1-2, 2004, pp. 1-9.

⁴² 'Ties between Israel and US 'worst in 35 years'', *BBCNews*, 15 March 2010, <http://news.bbc.co.uk/1/hi/8567706.stm>, [accessed: 26 October 2015].

⁴³ Gad Yair, Sharona Odom-Weiss, 'Israeli Diplomacy: The Effects of Cultural Trauma', *The Hague Journal of Diplomacy*, No. 9, 2014, pp. 1-23.

⁴⁴ For example see: Dov Ben-Meir, *Medinyut Hutz*, [Foreign Policy], (Tel-Aviv: Yedioth Ahronot and Chemed Books, 2011); Aaron Klieman, *Israel & The World after 40 Years*, (McLean: Pergamon-Brassey's International Defense Publishers, 1990); Sason Sofer, *Lidata shel ha'mah'shava hamedinit be'israel*, [The birth of the Political Thought in Israel], (Jerusalem: Shoken, 2001); Uri Bialer, 'Top Hat, Tuxedo and Cannons: Israeli Foreign Policy from 1948 to 1956 as a Field of Study', *Israel Studies*, Vol. 7, No. 1, 2002, pp. 1-80.

examination from 1948, the year of the establishment of the state of Israel, and go back to the roots of the pre-state foreign policy narratives when it is required.

The discussion of the American and Russian foreign policies, presented in the previous chapters, primarily focused on the mechanisms intended to fend off international criticism followed by the military activity of these states, or, in other words, how these states have maintained the legitimacy of their military operations. In the case of Israel, however, this question of legitimacy has always been a much more complicated issue. Unlike the U.S. and Russia, which have had to defend the legitimacy of their military deployments that were criticised for causing civilian casualties and collateral damage, Israel, from its very beginning, has had to defend, not only the legitimacy of its military operations, but also its own legitimacy as a Jewish state.⁴⁵ Consequently, in Israeli foreign policy, these two different types of legitimacy seem to be highly interconnected, as according to many Israeli scholars and politicians “after more than 60 years of the independence of the State of Israel, there are still many question marks regarding its sovereignty and its right to be an equal member of the international community.”⁴⁶

As the establishment of the State of Israel in 1948 was an outcome of a UN resolution, the initial attitude of Israeli leadership towards the international community was very positive and was characterised by a “mutual trust built on mutual expectations and their realisation.”⁴⁷ Based on the traditional political Zionism expressed by Chaim Weizmann in 1907 that “[we have] to make the Jewish question an international one. It means going to the nations and saying to them: We need your help to achieve our aim,”⁴⁸ the initial foreign policy of Israel was based on a “knock on every door” policy.⁴⁹ For David Ben-Gurion, the first Israeli Prime Minister, the crucial basis for Israeli foreign policy was his conclusion that Jews “are the weakest nation on earth ... we lack any declared friendship anywhere in the world... [and] we must take all possible steps to find understanding, if not friendship, anywhere in the world.”⁵⁰ Many scholars define this period as the “Golden Age” of Israel, when it enjoyed the broadest international

⁴⁵ Aaron Klieman, *Israel & The World...*, pp. 7-17.

⁴⁶ Dov Ben-Meir, *Medinyut Hutz...*, p. 25.

⁴⁷ Arie Gronik, ‘Yahasei Israel ve’um – shalosh tkufot ve’shalosh she’elot’, [‘The Israel-U.N. Relations – Three Periods and Three Questions’] in Benjamin Noberger, Arie Gronik, (ed.), *Medinyut Hutz bein imut le’esderim – Israel 1948-2008*, [The Foreign Policy between Conflict and Agreement – Israel 1948-2008], Vol. B, (Raanana: The Open University of Israel, 2008), p. 1080.

⁴⁸ Dan Leon, Yehuda Adlin, (ed.), *Chaim Weizmann: Statesman of the Jewish Renaissance*, (Jerusalem: Alpha Press, 1974), p. 139.

⁴⁹ Uri Bialer, *“Our Place in the World” – Mapai and Israel’s Foreign Policy Orientation 1947-1952*, (Jerusalem: Magnes Press, Hebrew University, 1981), p. 10.

⁵⁰ David Ben-Gurion quoted in Uri Bialer, *“Our Place in the World” ...*, p. 11.

approval in its history. In addition to the openness of Israel's leaders towards the world, its military victory in the War of Independence was seen by the world as a stand of "the few against the many", as a "David facing Goliath", and, therefore, Israel was endorsed by the majority of countries. Moreover, the successful immigration absorption, the establishment of kibbutz communities, the development of the Negev desert, and the creation of an independent military industrial complex – all these created vast empathy and support of Israel in the eyes of the international community.⁵¹

This period, however, was very short-lived. In an effort not to be seen as taking sides in the emerging Cold War conflict, between the two giants, Israeli leaders began to realise that that despite Israel's non-committed foreign policy "both the United States and the Soviet Union tended to judge Israel by its pro-Communist or pro-Western proclivity and pressured Israel to define its position much more clearly."⁵² Ben-Gurion, who realised that Israel could become a hostage of the Soviet-American struggle, had, already in 1952, started to emphasise the independence of the Israeli political decision-making process:

There is no external force – even as most powerful, aggressive and rich as it could be imagined – that will define the needs and the values of Israel. The foreign policy of Israel is organised according to the values and the basic needs of the Jewish nation, and not by any other decision-maker.⁵³

During the 1950s, two different developments in the global arena forced Israel to harden this narrative. The first one was the choice of the U.S.S.R. to support Arab countries against Israel. Since 1954, the Soviet bloc countries had ceased their support of Israel, after the Kremlin for the first time vetoed the UN Security Council resolution in favour of an Arab country (Syria) over Israel. The second development was the decolonisation process that added a significant number of new sovereign Arab and Muslim States to the international community, and, therefore, to the U.N.⁵⁴ Following these changes on the international map, and subsequently rising criticism of Israel, Israeli leadership adopted a narrative that could be described as: "we're on our own because the world is against us"⁵⁵ – statement that expressed a fundamental

⁵¹ Jonatan Manor, 'Kishalon ha'asbara or kishalon ha'mediniyut?', [A Failure of the Hasbara or a Failure of the Policy?], in Benjamin Noberger, Arie Gronik, (ed.), *Mediniut Hutz bein imut le'esderim...*; Sharon Pedro, *Utzma raka ke'nehes leumi*, [Soft Power as a National Asset], (Jerusalem: The Jewish People Policy Planning Institute, 2004).

⁵² Uri Bialer, 'Top Hat, Tuxedo and Cannons...', p. 28.

⁵³ David Ben-Gurion, 'Israel ben ha'umot', ['Israel between the Nations'], *Israel Government Year Book*, 1952, p. 23.

⁵⁴ Arie Gronik, 'Yahasei Israel ve'um...', pp. 1086-1087.

⁵⁵ Uri Bialer, 'Ben-Gurion ve'she'elat ha'orientatziya ha'beinleumit shel' Israel 1948-1956', ['Ben-Gurion and the Question of the International Orientation of Israel 1948-1956'], *Cathedra*, No. 43, 1987, p. 148.

distrust of the goodwill of the international community. This was the time when the “mutual trust” between the U.N. and Israel was transformed in one of the most common narratives of the Israeli foreign policy – *Um Shmum* (the U.N. is nothing) – a term coined by David Ben-Gurion in 1955.⁵⁶

The Israeli military victories in the Six-Day War, in 1967, and the October War (the Yom Kippur War), in 1973, completely changed the way Israel was perceived by the international community. From the small “David”, which barely won its independence in 1948, Israel twice thrashed significantly superior Arab militaries, emerging as a regional “Goliath” itself. Utilising the bipolar tension of the Cold War, the Arab countries succeeded to recruit significant support in the U.N. against Israel, which was expressed in a chain of anti-Israeli resolutions. The peak of the Arab states efforts to delegitimise Israel was in 1975 when the UN General Assembly passed a resolution that determined that “Zionism is a form of racism and racial discrimination.”⁵⁷ The response of Israeli Prime Minister Yitzhak Rabin was simple: “The U.N. lost its ethical and political validity and became a battlefield for wrangling and harassment that have no connection, what so ever, with the principles and ideals for which it was established.”⁵⁸

Since then, the general approach of Israeli politicians toward the U.N. was best described by the prominent Israeli diplomat Abba Eban: “Any U.N. decision against Israel automatically enjoys major support, and if Israel would propose that the Earth is round, the majority in the U.N will vote against.”⁵⁹ In other words, facing criticism from the international community, the Israeli political reaction was based on its disdain for what it saw as other powers’ biased political action, disconnected from the political or military situation on the ground.

An additional facet of this *Um Shmum* narrative was the increasing unilateralism in the Israeli foreign policy. The disdain for and mistrust of international organisations led Israeli politicians to emphasise the independence of their decisions, as Ben-Gurion famously put it

⁵⁶ Gad Yair, Sharona Odom-Weiss, ‘Israeli Diplomacy...’, p. 7.

⁵⁷ UN General Assembly, *Resolution 3379: Elimination of All Forms of Racial Discrimination*, 10 November 1975, New York; Also see Efraim Inbar, *Israel eina mevudedet*, [*Israel Is not Isolated*], (Tel-Aviv: Begin-Sadat Center for Strategic Studies, 2013); Jonatan Manor, ‘Kishalon ha’asbara...’, pp. 65-68.

⁵⁸ Yitzhak Rabin, *Speech in the Knesset Regarding the U.N. General Assembly Resolution from 10 November 1975 about Zionism*, 11 November 1975, (Hebrew), published in Inbal Telem, Shmuel Tzvaog, Benjamin Noiberger, (ed.), *Medinyut ha’hutz shel Israel – kovetz mismachim*, [*The Foreign Policy of Israel – Documents Collection*], Vol. A., (Raanana: The Open University of Israel, 2004), p. 352.

⁵⁹ Yohanan Bein, ‘Israel, ha’um ve’ha’ma’araha le’shalom’ [‘Israel, the U.N. and the Struggle for Peace’] in Moshe Igar, Yosef Guvrin, Rei Oded, (ed.), *Misrad ha’hutz – 50 ha-shanim ha’rishonot* [*The Foreign Affairs Office – the 50 First Years*], (Jerusalem, Keter, 2002), p. 883.

“It’s not important what the gentiles would say; it is important what the Jews would do.”⁶⁰ Interestingly enough, this political unilateralism allowed Israel to persist with its actions regardless the vast criticism coming, not only from Israel’s natural enemies (i.e., the Arab and Muslim world), but also from its allies. For example, despite the fact that the construction of the “Separation Wall” was ruled illegal by the International Court of Justice in Hague and was highly criticised by the international community (and more cautiously by the U.S.), Israel erected the “Security Barrier” as planned.⁶¹ As Raanan Gissin, the then Israeli prime minister’s spokesperson, put it: “I believe that after all the rancour dies, this resolution will find its place in the garbage can of history. The court has made an unjust ruling denying Israel its right of self-defence.”⁶²

While U.S. foreign policy creates an image of *a good protector against a bad evil* to legitimise American actions, and Russians argue for *double standards* to fend off international criticism, Israelis simply state: “we care nothing for what UN members think or vote” and “when it comes to Israel’s survival, we must always remain the masters of our own fate.”⁶³ Nevertheless, it would be wrong to argue that this Israeli traditional *chutzpah* (insolence or audacity), in its attitude toward the international community, is the only factor that enables them to withstand criticism of its political-military decisions. After all, Israel’s economic, political and military power and independence cannot be compared to those of America or Russia. This additional factor, which has been allowing Israel to keep afloat in a rising tide of international criticism, was best expressed by Prime Minister Benjamin Netanyahu in his speech to the US Congress, on 10 July 1996:

You, the people of America, offered the fledgling Jewish state succour and support. You stood by us time and time again ... The United States has given Israel - how can I tell it to this body? The United States has given Israel, apart from political and military support, munificent and magnificent assistance in the economic sphere. With America’s help, Israel has grown to be a powerful, modern state.⁶⁴

One of the main foundations of the Zionist movement was a quest for the support of the Great Powers. With the end of the Second World War and the surprising support of both of the

⁶⁰ Gad Yair, Sharona Odom-Weiss, ‘Israeli Diplomacy...’, p. 7.

⁶¹ Jeremy Pressman, ‘Israeli Unilateralism and Israeli-Palestinian Relations 2001-2006’, *International Studies Perspectives*, No. 7, 2006, pp. 360-376.

⁶² ‘World Court Tells Israel to Tear Down Illegal Wall’, *Guardian*, 10 July 2004, <http://www.theguardian.com/world/2004/jul/10/israel3>, [accessed: 26 October 2015].

⁶³ Gad Yair, Sharona Odom-Weiss, ‘Israeli Diplomacy...’, pp. 8, 12.

⁶⁴ Benjamin Netanyahu, *Speech to US Congress*, 10 July 1996, <http://mfa.gov.il/MFA/MFA-Archive/1996/Pages/PM%20Netanyahu-%20Speech%20to%20US%20Congress-%20July%2010-%201996.aspx>, [accessed: 26 October 2015].

newly emerging superpowers – the U.S. and the U.S.S.R. – Israel preferred to adopt a political line that was defined at that time as “non-identification”. This Israeli attempt to play on both sides of the field in the context of the rising tensions of the Cold War proved to be unfeasible for two main reasons. The first was the fact that after a short love-affair with the Soviets, during the first few years of independence, Israel began to understand that Moscow had too little to offer to the newly established state which was facing a massive Arab political-military-economic boycott. The second was the rising American political, economic, military and strategic weight in the world, as well as the Washington’s increasing interest in Middle Eastern affairs and its approach toward Israel – all of which were considered by Israel as far more beneficial than whatever the Kremlin could offer. Nevertheless, in the months leading up to the Sinai Campaign (October 1956), it was clear to all that Israel’s choice, whether due to its own initiative, or circumstantial, was made in favour of the West.⁶⁵

During the first years after 1948, however, Washington was hesitant in its official support of Israel, and the initial American involvement in the 1960s and 1970s in the Middle East, in general, and in Israel’s affairs, in particular, was mainly due to its own economic (i.e., Arab oil) and strategic (i.e., the Cold War) interests.⁶⁶ During the following decades, and especially after the Yom Kippur War, the American patronage has become one of the most dominant narratives of Israel’s foreign policy – “despite the fact that no formal alliance exists between the two nations, the United States has evolved into the ultimate guarantor of Israel’s security, its principal diplomatically and its foremost economic supporter.”⁶⁷ This special relationship developed between two countries was best emphasised in the *Economist* as “the mighty edifice of support” that Washington provides Israel each time it faces a severe criticism from all corners of the globe.⁶⁸

On the one hand, many scholars and politicians regard this unconditional American support for Israel as a result of the powerful role of the Jewish/Israeli lobby in American domestic politics⁶⁹ – as Ehud Olmert, former Israeli Prime Minister, stated in 2006: “Thank God we have AIPAC [the American Israel Public Affairs Committee], the greatest supporter

⁶⁵ Uri Bialer, ‘Top Hat, Tuxedo and Cannons...’, pp. 23-33.

⁶⁶ John Campbell, ‘The United States and the Arab-Israeli Conflict’, in Robert Freedman, (ed.), *World Politics and the Arab-Israeli Conflict*, (New York: Pergamon Press, 1979).

⁶⁷ Sasson Sofer, ‘Towards distant frontiers...’, p. 6.

⁶⁸ ‘To Israel with love’, *Economist*, 3 August 2006, <http://www.economist.com/node/7255198>, [accessed: 26 October 2015].

⁶⁹ See John Mearsheimer, Stephen Walt, *The Israel Lobby and US Foreign Policy*, (New York: Penguin Books, 2007).

and friend we have in the whole world.”⁷⁰ On the other hand, there are scholars who reject this “theory of everything” (i.e., the Jewish/Israeli control of U.S. foreign policy).⁷¹ There are those who claim that the U.S. supports Israel due to its own strategic interests and positions in the Middle East and “Israel is America’s most reliable ally in the region,”⁷² and those who simply blame American public opinion, which is overwhelmingly on Israel's side.⁷³ Nevertheless, regardless of the roots of American diplomatic protection, Israeli political leaders take it for granted, even if “sometimes they [themselves, i.e., Israelis] do not act like a [most] loyal ally.”⁷⁴

In analysing Israel’s foreign policy, it is important to highlight its almost instinctive reliance on U.S. support. After all, between 1972 and 2015, Washington vetoed 43 UN Security Council resolutions that were critical of Israel (more than half of all America’s vetoes during these years).⁷⁵ Consequently, this unprecedented protection by the U.S., “the most powerful state in the world,”⁷⁶ combined with the Israeli traditional narrative of *Um Shmum* (i.e., disdain for international criticism), allows Israeli politicians to minimise the influence of international pressure on their decision-making process regarding Israel’s military activities. In other words, facing international criticism, Israel’s leaders not only explicitly reject it as biased against Israel, but also count on American protection against truly meaningful UN Security Council decisions.

While in the previous chapters, the analysis showed how American and Russian foreign policies fend off general international criticism regarding their military actions, and then the discussed narratives were projected on the criticism of enemy civilian casualties, the case of Israel is different. On the one hand, Israeli politicians have been continuously trying to link the legitimacy of Israel as a Jewish state and the legitimacy of its military actions, even at the price of misusing Anti-Semitism terminology and abusing history.⁷⁷ One of the best examples of this abuse was in 2015, when the Israeli Prime Minister Benjamin Netanyahu argued that

⁷⁰ Ehud Olmert quoted in ‘To Israel with love’.

⁷¹ Yossi Shain, Neil Rogachevsky, ‘Between JDate and J Street: US Foreign Policy and the Liberal Jewish Dilemma in America’, *Israel Journal of Foreign Affairs*, Vol. 3, 2011, pp. 37-48.

⁷² Sasson Sofer, ‘Towards distant frontiers...’, p. 6.

⁷³ An argument reflected in ‘To Israel with love’.

⁷⁴ John Mearsheimer, Stephen Walt, *The Israel Lobby...*, p. 75.

⁷⁵ UN Security Council, *Veto List*, <http://research.un.org/en/docs/sc/quick>, [accessed: 27 October 2015].

⁷⁶ Efraim Inbar, ‘Israel eina mevudedet’, p. 14.

⁷⁷ See Norman Finkelstein, *Beyond Chutzpah: On the Misuse of Anti-Semitism and the Abuse of History*, second edition, (London: Verso, 2008).

Adolf Hitler had only wanted to expel Jews from Europe, and it was the Grand Mufti of Jerusalem Haj Amin al-Husseini, who told him to “Burn them”.⁷⁸

On the other hand, international criticism of Israel during the last decade has continuously focused on the collateral damage and civilian casualties of Israel’s military activity, rather than on the legitimacy of the State of Israel. The best examples of this are the international investigations of Israel’s repetitive military operations in Gaza in the last decade. Concentrating on these military operations, the following analysis offers a better understanding of how the Israeli foreign policy narratives described above were used to fend international criticism off and allowing Israeli political decision-makers to be relatively relaxed about enemy civilian costs during these military operations.

Since the Israeli unilateral disengagement from Gaza in 2005 and the subsequent Hamas’s rise to power in 2007, Israel launched three major military operations against the terrorist organisations there – Operation Cast Lead (December 2008 – January 2009), Operation Pillar of Defence (November 2012), and Operation Protective Edge (July – August 2014). While it is difficult to establish an objective number of Palestinian casualties in each of these operations, as this number is highly politicised,⁷⁹ it seems right to argue that Gaza, and its inhabitants, suffered much greater damage than Israel did. Consequently, the Gaza operations had exposed Israel to severe international criticism that was followed by international investigations of IDF’s conduct. The two best known of these investigations were: The United Nations Fact Finding Mission on the Gaza Conflict (the Goldstone Report)⁸⁰ and The United Nations Fact Finding Mission on the 2014 Israel–Gaza conflict.⁸¹

Analysing the reaction of the Israeli scholars and politicians to the findings of these reports, it is possible to point to four main areas that have been perceived by Israelis as international criticism of their actions: (1) Israel’s actions were disproportional; (2) Israel did not try hard enough to avert enemy civilian casualties; (3) Israel’s use of force was not merely a last-resort option; and (4) The Israeli occupation makes all military actions immoral/illegal.⁸²

⁷⁸ ‘Netanyahu Holocaust remarks: Israeli PM criticised’, *BBCNews*, 21 October 2015, <http://www.bbc.co.uk/news/world-middle-east-34594563>, [accessed: 27 October 2015].

⁷⁹ See: The Intelligence and Terrorism Information Center (ITIC), *Estimate of the number of Hamas operatives killed in Operation Protective Edge (Part Eleven)*, Tel-Aviv, 20 July 2015.

⁸⁰ UN Human Rights Council, *Human Rights in Palestine and Other Occupied Arab Territories: Report of the United Nations Fact-Finding Mission on the Gaza Conflict*, 25 September 2009.

⁸¹ UN Human Rights Council, *Report of the Independent Commission of Inquiry Established Pursuant to Human Rights Council Resolution*, 24 June 2015.

⁸² Shmuel Rosner, Michael Herzog, *Jewish Values and Israel’s Use of Force in Armed Conflict: Perspectives from World Jewry*, (Jerusalem: The Jewish People Policy Institute, 2015), pp. 21-25.

The main argument, however, that is emphasised by these four claims is that “Israel uses excessive force and endangers (or kills) too many civilians in its response to Palestinian aggression.”⁸³ To fend off this criticism, Israel’s foreign policy concentrates on five major narratives.

The first narrative of Israel’s foreign policy to deal with international criticism is the Israeli traditional *Um Shmum*, i.e., the international community is biased against Israel and, therefore, Israel can disdain its criticism. For example, Shimon Peres, the President of Israel at the time of Operation Cast Lead, stated that the Goldstone Report “makes a mockery of history”⁸⁴ and Avigdor Lieberman, the Minister of Foreign Affairs at the time, claimed that “the Goldstone Report wishes to take the UN back to the dark ages, where it was also determined, through the leadership of utilitarian countries, that Zionism is racism.”⁸⁵ Continuing the narrative that *the world is always against Israel*, Israel rejected the Goldstone Report by claiming that:

Both the mandate of the Mission and the resolution establishing it prejudged the outcome of any investigation and gave legitimacy to the Hamas terrorist organization.⁸⁶

Israel’s Prime Minister Benjamin Netanyahu put it more directly: “this report is tendentious and biased, that its end result was determined before it started. This is a kangaroo court that decided to convict Israel in any case.”⁸⁷

The second narrative, as discussed above, is Israel’s reliance on the American “generous and unconstrained support”,⁸⁸ which is, usually, not long in coming. Less than three months after the initial release of the Goldstone Report the US Congress passed, by 344 votes to 36, a condemning resolution stating that the report is “irredeemably biased and unworthy of further consideration or legitimacy.”⁸⁹ Moreover, in 2015, the U.S. was the only country that

⁸³ Shmuel Rosner, Michael Herzog, *Jewish Values...*, p. 24.

⁸⁴ Roni Sofer, ‘Peres: Goldstone Report Makes Mockery of History’, *Yedioth Ahronoth*, 16 September 2009, <http://www.ynetnews.com/articles/0,7340,L-3777814,00.html>, [accessed: 29 October 2015].

⁸⁵ Roni Sofer, ‘Lieberman: Goldstone Report Meant to Destroy Israel's Image’, *Yedioth Ahronoth*, 17 September 2009, <http://www.ynetnews.com/articles/0,7340,L-3778143,00.html>, [accessed: 29 October 2015].

⁸⁶ Israel Ministry of Foreign Affairs, *Israel’s Analysis and Comments on the Gaza Fact-Finding Mission Report*, (communicated by the Foreign Ministry Spokesperson), 15 September 2009, http://mfa.gov.il/MFA/PressRoom/2009/Pages/Israel_initial_reaction_Goldstone_Mission_15-Sep-2009.aspx, [accessed: 28 October 2015].

⁸⁷ Israel Ministry of Foreign Affairs, *Goldstone Report: Interviews with PM Netanyahu on Israeli Television*, (communicated by the Prime Minister's Media Adviser), 17 September 2009, http://mfa.gov.il/MFA/PressRoom/2009/Pages/Goldstone_Report_Interviews_PM_Netanyahu_17-Sep-2009.aspx, [accessed: 28 October 2015].

⁸⁸ John Mearsheimer, Stephen Walt, *The Israel Lobby...*, p. 48.

⁸⁹ ‘The Goldstone Report’, *Journal of Palestine Studies*, Vol. 39, No. 2, Winter 2010, p. 109.

voted in the Human Rights Council against the Fact Finding Mission on the 2014 Israel–Gaza report.⁹⁰ When Netanyahu’s statement in the US Congress that “Israel is not what is wrong about the Middle East; Israel is what's right about the Middle East”⁹¹ was cheerfully applauded, it seems only right to argue that Israel can rely on its American ally to stand by it and protect Israel from what the US Congress defines as “anti-Israel bias at the United Nations.”⁹²

The third narrative that has developed quite recently within the specific context of the conflict in Gaza is a purely legal one. To justify the IDF’s activity, as a part of the emerging *lawfare* (a method of warfare where law is used as a means of realising a military objective)⁹³ around the hostilities in Gaza, Israel has been very constantly arguing that all its military activities were carried out according to International Law. Rejecting the accusations emphasised by international investigations, Israel has continuously argued that it was entitled to attack Gaza, based on the right of self-defence according to Article 51 of the UN Charter and that the IDF took the all precautions required by law to minimise civilian casualties.⁹⁴ Specifically referring to these requirements, the Israeli Ministry of Foreign Affairs stated that:

The IDF not only implemented a range of precautions related to targeting and munitions, but also used an extensive system of graduated warnings to civilians, including both general advance warnings through media broadcasts and widespread leafleting, regional warnings to alert civilians to leave specific areas before IDF operations commenced, and specific warnings to civilians in or near military targets, through telephone calls and warning shots with light weapons.⁹⁵

⁹⁰ Elad Simchayoff, Udi Segal, ‘Doh ha’um al mitvza “tzuk eitan” ushar, rak aratzot habrit hitnagda’ [The UN Report about Operation Protective Edge Was Approved, only the U.S. Was Against], *Mako*, http://www.mako.co.il/news-military/israel-q3_2015/Article-268b8dec0445e41004.htm?sCh=31750a2610f26110&pId=786102762, [accessed: 28 October 2015].

⁹¹ Benjamin Netanyahu, *Speech to US Congress*, 10 July 1996, <http://www.theglobeandmail.com/news/world/americas/transcript-of-prime-minister-netanyahus-address-to-us-congress/article2032842/>, [accessed: 28 October 2015].

⁹² ‘The Goldstone Report’, *Journal of Palestine Studies*..., p. 109.

⁹³ The term *lawfare* was developed by USAF Colonel Charles J. Dunlap, Jr. in ‘Law and Military Interventions: Preserving Humanitarian Values in 21st Conflicts’, *The Proceedings to the Humanitarian Challenges in Military Intervention Conference*, Carr Center for Human Rights Policy Kennedy School of Government, Harvard University, Washington, 29 November 2001. For the Israel’s interpretations of *lawfare* see Eyal Weizman, ‘Lawfare in Gaza: Legislative attack’, *Open Democracy*, <https://www.opendemocracy.net/article/legislative-attack>, [accessed: 28 October 2015]; Noam Noiman, ‘Lohamat mishpat: iumim ve’hizdamnuyiot’ [‘Lawfare: Threats and Opportunities’], *Ma’arachot*, No. 449, 2013, pp. 16-23; Gerald Steinberg, ‘Lawfare’, *Hamas, the Gaza War and Accountability, under International Law, Updated Proceedings to an International Conference, 18 June 2009*, Jerusalem Center for Public Affairs and the Konrad Adenauer Stiftung, Jerusalem, 2013.

⁹⁴ See Israel Ministry of Foreign Affairs, *The 2014 Gaza Conflict, 7 July – 26 August 2014: Factual and Legal Aspects*, Jerusalem, May 2015; Israel Ministry of Foreign Affairs, *FAQ: The Operation in Gaza-Factual and Legal Aspects*, 16 August 2009, http://mfa.gov.il/MFA/ForeignPolicy/FAQ/Pages/FAQ-Operation_in_Gaza-Legal_Aspects.aspx#13, [accessed: 28 October 2015].

⁹⁵ Israel Ministry of Foreign Affairs, *FAQ: The Operation in Gaza*....

This legal argument ultimately leads to the fourth Israeli narrative that helps to withstand international criticism – a *holier-than-thou* approach. Not only that according to Israeli leaders all military activities were conducted within the framework of International Law, but also that “the IDF is the most moral army in the world.”⁹⁶ To fend off the accusations of disproportional harming civilians, Israel argues that “the Israel Defence Forces demonstrate higher military and moral standards,”⁹⁷ than other military forces, pointing to the fact that the IDF harms fewer civilians than other armies do acting in similar conditions.⁹⁸

On the one hand, these foreign policy narratives undoubtedly help Israeli leadership to fend off international criticism and feel relatively free to deploy military force as and how it deems necessary. On the other, it will be unfair to claim that Israel enjoys the same freedom of political manoeuvring on the international arena as the U.S. or Russia do. Following the reliance of Israeli foreign policy on American protection, in the Israeli political discourse, international pressure is commonly translated as “American pressure to cease hostilities”.⁹⁹ In other words, Israel’s disdainful approach to international political institutions and its dependence on the U.S. protection turn Washington into “the only foreign actor whose policies constitute a critical input into Israeli decision-making.”¹⁰⁰ Israeli leaders, however, understand that given the broader American agenda, the opinion of the international community cannot be entirely downplayed (even if they want so) and a broader consensus of support among other countries would reduce pressure on Washington, thus providing Israel with a greater freedom.

In an attempt to win the support (of or, at least, to minimise criticism by) other countries, Israel’s foreign policy utilises its fifth narrative. As Israel inherently does not trust international organisations, its diplomatic activity to achieve broader international support focuses on a direct approach based on a separate bilateral relation with each of its counterpart states, support of which Israel is looking for. While in doing so, Israeli leaders many times “craft diplomatic scenes that forsake common diplomatic language, manner and ceremony”¹⁰¹ by bypassing international organisations, it seems that this repudiation serves Israel well. One

⁹⁶ Roni Sofer, ‘Lieberman: Goldstone Report ...’.

⁹⁷ Israel Ministry of Foreign Affairs, *Israel Rejects General Assembly Resolution*, 5 November 2009, http://mfa.gov.il/MFA/PressRoom/2009/Pages/Israel_rejects_General_Assembly_resolution_5-Nov-2009.aspx, [accessed: 28 October 2015].

⁹⁸ William Saletan, ‘Israel’s Unprecedented Steps to Avoid Civilian Casualties’, *The National Post*, 16 July 2014.

⁹⁹ Mark Heller, ‘The International Dimension: Why So Few Constrains on Israel?’, in Shlomo Brom, Meir Elran, (ed.), *The Second Lebanon War: Strategic Perspectives*, (Tel-Aviv: Institute for National Security Studies, 2007), p. 209.

¹⁰⁰ Mark Heller, ‘The International Dimension...’, p. 209.

¹⁰¹ Gad Yair, Sharona Odom-Weiss, ‘Israeli Diplomacy...’, p. 2.

of the most fruitful examples of this narrative was Israel's success in obtaining the support of the European Union during Operation Cast Lead via the Czech Republic, relations with which are often described as "the strongest between Israel and any [other] European country."¹⁰²

At the time of the beginning of operation Cast Lead, the European presidency was held by France, and following a meeting of the foreign ministers, held on 30 December 2008, the European Union condemned both Israel and Hamas, calling for an "immediate and permanent ceasefire" and "an unconditional halt to rocket attacks by Hamas on Israel and an end to Israeli military actions."¹⁰³ On 3 January 2009, three days after the Czech Republic took over the role of the Presidency of the European Union, Jiri Putuznik, spokesman for the new Czech presidency, stated that "at the present time and at the light of the events of these last days, we estimate that this measure [Israeli military operation] constitutes a defensive action, not offensive."¹⁰⁴ While this statement attracted vast criticism from many European countries forcing the Czechs to apologize for the "misunderstanding," arguing that "it was a personal error,"¹⁰⁵ this example demonstrates perfectly the role of bilateral relations within Israeli foreign policy.

Another good example of the value of Israel's direct approach in foreign policy, at the expense of multilateral international organisations, was the reaction of Israeli leaders to the Goldstone Report. Mistrusting their ability to influence the decision-making process at the UN Human Rights Council, Israel immediately turned to direct approach, separately asking different countries "to express disagreement with the report and to oppose any use of it as the basis for anti-Israeli resolutions at other international institutions."¹⁰⁶ This approach was best emphasised in a *Ha'aretz* article published on the day the Goldstone Report was released:

Following the report's release, Netanyahu, Lieberman, President Shimon Peres and Defence Minister Ehud Barak will telephone many of their counterparts around the world. ... Israel's diplomatic efforts will focus on the five permanent members of the UN Security Council – the United States, Russia, China, Britain and France –

¹⁰² Tamas Berzi, 'European Reactions to Israel's Gaza Operation', Jerusalem Center for Public Affairs, *Articles on Europe & Israel*, Vol. 8, No. 20, 2009.

¹⁰³ Council of European Union, *EU Statement Following Israel's Operation Cast Lead in Gaza Calling for an Immediate and Permanent Ceasefire*, 30 December 2008.

¹⁰⁴ Maud Swinnen, 'Gaza EU statement is a misunderstanding, says Czech Minister', *The European Jewish Press*, 5 January 2009, <http://www.eurojewcong.org/Improving%20EU-Israel%20relations/3345-gaza-eu-statement-is-a-misunderstanding-says-czech-minister.html>, [accessed: 29 October 2015].

¹⁰⁵ Maud Swinnen, 'Gaza EU statement is a misunderstanding...'

¹⁰⁶ Jack Khoury, et al., 'Israel Girds for Diplomatic War Over 'Biased' UN Gaza Report', *Ha'aretz*, 15 September 2009, <http://www.haaretz.com/israel-girds-for-diplomatic-war-over-biased-un-gaza-report-1.7831>, [accessed: 29 October 2015].

but will also give priority to members of the European Union, because of their influence in the UN Human Rights Council in Geneva.¹⁰⁷

Summarising Israel's foreign policy narratives that have been structured by the Israeli leaders in order to fend off the international criticism of its military actions, it is important to separate between the political rhetoric and the actual deeds. While, from first impression one might assume that Israeli leadership simply ignores international organisations, accusing them of being anti-Israel, biased whilst trusting the U.S. to protect Israel against them, the real situation is quite different. In fact, Israel wholly understands its weak political position on the international arena, on the one hand, and its economic and military dependence on its international counterparts, on the other (mainly the U.S., but not only, as the European Union is the Israeli biggest trade partner).¹⁰⁸ One of the most prominent Israeli strategists, Yehoshafat Harkabi, stated in 1979:

The biggest change that has happened in the world is the creation of the international system and the international public opinion that influence the behaviour of the states and the decisions of their leaders. The international system ... can tip the scales and determine success or failure... The international system is most important for the small states, as their dependence on the big states has been growing and the support of the big states, especially in terms of weapons, becomes vital.¹⁰⁹

Israel is a small state and, therefore, according to many Israeli scholars it “has [always] had to take international factors into account in all of its military engagements with its neighbours”¹¹⁰ much more seriously than anyone of the previously examined countries. The political rhetoric of *Um Shmum* or the *holier-than-thou* attitude have been very useful to fend off criticism, but definitely not enough to get a free rein for military operations. To manoeuvre through the deep waters of international criticism, Israel has adopted two supplementary ways to minimise international criticism and provide itself with a limited window of political opportunity for its military actions.

The first of Israel's ways to create a more supportive atmosphere in the international arena is the policy of restraint (i.e., toleration of offensive activities done by Israel's enemies).

¹⁰⁷ Jack Khoury, et al., ‘Israel Girds for Diplomatic War...’.

¹⁰⁸ Israel's State Bureau of Statistics, *Israel's Foreign Trade in Goods, by Country - September 2015*, Jerusalem, 25 October, 2015, http://www.cbs.gov.il/reader/newhodaot/hodaa_template_eng.html?hodaa=201516283, [accessed: 30 October 2015].

¹⁰⁹ Yehoshafat Harkabi, ‘Hir'urim al torat ha'bitachon ha'leumi’, [‘Thoughts about the National Security Doctrine’], *Ma'arachot*, No. 270-271, 1979, p. 44.

¹¹⁰ Oded Eran, ‘International Aspects of Operation Pillar of Defence’, *INSS Insight*, No. 386, 2012; See also Yuval Bazak, ‘Responding to the Need for International Legitimacy: Strengthening the IDF Strike Force’, *Military and Strategic Affairs*, Vol. 3, No.2, 2011, pp. 3-17.

According to Israel's viewpoint, this restraint shows that the Israeli governments are not eager for battle and do everything possible to avoid confrontation and, therefore, eases the political efforts to explain Israel's military actions as self-defence.¹¹¹ The second way is an attempt to choose the most convenient timing to achieve as large a margin for manoeuvre, as possible. The best example of this was Operation Cast Lead, which: (1) started at the end of the calendar year, a period marked by a near-freeze of activity in international diplomacy due to the Christmas season; (2) in the interregnum between the Bush and Obama administrations, which gave Israel a great deal of freedom;¹¹² and (3) the incoming Czech presidency in the European Union, which, as it noted above, promised to ease the pressure from Europe. It is important to note that these two ways are highly interconnected, as restraining from action and waiting for the right timing in international affairs, Israeli leaders are at risk of losing domestic support, especially in such situations where Israeli civilians are threatened by continuous enemy bombardments. This dilemma, however, seemed to have been resolved after the successful introduction of the Iron Dome Anti-Missile Shield as "the public's sense of protection by Iron Dome gives time and space for the government to make [more] calculated decisions on how to proceed in response to the rocket fire"¹¹³ taking into consideration international, domestic and operational factors.

Israeli politicians and diplomats, undoubtedly, toil much harder than their Russian or American counterparts to defend their own state's military engagements in the international arena and they are much more sensitive to international pressure. When it comes to military actions, "Israel faces criticism regarding both the decision to react forcibly and the scope of force employed"¹¹⁴ and it understands that it acts on borrowed time. Interestingly enough, unlike in the cases of Russia or the U.S., most of the criticism of Israel's military operations specifically points to enemy civilian casualties, and Israeli political-military decision-makers do indeed pressurise the IDF to minimise the collateral damage of its actions. After all, as the former commander of British forces in Afghanistan Colonel Richard Kemp put it: "No army in the world acts with as much discretion and great care as the IDF in order to minimize

¹¹¹ Zaki Shalom, 'Is the IDF Prepared to Face a Regular War against the Arab States?', *Military and Strategic Affairs*, Vol. 1, No. 1, April 2009, pp. 17-23.

¹¹² Zaki Shalom, 'Is the IDF Prepared to Face...?'

¹¹³ Emily Landau, Azriel Bermant, 'Iron Dome Protection: Missile Defense in Israel's Security Concept', in Anat Kurz, Shlomo Brom, (ed.), *The Lessons of Operation Protective Edge*, (Tel-Aviv: Institute for National Security Studies, 2014); Yiftah Shapir, 'Iron Dome: The Queen of Battle', in Shlomo Brom (ed.), *In the Aftermath of Operation Pillar of Defense The Gaza Strip, November 2012*, (Tel-Aviv: Institute for National Security Studies, 2012).

¹¹⁴ Pnina Baruch, 'Operation Protective Edge: Legality and Legitimacy', *INSS Insight*, No. 577, 2014.

damage. The US and the UK are careful, but not as much as Israel.”¹¹⁵ The main question, however, is why this pressure has not pushed for the military employment of NLW. To answer this question, a better understanding of Israeli culture and its attitude towards the enemy is required.

Part Three: Israeli Culture and Civilian Casualties

In 1971, Sir Ernest John Barnes, the British ambassador in Israel, provided a significant insight into the Israeli character. In his report to the British Foreign Office, he wrote:

Her [Israel's] attitudes spring from deeper historical roots too. A people, which has been pushed around the world for two thousand years, does not intend to be pushed any more. Nor is it only ancient history, which produces the Massada complex of total resistance, death rather dishonour. The memories of persecution, and above all of Hitler's holocaust, are much nearer the surface. ... Be that as it may, many Israelis feel oppression in their bones... ¹¹⁶

Almost 40 years later, when another Briton, an English student who studied in Israel, was asked, as a part of sociological survey, to describe Israeli society, he said:

No Englishman in London will ever say the sentence that you [Israelis] always say – ‘Who knows, may be in one generation, we will not be here at all.’ The possibility that London and England will not stand for next generations or for the next hundred years does not appear in our minds. But for you, it comes in every second sentence. You live in a constant anxiety. Before I came here, I did not understand the depth of your trauma.¹¹⁷

In their observations of the Israeli culture, or *Israeliut* (Israeliness) as it is often called by the scholars,¹¹⁸ these two outsiders, not only accurately pointed at its several characteristics (“constant anxiety”, “Masada complex”, etc.), but also suggested that any attempt to understand Israel's culture has to begin with the long Jewish history. In other words, “if you want to understand Israelis, you have to start with their past, very distant past.”¹¹⁹

¹¹⁵ Lahav Harkov, ‘Former British commander in Afghanistan: No army acts with as much discretion as IDF does’, *Jerusalem Post*, 9 April 2014.

¹¹⁶ Barnes, John ‘The Intransigent Israeli?’, British Embassy, Tel-Aviv, 18 November 1971, republished in Shmuel Bar, ‘The Intransigent Israeli? – A document from the Archives of the British Foreign Office (FCO/17 1554)’, *Israel Journal of Foreign Affairs*, Vol. 4, No. 1, 2010, pp. 103-113.

¹¹⁷ Yair Gad, *Tzofen ha'isareliyyut: aseret ha'dibrot shel' shnot he'al'paiim*, [The Code of Israeliness: The Ten Commandments for the 21st century], (Jerusalem: Keter Books, 2011), p.15.

¹¹⁸ For example see: Baruch Kimmerling, *The Invention and Decline of Israeliness: State, Society, and the Military*, (Berkeley: University of California Press, 2001); Motti Regev, ‘To have a Culture of Our Own: on Israeliness and Its Variants’, *Ethnic and Racial Studies*, Vol. 23, No. 2, 2000, pp. 223-247; Yair Gad, *Tzofen ha'isareliyyut...*

¹¹⁹ Yair Gad, *Tzofen ha'isareliyyut...*, p. 17.

The significant influence of the distant Jewish historical experience on the Israeli mind-set, and especially such constitutive events, as the Siege of Masada, the Bar-Kokhba Revolt, the Holocaust, etc., has been vastly discussed by many scholars and researchers in the fields of sociology, history, politics and strategy.¹²⁰ Professor Yair Gad, one of the most prominent contemporary Israeli sociologist, in his book *The Code of Israeliness*, identified ten most pivotal narratives of the Israeli character: (1) existential anxiety; (2) proud standing and deliberate audacity (*chutzpah*); (3) the feeling of entitlement to and the ownership of the Land of Israel (*Eretz Yisrael*); (4) a *give-and-take* style contract with the state; (5) a fear of being a *fraier* (somebody who has been taken advantage of); (6) ‘*I speak means I exist*’; (7) creative improvisation (*iltur*) and lack of seriousness; (8) anti-hierarchy and equality; (9) collectivism and meddlesomeness; and (10) intimacy. In the conclusion to his book, he writes:

In each and every Jew living in Israel, deep in their minds and stomach, there is a shared culture – culture that is based on a shared history and a shared destiny... The Israeli culture embeds in us [Israelis] a deep historical consciousness, as well as horrific future scenarios... In our every movement, in our every expression and reaction, it is possible to find the roots of this epic story.¹²¹

While it seems that the contemporary Israeli mind-set is deeply rooted in the long Jewish history, the following analysis does not intend reproduce a complete picture of the Israeli culture. It seeks, instead, to understand a much narrower phenomenon – how the Jewish, and the more recent Israeli, experience has shaped what Israelis think about war and enemy civilian casualties. Those who are interested in a broader picture are advised to focus more on the works of the leading Israeli scholars that rest at the core of this analysis.

Israeli Culture and the Value of Human Life

Much has been thought and written about Israeli culture. Different scholars have discussed it from different perspectives analysing its different aspects, yet, all agree on the fact that “Israel is what is known in psychological literature as a post-disaster community.”¹²² While

¹²⁰ See Yehoshafat Harkabi, *The Bar Kokhba Syndrome: Risk and Realism in International Politics*, (Chappaqua: Rossel Books, 1983); Moshe Lissak, (ed.), *Israeli Society and Its Defense Establishment: The Social Political Impact of a Protracted Violent Conflict*, (London: Frank Cass, 1984); Robert Wistrich, David Ohana, (ed.), *The Shaping of Israeli Identity: Myth, Memory and Trauma*, (London: Fank Cass, 1995); Edna Lomsky-Feder, Eyal Ben-Ari, (ed.), *The Military and Militarism in Israeli Society*, (New York: State University of New York Press, 1999).

¹²¹ Yair Gad, *Tzofen ha'isareliyut...*, p. 187-188.

¹²² Raymond Cohen, *Culture and Conflict in Egyptian-Israeli Relations: A Dialogue of the Deaf*, (Bloomington: Indiana University Press, 1990), p. 38; See also: Daniel Bar-Tal, *Lechiot im ha'sichsuch: nituah psichologiyavratil shel' he'hevra ha'yehudit be'israel*, [*Living with the Conflict: Socio-Psychological Analysis of the Jewish Society in Israel*], (Jerusalem: Karmel, 2007); Dalia Ofer, ‘We Israelis Remember, but How?: The Memory of the Holocaust and the Israeli Experience’, *Israel Studies*, Vol. 18, No. 2, 2013, pp. 70-85; Yair Gad, ‘Israeli Existential Anxiety: Cultural Trauma and the constitution of National Character’, *Social Identities*:

long Jewish history provides many traumatic experiences, there were the enslavement in Egypt and the Babylonian captivity, the Exile after the destruction of the Second Temple by the Romans and the Alhambra Decree ordering the expulsion of Jews from Spain; the Holocaust is, undoubtedly, the experience that shaped most of the contemporary Israeli character.¹²³ This apocalyptic history of attempted annihilation, best represented by the Jewish/Israeli calendar that is strewn with related holidays and memorials, lies at the core of one of the most prominent characteristics of Israeli national mind-set – the existential anxiety.¹²⁴

On the one hand, the initial ideological and political goal of the *Yishuv* (pre-State Jewish settlement in Israel) leadership was, in accordance with the Zionist ideology, to establish a “normal” state. In other words, the leading vision was to establish a state that would become a “normal” member of the “family of nations” and “that traumatic memories of the helpless state of the Jews during World War II would give way to rational considerations.”¹²⁵ On the other, the destruction and persecution did not stop with the establishment of the State of Israel, and, in fact, quite the opposite is true. The War of Independence, which immediately followed the declaration of independence, and the subsequent repetitive conflicts with the neighbouring Arab countries, as well as the Palestinians, have recreated and enforced in the Israeli mind a strong sense of continually being under existential threat. As Yair Gad put it:

In the Israeli head, there is a well-established doctrine of near-annihilation. In the Six-Day War we thought that we would have to take a long swim to Cyprus; in the Yom Kippur War we already imagined concentration camps; in the First Gulf War, in 1990, we saw in our mind a destroyed Tel-Aviv; in preparation for the rerun in 2003, we saw ourselves burnt by mustard gas; and since the Second Lebanon War and operations in Gaza we know that rockets are an existential threat in all parts of Israel.¹²⁶

The interpretation of any event and political development through the lens of the long Jewish history of persecution, the Holocaust and the more contemporary experience of Israeli conflicts, ultimately has led the Israelis to think that “all the world is against us.”¹²⁷ And, while one might assume that such a long history of oppression would generate more universal sympathy for “all oppressed”, it seems that this is not the case.

Journal of the Study of Race, Nation and Culture, Vol. 20, No. 4-5, 2014, pp. 346-362; Yair Gad, *Tzofen ha'isareliyyut...*

¹²³ Yair Gad, *Tzofen ha'isareliyyut...*, pp. 15-31.

¹²⁴ Yair Gad, ‘Israeli Existential Anxiety...’.

¹²⁵ Dalia Ofer, ‘We Israelis Remember, but How?...’, p. 72; Also see Ofira Seliktar, *New Zionism and the Foreign Policy System of Israel*, (Carbondale: Southern Illinois University Press, 1986).

¹²⁶ Yair Gad, *Tzofen ha'isareliyyut...*, p. 15.

¹²⁷ Yair Gad, ‘Israeli Existential Anxiety...’, p. 355.

The trauma of the Holocaust has been perceived by the Israeli mind as a singular and very unique experience. Though the majority of Jewish population in Israel is not direct heirs of the survivors of the Holocaust,¹²⁸ “the self-understanding of individuals in Israel [is] as survivors, heirs, and kin to the victims.”¹²⁹ Consequently, this Israeli collective memory of the Holocaust, preoccupied by an all-consuming fear of a repetition of the trauma, shapes the Israeli attitude toward others, creating a very distinctive deviation between enemies and friends. When it comes to friends, Israelis easily open their hearts and come to their aid, however, when it comes to enemies, the Israeli mind is insensible and offensive. For example, Israel would easily send a generous rescue team to an Asian country struck by an earthquake; yet, Israelis’ hearts are hardened to the suffering of their neighbours in Gaza, who have been locked for years in the Gaza Ghetto – “We [Israelis] even will not allow them to call it a ‘Ghetto’, because ‘Ghetto’ is ours and ours only.”¹³⁰

In analysing this Israeli narrative of existential anxiety within the context of the valuing human life, it is important to highlight the relation between the collective and the individual in the Israeli culture. While, as discussed in the previous chapters, the American character is predisposed toward individualism, and the Russian one towards collectivism; the Israeli mind-set, based on Jewish traditions, paradoxically comprehends both. On the one hand, due to a long history of life in exile, usually in hostile environments, Jewish communities developed a very strong sense of collectivism. Community was essential not only for physical survival, but also for the survival of Jewish traditions – “for the individual, the collectivity was a community of fate – one’s destiny was inseparable from that of the group.”¹³¹ Very similar to the Russian concept of *krugovaya poruka* (collective responsibility and punishment), the Jewish communities in the diaspora shaped the Jewish mind around an idea that the community is responsible for one’s actions and the only prospect for help lay within the community.¹³² However, while in the Russian case *krugovaya poruka* was imposed by law,¹³³ in the Jewish communities this collectivism was an inherent part of Talmudic teaching, as Rabbi Hillel said: “Do not separate yourself from the community.”¹³⁴ In other words, Israeli mind based on this

¹²⁸ Yechiel Klar, Noa Schori-Eyal, Yonat Klar, ‘The ‘Never Again’ State of Israel: The Emergence of the Holocaust as a Core Feature of Israeli Identity and Its Four Incongruent Voices’, *Journal of Social Issues*, Vol. 69, No. 1, 2013, pp. 125-143.

¹²⁹ Dalia Ofer, ‘We Israelis Remember, but How?...’, p. 72.

¹³⁰ Yair Gad, *Tzofen ha’isareliyut...*, p. 30.

¹³¹ Raymond Cohen, *Culture and Conflict in Egyptian-Israeli Relations...*, p. 31.

¹³² Raymond Cohen, *Culture and Conflict in Egyptian-Israeli Relations...*, p. 32.

¹³³ *Brockhaus and Efron Encyclopedic Dictionary*, Petersburg, 1907, Vol. XVI, pp. 836-839, (Russian).

¹³⁴ Quoted in Raymond Cohen, *Culture and Conflict in Egyptian-Israeli Relations...*, p. 32.

Jewish mentality is less oriented on oneself and “tends to be focused more on the pursuit of collective goals and well-being of the society.”¹³⁵

On the other hand, simultaneous to the strong sense of collectivism, the Jewish tradition also cultivated a very deep respect for the uniqueness of the individual, as Rabbi Hillel also said: “If I am not for myself, who will be for me?”¹³⁶ Within Jewish communities individualism was encouraged from an early age and its values were well protected by the Talmudic tradition, just as one of the most prominent Jewish maxims states: “To save a single soul out of Israel is to save an entire world.” While this combination of appreciation of the community and the importance of individuals within it helped Jewish people to survive two thousand years of diaspora, it also ultimately left a significant footmark on the Israeli mind shaping the relations of Israelis between themselves, and between Israelis and others.

The Israeli character, bred on the traditional view of the Jewish community, as one collective with one shared destiny, tends to understand others in a very straightforward way, automatically and very easily labelling others either “friend” or “foe”. Unable to comprehend the complexity of “grey” political pattern, Israeli mind-set almost intuitively rush to utilise the collective memory of the Jewish history of persecution pointing out its uniqueness: “We are the Chosen People, Holy People. There is no nation that is more ethic than us, and everybody who claim differently will be forced to realise his mistake.”¹³⁷ Interestingly enough, in their reaction to any attempt to undermine this claim, the Israelis “shoot-down” allegation targeting even their friends. Professor Dan Kaspi summarised this predisposition of the Israeli character describing the traditional Israeli response to a speech of President Barak Obama that was perceived as not sympathetic enough:

Hussein Obama is a belittler [*katan aleinu*!] We are Chosen and Enlightened People! Without any prejudices towards the skin colour of any one of the United States presidents, he just does not know history. Because one who survived Pharaoh and Nazis, damn them, will also succeed against a greenhorn president with brownish skin.¹³⁸

While this predisposition of the Israeli character to react at external threats is based on its collectivistic nature, as an old Talmudic maxim says “all of Israel stand surety for one another,” the inspiration for their internal affairs Israelis traditionally tend to draw from their

¹³⁵ Dima Adamsky, *The Culture of Military Innovation: The Impact of Cultural Factors on the Revolution in Military Affairs in Russia, the US and Israel*, (Stanford: Stanford University Press, 2010), p. 110.

¹³⁶ Quoted in Raymond Cohen, *Culture and Conflict in Egyptian-Israeli Relations...*, p. 32.

¹³⁷ Yair Gad, *Tzofen ha'isareliyyut...*, p. 45.

¹³⁸ Dan Kaspi, ‘Shuv yesh lanu oiev meshutaf’ [‘We Have a Mutual Enemy Again’], *Ynet*, 31 July 2009, <http://www.ynet.co.il/articles/0,7340,L-3753712,00.html>, [accessed: 5 November 2015].

inherent individualism. The Jewish religion tradition, unlike many other religions, is far from dogmatic; innovative explanations, variant opinions and general independence of thought have been highly prized: “no institution or dynasty has a monopoly of authority, let alone truth.”¹³⁹ This inborn self-confidence lies at the core of the Israelis’ predisposition to argue and sincerely believe that they have the rightest answer to any question: “every Israeli has an opinion, an assessment, an evaluation and a decisive conclusion on any given subject: governmental policy, military operation, scientific discovery, criminal news item or a singer’s haircut.”¹⁴⁰

The paradoxical relations between the collective and the individual in the Israeli mind-set also explain best the complex relations between the State of Israel and its citizens. On the one hand, Israelis see the state in the traditional terms of one big Jewish community, and therefore instinctively rush to contribute to the common good by serving in the IDF, by volunteering, donating, etc. On the other, they expect and demand from the state an unprecedented individual approach to each one of its citizens, especially in times of distress. In the mind of an Israeli, there is an unwritten contract with the state, as Yair Gad demonstrate it:

When I am in distress, it [Israel] will come to rescue me. To dress me up. To give me emergency money. To fly me back home, and fast. And why all these? Because I contributed. Because I deserve it. Because I am an Israeli. Because it is my country, and it is an alternative for God.¹⁴¹

This expectation from the state, combined with the traditional manner of arguing (or demanding), had created another paradox in the Israeli character. On the one hand, externally, Israelis are very sensitive to protecting their state expressing high levels of patriotism and concern for its image. On the other, internally, they fully exercise the right to criticise it, the right that is preserved for them and them alone, because they are Israelis and they contributed to the state.¹⁴² In other words, Israeli society represents a very close-knit community, when it comes to outsiders, but within itself it is an entire opposite. As Ben Gurion observed:

Many of our inhabitants, including Israeli youth, have not learned how to respect their fellow-citizens and treat them with politeness, tolerance and sympathy. Elementary decency is lacking among us.¹⁴³

Interestingly enough, while Ben Gurion made his observation on an individual level, many scholars agree to the fact that the Israeli collective, as a whole, behaves in a similar

¹³⁹ Raymond Cohen, *Culture and Conflict in Egyptian-Israeli Relations...*, p. 33.

¹⁴⁰ Yair Gad, *Tzofen ha'isareliyyut...*, p. 101.

¹⁴¹ Yair Gad, *Tzofen ha'isareliyyut...*, p. 74-75.

¹⁴² Yair Gad, *Tzofen ha'isareliyyut...*, pp. 71-84.

¹⁴³ Quoted in Shlomo Avnery, *The Making of Modern Zionism*, (New York: Basic Books, 1981), p. 277.

manner.¹⁴⁴ This strong sense of community based on the long history of persecution and consequential existential anxiety shaped in the Israeli mind another pivotal cultural narrative: never be a passive victim again. Benjamin Netanyahu, expressed it best:

Nevertheless, today we must ask the question: have the lessons of the Holocaust been learned? I believe that there are three lessons: fortify your strength, teach good deeds and fight evil.

And if somebody was unsure what “good deeds” mean, he clarified:

Good deeds have a complementary side, and that is the third lesson of the Holocaust: fight evil. It is not enough to simply do good and be tolerant. A free society must ask itself what it will do when faced with the destructive forces of evil that seek to destroy and trample man and his rights.¹⁴⁵

While for thousands of years, stateless Jews had to accept the doctrine of submission to the powerful, a submission that more than several times almost ended with total annihilation, since the establishment of their own state and their own military forces the Israeli mind is not ready to accept any type of patronising. Some might argue that this behaviour is a psychological compensation for past humiliations,¹⁴⁶ or a post-traumatic syndrome.¹⁴⁷ Either way, building and exercising military strength seems to be the prime lesson learned by Israelis from their history.

As discussed above, the Israeli mind-set tends to divide the world categorically into “friends” and “foes”. Subsequently, it is not surprising that the appreciation of human life in the Israeli mind also differentiates between “our lives”, “the lives of our friends” and “the lives of our enemies”. One of the most important influences of the traumatic Jewish history on the Israeli culture is the commitment “to ensure the future of the Jewish people.”¹⁴⁸ Consequently, Israelis appreciate not only their own lives but also the lives of all Jewish people around the world. Moreover, when it comes to more a universal value of life, the Israeli memory of Holocaust forces the Israeli mind to demonstrate the best side of its character. Moral outrage toward bystander nations for their lack of help during the Holocaust created in the Israeli mind

¹⁴⁴ For example see: Uri Bialer, ‘Top Hat, Tuxedo and Cannons...’; Gad Yair, Sharona Odom-Weiss, ‘Israeli Diplomacy...’.

¹⁴⁵ Benjamin Netanyahu, *Speech at the Holocaust Martyrs’ and Heroes’ Remembrance Day Ceremony*, 11 April 2010, <http://www.pmo.gov.il/English/MediaCenter/Speeches/Pages/speechshoa1104010.aspx>, [accessed: 5 November 2015].

¹⁴⁶ For example see: Raymond Cohen, *Culture and Conflict in Egyptian-Israeli Relations...*, p. 36.

¹⁴⁷ For example see: Yair Gad, *Tzofen ha'isareliyut...*

¹⁴⁸ Dalia Ofer, ‘We Israelis Remember, but How?...’, p. 71.

“a need to demonstrate that Israelis have higher humanitarian values than other countries,”¹⁴⁹ and generous Israeli rescue teams sent all around the world are proof of that.

A closer examination, however, shows that this humanitarian spirit is very limited, and the universal appreciation of human life is not as all-inclusive as it seems. When it comes to something or somebody that is perceived as a threat, the Israeli mind-set demonstrates much less sensitivity (if any). One of the best examples of this is the way in which Israel deals with African refugees in Israel. Unwilling to grant them refugee status, the Israeli authorities simply offered them a choice between \$3,500 in cash and a one-way ticket home or imprisonment in a specially built detention facility.¹⁵⁰ Another obvious example is the way in which the Israeli mind-set appreciates (or not) the lives of Palestinians. But Palestinians, unlike refugees from Sudan, Eritrea, and other African countries, are perceived by the Israeli mind as enemies, at least as far as the conflict is unsolved, and, therefore, they are treated according to the Israeli perception as an enemy in wartime.

War and the Israeli Character

While Americans perceive war as a temporary interruption, and Russians understand it as an integral part of the human condition, it seems right to argue that the Israeli perception of military confrontation presents a type of hybrid of these two. In an attempt to understand this Israeli characteristic, it is important to differentiate between a “state of war” and a “state of conflict” in the Israeli historical-cultural context. Baruch Kimmerling, one of the most prominent Israeli sociologists, who tended to question the official narrative of Israel's creation, defines the “state of war” as a period of active combat between Israel and its one, or more, enemies. All other periods, during which active combat is dormant, can be defined as a “state of conflict”, since Israel’s enemies carry on warfare by other means (economic, political, terror, etc.).¹⁵¹

On the one hand, Israeli mentality, similar to the Russian character, perceives conflict as a permanent condition or destiny of society, as Moshe Dayan put it:

We are a generation of settlers; without a helmet or a gun we will be unable to plant a tree or build a house... This is the destiny of our generation. The only choice we

¹⁴⁹ Yechiel Klar, Noa Schori-Eyal, Yonat Klar, ‘The ‘Never Again’ State of Israel...’, p. 136.

¹⁵⁰ William Booth, ‘Israeli government to refugees: Go back to Africa or go to prison’, *The Washington Post*, 14 May 2015, https://www.washingtonpost.com/world/middle-east/toughening-its-stance-toward-migrants-israel-pushes-africans-to-leave/2015/05/14/e1637bce-f350-11e4-bca5-21b51bbdf93e_story.html, [accessed: 5 November 2015].

¹⁵¹ Baruch Kimmerling, ‘Making Conflict a Routine: Cumulative Effects of the Arab-Jewish Conflict Upon Israeli Society’, in Moshe Lissak, (ed.), *Israeli Society...*

have is to be armed, strong and resolute, else the sword will fall from our hands and the thread of our lives will be severed.¹⁵²

On the other, war, similar to the American view, is perceived by Israelis as a temporary interruption. In contrast to the Americans, however, the Israeli mind-set, brewed on the traditional existential anxiety, intuitively assumes that the only possible predominant goal of war is “to ensure the very existence of society” and it might be achieved “only through optimal mobilisation of virtually all available human and material resources of the system”.¹⁵³ Consequently, as waging wars demands such an enormous mobilisation of society, wars have to be waged as decisively as possible and be concluded as fast as possible.

Due to the Israeli history of confrontations, the “state of conflict” has become a routine, something that military specialists call “current security” (*Bitachon Shotef*, or *Batash*), punctuated by “states of war”, i.e., Israeli-Arab wars (Six-Day War, Yom Kippur War, etc.) or large military operations in Gaza and the Western Bank (Operation Defensive Shield, Operation Cast Lead, Operation Protective Edge, etc.). Since the focus of this research is on the latter, it is important to understand three main pillars of the Israeli cultural approach towards wars: *harta'a* (deterrence), *hatra'a* (early warning) and *hachra'a* (humiliation on the battlefield).¹⁵⁴ While the first pillar is intended to deter the enemy from attacking by maintaining considerable military power, and the purpose of the second one is to alert Israeli leadership when the first fails, the third, “humiliation on the battlefield”, is the most crucial, as it intends not only to bring an ultimate victory, but also to restore deterrence. In the Israeli mind the main objective of war is not a terminal knockdown of the enemy, as it seems impossible in light of the imbalance of resources vis-a-vis the Arab states and international political pressures. For Israelis, the major strategic goal of war is deterring the enemy from attacking Israel again for as long period, as possible.¹⁵⁵

According to the Israeli understanding, “all of Israel’s wars and military campaigns ... were fought because the deterrence Israel had hoped to establish by prior threats or actions broke down,”¹⁵⁶ and therefore, once deterrence failed and war began, the enemy has to be

¹⁵² Moshe Dayan quoted in Shabtai Teveth, *Moshe Dayan: The Soldier, the Myth, the Legend*, (Steinmatzky’s Agency with Weidenfeld & Nicolson, 1972), p. 240.

¹⁵³ Baruch Kimmerling, ‘Making Conflict a Routine...’, p. 14.

¹⁵⁴ Although Adamsky translates *hachra'a* as ‘battlefield decisions’, ‘humiliation on the battlefield’ seems to be more appropriate, as he writes by himself that “although not intended as a terminal knockout, it was to bring the ultimate victory”, Dima Adamsky, *The Culture of Military Innovation...*, p. 112.

¹⁵⁵ Gabriel Siboni, ‘War and Victory’, *Military and Strategic Affairs*, Vol. 1, No. 3, 2009, pp. 39-49.

¹⁵⁶ Mark Heller, ‘Israeli Deterrence in the Aftermath of Protective Edge’, in Anat Kurz, Shlomo Brom, (ed.), *The Lessons of Operation Protective Edge...*

punished so severely that it will be deterred from doing it again. This idea of deterrence by punishment was formulated best by Moshe Dayan in 1959:

We cannot guard every water pipeline from explosion and every tree from uprooting. We cannot prevent every murder of a worker in an orchard [or] a family in their beds. But it is in our power to set a high price on our blood, a price that will be too high to pay for the Arab community, the Arab army, or the Arab government.¹⁵⁷

While one might have thought that this sort of “massive retaliation” during military operations belongs to the past, the opposite is true. One of the best examples was during the Second Lebanon War, when Prime Minister Ehud Olmert requested to determine “such a price tag, that nobody will wish to trouble us again,”¹⁵⁸ the Defence minister Amir Peretz claimed that “the central goal is to cause Hezbollah to feel bitten [and] persecuted ...”¹⁵⁹ and the Chief of Staff Dan Halutz stated the need to “turn back the clock in Lebanon by 20 years.”¹⁶⁰

Consequently, it is not surprising that many scholars describe the Israeli way of war as a matter of emotional revenge.¹⁶¹ As Niccolo Petrelli concluded:

Mainstream Yishuv thinking stressed the importance and effectiveness of offensive retaliatory actions for the purposes of taking revenge, exacting punishment and, most of all, deter Arab violence.¹⁶²

The perception of military operations as an act of revenge is deeply rooted in the Israeli culture as retaliatory raids against Arab villages, and the destruction of their fields or herds was a part of Israeli official policy during the 1950s.¹⁶³ Moreover, in the Israeli mind, short periods of war that punctuate long periods of “state of conflict” are intended not only to restore the failed deterrence, but also are seen as an opportunity to *lishbor kelim* (to break the rules) of *havlaga* (self-restraint) that usually precedes war. The way in which Israelis measure the success of war demonstrates best this traditional desire for revenge. During the early days of the Second Lebanon War, support among Jewish public reached 82 percent, however, by the end of the

¹⁵⁷ Moshe Dayan, ‘Peulot Tzvayiot be’yemei shalom’, [‘Military Operations in Peacetime’], *Ma’arachot*, Vol. 119, 1959, p. 56.

¹⁵⁸ Ehud Olmert quoted in State of Israel, *The Partial Report of the Commission of Inquiry into the Events of Military Engagement in Lebanon 2006*, April 2007, (Hebrew), p. 81.

¹⁵⁹ Amir Peretz, quoted in State of Israel, *The Partial Report of the Commission of Inquiry...*, p. 71.

¹⁶⁰ Dan Halutz quoted in William Arkin, *Divining Victory Airpower in the 2006 Israel-Hezbollah War*, (Maxwell: Air University Press, 2007), p. 152.

¹⁶¹ See Oded Lowenheim, Gadi Heimann, ‘Revenge in International Politics’, *Security Studies*, Vol. 17, No. 4, pp. 685-724; Gil Muciano, ‘A Matter of Honour: A Review of Israeli Decision Making during the Second Lebanon War’, *The Atkin Paper Series*, The International Centre for the Study of Radicalisation and Political Violence, March 2011.

¹⁶² Niccolo Petrelli, ‘Israel’s Struggle Against Hamas’, (PhD Dissertation, Roma Tre University, 2014), p. 63.

¹⁶³ Raanan Kuperman, ‘The impact of Internal Politics on Israel’s Reprisal Policy During the 1950s’, *Journal of Strategic Studies*, Vol. 24, No.1, pp. 1-28; Niccolo Petrelli, ‘Israel’s Struggle..’, pp. 24-89.

war polls reflected a dramatic turnaround and polls taken on 10 August, 4 days before the end, found that only 20 percent of the overall Israeli sample felt that “Israel had won the war.” According to the analysts, one of the main explanation for such a dramatic change was the Israeli public refusal to accept the fact that “after thirty-three days of air and ground warfare, the IDF was unable to make even a dent in Hezbollah’s capacity to attack Israel.”¹⁶⁴ Despite the fact that as an outcome of this war, the Israeli northern border has been enjoying the longest period of peace in Israel’s history, this war has been perceived as a failure, mainly because “the best military in the Middle East” was humiliated by a “para-military organisation with several thousand fighters”, and the IDF was not able to humiliate it in turn.¹⁶⁵ In other words, as an Israeli proverb states: “Arabs understand only force” (*Aravim mevinim rak koah*), and the Israeli mind-set feels obligated to forcefully retaliate back, each time it gets the opportunity.

While Israel’s retaliation and revenge is aimed directly against military enemies, such as Hamas or Hezbollah; indirectly, it obviously harms enemy population. Moreover, there are three main arguments that suggest that the Israeli public has very little objection to it. The first argument is the long and constitutive history of retaliatory raids and “collective punishment” from the Israel’s past. Interestingly enough, while in the mid-1950s the Israeli Prime Ministers developed doubts about the utility of retaliation as a method for deterring Arab infiltrators, or compelling the Arab governments to prevent infiltration, they still tended to authorise reprisals to calm the Israeli public outrage that demanded violent reactions.¹⁶⁶

The second argument is the Jewish traditional collectivism that perceives community as responsible for one’s actions. For example, in the context of the Palestinian conflict, Israeli collectivistic culture projects its narratives onto Palestinian society considering all Palestinians as responsible for the actions of Hamas. In 1994, despite the vast support of the peace negotiations, the majority of the Jewish population in Israel (between 54 to 71 percent) believed that if the Palestinians had a chance they would annihilate Israel. In 2000, with the Al-Aqsa Intifada at the background, 68% of the Jewish population in Israel perceived all Palestinians as violent. A year into the intifada, 23% believed that all Palestinians support terror, 32.7% believed that the majority of Palestinians support terror, and 17.3% believed that half of the

¹⁶⁴ Yehuda Ben-Meir, ‘Israeli Public Opinion and the Second Lebanon War’, in Shlomo Brom, Meir Elran, (ed.), *The Second Lebanon War: Strategic Perspectives...*

¹⁶⁵ State of Israel, *The Partial Report of the Commission of Inquiry...*, p. 11.

¹⁶⁶ Raanan Kuperman, ‘The impact of Internal Politics...’.

Palestinians supported terror (i.e., only 27% did not blame Palestinian people for the terror actions done by terror organisations).¹⁶⁷

Table 6: Israeli (Jewish) Public Opinion on Palestinians

"With which statement do you agree most?" (2001)	Percent from Total Responses
All Palestinians support violence against Israel	23.0%
Majority of Palestinians support violence against Israel	32.7%
Half of Palestinians support violence against Israel	17.3%
Less than half of Palestinians support violence against Israel	27%

"Describe characteristics that most suit Palestinians" (2005) (more than one possible answer)	Percent from Total Responses
Unintelligent	37.8%
Dishonest	44.6%
Evil	36.3%
Violent	63.0%
Cruel	59.6%

Source: Daniel Bar-Tal, *Lechiot im ha'sichsuch: nituah psichologi-havrati shel' he'hevra ha'yehudit be'israel*, [Living with the Conflict: Socio-Psychological Analysis of the Jewish Society in Israel], (Jerusalem: Karmel, 2007), pp. 237-238.

This leads to the third argument – an assumption that the enemy population is responsible for the action of its military, and, once it suffers, it will force its military fractions to halt activity against Israel. According to the Israeli military culture of retaliation, the purpose of “extensive damage on the civilian infrastructure of Hezbollah in Beirut and southern Lebanon”¹⁶⁸ is to retaliate against Hezbollah and deter it from further actions, and the IDF violent response in Gaza “would lead to destruction and [assumedly] increased domestic pressure on the organization’s leadership” (assumedly, because it did not).¹⁶⁹ Israeli public understands that such a retaliation will come with a significant toll of enemy civilian casualties, however, Israelis have little problem with that as (1) Hezbollah’s and Hamas’s rockets cover all parts of Israel endangering all of Israel’s population; and (2) in the Israeli mind, to repeat, the enemy population is responsible in any case.

It is impossible to discuss any military culture without mentioning its founding myths. While Russians have their Patriotic wars and Americans have their War of Independence, the Civil War and World War Two, the Israeli military culture is undoubtedly brewed on the

¹⁶⁷ Daniel Bar-Tal, *Lechiot im ha'sichsuch...*, pp. 237-238.

¹⁶⁸ Yair Evron, ‘Deterrence and its Limitations’, in Shlomo Brom, Meir Elran, (ed.), *The Second Lebanon War: Strategic Perspectives...*

¹⁶⁹ Avner Golov, ‘Rethinking the Deterrence of Hamas’, in Anat Kurz, Shlomo Brom, (ed.), *The Lessons of Operation Protective Edge...*

mythical narratives of the Siege of Masada (73 – 74 A.D.)¹⁷⁰ and the Bar-Kokhba Revolt (132 –135 A.D.).¹⁷¹ Interestingly enough, these two not-so-successful (if not to say the least successful) events in Jewish history, which had very little appeal to Jewish communities in exile, were reconstructed by the Zionism movement, making Masada as “a symbol of military valour and national commitment”¹⁷² and turning Bar-Kokhba into “a national hero.”¹⁷³

The Siege of Masada was the final defeat of a much bigger Jewish uprising (the Great Jewish Revolt against Rome, between the years 66-73 A.D.) that ended in a catastrophic disaster and the violent oppression of the Jews. According to the Israeli myth, which does not necessarily represent the true course of events,¹⁷⁴ at the end of the Great Revolt Jewish rebels found themselves trapped on the top of Masada fortress, and as they realised that there was no more hope of holding against the Roman army, they chose to kill themselves rather than surrender and become slaves.¹⁷⁵ As the only available written source on the battle of Masada is Josephus’s *The Jewish War*, for many centuries it was almost unknown outside the Christian Church, in general and by the Jewish community, in particular.¹⁷⁶ In the late 19th century, however, when the Zionism’s founders were re-examining Jewish Antiquity in an attempt to establish a basis for the emerging national Hebrew culture, the Masada story “came to represent a resolute commitment to national freedom.”¹⁷⁷ Since then, the Siege of Masada has represented, within Israeli Culture, a narrative of determination to survive or die, a symbolic equivalent to the American Alamo, but with multiplied influences on the national character. Like the besieged and desperate defenders of Masada, contemporary Israelis see themselves surrounded by hostile and numerically superior forces.¹⁷⁸ Concurringly, a verse from a popular poem, by Hebrew poet Yitzhak Lamdan – “Never again shall Masada fall!” – has become a national slogan and a patriotic vow that shaped generations of soldiers in the IDF.¹⁷⁹ Moreover,

¹⁷⁰ See Barry Schwartz, et al., ‘The Recovery of Masada: A Study in Collective Memory’, *The Sociological Quarterly*, Vol. 27, No. 2, 1986, pp. 147-164; Nachman Ben-Yehuda, ‘The Masada Mythical Narrative and the Israeli Army’, in Edna Lomsky-Feder, Eyal Ben-Ari, (ed.), *The Military and Militarism in Israeli Society...*; Yael Zerubavel, ‘The Multivocality of a National Myth: Memory and Counter-Memories of Masada’, in Robert Wistrich, David Ohana, (ed.), *The Shaping of Israeli Identity...*

¹⁷¹ See Yael Zerubavel, ‘Bar Kokhba’s Image in Modern Israeli Culture’, in Peter Schafer, (ed.), *The Bar Kokhba War Reconsidered: New Perspectives on the Second Jewish Revolt against Rome*, (Tubingen: Mohr Siebeck, 2003); Yehoshafat Harkabi, *The Bar Kokhba Syndrome...*

¹⁷² Barry Schwartz, et al., ‘The Recovery of Masada...’, p. 151.

¹⁷³ Yael Zerubavel, ‘Bar Kokhba’s Image...’, p. 279.

¹⁷⁴ See Barry Schwartz, et al., ‘The Recovery of Masada...’; Nachman Ben-Yehuda, ‘The Masada Mythical Narrative ...’; Yael Zerubavel, ‘The Multivocality of a National Myth ...’.

¹⁷⁵ Nachman Ben-Yehuda, ‘The Masada Mythical Narrative ...’.

¹⁷⁶ Barry Schwartz, et al., ‘The Recovery of Masada...’.

¹⁷⁷ Yael Zerubavel, ‘The Multivocality of a National Myth ...’, p. 111.

¹⁷⁸ Barry Schwartz, et al., ‘The Recovery of Masada...’.

¹⁷⁹ Yael Zerubavel, ‘Bar Kokhba’s Image...’.

the preference to die rather than be captured, especially as it was represented in the myth of Masada, explains best the IDF's combat procedures in the case of kidnapping (*Noal' Khanibal*) that orders soldiers to prevent kidnapping by any costs, including killing the hostage.¹⁸⁰

The Bar-Kokhba Revolt, the last Jewish uprising was also mythicised by the Zionism's leaders at the same time as was the Masada myth and for the same reasons. While previously Jewish memory tended to consider this revolt as one of the most traumatic disasters in Jewish history, and Bar-Kokhba himself was mythicised as a bold, but arrogant and short-tempered leader who led his people to doom and exile,¹⁸¹ the emerging Hebrew nationalism saw it otherwise. The glorification of Bar-Kokhba by Zionism stemmed from the conviction that he represents a spirit of heroism that was suppressed during centuries of Jewish exile, and the rebellion became a model for "breaking the yoke of foreign rule."¹⁸² Moreover, the main narrative of the Bar-Kokhba Rebellion in Zionism's interpretation, which has become embedded in the Israeli culture, is that it represents "the Jewish people's capacity for survival, in spite of all hardship it has endured" and that Jewish existence cannot be taken for granted, but has to be taken by force.¹⁸³

In the conclusion of this discussion, about the Israeli cultural character, it is difficult to disagree with ones who title Israel as "a nation in arms" or a "nation in uniform", that lives in a situation that can be labelled a "dormant war."¹⁸⁴ The Israeli mind – shaped by an existential anxiety, brewed on the myths of prerequisite of "fight for survival" (i.e., the Bar-Kokhba Rebellion), and a readiness to sacrifice in a cul-de-sac situation (i.e., the Siege of Masada) – is predisposed to see the enemy society and its military as one whole and has very little sympathy for the enemy population. Despite the vast theoretical discourse led by Jewish and Israeli, secular and religious, philosophers on the ethical and moral problems of enemy civilian casualties, this debate always ended with the question of legality.¹⁸⁵ Probably because,

¹⁸⁰ Michal Danieli, 'Noal' Khanibal: adif hayal harug ni'asher hayal hatuf?' ['Khanibal Procedure: Is a dead soldier preferable to a kidnapped soldier?'], *Mako*, 17 October 2011, <http://mobile.mako.co.il/pzm-magazine/Article-d4a692186511331006.htm&sCh=3d385dd2dd5d4110&pId=1093150966>, [accessed: 7 November 2015].

¹⁸¹ Yael Zerubavel, 'Bar Kokhba's Image...?'

¹⁸² Yehoshafat Harkabi, *The Bar Kokhba Syndrome...*

¹⁸³ Yehoshafat Harkabi, *The Bar Kokhba Syndrome...*, pp. 107-110.

¹⁸⁴ Avner Yaniv, 'A question of survival: The military and politics under siege' in Avner Yaniv, (ed.), *National security and democracy in Israel*, (Boulder: Lynne Rienner, 1993).

¹⁸⁵ For example see: Ehud Luz, "'Jewish Ethics' as an Argument in the Public Debate Over the Israeli Reaction to Palestinian Terror", *Israeli Studies*, Vol. 7, No. 3, 2002, pp. 134-156; Amichai Cohen, Stuart Cohen, 'Israel and International Humanitarian Law: Between the Neo-Realism of State Security and the "Soft Power" of Legal Acceptability', *Israel Studies*, Vol. 16, No. 2, 2011, pp. 1-23; Ziv Boher, Mark Osiel, 'Proportionality in Military Force at War's Multiple Levels: Averting Civilian Casualties vs. Safeguarding Soldiers', *Vanderbilt Journal of*

as J. David Bleich, a Jewish orthodox scholar who is considered an authority on Jewish law and ethics, controversially concluded:

There exists no discussion in classical rabbinic sources that takes cognizance of the likelihood of causing civilian casualties in the course of hostilities legitimately undertaken as posing a halakhic or moral problem.¹⁸⁶

Consequently, when civilians are killed during legitimately undertaken hostilities, their deaths are not just, but they are justifiable in the circumstances of war, i.e. “when the damage isn’t disproportionate to the probable benefits of attacking the target” and “when this damage is the unintended side-effect of a legitimate military operation.”¹⁸⁷ And it seems that in the Israeli culture, the IDF’s military operations are always legitimate, because, after all, *Never again shall Masada fall!*

Part Four: Israeli Military Culture and NLW

One of the most popular Israeli slogans regarding the relation between the Israelis and their military is *am bone tzava bone am* (the nation builds the military builds the nation). While the degree to which this slogan reflects the real nature of socio-military relations in Israel is debatable,¹⁸⁸ it definitely points to complex and intense relations between Israel’s culture and its military. Already in 1974, a British Brigadier Nigel Bagnall (later Field Marshal and the Chief of the General Staff Sir Nigel Thomas Bagnall) in his analysis of the IDF’s performance during the Six-Day War pointed to a strong connection between the Jewish history, the emerging Israeli culture, Israel’s geopolitical situation and the IDF’s way of war.¹⁸⁹ The same arguments have been supported by many Israeli and foreigner scholars and military thinkers.¹⁹⁰

The main interest of this research is the failure of the IDF to employ NLW during its military operations, and, therefore, a broad discussion of Israeli military culture is beyond its scope. As NLW is a military technology, the following analysis will narrow its focus on the

Transnational Law, Vol. 46, No. 747, 2013, pp. 747-822; Michael Walzer, ‘The Ethics of Warfare in the Jewish Tradition’, *Philosophia*, Vol. 40, 2012, pp. 633-641.

¹⁸⁶ J. David Bleich quoted in Michael Walzer, ‘The Ethics of Warfare...’, p. 637.

¹⁸⁷ Michael Walzer, ‘The Ethics of Warfare...’, p. 637.

¹⁸⁸ Tal Peled, ‘Am bone tzava bone am – ha’umnam?’, [‘Nation Builds Military That Builds Nation – Is That So?’], *Ma’arachot*, Vol. 442, 2012, pp. 68-72.

¹⁸⁹ Nigel Bagnall, *The Israeli Experience: A Study of Quality*, (Surrey: Tactical Doctrine Retrieval Cell, Staff College, 1974).

¹⁹⁰ For example see: Michael Handel, *Israel’s Political Military Doctrine*, (Cambridge, MA: Harvard University Press, 1973); Israel Tal, *Bitachon leumi: meatim mul rabim*, [National Security: Few against Many], (Tel Aviv: Dvir, 1996); Stuart Cohen, (ed.), *Democratic Societies and Their Armed Forces: Israel in Comparative Context*, (London: Frank Cass, 2000), part IV; Uri Bar-Joseph, (ed.), *Israel National Security Towards the 21st Century*, (London: Frank Cass, 2001).

role of technology in Israeli military culture in general and what Israeli military thought has to say about NLW, in particular.

Israeli Military Culture and Technology

Since the very beginning of Israel, the idea of “qualitative edge” (*itaron echuti*) has been one of the foundation stones of Israeli military culture. Realising that the IDF would never be able to counterbalance the numerical superiority of its adversaries, creating and maintaining this edge became a lodestar of Israeli military thinking and build-up in terms of material and human factors.¹⁹¹ As Major General Israel Tal, one of the prominent Israeli military strategists, put it:

Israel has to turn to all of its national resources in wartime, and to rely on the quality of its society in all areas... The qualitative difference between Israel and Arabs must be one not of degree but of kind¹⁹²

The role of technology in the Israeli military culture expanded gradually. In the early years after achieving independence, Israel experienced political difficulties with procuring advanced foreign weaponry and the IDF had to rely mostly on pre-war and World War Two technologies. Consequently, analysing this early period of the IDF’s relationship with technology, researchers argue that “the IDF had little understanding of technology”¹⁹³ and “in Israeli opinion, many complex items of Western inventiveness offer little advantage over the simpler equipments they are designed to replace.”¹⁹⁴ However, driven by a fundamental sense of insecurity and anxiety, Israel strove to improve, not only its general technological edge, but to attain autonomy in weapon production.¹⁹⁵ Therefore, about the time of the Six-Day War, and especially in 1970s, when the various political obstacles that prevented Israel from purchasing foreign weaponry were significantly relieved, Israel already had developed its own defence industry. By 1982 and the First Lebanon War, the IDF internally developed and fielded technology with “ultra-sophisticated” capabilities.¹⁹⁶ While during the 1950s and 1960s “the IDF sought to achieve technological superiority where possible,” and during the 1970s and 1980s “technology had come to occupy an ever more important role in the IDF’s self-understanding”, by the late 1990s, the IDF had not only “excellent equipment, much of it of

¹⁹¹ Dima Adamsky, *The Culture of Military Innovation...*, p. 113.

¹⁹² Israel Tal, *Bitachon leumi...*, p. 70.

¹⁹³ Dima Adamsky, *The Culture of Military Innovation...*, p. 113.

¹⁹⁴ Nigel Bagnall, *The Israeli Experience...*, p. 205.

¹⁹⁵ Sharon Sade, ‘Israel’s Defence Industry in the 21st Century: Challenges and Opportunities’, *Strategic Assessment*, Vol. 7, No. 3, 2004, pp. 31-40; Alex Mintz, ‘The Military-Industrial Complex: The Israeli Case’, in Moshe Lissak, (ed.), *Israeli Society...*

¹⁹⁶ Dima Adamsky, *The Culture of Military Innovation...*, p. 114.

indigenous manufacture” but also succeeded “to field military capabilities in advance even of the United States.”¹⁹⁷

Since the 1970s, the IDF has been considering the advanced technology as a lodestar for military successes,¹⁹⁸ as a panacea not only for minimising costs and duration of wars,¹⁹⁹ but also casualties among Israeli civilian population and military personnel. While “offensive romanticism”, which is deeply integrated in the Israeli military culture and operational mindset,²⁰⁰ led, for example, to the development of the sophisticated *Merkava* tank or attacking Unmanned Aerial Vehicles (UAVs),²⁰¹ defence technologies have “become a crucial element of Israel’s approach in defending the country,”²⁰² with Arrow Anti-Missile System and the Iron Dome Anti-Missile Shield as good examples. Moreover, since the number of casualties among IDF’s soldiers determines the level of the IDF’s success in the eyes of the Israeli public,²⁰³ technologies for military personnel’s protection have also been enjoying a high priority. The number of casualties in the IDF Armour Corp during the Second Lebanon War created vast public criticism of the “penetrability” of the *Merkava* tanks.²⁰⁴ While this criticism was not supported by facts as, in comparison to the Yom Kippur War, the percentage of penetrated tanks (by anti-tank missiles) was significantly lower (86% in 1973 vs. 47% in 2006) and the average number of killed soldiers in each penetrated tank was halved (from two to one),²⁰⁵ the IDF rushed to introduce the *Meil’ Ruach* (windbreaker) Active Protection System for Vehicles.²⁰⁶ Interestingly enough, while the main criticism was against the poor training of the crews before the war and the ill employment of the tanks during the war,²⁰⁷ the IDF preferred

¹⁹⁷ Eliot Cohen, Michael Eisenstadt, Andrew Bacevich, *Knives, Tanks & Missiles: Israel’s Security Revolution*, (Washington: The Washington Institute for Near East Policy, 1998), pp. 59, 47, 139.

¹⁹⁸ Moshe Sharvit, ‘Mekoma shel ha’tehnologia be’doktrina shel tzal’, [‘The Place of Technology in the IDF’s Doctrine’], *Ma’arachot*, Vol. 393, 2004, pp. 81-83.

¹⁹⁹ Zvi Ofer, Avi Kober, (ed.), *Ichut ve’kamut: dilemot be’bniyat ha’koah ha’tzvai*, [Quality and Quantity: Dilemmas of Building a Military Force], (Tel Aviv: Ma’arachot, 1985).

²⁰⁰ Dima Adamsky, *The Culture of Military Innovation...*, p. 126.

²⁰¹ Eliot Cohen, Michael Eisenstadt, Andrew Bacevich, *Knives, Tanks & Missiles...*, p. 44.

²⁰² Emily Landau, Azriel Bermant, ‘Iron Dome Protection...’.

²⁰³ Yehuda Ben-Meir, ‘Operation Cast Lead: Political Dimensions and Public Opinion’, *Strategic Assessment*, Vol. 11, No. 4, 2009, pp. 29-34.

²⁰⁴ Hanan Grinberg, ‘Ha’til she’kofef et egrof ha’plada’, [‘The Missile that Bended the Iron Fist’], *Ynet*, <http://www.ynet.co.il/articles/0,7340,L-3297389,00.html>, [accessed: 08 November 2011].

²⁰⁵ Yitzhak Ben-Israel, *Milchemet tilim Harishona: Israel – Hizballa (kaitz 2006)*, [The First Missile War: Israel – Hezbollah (2006)], (Tel Aviv: Tel Aviv University Press, 2007), p. 37.

²⁰⁶ Amos Dotan, ‘Technologiyat meil’ ruach: yoter mi’mahapecha technologit be’lechimata shir’yon’, [‘The Technology of Meil’ Ruach : More than a Revolution in Armour Warfare’], *Ma’arachot*, Vol. 448, 2013, pp. 68-74.

²⁰⁷ Moshe Kaplinsky, ‘The IDF in the Years before the Second Lebanon War’, *Military and Strategic Affairs*, Vol. 1, No. 2, 2009, pp. 25-37; Hanan Grinberg, ‘Ha’til she’kofef...’; Yitzhak Ben-Israel, *Milchemet tilim Harishona...*

to invest in a technological solution, rather than improving the quality of training and operational concepts.

Analysing the contemporary IDF approach to technology, Avi Kober pointed to the rising “cult of technology” stating that “in the recent years technology started overshadowing the non-material aspects of Israeli strategy and tactics, becoming the main factor in military build-up and operations.”²⁰⁸ He stresses the fact that the IDF has become heavily technologically-oriented, identifying military quality with high-technological capabilities, explaining this shift in the Israeli military culture as over-exposure to American military thinking. While his argument that the American fascination with technology “has been received in the IDF enthusiastically with little scepticism, and has affected IDF commanders’ thinking and modus operandi”²⁰⁹ points at a change in the Israeli military way of thinking, it seems that very little has changed in the IDF’s culture of development of the technology itself.

Describing the way in which the IDF develops its operational concepts, Eliot Cohen, Michael Eisenstadt and Andrew Bachevich stated that: “Israeli operational concepts resemble keys carefully crafted to fit particular locks, rather than a general approach to the problem of opening doors.”²¹⁰ This description, however, also describes best the IDF’s attitude towards the development of new weaponry. Despite the warning of the former director of the Research and Development (R&D) Directorate at the Ministry of Defence, Major General Yitzhak Ben-Israel, that the IDF’s approach to R&D processes has to be based on “relative edge” (*itaron yahasi*), rather than “bridging the gaps” (*sgirat pa’arim*), this is not the case in the IDF, as he concluded himself that the IDF’s disproportional investment in the Air Force was of the first, rather than the latter.²¹¹ Having no resources for great technological leaps in all of the military realm, the IDF has always preferred to invest in specific technologies to bridge certain gaps, at the huge expense of others. In 2014, during Operation Protective Edge, the oversophisticated *Merkava IV* tanks with the state-of-the-art *Meil’ Ruach* Active Protection Systems were followed by the M113 armoured personnel carriers built in the 1970s,²¹² and Puma armoured

²⁰⁸ Avi Kober, ‘What Happened to Israeli Military Thought?’, *Journal of Strategic Studies*, Vol. 34, No. 5, 2011, p.724.

²⁰⁹ Avi Kober, ‘The IDF in the Second Lebanon War: Why the Poor Performance?’, *Journal of Strategic Studies*, Vol 31, No. 1, pp. 3-40.

²¹⁰ Eliot Cohen, Michael Eisenstadt, Andrew Bachevich, *Knives, Tanks & Missiles...*, p. 125.

²¹¹ Yitzhak Ben-Israel, ‘Torat ha’yahasut shel bniyat ha’koah’, [The Theory of Relativity of the Military Build-up], *Ma’arachot*, Vol. 352-353, 1997, pp. 33-42.

²¹² Shai Levy, ‘Ason ha’nagmashim: lama tzal meshtamesh be’kli lo memugan mi-1971?’, [‘The Disaster of APCs: Why does the IDF uses vehicles with no armour from 1971?’], *Mako*, 22 July 2014, <http://mobile.mako.co.il/pzm-israel-wars/operation-protective-edge/Article-2fab4a8f83e5741006.htm>, [accessed: 8 November 2015].

engineering vehicles that are based on the hulls of the British Centurion tanks built in the late 1950s.²¹³ This technological mishmash matches well the Israeli approach to military strategy, which is often described as “a conceptual salad, marked by a lack of vision.”²¹⁴

Despite IDF commanders’ fascination with the American techno-mania, the IDF’s budget is a fraction of its American counterpart, and, therefore, unlike the U.S. military, the IDF is “wringing the last iota of usefulness” out of any technology.²¹⁵ The *Merkava* project, the IDF Air Force, the Anti-Missile defence systems are the outcomes of specified prioritising and heavy investment.²¹⁶ In all other cases, technological advance rests on the Israeli cultural belief that “small technological advantages – marginal edges in range, accuracy, or manoeuvrability – can yield large differentials of combat power.”²¹⁷ In other words, the IDF’s fiscal constraints combined with the IDF’s popular slogan *ze ma yesh, ve'im ze nenatzeah* (this is what we have, and with this we will win) has led to the situation that the advancement of technologies, which are not in the main focus, is based on small and steady adaptations and upgrades that answer specific deficiencies discovered during cumulative combat experience. When hitting his fingers, an American will seek a way to improve the hammer and a Russian will endure the pain, an Israeli, having neither American economic privileges, nor Russian readiness to endure, will invent a small and cheap gadget that will hold the nail while striking.

Israeli Military Thought and NLW

Much has been written on the lack of intellectual tradition in the Israeli military culture, the IDF’s “anti-intellectualism”,²¹⁸ or even “false intellectualism”.²¹⁹ The existent research proposes three main cultural explanations for this phenomenon. The first one is the incompetence of Jewish thought on war, driven from the central historical fact of the Jewish stateless condition, as “Jews had no ‘high’ politics, no politics of war and peace, from the time of Bar-Kokhba (135 A.D.) to the time of Ben-Gurion (1948).”²²⁰ The second explanation is the

²¹³The IDF General Officer Commanding Army Headquarters, *Puma*, <http://mazi.idf.il/4986-5648-HE/IGF.aspx>, [accessed: 8 November 2015], (Hebrew).

²¹⁴ Dima Adamsky, *The Culture of Military Innovation...*, p. 111.

²¹⁵ Eliot Cohen, Michael Eisenstadt, Andrew Bacevich, *Knives, Tanks & Missiles...*, p. 139.

²¹⁶ Lazar Berman, ‘Capturing Contemporary Innovation: Studying IDF Innovation against Hama and Hezbollah’, *Journal of Strategic Studies*, Vol. 35, No.1, 2012, pp. 121-147.

²¹⁷ Eliot Cohen, Michael Eisenstadt, Andrew Bacevich, *Knives, Tanks & Missiles...*, p. 76.

²¹⁸ For example see: Eliot Cohen, Michael Eisenstadt, Andrew Bacevich, *Knives, Tanks & Missiles...*; Dima Adamsky, *The Culture of Military Innovation...*; Avi Kober, ‘The IDF in the Second Lebanon War...’.

²¹⁹ Avi Kober, ‘What Happened to Israeli Military Thought?...’. See also Avi Kober, ‘The Rise and Fall of Israeli Operational Art, 1948–2008’, in John Olsen, Martin van Creveld, (ed.), *The Evolution of Operational Art: From Napoleon to the Present*, (Oxford, Oxford University Press, 2010).

²²⁰ Michael Walzer, ‘The Ethics of Warfare...’, p. 633.

fact that the Israeli military culture is rooted in the partisan-like culture of the *Palmach* (the striking companies of the Jewish military force during the British mandate) that favoured heroic practitioners over theoreticians, leading the IDF to promote “heroic and charismatic generals [who] exhibited little intellectual curiosity in studying military science.”²²¹ The third one is the previously discussed “cult of technology” that led to the preference of the Israeli generals “to think in terms of technological force multipliers, such as smart weapons, than to create force multipliers based on smart doctrines.”²²²

Traditionally, the IDF’s culture cultivated “doers”, rather than “talkers” or “thinkers”. The lack of intellectual vigour, however, has always been compensated by Israeli cultural emphasis on *iltur* (improvisation), when an officers’ abilities “to orient, to think, and to bounce ideas quickly,” finding a better, “not-by-the-book” solution, are considered a hallmark of military performance.²²³ On the one hand, this prominence for *iltur* in the IDF has often been connected to the lack of military professionalism.²²⁴ One of the most recent criticisms was raised by the Winograd Commission (the Commission of Inquiry into the Events of Military Engagement in Lebanon 2006) that highlighted “the connection between cultural organisation of improvisation and the lack of professionalism at the level of soldiers, as well as commanders.”²²⁵ On the other, creative improvisation frequently compensates for anti-intellectualism and deficit of professionalism, as “improvisers” are also “problem solvers” and, as the military is constantly busy with fighting, there is never time to “sit and learn”.²²⁶

The IDF, lacking Russian cultural predisposition towards abstract thinking or the American extensive military education system that forces them to think (to a certain success),²²⁷ has never become a “bookish military”. Consequently, while the IDF has always been good in fielding innovative technologies, “Israeli military thought lacked the ability to

²²¹ Dima Adamsky, *The Culture of Military Innovation...*, p. 121.

²²² Avi Kober, ‘The Intellectual and Modern Focus in Israeli Military Thinking as Reflected in *Ma’arachot* Articles, 1948-2000’, *Armed Forces & Society*, Vol. 30, No. 2, 2003, p. 145.

²²³ Dima Adamsky, *The Culture of Military Innovation...*, p. 117-119.

²²⁴ Avi Kober, ‘The IDF in the Second Lebanon War...’.

²²⁵ State of Israel, *The Full Report of the Commission of Inquiry into the Events of Military Engagement in Lebanon 2006*, January 2008, (Hebrew), p. 425.

²²⁶ Amihud Shachar, ‘Ha’baya eina be’tzal’, [‘The Problem is not in the IDF’], *Ma’arachot*, Vol. 380-381, 2001, pp. 88-89.

²²⁷ Williamson Murray, ‘Transformation and Professional Military Education: Past as Prologue to the Future’, in Williamson Murray, (ed.), *National Security Challenges for the 21st Century*, (Carlisle: US Army War College, 2003).

analyse, envision, and assess future [technological] developments and to generate knowledge in that concept.”²²⁸

It is not surprising then that the theoretical discourse about possible usefulness of NLW in Israel is very limited (if, indeed, less than a dozen articles can be considered a discourse).²²⁹ While the theoretical and conceptual milieu that surrounds NLW in the IDF generally suits the intellectual desert described above, a title of “oasis” might be bestowed on the work of Lieutenant Colonel Guy-Zahar Shtultz, who was responsible for the field of NLW and riot control at the IDF Infantry and Paratroopers Forces Headquarters. After a very comprehensive theoretical analysis of the political-military situation in which the IDF has been acting in Gaza and the West Bank, Shtultz produced a very concrete and practical list of recommendations concluding that:

A deployment of effective NLW by the [IDF’s] fighting forces is a requirement of reality. A proficient employment of NLW will increase the legitimacy of our forces’ activity in civilian environments, in general, and in Gaza and the West Bank, in particular, thus, providing the IDF with an advantage, which will frequently be of a strategic value. An effective employment of NLW will also provide our forces with a clear tactical advantage, as it will expand the range of the available means and solutions during operations in civilian environments, where the employment of usual lethal weapons is not optimal.²³⁰

Shtultz’s wise analysis, however, fell on deaf ears, as the lack of enthusiasm for NLW in the IDF is based on two paramount factors. The first one is the IDF’s principal differentiation between *Bitachon Shotef* (*batash*, “current security”, “state of conflict”) and *Bitachon Yisodi* (“state of war”, large military operations). On the one hand, Israeli forces have to prepare for war, or, at least, for a large military operation that is waged as a war. On the other, they constantly perform law enforcement missions in the West Bank, or routine patrolling of Israel’s non-peaceful borders. As “an appointment of continuous *batash* missions on military units that were built to fight war disturbs their operational logic and harms their readiness for war,”²³¹ the IDF generals has cultivated an understanding that the accumulated experience in *batash* is

²²⁸ Dima Adamsky, *The Culture of Military Innovation...*, p. 122.

²²⁹ As for 2015, the list of articles that directly discuss NLW includes: Yitzhak Ben-Israel, ‘Neshel al-heger’, [‘Non Lethal Weapon’], *Ma’arachot*, Vol. 363, 1999, pp. 20-24; Roi Ben-Horin, ‘Non-Lethal Weapons...’; Guy-Zahar Shtultz, ‘Haf’alat koah medureget...’, Uzi Ben-Shalom, “‘Faser lematzav ham’em’: mah’shevot...’. Also, there are several articles that loosely discuss NLW in the context of the Riot Control: Yonatan Sher, ‘Hafsad lo ba’ be’hashbon’, [‘A Riot Is not an Option’], *Be’yabasha*, No. 24, 2010; Yehuda Albek, ‘Pizur hafganot seder: ha’etgar ve’hama’ane’, [‘Riot Control: The Challenge and the Solution’], *Ma’arachot*, Vol. 449, 2013, pp. 24-29.

²³⁰ Guy-Zahar Shtultz, ‘Haf’alat koah medureget...’, p. 17.

²³¹ Tamir Mantzur-Karmel, ‘Likrat hel hagana mirchavit’, [‘Towards a Territorial Defence Force’], *Ma’arachot*, Vol. 459, 2015, p. 20.

not relevant for the IDF's preparations for war.²³² After the Second Lebanon War, the sense of 'what is good for *batash* is not necessary good for war' was sharpened even more, due to the criticism that the IDF's poor performance was an outcome of the IDF's inability to switch from the mode of *batash* to the mode of war.²³³ As it was discussed at the beginning of this chapter, NLW are primarily considered by the Israeli military as weapons for *batash*, and, therefore, their employment during a war is intuitively regarded as something that is unthinkable. When, as Brigadier General Oren Abman stated, the transition from *batash* to war "must be expressed in terms of aggressiveness and offensiveness, meaning the employment of all firepower that is available to the unit"²³⁴ there is, understandably, no place for something that is not intended to kill (i.e., NLW).

The second reason, for the lack of the IDF's conceptual interest in the employment of NLW on the battlefield, is the fact that the reduction of enemy civilian population casualties has been treated by Israeli military culture as a purely legal issue. It will be unfair to claim that the IDF does not try to reduce casualties among the enemy civilian population as even foreign military specialists assess the IDF's attempts to avert unnecessary harm to the local populace as one of (if not the) best in the Western world.²³⁵ It seems, however, that the main leading factor behind these attempts is the IDF's obsessiveness (some would even argue over-obsessiveness)²³⁶ with legitimacy, as Israeli generals understand that "every time, when the IDF finishes an operation, the UN Human Rights Council establishes an inquiry into the war crimes supposedly committed by Israel."²³⁷ While this aspect of "lawfare" is relatively new to the Israeli military culture, there is a traceable rising influence of the IDF International Law Department (known by its Hebrew acronym *DABLA*) on the strategic, operational and tactical decision-making process.²³⁸ In other words, instead of developing concepts of how to employ weapons that are intended to minimise civilian casualties (i.e., NLW) the Israeli military

²³² Lieutenant Colonel Y. and Colonel Y., 'Mischakei milchama memuchshavim be tzal', ['Computerised War-games in the IDF'], *Ma'arachot*, Vol. 343, 1995, p. 29.

²³³ See for example State of Israel, *The Full Report of the Commission of Inquiry...*, pp 550-554; Avi Kober, 'The IDF in the Second Lebanon War...'

²³⁴ Oren Abman, 'Ha'ma'avar le'lehima...', p.21.

²³⁵ Lahav Harkov, 'Former British commander...'

²³⁶ Rafael Rodnik, 'Haderch le'hasagat legitimatziya', ['The Way to Achieve a Legitimacy'], *Ma'arachot*, Vol. 449, 2013, pp.9-15.

²³⁷ Raz Sagi, 'Mi'tzava ha'hagana le'tzava ha'hagana ha'mishpatit', ['From the Defence Force to the Legal Defence Force'], *Ma'arachot*, Vol. 462, 2015, p. 58.

²³⁸ Amichai Cohen, Stuart Cohen, 'Israel and International Humanitarian Law...'; Noam Noiman, 'Lohamat mishpat...'

struggles to improve the compliance of the IDF with International Humanitarian Law, and, most importantly, the collection process of evidences for this compliance.²³⁹

One of the outcomes of this approach to reducing enemy civilian casualties was the introduction of Population-during-Warfare Officers (*ktzin uchlisiya be lehima*). As one of the lessons of Operation Cast Lead (and probably the results of the following Goldston Report), these officers have been attached to each deployed battalion and their duty is “to promote the balance between military necessity and the humanitarian need of the local populace,” as well as to record the enemy’s abuses of international law.²⁴⁰ Interestingly enough, Lieutenant Colonel Guy-Zahar Shtultz, one who so arguably promoted the possible usefulness of NLW to reduce enemy civilian casualties, was promoted to be the Head of the Department of Civilian Affairs during Fighting (*rosh anaf ha’markiv ha’ezrachi be lehima*) – the department, which is responsible for the development of training and operational procedures for Civilian-Population-during-Warfare Officers.²⁴¹ A promotion that reflects best that the IDF’s thinking of the problem of enemy civilian casualties is more inclined towards the legal aspects of this issue, rather than towards a search for a technological solution (i.e., NLW).

Part Five: Conclusions

In summarising the history of NLW in Israel it is important to highlight the fact that compared with the American and Russian militaries (and probably any other in the world), the IDF seems to be the most experienced. The long history of deployment as law enforcement forces during routine *batash* operations forced the IDF to develop and employ NLW at an unprecedented scale. Moreover, the combination of the Israeli *iltur* culture combined with traditional out-of-the-box thinking and tendency to look for simple and cheap technological solutions allowed the IDF to develop and successfully employ such extraordinary NLW as *Hatzatzit*, *Bo’esh* or non-lethal shells for tanks. The IDF, however, is “a dynamic and agile military,” and its culture tends to believe that “the wars of the past are irrelevant (or almost

²³⁹ Aviram Zino, ‘Ha’ mishor ha’ mishpati: keitzad ne’erechet Israel le’yom she’le’achar ha’ mivtza be’haza’, [‘The Legal Dimension: How Israel Prepares Itself for the Day after the Operation in Gaza’], *MaarivOnline*, 9 August 2014, <http://www.maariv.co.il/news/new.aspx?pn6Vq=E&0r9VQ=FMMFL>, [accessed: 10 November 2015].

²⁴⁰ Noam Vitman, ‘4 shanim le’oferet yatzuka: ktzinei ha’uchlusiya hafchu le’helek integrali mi’hakoach ha’lochem’, [‘4 Years after the Cast Lead: Population-during-Warfare Officers Have Become an Integral Part of the Fighting Forces’], *IDF Website*, <http://www.idf.il/1133-17987-he/Dover.aspx>, [access: 10 November 2015].

²⁴¹ Noam Vitman, ‘4 shanim le’oferet yatzuka...’.

irrelevant) for the wars of the future.”²⁴² It is not surprising then that once the immediate operational need for NLW dwindled, *Hatzatzit* was forgotten,²⁴³ non-lethal shells for tanks were abandoned,²⁴⁴ and, in fact, even the Civilian-Population-during-Warfare Officer was a forgotten lesson of the Al-Aqsa Intifada that was relearned after the Operation Cast Lead.²⁴⁵

On the one hand, as it was discussed previously, the international criticism of Israeli military operations specifically focuses on enemy civilian casualties burdening the Israeli political-military decision-making process. Despite its traditional foreign policy narratives of *Um Shmum, the world is always against us*, the *chutzpah* attitude to the international community, and the traditional reliance on American protection, Israel is, undoubtedly, most vulnerable to external criticism, especially compared with the U.S. or Russia. Therefore, it could be assumed that the Israeli political-military decision-makers will do more than their counterparts in Washington or Moscow to pressure their military to look for less lethal technologies in an attempt to reduce this international pressure.

On the other hand, the cultural existential anxiety embedded in the Israeli society, combined with the readiness to make sacrifices (the Masada myth) and a belief that Israel's existence cannot be taken for granted, but has to be taken by force regardless the price (the Bar-Kokhba Syndrome), contradicts the very idea of reducing the punishment of a society that dares to aim a blow at Israel. While the traditional Jewish individualism increases the value of Jewish life and the Holocaust experience explains Israeli concern about the suffering of others, the cultural collectivism shaped by two thousand years of persecution pays little respect to the lives of Israel's enemies and their societies. In 1983, in his criticism of Israeli culture, Yehoshafat Harkabi said that “to admire the Bar-Kokhba Rebellion is to admire rebelliousness and heroism detached of responsibility for their consequences.”²⁴⁶ It seems that 30 years later, very little has changed, as in 2015, surveys showed that a majority (53%) of the Jewish population in Israel agreed with the statement that “any Palestinian who has perpetrated a terror

²⁴² Gabi Grinfeld, ‘Lean halchu ha’lekhachim kulam?’, [‘Where Did All Lessons Go To?’], *Ma’arachot*, Vol. 380-381, 2001, p. 83; Amihud Shachar, ‘Ha’baya eina be’tzal..’, p. 89. See also Yaakov Tzur, ‘Haim hiskil tzal lehafik et lekhei milhamotav ve’le’yasmam?’, [‘Whether Did the IDF Succeed to Generate the Lessons from Its Wars and Learn from Them?’], *Ma’arachot*, Vol.378-379, pp. 12-19.

²⁴³ Alexander (Alik) Ron, *Eduto shel’ nitzav Alik Ron...*

²⁴⁴ Amir Rapaport, ‘Metach gavoha...’.

²⁴⁵ Noam Vitman, ‘4 shanim le’oferet yatzuka...’.

²⁴⁶ Yehoshafat Harkabi, *The Bar Kokhba Syndrome...*, p. 105.

attack against Jews should be killed on the spot, even if he has been apprehended and no longer poses a threat.”²⁴⁷

Table 7: Public Opinion (Jews) on killing unarmed terrorists (2015)

Question: "Some have been saying that every Palestinian who has perpetrated a terror attack against Jews should be killed on the spot, even if he has been apprehended and no longer poses a threat. To what extent do you agree or disagree with this opinion?"

Totally disagree	26.6%
Moderately disagree	17.1%
Moderately agree	19.7%
Strongly agree	33%
Don't know/Decline to answer	3.5%
Total	100%

Source: The Israel Democracy Institute, *The Peace Index: October 2015*, 5 October 2015, <http://www.peaceindex.org/indexMonthEng.aspx?num=298>, [accessed: 10 November 2015]

Israeli inherent predisposition towards violent solutions, regardless of the consequences, and their tendency to see a whole society as responsible for the actions of its individuals, leaves very little space (if any) for the appreciation of enemy civilian population, and, therefore, in the Israeli mind-set anything less than the employment of lethal force is just unthinkable. After all, in their evaluation of the IDF's performance during Operation Protective Edge “only 6% of the entire Jewish public saw the IDF as having used too much firepower.”²⁴⁸

Table 8: Public Approval (Jews) of the level of firepower used by the IDF during the operation Protective Edge (2014)

Question: "How would you characterize the IDF's use of its firepower in Gaza?"

Appropriate Use	47.9%
Too much use of firepower	5.9%
Too little use of firepower	44.9%
Don't know/Decline to answer	1.4%

Source: The Israel Democracy Institute, *The Peace Index: August 2014*, 12 August 2014, <http://www.peaceindex.org/indexMonthEng.aspx?num=283&monthname=August#.VkIiwdLhDcs>, [accessed: 10 November 2015].

²⁴⁷ The Israel Democracy Institute, *The Peace Index: October 2015*, 5 October 2015, <http://www.peaceindex.org/indexMonthEng.aspx?num=298>, [accessed: 10 November 2015].

²⁴⁸ The Israel Democracy Institute, *The Peace Index: August 2014*, 12 August 2014, <http://www.peaceindex.org/indexMonthEng.aspx?num=283&monthname=August#.VkIiwdLhDcs>, [accessed: 10 November 2015].

It seems right to argue that manoeuvring between these two almost opposite political vectors, the Israeli leadership pressured its military to deal with both of the problems by overemphasising the legal issues surrounding its military operations. In other words, the IDF has been forced not only to pretend to be *holier-than-thou*, but to actually try and be one. To improve the IDF's compliance with International Humanitarian Law, the IDF introduced *DABLA* that provides "operational legal advice" to the scale that "a military lawyer had to be present for every approval of targeting killing."²⁴⁹ Moreover, the purpose of the mentioned above Population-during-Warfare Officers is to improve this compliance on the ground. According to many Israeli generals and military scholars, the IDF has become obsessed with the legitimacy and legality of its actions. Each time when there is a suspicion of misconduct or overuse of firepower, the IDF does not hesitate to open its own investigations.²⁵⁰ In other words, averting enemy civilian casualties, in the IDF's eyes, is a problem that has to be solved by an increased compliance with the law, rather than more suitable weaponry that will minimise civilian casualties and collateral damage (i.e., NLW).

The conceptual perception that NLW belong to *batash* and, therefore, they do not have a place on the battlefield reduces even more the chances for the RMA of NLW in Israel. Once a non-lethal effect is required, the IDF prefers to use lethal weapons in a non-lethal way, firing in the air or close to the target. The Israeli Air Force procedure *hakesh-be-gag* (knock-on-the-roof), is the best example of this, when a first missile is shot to disperse civilians from the roof of a target, and then the second one (usually deadlier than the first) is shot to destroy the target.²⁵¹ As long as this perception stays prevalent, and as far as the political leadership does not pressure to look for technological solutions, rather than legal, to reduce enemy civilian casualties during Israeli military operation, NLW are doomed to play an important, yet very limited role during routine *Batash* deployments.

²⁴⁹ Amichai Cohen, Stuart Cohen, 'Israel and International Humanitarian Law...', pp. 9, 15.

²⁵⁰ Raz Sagi, 'Mi'tzava ha'hagana le'tzava ...'; Rafael Rodnik, 'Haderch le'hasagat legitimatziya...'.
²⁵¹ Uzi Ben-Shalom, "'Faser lematzav ham'em': mah'shevot...".

CONCLUSIONS

CIVILIAN CASUALTIES – DO WE REALLY CARE?

This research addressed the puzzling story of military employment of NLW in the U.S., Russian and Israel in an attempt to understand why the RMA of NLW did not occur. As noted in Chapter 1, to speak about a Political-Military System is merely a novel conceptualisation of the assumption that political decisions are the main driving forces behind the military adaptation of revolutionary technologies. While American, Russian and Israeli military organisations have approached NLW in different ways, it seems that minimising enemy civilian casualties has never been defined by their political leaders as a significant challenge demanding a fundamental change in the conduct of war. Consequently, the conclusions of this research will be divided into three main parts. First, to establish why, contrary to expectations, there was no RMA of NLW, it is important to resolve three main questions regarding the American, Russian and Israeli cases:

- (a) to what extent does international political pressure to minimise enemy civilian casualties influence the political-military decision-making processes?
- (b) Why is there no domestic political pressure to minimise enemy civilian casualties?
- (c) If the challenge of minimising civilian casualties has never been handed to military organisations, then, why is there still an interest in NLW?

Secondly, based on the example of the analysis outlined throughout this research it is important to highlight the significance of the concept of the *Political-Military System* as suitable not only for the analysis of the failed RMA of NLW, but also for the examination of military transformations in general.

And finally, in an attempt to take these conclusions beyond the American-Russian-Israeli case studies and produce a broader argument, it seems important to resolve an additional question: What does the absence of the RMA of NLW teach about the decline in violence in the 21st century?

International Criticism and Enemy Civilian Casualties

Causing civilian casualties during military operations has become a much politicised topic in international relations since the Second World War. While countries, as well as non-state actors, use this argument to criticise their political adversaries in the international arena, the American, Russian and Israeli governments are well prepared and politically equipped to

fend off this criticism. Interestingly enough, each one of them has created its own foreign policy mechanisms to withstand international pressure, so that they feel relatively free to employ their military forces regardless of the extensive collateral damage and enemy civilian casualties. Moreover, it seems that their success in countering international criticism is rooted much more in their general political, economic and military power than in their attempts to minimise the undesired outcome of their military activities. Consequently, it is not surprising that American politicians are much more successful in minimising the outcome of international criticism than their Russian counterparts, and that the Israeli foreign policy is the most vulnerable of the three.

While Russians and Israelis are struggling to fend off the international criticism of their military actions, Washington adopts an entirely different strategy based on the prevention of the criticism, rather than a reaction to it. This strategy of prevention is based on two main narratives of the America's foreign policy in terms of its military operations. The first one is based on the Cold War heritage that bestows on the U.S. the position of *the great protector of the free world against a great evil*. As far as Washington enjoys this status (and the American leadership puts a great effort in its preservation), the U.S. military activity would be relatively free from international criticism, regardless the undesired collateral damage and civilian casualties. When "small massacres" (or "big mistakes"), committed by the U.S. military, create an international outrage, such as in the case of the Kunduz hospital airstrike on 3 October 2015,¹ America "expresses its condolences" stating that it "goes to great lengths to limit the loss of life."² However, as the history of the past few decades illustrates, the international outrage fades away very quickly and these events have very little (if any) effect on the Washington political-military decision-making process; after all, the U.S. military *protects the free world against the great evil*. The second mechanism of U.S. foreign policy to prevent international criticism is the American tradition to create the "coalitions of willing". Based on its political and economic power, Washington builds on the self-interests of other states, "recruiting" them to participate in U.S.-led military activities. On the one hand, this practice helps Washington to preserve its freedom of decision-making, as in most of the cases the actual military contribution of the coalition's members is very limited. On the other, the fact that many states raise their flags in support of U.S. military operations (i.e., provide political support) prevent

¹ Tim Craig, Missy Ryan, Thomas Gibbons-Neff, 'By Evening, a Hospital. By Morning, a War Zone', *Washington Post*, 10 October 2015, https://www.washingtonpost.com/world/national-security/story-of-how-a-kunduz-hospital-was-shelled-by-us-gunship-in-question/2015/10/10/1c8affe2-6ebc-11e5-b31c-d80d62b53e28_story.html, [accessed: 22 November 2015].

² 'Obama Apologises to MSF President for Kunduz Bombing', *BBCNews*, 7 October 2015, <http://www.bbc.co.uk/news/world-us-canada-34467631>, [accessed: 22 November 2015].

them from openly criticising American actions, simultaneously, making it more difficult for third states to criticise the whole coalition.

Unlike Washington, the Kremlin bases its political freedom of military actions on a much more defensive strategy. While the U.S. prevents international criticism by maintaining the “good” intentions of its military activity, Russia fends the criticism off, by claiming that it applies “double standards”. During the last decade and a half the Kremlin has invested much effort rehabilitating not only its economic and military power, which were lost after the collapse of the U.S.S.R., but also its role on the international arena. Building on its status as the biggest nuclear power, a permanent member of the UN Security Council, its rehabilitated economy and unprecedented domestic support, the Kremlin feels free to disdain international criticism as a political manipulation that is intended, according to President Putin, “to accuse Russia of growing ambitions ... as though those who say that, have no ambitions [of their own].”³ When Moscow decides to employ its military, it feels few constraints concerning possible undesired collateral damage and civilian casualties, at least as far as the levels of damage and lethality caused by Western operations would not be minimised significantly. Interestingly enough, the American techno-utopia in military affairs led Washington to base its criticism of the Russian intervention in the Syrian conflict in 2015 on Russian technology, rather than on the outcome of Russian activity. Thus, Americans claim that, while Western attacks “are the most precise in the history of warfare” and so “the amount of care that we [the U.S.] have taken to preserve civilian life, to preserve civilian infrastructure, is unprecedented;” Russian’s munitions “lag so far behind those of Western militaries” that they “inadvertently kill innocent men, women and children.”⁴ It did not take long for the Kremlin to answer this narrowly technical criticism. Just 5 days later, it launched 26 guided missiles from a distance of 1500 km,⁵ signalling to the U.S. not only the technological sophistication of Russian military, but also the fact that Moscow uses the same technology as the U.S. and, therefore, “takes care” to avert civilian casualties at least on the same level as the U.S. does. In other words, Russian political leadership is powerful and confident enough to shrug off international criticism of its military activities and their undesired outcomes.

³ Vladimir Putin, *Speech at the UN General Assembly*, 28 September 2015, <https://russian.rt.com/article/119712>, [accessed: 22 November 2015].

⁴ ‘Russia’s Unguided Weapons in Syria Could Ricochet on Moscow’, *Time*, 2 October 2015, <http://time.com/4059442/russia-bombing-syria-isis-assad/>, [accessed: 22 November 2015].

⁵ Elizabeth Foht, ‘Rossiyskiye korabli v Kaspiyskom more nanesli udary po pozitsiyam IG v Sirii’, [‘Russian Ships in the Caspian Sea Attacked the Positions of ISIS in Syria’], *RBC*, 7 October 2015, <http://www.rbc.ru/politics/07/10/2015/561502039a7947add1998f52>, [accessed: 22 November 2015].

In comparison to the powerful positions of America and Russia in the international arena, which allow them to pay very little regard to the criticism of their military actions, Israel seems to be the most sensitive and vulnerable. To deal with international criticism, Israeli foreign policy combines both: the Russian defensive approach and the American strategy of prevention. On the one hand, Israeli foreign policy, shaped by the narrative of *Um Shmum* and the traditional reliance on American protection, easily cold-shoulders international criticism. Taking into consideration the scale of the criticism produced by international organisations, Israeli politicians seem to be much more effective in ignoring it compared with their Russian counterparts. The tendency of Israelis, as already observed in 1971 by Sir Ernest John Barnes, “to air their views so loudly and so frequently on anything that happens ... [and] blow [the UN resolutions] up into international tragedies”⁶ seems to be a useful strategy, because, after all, Israel is not as isolated as it is in its self-image.⁷ When the Kremlin tried to fend off the international outrage regarding the Russian seizure of Crimea in 2014, it had to deal with economic sanctions detrimental to the Russian economy. In contrast, Israel has been, so far, relatively successful in withstanding the international criticism of its seizure of the West Bank – despite the fact that the European Union is one of the biggest critics of Israel, it is also Israel’s biggest trading partner.⁸

On the other hand, considering Israeli foreign policy in the context of international criticism, it is also important to point out the preventive tactics intended to minimise international outrage. While Washington “recruits” other states to support its actions by American political and economic power, Israel does it by self-restraint. To open a window for international political support for its actions, Israeli political leadership tolerates enemy attacks to an unprecedented scale, manoeuvring between the danger of being accused of indecisiveness by the Israeli public and the attempt to minimise international accusations that Israel is bellicose.

In conclusion, it seems right to argue that the international criticism of the American, Russian and Israeli military activities is not as effective in minimising collateral damage and civilian casualties, as one might think. The political leaderships of these countries have very

⁶ John Barnes, ‘The Intransigent Israeli?’, British Embassy, Tel-Aviv, 18 November 1971, republished in Shmuel Bar, ‘The Intransigent Israeli? – A document from the Archives of the British Foreign Office (FCO/17 1554)’, *Israel Journal of Foreign Affairs*, Vol. 4, No. 1, 2010, pp. 103-113.

⁷ Efraim Inbar, *Israel eina mevudedet, [Israel Is not Isolated]*, (Tel-Aviv: Begin-Sadat Center for Strategic Studies, 2013).

⁸ Israel’s State Bureau of Statistics, *Israel’s Foreign Trade in Goods, by Country - September 2015*, Jerusalem, 25 October, 2015, http://www.cbs.gov.il/reader/newhodaot/hodaa_template_eng.html?hodaa=201516283, [accessed: 30 October 2015].

little reason to press their militaries to perform fundamental changes in their weaponry or concepts of operations because of enemy civilian casualties. It is important to highlight, however, that the general ineffectiveness of international criticism is rooted not only in the successful foreign policy mechanisms, developed by these countries to withstand this criticism, but also in the general framework of the International Humanitarian Law, in context of which this criticism is articulated. And while the first was already intensively examined throughout this research, the latter will be discussed in more details in following parts of this chapter.

Domestic Politics and Enemy Civilian Casualties

As was discussed throughout this research, each of the examined countries has experienced significant domestic political pressure to reduce the casualties of their own military personnel, e.g., the U.S. in Vietnam, Russia in Afghanistan and then in Chechnya, and Israel in the Second Lebanon War. While the presence of this domestic political pressure is undeniable, it seems that the societies of these countries have expressed much less (if any) political outrage when it comes to enemy civilian casualties. To understand this absence of domestic political pressure, this research addressed the cultural-historical narratives of each national character, finding that while the American, Russian and Israeli national heritages are very different, all of them show very little concern about the enemy, in general, and enemy civilian casualties, in particular. Throughout the analysis of the American, Russian and Israeli national characters, this research focused on their respective position on the individualistic-versus-collectivistic continuum. While the American mind-set is characterised by its extreme individualism and the Russian one by its predisposition towards collectivism, the Israeli combination of these two places the Israeli character somewhere in the middle. Interestingly enough, all three have developed a strong differentiation between “us and them” that prevents them from projecting their appreciation of their own lives onto the lives of their enemies.

American, Russian and Israeli national characters are, undoubtedly, products of the unique historical experience of each one of these nations. Most interesting, however, is the fact that despite their differences, all of three pay very little regard to foreigners’ lives. The American mind-set, shaped by the violent experience of the frontier, perceives war as an act of vengeance or as a rightful act intended to “free” or “protect” local population. Throughout their history, Americans considered wars as temporary and unfortunate events that disturb their “American Dream” and, therefore, have to be concluded as fast and decisively as possible. The

combination of this approach towards war with the traditional inclination towards violence has left very little time and place for valuing enemy civilian population. After the Vietnam War, Americans have become very sensitive to their own casualties, however, as their latest experiences in Iraq and Afghanistan proved, American society generally failed to project its rising appreciation of human life onto the enemy civilian population. From the early violent clashes on the frontier to this day and age, wars have been interpreted by the American mind-set, as a fight of “brave American soldiers” against a “brutish enemy”, who understands only violence and, therefore, has to be treated accordingly.

Unlike the American mind-set, the Russian national character perceives war as an integral part of the human condition. Russian history, rich with conflicts and suffering, cultivated the narratives of permanent struggle and readiness to sacrifice for the common good. Bred on the heritage of the Great Patriotic Wars, Russians perceive military operations as a matter of survival, rather than a way to make their lives better or safer. This narrative is so important in the Russian cultural context that leaders who failed to address it, paid an enormous political price – Nicolas II during the First World War, Michail Gorbachev during the war in Afghanistan and Boris Yeltsin during the First Chechen campaign. It is not surprising then that Putin, having learnt these lessons, described Russian intervention in Syria as a matter of Russia’s survival, because:

More than 2,000 fighters from Russia and Ex-Soviet Republics are in the territory of Syria [fighting for ISIS]. There is a threat of their return to us. So, instead of waiting for their return, we are better off helping Assad fight them on Syrian territory.⁹

When a war is a matter of survival, when people are ready to suffer to protect their homes and families, when they are led by a strong leader, the Russian people demonstrate unprecedented levels of endurance and sacrifice. However, while this readiness to endure saved Russians from Napoleon and Hitler, and had helped them to survive extreme totalitarian regimes, it also shaped their little concern for enemy civilian casualties. In other words, the casualties of an enemy population during military operation are generally tolerated in the Russian cultural context, because a war, as Major General Alexander Vladimirov put it, “is an integral part of human existence,”¹⁰ and Russians are ready to sacrifice themselves to win this war.

⁹ Vladimir Putin in an interview to CBS News, 27 September 2015, <http://www.cbsnews.com/news/vladimir-putin-russian-president-60-minutes-charlie-rose/>, [accessed: 23 November 2015].

¹⁰ Alexander Vladimirov, *Osnovy Obshchey Teorii Voyny*, [Fundamentals of the General Theory of War], (Moscow: Moskovskiy Finansovo-Promyshlennyy Universitet “Sinergiya,” 2013), Volume 1, p.160.

Interestingly enough, it seems right to argue that the Israeli understanding of the phenomenon of war combines, to a certain degree, the Russian traditional perception of permanent struggle with the American fast-cut-and-aggressive approach to war. On the one hand, the Israeli character shaped by a combination of the political-military reality of the Middle East and the national cultivation of the myth of Masada, is predisposed to believe (similar to Russian culture that perceives Russia as a besieged fortress) that the whole world is against Israel. The very simple fact that Masada's defenders were arguably more alike bandits and outlaws (who preferred to kill themselves, rather than be killed by the Romans) than "brave defenders" (who sacrificed themselves instead of being enslaved), is perceived by the contemporary Israeli culture as an all-too detailed interpretation intended just for historians, rather than for schools.¹¹ The heritage of the long Jewish history of persecution shaped, not only the Israeli cultural existential anxiety, but also the very clear distinction between Israel and everybody else who, ultimately has to have an – either open or hidden – anti-Semitic agenda. Consequently, as Israelis see it, Israel has permanently and continuously to defend itself against Palestinians, Arab countries, Anti-Semitic Western countries and the whole world, as Israel is the only safe place for Jews.

On the other hand, the economic and political constraints shaped the Israeli approach to war as something that has to be carried out as fast and decisively as possible. Having neither resources, nor international political approval for prolonged wars, the Israeli mind-set is predisposed towards aggressive peaks of fighting that will only provide relative peace for a certain period, rather than an overwhelming victory. As the Jews' struggle is perceived as an eternal phenomenon, and conclusive victory as an unachievable outcome, Israelis fight not to defeat their enemies irrefutably, but to deter them from future hostilities for a certain period. After each war, Israelis ask themselves: "Will deterrence be achieved and will there be quiet? For how long?"¹² If the meaning of victory is, as Amos Yadlin put it, "postponing the next conflict for as long as possible by depriving the enemy of capabilities and influencing its intentions,"¹³ then the conduct of war has to be fast-cut-and-aggressive, and this approach

¹¹ Nachman Ben-Yehuda, 'The Masada Mythical Narrative and the Israeli Army', in Edna Lomsky-Feder, Eyal Ben-Ari, (ed.), *The Military and Militarism in Israeli Society*, (New York: State University of New York Press, 1999); Yael Zerubavel, 'The Multivocality of a National Myth: Memory and Counter-Memories of Masada', in Robert Wistrich, David Ohana, (ed.), *The Shaping of Israeli Identity: Myth, Memory and Trauma*, (London: Fank Cass, 1995).

¹² Amos Yadlin, 'The Strategic Balance of Operation Protective Edge: Achieving the Strategic Goal Better, Faster, and at a Lower Cost', in Anat Kurz, Shlomo Brom, (ed.), *The Lessons of Operation Protective Edge*, (Tel-Aviv: Institute for National Security Studies, 2014), p. 205.

¹³ Amos Yadlin, 'The Strategic Balance...', p. 211.

leaves little space for the appreciation of enemy civilian lives. While Americans disregard the lives of their enemies because of American traditional imprudence and inclination toward violence, and the Russians because of their collectivistic characteristic that tends to keep societies as responsible for the action of individuals; Israelis combine both. Though American, Russian and Israeli political leaderships have been pressed by their people to minimise the casualties of their own military personnel, a similar pressure regarding enemy civilian casualties simply does not exist. And, while under domestic political pressure to minimise friendly casualties, politicians forced their militaries to develop and employ technologies accordingly, there has been no political reason to invest in the development of NLW.

To conclude the discussion about domestic politics and the absence of the RMA of NLW, it is important to discuss an additional factor that was not covered by this research, but is identified by the existent literature as influential in the domestic politics of military armament: the military-industrial complex. Since the end of the Second World War, and especially after President Eisenhower's famous farewell address in 1961, which warned the American people against an extension of the influence of the U.S. military-industrial complex on political-military decision-making,¹⁴ scholars have continuously pointed to the significant role of the military-industrial complex in promoting novel military technologies.¹⁵ While it is difficult to disagree with the fact that military organisations employ certain novel technologies due to the powerful political lobby of the military-industrial complex, this is not the case of NLW. As it was discussed in the empirical chapters of this research, American, Russian and Israeli military-industrial complexes are able to produce effective NLW when they are specifically tasked by their military. Without this specific demand, however, it seems that big manufactures are not very interested in promoting NLW, because, as one Israeli defence analyst put it:

The defence industries have no economic motivation to develop enhanced NLW. On the one hand, the headache is enormous (for example, lawyers can spend months discussing whether the system answers the legal definition of non-lethality). On the other, the profits are diminutive. One lethal and sophisticated

¹⁴ Dwight D. Eisenhower, *Farewell Radio and Television Address to the American People*, January 17, 1961, <http://www.presidency.ucsb.edu/ws/index.php?pid=12086&st=farewell&st1>, [accessed: 27 November 2015].

¹⁵ For example see: Michael Armacost, *The Politics of Weapons Innovations: The Thor-Jupiter Controversy*, (New York: Columbia University Press, 1969); Carroll Pursell, *The Military-Industrial Complex*, (New York: Harper & Row Publishers, 1972); Paul Koistinen, *The Military-Industrial Complex*, (New York: Praeger Publishers, 1980); Helen Caldicott, *The New Nuclear Danger: George W. Bush's Military-Industrial Complex*, (New York: The New Press, 2002); Peter Dombrowski, Eugene Gholz, *Buying Military Transformation: Technological Innovation and the Defense Industry*, (New York: Columbia University Press, 2006).

system, which can be sold after [being sold to] the IDF to the whole world, will bring more profits than all NLW together.¹⁶

Moreover, as big industries are not interested in NLW, most of the American, Russian and Israeli (and, in fact, all around the world) companies that produce them are small and medium sized manufactures¹⁷ that are short of the required economic and political power to support an effective lobbying of NLW. In other words, American, Russian and Israeli political-military decision-makers do not press their military organisations to employ NLW not only because the domestic public opinion tolerates enemy civilian casualties, but also because the military-industrial complex shows very little interest in promoting these weapons.

Military Interest in NLW

The analysis of different political and cultural factors, as appeared throughout this research, depicted the indifference of the American, Russian and Israeli political leadership towards enemy civilian casualties and the following lack of political pressure to employ less lethal armament. The question is, however, why the military organisations of these countries still express an interest in NLW. Interestingly enough, despite the fact that each military has its own reasons to believe in the potential usefulness of NLW, their interests in these weapons are highly interconnected.

As was discussed in chapter 3, the idea of the military employment of NLW is the fruit of American military thought. After the end of the Cold War, the American military was struggling to find *a new great evil* to fight against. The political atmosphere in the U.S. in the beginning of the 1990s was best described by Francis Fukuyama's *The End of History and the Last Man*, where he argued for the unchallengeable triumph of liberal democracy that would eventually end the bloody wars of the 20th century.¹⁸ It is not surprising then that the U.S. military assessed the upcoming 21st century as “a century of shared understanding through information technology – a new era of relative peace”¹⁹ and, therefore, it was assumed that the

¹⁶ Amir Rapaport, ‘Metach gavoha’, [‘High Tension’], *Israel Defense*, 26 April 2011, <http://www.israeldefense.co.il/he/content/%D7%9E%D7%AA%D7%97-%D7%92%D7%91%D7%95%D7%94>, [accessed: 28 September 2015].

¹⁷ Homeland Security Research Cooperation (HSRC), *Non-Lethal Weapons: Technologies and Global Market – 2012-2020*, 2011, <http://www.homelandsecurityresearch.com/2011/10/non-lethal-weapons-technologies-global-market-2012-2020/>, [accessed: 27 November 2015].

¹⁸ Francis Fukuyama, *The End of History and the Last Man*, (Penguin Books, 1992).

¹⁹ Department of the Army Headquarters, United States Army, *Force XXI Operations: A Concept for the Evolution of Full-Dimensional Operations for the Strategic Army of the Early Twenty-First Century TRADOC Pamphlet 525-5*, Fort Monroe VA, 1 August 1994, p. 2.

main future role of U.S. military forces would be to police the *Pax Americana*. While this understanding dominated and drove the American military attraction for NLW during the 1990s, the 9/11 attacks and the following declaration of Global War on Terror propelled American military into interventions in Afghanistan and Iraq, which were anything but a peacekeeping activity, as it had been assumed during the 1990s. On the one hand, without political support and no real military necessity, the interest in NLW ultimately dwindled. From 1997 to 2009, the overall investment in the research and development of NLW in the U.S. military was no more than \$386 million²⁰ – a diminutive fraction of the U.S. defence budget that did not leave a chance for the development of the revolutionary technologies promised during the 1990s. On the other, two different cultural factors prevented the American military from abandoning the idea of NLW completely. The first one is the American traditional technoutopia in military affairs, and the fact that NLW provide a technological solution for something that the U.S. military had defined as a problem. The fact that this problem has not been seen significant enough does not mean that the interest in the potential of this technology should be abandoned. The second factor is the inability of American military thought, shaped by the traditional rivalry between different Services, to produce a coherent understanding of the strategic environment and future technologies that answer future military challenges. As different Services within the American military are incapable of reaching an agreement on the future of NLW, they also are unable to disregard them completely.

In contrast to the American military, Russians have never considered technology as a “magic bullet” that solves problems on the battlefield. Moreover, the Russian military-industrial complex has traditionally been suffering from technological inferiority in comparison to the West and rarely produced revolutionary novel military technologies. Consequently, Russian observation of Western technologies in general, and American in particular, has always been one of the main drives behind not only Russian defence production, but also the Russian military thought. While, as it was discussed in chapter 4, Russian military thinkers succeeded in developing more comprehensive concepts for a possible employment of NLW, however, it was the American fascination with this technology that drove their interest. Moreover, as Western technological achievements frequently force Russian political-military decision-makers to urge their industries to develop similar capabilities, the American failure to develop operationally effective NLW reduced Russian interest and enthusiasm to press for

²⁰ United States Government Accountability Office (GAO), *DOD Needs to Improve Program Management, Policy, and Testing to Enhance Ability to Field Operationally Useful Non-Lethal Weapons: Report to Congressional Requesters*, Washington DC, April 2009, p.18.

further development and employment. Interestingly enough, it has not stopped Russian military thinkers (who have never been deterred by the gap between theory and practice) to continue developing concepts and theories for the possible employment of NLW. While the American interest in NLW has been kept alive by the American traditional fascination with technologies and inability to coherently conceptualise their future implementations, Russians are still interested in NLW because of their traditional inclination toward abstract thinking and their belief that solutions lie not in technology, but rather in a sophisticated conceptual military theory.

As it was discussed in chapter 5, it seems right to argue that the IDF has more operational experience with NLW than both the American and Russian militaries together. Due to the routine deployment of military units in the Territories as law enforcement forces the Israeli military has not only mastered typical NLW as tools for riot control, but also introduced several very innovative technologies. The success of NLW during *batash* missions, however, has also been a vital factor that denied the transition of NLW to large-scale military operations, as in the Israeli military tenet what is good for *batash* is not suitable for war. The IDF's cultural predisposition to admire "doers", rather than "thinkers", explains not only the absence of a broader conceptual approach towards NLW, but also the technological setback between the peaks of civilian unrest in the Territories – the technologies of the First Intifada were forgotten before the Second one, and technologies developed during the Second were abandoned after it ended. While the IDF's interest in NLW has been driven solely due to the requirements of the *batash* realities, it is important to highlight the Israelis' increasing American-style quest for technological solutions for military challenges. The Israeli military, lacking its own resources for technological adventures that are not supported by a clear military necessity, closely observes American technological achievements and, as history of the latest Information-Technology RMA of precision-guided munitions teaches, Israelis are able to employ novel technologies, developed in the U.S., without having a conceptual framework for using it.²¹ The IDF does not employ NLW during its military operations not only because the conceptual denial of NLW as *batash* weaponry, but also because American military has not introduced NLW that are operationally employable on the battlefield.

The main reason why the American, Russian and Israeli military organisation still discuss the potential of NLW, despite the noticeable absence of political pressure to minimise

²¹ See Dima Adamsky, *The Culture of Military Innovation: The Impact of Cultural Factors on the Revolution in Military Affairs in Russia, the US and Israel*, (Stanford: Stanford University Press, 2010).

enemy civilian casualties to a technologically possible minimum, is the American unfading interest in these weapons. Since the Second World War, the U.S. military has been a technological leader in military affairs and NLW are not an exception. As long as Americans will show interest in NLW, it will inspire Russians to develop theories for their possible employment and Israelis to look at American manufactures for possible acquisitions.

The Concept of the Political-Military System and the Failed RMA of NLW

As was introduced in chapter 1, the Political-Military System consists of three main elements – political entity, military and political-military challenge. On the one hand, as long as these three succeed in maintaining their mutual balance, the system will slowly evolve gradually transforming each one of the elements. On the other, a rapid and fundamental change of one of the elements will ultimately upset the whole system, and, as an outcome of this imbalance, an RMA might occur. As proposed in chapter 1, *an RMA occurs when a political leadership, shaped by certain socio-cultural circumstances, defines to its military a challenge that military culture interprets as unmet; and when dealing with it requires a fundamental change that combines novel – but already available technology – operational concept and organisation. Moreover, the political leadership supports its military through the required transformation.* According to this proposition, an analysis of an RMA had to follow the following questions:

- (1) Does the political leadership define this a particular state of affairs as a military challenge? If not, then what is the socio-cultural context that influences the political-military leadership in its decision-making process?
- (2) If the challenge is defined, how does the military, shaped by its military culture, interpret this challenge? If it is interpreted as a challenge that the military can deal with, then what is the military cultural context that influences the military leadership in its decision-making process?
- (3) If the challenge is defined by the military as unmet, does the political leadership support its military through the transformation? And if it does not, what is the socio-cultural context that prevents the political leadership from supporting it military?

While these three questions were paraphrased at the end of chapter 2, to fit the specifics of the RMA of NLW and the political-military challenge of *the minimisation of enemy civilian casualties*; to conclude the significance of the concept of the Political-Military System, as is represented by these questions, it seems right to try and address these questions more directly.

As it was demonstrated throughout this research, the problem of harming enemy civilian population during military operations is an inherent part of the rhetoric of the

American, Russian and Israeli political leaderships. The need to avert enemy civilian casualties has indeed been defined as a military challenge that has to be met, it seems, however, that the tangible reactions to this challenge are not as significant as it is presented by the politicians' rhetoric. As the analyses of the American, Russian and Israeli cases reveal, the political leaderships of these countries have very little external or domestic reasons to meet this challenge through fundamental-revolutionary change in their conduct of war. In other words, the socio-cultural and political contexts that have influenced the American, Russian and Israeli political-military leadership in their decision-making processes, regarding enemy civilian population, have necessitated giving *the impression* of minimising enemy civilian casualties, rather than their *actual* minimisation.

While the challenge of minimising civilian casualties has been identified and defined as such, military organisations see it as of secondary importance. As the political leadership has not called for fundamental changes in the conduct of war have, the military has been satisfied by the mere adaptation of existing capabilities accompanied by quite modest innovativeness. Due to their different cultural predispositions, the American, Russian and Israeli military establishments have been engaging with the challenge of averting enemy civilian casualties differently – Americans by emphasising the “humane” role of precision weapons; Russians by conceptualising intangible military theories intended to minimise enemy civilian casualties; and the Israelis by emphasising the “lawfare” and increased compliance with International Humanitarian Law as a way to avert collateral damage and unnecessary civilian casualties. In other words, none of the analysed military organisations have defined *the minimisation of enemy civilian casualties* as an unmet military challenge that requires a revolution in the form of innovative technological solutions combined with novel operational and organisational concepts. The RMA of NLW in the U.S., Russia and Israel has (so far) failed to materialise because the political leadership has asked the militaries to reduce the casualties to a politically acceptable level, rather than to the technologically possible minimum; in the socio-cultural context of each country, support for the former appears to be significantly higher than for the latter.

Throughout this research, the concept of the Political-Military System proved to be very useful to discover not only the reasons for the failure of the RMA of NLW, but also to identify a broader socio-political-cultural context that sustains the level of enemy civilian casualties on the battlefields in the beginning of 21st century at a significantly higher level than is technologically possible. Consequently, this analytical approach can help to understand and clarify different aspects of other military transformations. On the one hand, historians might

find this concept useful to explain the inter-connection between society and the military, in analysing the events of the past. On the other, and more importantly, strategists and practitioners might find it useful in an attempt to understand current military transformations that sometimes seem puzzling and counterintuitive. For example, a methodical application of the concept of the Political-Military System might improve our ability to understand the factors that drive (or restrain) military transformations in the field of robotics or cyber – two technologies that have recently attracted significant scholarly attentions.²² A systematic examination of the political-military challenges that these transformations are intended to bridge, and socio-cultural environments that shape political-military decision-making processes in these fields, could significantly improve the ability to explore, explain and anticipate the directions these transformations might take.

The Absence of the RMA of NLW and the “Declining Violence” of Human Nature

The contemporary research that discusses the role and the place of violence in 21st century society can be generally divided into two schools of thought, and while both agree that violence is declining, their explanation of this trend is different. The most notable advocate of the first school is psychologist Steven Pinker. In his *The Better Angels of Our Nature* he suggests that “today we may be living in the most peaceable era in our species’ existence” because the contemporary society has become more empathic, self-controlling, moral and reasonable and has developed “a commitment that other living things, no matter how distant or dissimilar, be safe from harm and exploitation.”²³ While Pinker generally argues that contemporary societies show more respect for human life than they used to in the past, and, therefore, inter-human violence is declining, some scholars suggest an alternative explanation of this phenomenon. The main supporter of this second school of scholars is the U.S.-based British classicist and archaeologist Ian Morris. While in his *War – What Is Good For?* he agrees with Pinker’s observation of the trend, stating that “today’s world [is] safer and richer than ever

²² For robotics see: P. W. Singer, *Wired for War: The Robotics Revolution and Conflict in the 21st Century*, (New York: Penguin Press, 2009); Benjamin Medea, Barbara Ehrenreich, *Drone Warfare: Killing by Remote Control*, (New York: OR Books, 2012); Bradley Strawser, Jeff McMahan, (ed.), *Killing by Remote Control: The ethics of an Unmanned Military*, (New York: Oxford University Press, 2013); For cyber see: Andrew Jason, Steve Winterfeld, *Cyber Warfare: Techniques, Tactics and Tools for Security Practitioners*, (Waltham: Elsevier, 2013); P.W. Singer, Allan Friedman, *Cybersecurity and Cyberwar: What Everyone Needs To Know*, (Oxford: Oxford University Press, 2014); James Green, (ed.), *Cyber Warfare: A Multidisciplinary Analysis*, (London: Routledge, 2015).

²³ Steven Pinker, *The Better Angels of Our Nature: A History of Violence and Humanity*, (London: Penguin Books, 2012), pp. XIX, 714.

before,”²⁴ his explanation is entirely different. In contrast to the Pinker’s “tale of six trends, five inner demons, four better angels, and five historical forces,”²⁵ which was shaped by his background in psychology, Morris’s analytical examination of “the whole ten-thousand-year-long story of war since the end of the last ice age” led him to conclude that, in fact, it is “war [that] has made the world safer” as “war made governments, and governments made peace.”²⁶ While the failure of the RMA of NLW, as it was shown in this research, has been shaped by general public tolerance of enemy civilian casualties during military operations, it seems important to test these two explanations of the “Declining Violence” in the 21st century in the light of the present research findings.

Pinker’s main argument is that different historical social circumstances have forced humans to “reframe violence as a problem to be solved rather than a contest to be won”. According to him, there are five historical developments that have led to this conclusion: (1) the development of a stronger state and judiciary with a monopoly on the legitimate use of force; (2) the international commerce that allows the exchange of goods and ideas over longer distances making other people become more valuable alive than dead; (3) the feminisation process that have empowered women and decreased cultural inclination towards violence that characterise largely a male pastime; (4) the globalisation and cosmopolitanism that have prompted societies to understand other people and embrace them, rather than fight them; (5) the increasing reasonability in human affairs that have been forcing people to recognise the futility of violence. These five historical developments, according to Pinker, have led people to favour their internal peaceable motives – *Better Angels* – Empathy, Self-Control, Moral Sense and Reason, and to reject their inner drives toward aggression and violence – *Inner Demons* – Instrumental Violence, Dominance, Revenge, Sadism and Ideology.²⁷ While it was not the aim of this research to criticise Pinker’s theory directly, the analysis of the American, Russian and Israeli attitudes to enemy civilian casualties offered a much more selfish perception of human life that is based more on revenge and dominance, than on universal empathy, moral sense and reason – and the resultant failure of military organisations to develop and employ weapons that would minimise unnecessary violence (i.e., NLW) is a clear evidence of that. It is difficult to disagree with Pinker on the fact that the traceable decreasing violence within Western societies has been caused by *Better Angels*, however, when it comes to the

²⁴ Ian Morris, *War – What Is Good For? The Role of Conflict in Civilisation, from Primates to Robots*, (London: Profile Books, 2014), p. 10.

²⁵ Steven Pinker, *The Better Angels of Our Nature...*, p. XXII.

²⁶ Ian Morris, *War – What Is Good For?...*, pp. 10, 8.

²⁷ Steven Pinker, *The Better Angels of Our Nature...*

contemporary ways of war, it seems right to suggest that the only *Angel* that restrains the violence is International Humanitarian Law. Though one may argue that this *Angel* is a by-side product of human internal peaceable motives and liberal values, which have forced international community to restrict the level of violence during military clashes, Chris Jochnick and Roger Normand, who critically analysed the history of the laws of war, claim the opposite, stating that:

[The] Examination of the historical development of these laws reveals that despite noble rhetoric to the contrary, the laws of war have been formulated deliberately to privilege military necessity at the cost of humanitarian values. As a result, the laws of war have facilitated rather than restrained wartime violence. Through law, violence has been legitimated.²⁸

As it was discussed in chapter 2, the International Humanitarian Law is a double-sided sword that intends to restrict the violence, on the one hand, but, on the other, create situations when, as Donald Rumsfeld stated, “our forces are allowed to shoot somebody and kill them, but they’re not allowed to use a non-lethal riot control agent [i.e., NLW].”²⁹ The International Humanitarian Law is a much politicised topic that facilitates the harming enemy civilians, rather asks their minimisation. And NLW are not an exception, as, for example, analysing the regulatory history of the small arms munitions, Paul Cornish stated that:

When a society feels under threat, from war, terrorism or violent crime, almost any effective weapon is likely to be seen as legitimate – regardless of the damage it can cause to the human body.³⁰

His analysis points to the politicisation of the International Arms Control Regimes and the cynical exploitation of international institutions for political reasons. His best example is the attempt of the Swedish experts in 1974 to ban the American 5.56mm cartridge under the auspices of the Red Cross due to “humanitarian concerns” and promote their own 7.62mm calibre, which, in fact, was capable of delivering even worse wounds.³¹ In other words, in his quite technical analysis, he points out the fact that the international legal system is controlled more by political self-interests covered by the rhetoric of “humanitarian concerns”, rather by our *Better Angels* – Moral Sense and Reason. Following Pinker’s terminology, the RMA of NLW failed because, despite the fact that *Better Angels* overcame *Inner Demons* within internal

²⁸ Chris Jochnick, Roger Normand, ‘The Legitimation of Violence: A Critical History of Laws of War’, *Harvard International Law Journal*, Vol. 35, No. 1, 1994, p. 50.

²⁹ Quoted in Brad Knickerbocker, ‘The Fuzzy Ethics of Nonlethal Weapons’, *Christian Science Monitor*, 14 February 2003, <http://www.csmonitor.com/2003/0214/p02s01-usmi.html>, [accessed:28 November 2015].

³⁰ Paul Cornish, ‘Unlawful Wounding: Codifying Interaction between Bullets and Bodies’, in Paul Cornish, Nicholas Saunders, (ed.), *Bodies in Conflict: Corporeality, Materiality and Transformation*, (London: Routledge, 2014), p. 20.

³¹ Paul Cornish, ‘Unlawful Wounding...’, pp. 14, 19.

human affairs of Western societies, these societies failed in doing so in their relation with their enemies – and this, eventually, quite weakens the very argument of *The Better Angels of Our Nature*.

Unlike Pinker, who structures his arguments on the increasing morality of human beings, Ian Morris tries to produce a more pragmatic explanation of the “Declining Violence” in human affairs. While emphasising only one of Pinker’s historical social developments – a stronger state and judiciary with a monopoly on legitimate use of force – Morris argues that throughout history violence has always been declining in big societies (Ancient Empires, Early Modern Empires or the contemporary *Pax Americana*) because:

The only way to make these large societies work was for their rulers to develop stronger governments, and one of the first things these governments had to do, if they wanted to stay in power, was suppress violence within the society.³²

In other words, it is not that humans have become “better souls” at the end of the 20th century, but they repeatedly had been forced to disown violence by their own collective request for a wealthier life. As Morris argues: “the men who ran these governments hardly ever perused policies of peacemaking purely out of the goodness of their hearts. They cracked down on killing because well-behaved subjects were easier to govern and tax.” Analysing human history, Morris concludes that “governments have made us safer and the war is pretty much the only way we have discovered to make governments” and as “the winners of wars incorporate the loser into larger societies ... with the passage of time – maybe decades, maybe centuries – the creation of bigger society tends to make everyone, the descendant of victors and vanquished alike, better-off.” In other words, wars create bigger societies and bigger societies create peace within these societies. In his analysis of human history, Morris distinguished between two types of war. While the first one – “the productive way of war” – when a winner successfully incorporates the loser creating bigger societies and making life safer and wealthier; the second one – “the counterproductive way of war” – when a stronger actor fails to incorporate the weaker rivals, which ultimately breaks down large societies, impoverishing people and making their lives more dangerous. He claims that after the “counterproductive” wars ruined Ancient Empires and engendered the Dark Ages, Early Modern Europe reinvented the “productive” way of war, discovering that:

³² Ian Morris, *War – What Is Good For?...*, p. 8.

The wealth of nations could be increased most not by plundering or even taxing downtrodden subjects, but by using state power to make as many people, as possible, as free, as possible to trade in bigger and bigger markets.³³

The “Decreasing Violence” and relative peace within the Western Hemisphere (in its political, rather than geographical borders), according to Morris, is not an outcome of humans’ better nature, but a result of 500 years of “productive” wars that were fought between the nations that inhabit this global, yet in many aspects limited, society. Interestingly enough, while Morris comes to a paradoxical conclusion that it is the process of waging (“productive”) wars that make life safer, he does not claim that these wars must be accompanied by high levels of violence. In other words, according to his theory, the most important characteristic of war is its “productiveness” (i.e., the inclusion of the loser’s society into the society of the winner), and, as far as a war has “productive” ends, any level of violence (the highest possible or the lowest required) is acceptable. In the final chapter of his book, Morris analyses the latest American Global War on Terror, suggesting that the way the West has been fighting this war is, in fact, “counterproductive”, as the West has failed to incorporate rival societies (i.e., Afghani and Iraqi). Fighting terror, according to Morris, is reminiscent of the Roman Emperor Domitian’s dilemma, who in 85 A.D. drew a radical conclusion that “Rome no longer had much to gain from productive war.”³⁴

Morris states that “we kill because the grim logic of the game of death rewards it ... [and] that is why we cannot just decide to end the war.” However, what if does “killing” itself make wars “counterproductive”? After all, the “productive” aim of war in the 21st century is to make as many people, as possible, as free, as possible and to win their hearts and minds, rather than killing them. The proposition that “killing” makes wars “counterproductive” makes Morris’s paradoxical conclusion that “productive war” makes peace even more puzzling, as it contradicts not only the logical perception of the consequences of war (i.e., destruction), but also shakes the very understanding of war as a peak of human violence. While this seemingly controversial argument will be discussed in more details in the last part of this chapter, it seems right to conclude that following Morris’s theory, the RMA of NLW failed because 500 years of “productive” wars, which have made the contemporary world the safest since the Stone Age, were also always accompanied by extreme violence. The long-term history suggests that “the logic of the game of death” has been rewarding, however, as Morris himself claims: “all the running we have done in the last ten thousand years has transformed our society, changing the

³³ Ian Morris, *War – What Is Good For?...*, pp. 8, 9, 337-338.

³⁴ Ian Morris, *War – What Is Good For?...*, p. 113.

payoffs in the game.”³⁵ Unfortunately, as it was discussed throughout this research, the social requirement to minimise enemy civilian casualties during this game has not been one of these transformations.

To conclude this discussion on the absence of the RMA of NLW and the “Declining Violence” it is important to answer the question in the title of this research – do we really care about enemy civilian casualties? On the one hand, Pinker’s appeal for increasing empathy and morality that human beings express to one another within their societies proved itself as incomplete in reflecting the way of war in the beginning of the 21st century. This chapter was written just several days after 13 November 2015 Paris attacks, a series of coordinated terrorist assaults that occurred in the French capital taking 130 lives. Two days after the attacks, French President Francois Hollande stated that “France will be merciless towards these barbarians,” ordering the biggest French air raid on ISIS’s targets that has taken place in Syria so far, a “massive” attack as described by the French defence ministry spokesman.³⁶ On 21 November 2015, 8 days after the attacks, the UN Security Council adopted resolution 2249 (2015) that called upon Member States to take “all necessary measures” to prevent and suppress terrorist acts on territory under the control of ISIS in Syria and Iraq,³⁷ proving that our *Inner Demons* are very much alive and kicking. While in its call, the UN Security Council insisted that Member States have to act “in compliance with international law, in particular with the United Nations Charter, as well as international human rights, refugee and humanitarian law;”³⁸ it is important to remember, that, as it was noted above, none of these “laws” explicitly demands the minimising of enemy civilian casualties. When it comes to waging wars against foreign societies, it is difficult not to concur with Ralph Peters’s already cited observation that:

The citizenry of the United States, in fact, will tolerate the killing of enormous numbers of foreigners, so long as that killing does not take too long, victory is clear-cut, friendly casualties are comparatively low, and the enemy dead do not have names, faces, and families.³⁹

While Peters focused primarily on American society, his conclusion seems to be generalisable and it depicts well the minor part played by *Better Angels* in minimising the harming of enemy

³⁵ Ian Morris, *War – What Is Good For?...*, pp. 337, 378.

³⁶ Doug Bolton, ‘French warplanes bombard Isis Raqqa strongholds two days after Paris attacks’, *Independent*, 18 November 2015, <http://www.independent.co.uk/news/world/middle-east/french-warplanes-bombard-isis-strongholds-in-raqqa-two-days-after-paris-attacks-which-killed-132-a6735636.html>, [accessed: 29 November 2015].

³⁷ UN Security Council, *UN Security Council resolution 2249 (2015) on ISIL*, New York, 21 November 2015.

³⁸ UN Security Council, *UN Security Council resolution 2249...*

³⁹ Ralph Peters, *Fighting for the Future: Will America Triumph?*, (Mechanicsburg: Stackpole Books, 2001), p.105.

civilians. In other words, from a moral perspective, due to the historical cultural predispositions shaped by the long history of bloody wars and violence, we just do not care about civilian population of a society that raised people who have dared to aim a blow at us, as long as the war is fast, decisive, with no painful costs (human, as well as financial) and the terrible consequences of our fighting are hidden from our eyes and minds.

On the other hand, according to Ian Morris, there is a more pragmatic explanation of the relationship between war and violence, and, in fact, violence during war is just a tool, rather than a goal, of war. The success of a war, according to Morris, is measured by its level of “productiveness” (i.e., the winner’s ability to absorb the loser, thus, creating a larger society), rather than the level of applied violence. Following this logic, it is possible to assume that the level of violence in contemporary conflicts is no more than a cultural relic of the long-term tradition of making war. According to this theory, we do not care about enemy civilian casualties because our history tells us not only that war makes us safer and wealthier, but also that war ultimately means unprecedented (though regulated) violence, as General William Tecumseh Sherman put it in 1864: “War is cruelty and you cannot refine it.”⁴⁰ The question is, however, if this much enrooted historical cultural narrative makes wars in the 21st century “counterproductive” – would we care more for enemy civilians? – if not for moral reasons, then, at least, for pragmatic selfishness, because, if Morris is right, fighting “counterproductive” wars ultimately leads to the collapse of the society. Interestingly enough, the analysis of America’s failure to fight “productive” wars in Iraq and Afghanistan offers a small ray of optimism.

A Ray of Optimism?

Analysing the historical examples of technologies that failed to ignite an RMA, Lieutenant Colonel Gregory Wilmoth differentiate between two different results to which the military employment of initially failing technologies might lead. The first one is an absolute rejection due to technological unfeasibility. According to Wilmoth, the best example of such technology was the glider, which after a very short operational success in the Second World War became obsolete due to its technological inferiority and more successful alternative technologies (i.e., air-assault aircraft and helicopter). The second pathway describes a technology, which initially failed due to different technological disadvantages and lacking conceptualisation, but which,

⁴⁰ General William Tecumseh Sherman in a letter to the Mayor of Atlanta, 12 September 1864.

after a period of time, makes a come-back when the operational needs require so. The best example, according to Wilmoth, is the technology of in-flight refuelling. Pioneered in the 1920s to extend the range of wooden biplanes, the idea of in-flight refuelling was generally abandoned due to many technological obstacles and general lack of operational need, as aircraft range and endurance improved during the 1930s. In the late 1940s, however, in-flight refuelling got a second chance to extend the range of strategic bombers in the context of the Cold War. During the following decades, the technology quickly spread throughout different services to extend the range of the tactical strike aircrafts. As Wilmoth concluded: “What was once a stunt and then a niche technology blossomed into a widespread innovation.”⁴¹

Keeping in mind these two possible results of a failed RMA, and the analysis of the military employment of NLW discussed throughout this research it seems right to argue that the story of NLW is more similar to the technology of in-flight refuelling, than that of gliders. In other words, as NLW have not been rejected by military for more than a quarter of century and, so far, mainly due to lacking conceptualisation of operational needs, they have been a niche technology intended for law enforcement capabilities. It could well be that, similar to the technology of in-flight refuelling, a clearly defined military necessity could turn NLW into a widespread innovation. As discussed in chapter 1, the military necessity for an RMA comes only when there is a military challenge that requires a development of novel organisational and operational concepts for the employment of innovative technologies. While it impossible to foreseen the future of NLW, the analysis of the military experience during in the first decade of the 21st century offers a ray of optimism.

One of the most distinctive characteristics of warfare in the first decade of the 21st century was the great confidence that military organisations felt regarding the Information-Technology RMA that occurred during the 1990s. The advocates of this RMA believed that a combination of intelligence, surveillance and reconnaissance; advanced command, control, communications, computers and information; and precision-strike weapons offers a rapid and decisive victory with low friendly casualties and limited collateral damage.⁴² Focused on the prevalence of the air power, the proponents of this RMA believed that it could save “enemy lives through the use of precision to minimise non-combatant fatalities, and friendly lives by the substitution of technology for manpower and the creation of battlefield conditions in which

⁴¹ Gregory Wilmoth, ‘False-Failed Innovations’, *Joint Force Quarterly*, Vol. 22, 1999, pp. 51-57.

⁴² Elizabeth Stanley-Mitchell, ‘The Digital Battlefield: What Army Transformation Efforts Say about its Professional Jurisdiction’, in Don Snider, Gayle Watkins, (ed.), *The Future of the Army Profession*, (New York: McGraw Hill, 2003), pp. 155-178.

land elements ... can do their job without significant resistance.”⁴³ While, in theory, this RMA was promised to provide an overwhelming victory, the practice proved the opposite. The American experience in Iraq and Afghanistan,⁴⁴ as well as the IDF’s encounter with Hezbollah in Lebanon in 2006,⁴⁵ proved that this RMA has very little to offer, as Colin Gray put it: “it is not unreasonable to ask why it has been that our ever-improving battle space knowledge has been compatible with so troubled a course of events in the 2000s in Iraq and Afghanistan.”⁴⁶

The interesting fact is that the failure of this RMA can be easily explained by an examination of its roots – the Information-Technology RMA was developed in the context of the Cold War, when the U.S. military was looking for new operational concepts and new technologies to meet the challenge of the deep-echeloned Soviet rear.⁴⁷ In other words, the unmet military challenge that had been bridged by this RMA was “the orderly advance of their [Soviet] follow-on echelons”⁴⁸ during symmetrical conflict against traditional military. It is not surprising then that this RMA was very helpful in defeating the Iraqi military (twice, in 1991 and in 2003) but failed to provide satisfactory results against insurgencies and terror organisation. This failure, however, is rooted not in technological sophistication of the enemy, but in the different nature of the conflict. While the Information-Technology RMA was intended to defeat conventional military, “insurgencies are defeated not by killing insurgents, but by winning the support of the population and thus denying the insurgents both refuge and recruits.”⁴⁹ In other words, as many scholars already pointed out, counter-insurgency and counter-terrorism are about winning “hearts and mind”, rather than a bold fighting against

⁴³ Benjamin Lambeth, *The Transformation of American Air Power*, (Ithaca: Cornell University Press, 2000), p. 303.

⁴⁴ Stephanie Carvin, Michael Williams, *Law, Science, Liberalism and the American Way of Warfare*, (Cambridge: Cambridge University Press, 2015), chapter 5; Richard Lock-Pullan, ‘U.S. Military Strategy, Strategic Culture, and the “War on Terror”’, in John Owens, John Dumbrell, (ed.), *America’s “War on Terrorism”: New Dimensions in U.S. Government and National Security*, (Lanham: Lexington Books, 2008).

⁴⁵ Avi Kober, ‘The Israel Defence Forces in the Second Lebanon War: Why the Poor Performance?’, *The Journal of Strategic Studies*, Vol. 30, No. 1, 2008, pp. 3-40.

⁴⁶ Colin Gray, *Making Strategic Sense of Syber Power: Why the Sky Is Not Falling*, (Carlisle: Strategic Studies Institute, 2013), p. 51.

⁴⁷ See Alvin Toffler, Heidi Toffler, *War and Anti-War: Survival at the Dawn of the 21st Century*, (Boston: Little, Brown and Company, 1993), chapter 7; Diego Ruiz Palmer, ‘The NATO-Warsaw Pact Competition in the 1970s and 1980s: A Revolution in Military Affairs in the Making or the End of a Strategic Age’, *Cold War History*, Vol 14, No. 4, 2014, pp. 533-574.

⁴⁸ Alvin Toffler, Heidi Toffler, *War and Anti-War...*, p. 50.

⁴⁹ James Dobbins, ‘Iraq: Winning the Unwinnable War’, *Foreign Affairs*, Vol. 84, 2005, No. 1, p. 19.

“invisible” enemy.⁵⁰ And, from that perspective, the Information-Technology RMA has had, indeed, very little to offer.

It seems, however, that the American military has been learning lessons from its failure in Iraq and Afghanistan and the understanding that in fighting counter-insurgency the “priority should be given to securing the civilian population, not hunting down insurgents”⁵¹ has begun to spread through the circles of the U.S. military decision-makers. In 2015, commenting on the American air-strikes of ISIL in Syria, Lieutenant General Bob Otto, the U.S. Air Force’s deputy chief of staff for intelligence, surveillance and reconnaissance, stated that:

We believe if you inadvertently kill innocent men, women and children, then there’s a backlash from that ... we might kill three and create 10 terrorists. It really goes back to the question of are we killing more than were making?⁵²

In other words, the American military has begun to understand that causing civilian casualties is pragmatically counterproductive in fighting insurgencies and terrorist organisations. Changing military doctrine, however, as Alvin and Heidi Toffler claim, is “like trying to stop a tank armour by throwing marshmallows at it. The military, like any huge modern bureaucracy, resists innovation – especially if the change implies the downgrading of certain units and the need to learn new skills and to transcend service rivalries.”⁵³ And, therefore, it is not surprising that the U.S. military intuitively looks for a solution in an existent technology, as Colonel Steve Warren, a spokesman for the anti-ISIL campaign, stated “the amount of care that we have taken to preserve civilian life, to preserve civilian infrastructure, is unprecedented” because the air-strikes of the U.S. and its allies “are the most precise in the history of warfare.”⁵⁴ The NATO-led Libya campaign in 2011, however, already showed that neither precision weapons, nor the strict rules of engagement do not make war “productive”. Despite the fact that “advanced munitions, particularly low-collateral, inert and fused weapons such as Hellfire, Dual Mode Seeker Brimstone and Paveway IV were highly prized” and the campaign “was conducted throughout with very restrictive rules of engagement, with a mandate to protect the population and minimise collateral damage to the infrastructure in order

⁵⁰ For example see: Michael Howard, ‘What’s in a Name? How to Fight Terrorism’, *Foreign Affairs*, Vol. 81, No. 1, 2002, pp. 8-13; Thomas Mockaitis, ‘Winning Hearts and Minds in the ‘War on Terrorism’’, *Small Wars & Insurgencies*, Vol. 14, No.1, 2003, pp. 21-38;

⁵¹ James Dobbins, ‘Iraq: Winning ...’, p. 19.

⁵² Lieutenant General Bob Otto quoted in ‘Russia’s Unguided Weapons in Syria Could Ricochet on Moscow’.

⁵³ Alvin Toffler, Heidi Toffler, *War and Anti-War...*, p. 52.

⁵⁴ Colonel Steve Warren quoted in ‘Russia’s Unguided Weapons in Syria Could Ricochet on Moscow’.

to help the country back on its feet after the cessation of violence”⁵⁵ – the violence in Libya has not ceased, and it seems that a more fundamental transformation has to occur to make contemporary counter-insurgency wars more “productive”.

Christopher Coker in his *Humane Warfare, The Future of War* and most recent *Warrior Geeks*, proposes an idea that by exploiting different novel technologies the killing in war may become redundant.⁵⁶ While he explores the radical idea that war might be “technicized” to a level that “we may be able to pass beyond the ‘death barrier’,”⁵⁷ this military transformation will require not only technological maturity, but also the socio-political environment that will facilitate these fundamental changes. In other words, before Coker’s technologies (e.g., genetic engineering of warriors, robots controlled by artificial intelligence, cyborgs, etc.) will fundamentally change the conduct of war, they have to pass the test of political-military necessity, i.e., there has to be a clearly defined political-military challenge that these technologies are intended to bridge, and the political leadership has to have a socio-political reason to cope with this challenge.

The RMA of NLW, as any fundamental military transformation, is no different. However, as discussed above, the future of NLW will be determined by the U.S. military and there are two reasons why the observation given by Lieutenant General Bob Otto offers a ray for optimism. The first is the fact that the U.S. political-military decision-makers have come to the understanding that counter-insurgency presents an unmet challenge that has to be bridged by a combination of novel operational and organisational concepts and innovative technologies.⁵⁸ Only time will show whether NLW will be a part of the required military transformation, but, as Theo Farrell and Terry Terriff put it, “whereas previously the focus had been on destroying targets,” today “it may be sufficient or indeed preferable to disable targets,”⁵⁹ and NLW are intended to do exactly that. The second reason for optimism regarding the future of NLW is, according to Ian Morris’s theory, the “counterproductiveness” (i.e., the inability of winners to incorporate losers into a larger society) of contemporary ways of war

⁵⁵ Elizabeth Quintana, ‘The War from the Air’, in Adrian Johnson, Saqeb Mueen, (ed.), *Short War, Long Shadow: The Political and Military Legacies of the 2011 Libya Campaign*, Whitehall Report 1-12, (London: Royal United Services Institute for Defence and Security Studies, 2012), pp. 34, 31.

⁵⁶ Christopher Coker, *Humane Warfare*, (London: Routledge, 2002); Christopher Coker, *The Future War: The Re-Enchantment of War in the Twenty-First Century*, (Oxford: BlackWell, 2004); Christopher Coker, *Warrior Geeks: How 21st Century Technology is Changing the Way We Fight and Think About War*, (London: C.Hurst & Co, 2013).

⁵⁷ Christopher Coker, *The Future War...*, p. 141.

⁵⁸ Theo Farrell, Terry Terriff, ‘Military Transformation in NATO: A Framework for Analysis’, in Theo Farrell, Terry Terriff, Frans Osinga, (ed.), *Transformation Gap? : American Innovations and European Military Change*, (Stanford: Stanford University Press, 2010)

⁵⁹ Theo Farrell, Terry Terriff, ‘Military Transformation in NATO...’, p. 5.

against insurgencies and terrorism. The US-led West failed to make Iraqi, Afghani (as well as Libyan, Yemeni, Syrian, etc.) people as free as possible to trade in bigger and bigger markets. To make counter-insurgency “productive”, its success or failure has to be measured not by body counts or a footage of “liberated” territory, but according to the public opinion of the local population. As the maximum possible minimisation of enemy civilian casualties is essential in achieving this, NLW are, again, intended to do exactly that.

The opponents of military employment of NLW might claim that these weapons suitable for police officers, rather than war-fighters. According to Ian Morris, however, the U.S. is the “globocop” of the early 21st century, and, it seems that it begins to understand that in conducting wars against insurgencies, “policing” (i.e., disabling, incapacitating, minimising collateral damage, etc.) may be more effective than “war-fighting” (i.e., destroying and killing). The RMA of NLW may eventually occur, not because of moral or political costs of causing enemy civilian casualties, but due to the potential effectiveness of these weapons in counter-insurgency. As the history of military innovations suggests, however, without a clear and decisive political directive and support, this can be a very long process.

BIBLIOGRAPHY

1. Primary Sources:

1.1 English Language:

1.1.1 International Conventions and Treaties:

- 1907 Hague Convention IV Respecting the Laws and Customs of War on Land.
- 1949 Geneva Conventions I, II, III and IV with 1977 Additional Protocols I and II.
- 1977 Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), (adopted 8 June 1977 entered into force 7 December 1978), 16 ILM 1391 (1977), Article 57(2/A/II-III).
- Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects (adopted 10 October 1980 and entered into force 2 December 1983), 19 ILM 1523.
- Convention on the Prohibition of the Development, Production, and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, (adopted 10 April 1972 and entered into force on 26 March 1975), 11 ILM 309.
- Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, (adopted 13 January 1993, entered into force 29 April 1997), 32 ILM 800.
- Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction, (adopted 18 September 1997 entered into force 1 March 1999), 36 I.L.M 1507.
- League of Nations, *Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare*, Geneva, 1925.
- Protocol for the Prohibition of the Use in War Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, (adopted 17 June 1925, entered into force 8 February 1928) , 94 L.N.T.S. 65.
- Protocol on Blinding Laser Weapons (Protocol IV), (adopted 13 October 1995 entered into force 30 July 1998), 35 ILM 1218.
- Protocol on Non-Detectable Fragments (Protocol I), (adopted 10 October 1980 entered into force 2 December 1983), 19 ILM 1529.
- Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III), (adopted 10 October 1980 entered into force 2 December 1983), 19 ILM 1535.
- Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices (Protocol II), (initially adopted 10 October 1980 entered into force 2 December 1983, review adopted in 3 May 1996 entered into force 3 December 1998), 35 ILM 1206.

1.1.2 Official Documents:

- Amnesty International, *Annual Report 2004*, <https://www.amnesty.org/en/documents/pol10/0004/2004/en/>, [accessed: 24 June 2015].
- Amnesty International, *Amnesty International Report 2005*, <http://web.amnesty.org/report2005/index-eng>, [accessed: 24 June 2015].
- Amnesty International, *Georgia-Russia conflict: Protection of civilians and accountability for abuses should be a priority for all*, Public Statement, 1 October 2008, <https://web.archive.org/web/20081111011924/http://www.amnesty.org/en/library/asset/EUR04/004/2008/en/3b540f63-8ef1-11dd-8d03-3f760a3cc4a3/eur040042008en.pdf>, [accessed: 14 March 2016].
- Amnesty International, *Report 2006: the state of the world's human rights* <https://www.amnesty.org/en/documents/pol10/0001/2006/en/>, [accessed: 24 June 2015].
- Amnesty International, *Report 2009: the state of the world's human rights*, 2009, <https://www.amnesty.org/en/documents/pol10/002/2009/en/>, [accessed: 24 June 2015].
- Center for Army Lessons Learned (CALL), *Afghanistan Civilian Casualties Prevention Handbook* 12-16, June 2012.
- Council of European Union, *EU Statement Following Israel's Operation Cast Lead in Gaza Calling for an Immediate and Permanent Ceasefire*, 30 December 2008.
- Defence Science Board, Department of Defense, *Challenges to Military Operations in Support of U.S. Interests*, Volume II, Main Report, Washington, December 2008.
- Department of the Army Headquarters, United States Army, *AirLand Operations: A concept for the Evolution of AirLand Battle for the Strategic Army of the 1990s and Beyond: TRADOC Pamphlet 525-5*, Fort Monroe, 4 August 1991.
- Department of the Army Headquarters, United States Army, *Concept for Nonlethal Capabilities in Army Operations: TRADOC Pamphlet 525-73*, Fort Monroe, 1 December 1996.
- Department of the Army Headquarters, United States Army, *Force Operating Capabilities: TRADOC Pamphlet 525-66*, Fort Monroe, 7 March 2008.
- Department of the Army Headquarters, United States Army, *Force XXI Operations: A Concept for the Evolution of Full-Dimensional Operations for the Strategic Army of the Early Twenty-First Century TRADOC Pamphlet 525-5*, Fort Monroe VA, 1 August 1994.
- Galdi, Theodor, *Revolution in Military Affairs? - Competing Concepts, Organizational Responses, Outstanding Issues*, Congressional Research Service Report to the Congress, (CRS 951170F, 11 December 1995).
- Homeland Security Research Cooperation (HSRC), *Non-Lethal Weapons: Technologies and Global Market – 2012-2020*, 2011, <http://www.homelandsecurityresearch.com/2011/10/non-lethal-weapons-technologies-global-market-2012-2020/>, [accessed: 27 November 2015].
- Human Rights Watch, *Fatally Flawed: Cluster Bombs and Their Use by the United States in Afghanistan*, 2002, New York.

- Israel Ministry of Foreign Affairs, *FAQ: The Operation in Gaza-Factual and Legal Aspects*, 16 August 2009, [http://mfa.gov.il/MFA/ForeignPolicy/FAQ/Pages/FAQ-Operation in Gaza-Legal Aspects.aspx#13](http://mfa.gov.il/MFA/ForeignPolicy/FAQ/Pages/FAQ-Operation%20in%20Gaza-Legal%20Aspects.aspx#13), [accessed: 28 October 2015].
- Israel Ministry of Foreign Affairs, *Goldstone Report: Interviews with PM Netanyahu on Israeli Television*, (communicated by the Prime Minister's Media Adviser), 17 September 2009, http://mfa.gov.il/MFA/PressRoom/2009/Pages/Goldstone_Report_Interviews_PM_Netanyahu_17-Sep-2009.aspx, [accessed: 28 October 2015].
- Israel Ministry of Foreign Affairs, *Israel Rejects General Assembly Resolution*, 5 November 2009, http://mfa.gov.il/MFA/PressRoom/2009/Pages/Israel_rejects_General_Assembly_resolution_5-Nov-2009.aspx, [accessed: 28 October 2015].
- Israel Ministry of Foreign Affairs, *Israel's Analysis and Comments on the Gaza Fact-Finding Mission Report*, (communicated by the Foreign Ministry Spokesperson), 15 September 2009, http://mfa.gov.il/MFA/PressRoom/2009/Pages/Israel_initial_reaction_Goldstone_Mission_15-Sep-2009.aspx, [accessed: 28 October 2015].
- Israel Ministry of Foreign Affairs, *The 2014 Gaza Conflict, 7 July – 26 August 2014: Factual and Legal Aspects*, Jerusalem, May 2015.
- Israel's State Bureau of Statistics, *Israel's Foreign Trade in Goods, by Country - September 2015*, Jerusalem, 25 October, 2015, http://www.cbs.gov.il/reader/newhodaot/hodaa_template_eng.html?hodaa=201516283, [accessed: 30 October 2015].
- Joint Non-Lethal Weapons Directorate, *Annual Report 2012: Non-Lethal Weapons for Complex Environments*, 2012.
- Joint Non-Lethal Weapons Directorate, *Current Non-Lethal Weapons*, <http://jnlwp.defense.gov/CurrentNonLethalWeapons.aspx>, [accessed: 27 August 15].
- Joint Non-Lethal Weapons Directorate, *Developed Non-Lethal Weapons: Acoustic Hailing Devices*, <http://jnlwp.defense.gov/CurrentNonLethalWeapons/AcousticHailingDevices.aspx>, [accessed: 1/12/2013].
- Joint Non-Lethal Weapons Directorate, *Developing Non-Lethal Weapons: The Pre-emplaced Electric Vehicle Stopper*, <http://jnlwp.defense.gov/DevelopingNonLethalWeapons/PreEmplacedElectricVehicleStopper.aspx>, [accessed: 1/12/2013].
- Joint Non-Lethal Weapons Directorate, *Developing Non-Lethal Weapons*, <http://jnlwp.defense.gov/DevelopingNonLethalWeapons.aspx>, [accessed: 27 August 15].
- Joint Non-Lethal Weapons Directorate, *Future Non-Lethal Weapons*, <http://jnlwp.defense.gov/FutureNonLethalWeapons.aspx> [accessed: 1/12/2013].
- Joint Non-Lethal Weapons Directorate, *Mission Payload Module – Non-Lethal Weapons System (MPM-NLWS) Fact Sheet*, October 2011.
- Joint Non-Lethal Weapons Directorate, *Non-Lethal Weapons Reference Book*, 30 June 2011.
- Joint Non-Lethal Weapons Program, *Annual Report*, 2012.
- Joint Non-Lethal Weapons Program, *Non-Lethal Weapons Requirement Fact Sheet*, <http://jnlwp.defense.gov/pdf/pressroom/NLW%20Requirements%20Fact%20Sheet%20Oct%202011.pdf>, [accessed: 24 June 2015].

- Joint Non-Lethal Weapons Program, *Organization*, <http://jnlwp.defense.gov/About/Organization.aspx>, [accessed: 24 June 2015].
- Joint Non-Lethal Weapons Program, *Purpose*, <http://jnlwp.defense.gov/about/purpose.html>, [accessed: 26 August 2015].
- National Research Council, *An Assessment of Non-Lethal Weapons: Science and Technology*, Washington, 2003.
- NATO, *NATO Policy on Non-Lethal Weapons*, Brussels, 13 October 1999.
- Security Planning Corporation, *Non-Lethal weapons for Law Enforcement: Research Needs and Priorities: A Report to the National Science Foundation*, (Washington: Security Planning Corporation, 1972).
- Stockholm International Peace Research Institute (SIPRI), *The Problem of Chemical and Biological Warfare. Volume I: The Rise of CB Weapons*, 1971.
- The Command and General Staff School, *Principles of Strategy for an Independent Corps or Army in a Theater Of Operations*, (Fort Leavenworth: The Command and General Staff School Press, 1936).
- The Independent International Fact-Finding Mission on the Conflict in Georgia, *Report*, 2009.
- The Intelligence and Terrorism Information Center (ITIC), *Estimate of the number of Hamas operatives killed in Operation Protective Edge (Part Eleven)*, Tel-Aviv, 20 July 2015.
- The Israel Democracy Institute, *The Peace Index: August 2014*, 12 August 2014, <http://www.peaceindex.org/indexMonthEng.aspx?num=283&monthname=August#.VklIwdLhDcs>, [accessed: 10 November 2012].
- The Israel Democracy Institute, *The Peace Index: October 2015*, 5 October 2015, <http://www.peaceindex.org/indexMonthEng.aspx?num=298>, [accessed: 10 November 2015].
- The U.S. Army Program Executive Office Soldier, *Equipment Portfolio*, 2014.
- U.S. Department of Defence, *Policy for Non-Lethal Weapons, Directive 3000.3E*, Washington, 25 April 2013.
- U.S. Department of Defence, *Policy for Non-Lethal Weapons, Directive 3000.3*, Washington, 9 July 1996.
- U.S. Department of State, Policy Planning Staff, *Non-Lethal and Discriminate Weapons and Technologies*, Washington, 1991.
- U.S. Joint Chiefs of Staff, *Capstone Concept for Joint Operations: Joint Force 2020*, Washington, 10 September 2012.
- U.S. Joint Chiefs of Staff, *Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms*, 8 November 2010 (as Amended Through 15 October 2013).
- U.S. Mission Geneva, *U.S. Response to Human Rights Commission Resolution on Chechnya*, 26 April 2000, Geneva, <https://web.archive.org/web/20080906094913/http://geneva.usmission.gov/press2000/0427chechnya.html>, [accessed: 14 March 2016].
- UN General Assembly, *Resolution 3379: Elimination of All Forms of Racial Discrimination*, 10 November 1975, New York.

- UN Human Rights Council, *Human Rights in Palestine and Other Occupied Arab Territories: Report of the United Nations Fact-Finding Mission on the Gaza Conflict*, 25 September 2009.
- UN Human Rights Council, *Report of the Independent Commission of Inquiry Established Pursuant to Human Rights Council Resolution*, 24 June 2015.
- UN Security Council, *Veto List*, <http://research.un.org/en/docs/sc/quick>, [accessed: 27 October 2015].
- UN Security Council, *UN Security Council resolution 2249 (2015) on ISIL*, New York, 21 November 2015.
- United States Marine Corp, *Non-Lethal Weapons (NLW) Training and Readiness (T&R) Manual*, Washington, 2012.
- United States Government Accountability Office (GAO), *DOD Needs to Improve Program Management, Policy, and Testing to Enhance Ability to Field Operationally Useful Non-Lethal Weapons: Report to Congressional Requesters*, Washington, April 2009.

1.1.3 Speeches, Statements, Letters and Published Interviews with Officials:

- 'Full text: Obama's victory speech', *BBCNews*, 5 November 2008, http://news.bbc.co.uk/1/hi/world/americas/us_elections_2008/7710038.stm, [accessed: 13 June 2015].
- Benjamin Netanyahu, *Speech to US Congress*, 10 July 1996, <http://www.theglobeandmail.com/news/world/americas/transcript-of-prime-minister-netanyahus-address-to-us-congress/article2032842/>, [accessed: 28 October 2015].
- Bush, George, *A Distinctly American Internationalism*, Simi Valley, 19 November, 1999, <http://fas.org/news/usa/1999/11/991119-bush-foreignpolicy.htm>, [accessed: 23 June 2015].
- Bush, George, *A Period of Consequences*, Charleston, 23 September 1999, http://fas.org/spp/starwars/program/news99/92399_defense.htm, [accessed: 23 June 2015].
- Bush, George, *Address Before a Joint Session of the Congress on the United States Response to the Terrorist Attacks of September 11*, Washington, 20 September 2001, <http://www.presidency.ucsb.edu/ws/?pid=64731>, [accessed: 23 June 2015].
- Bush, George, *Address to the Nation on Iraq From Cincinnati, Ohio*, Cincinnati, 7 October 2002, <http://www.presidency.ucsb.edu/ws/?pid=73139>, [accessed: 24 June 2015].
- Bush, George, *Address to the Nation on the Terrorist Attacks*, Washington, 11 September 2001, <http://www.presidency.ucsb.edu/ws/?pid=58057>, [accessed: 23 June 2015].
- Bush, George, *Letter to Congressional Leaders Reporting on the National Emergency With Respect to Iraq*, Washington, 11 February 1991, <http://www.presidency.ucsb.edu/ws/?pid=19295>, [accessed: 23 June 2015].
- Bush, George, *Radio Address to the Nation on the Persian Gulf Crisis*, Washington, 5 January 1991, <http://www.presidency.ucsb.edu/ws/?pid=19193>, [accessed: 22 June 2015].
- Bush, George, *Remarks Accepting the Presidential Nomination at the Republican National Convention in New York City*, New York, 2 September 2004, <http://www.presidency.ucsb.edu/ws/index.php?pid=72727&>, [accessed: 28 August 2015].

- Bush, George, *Remarks Following a Meeting with the National Security Team*, Washington, 12 September 2001, <http://www.presidency.ucsb.edu/ws/?pid=58058>, [accessed: 24 June 2015].
- Bush, George, *Remarks in a Victory Celebration*, Washington, 4 November 2004, <http://www.presidency.ucsb.edu/ws/index.php?pid=62664>, [accessed: 24 June 2015].
- Bush, George, *Remarks on the War on Terror*, Washington, 6 September 2006, <http://www.presidency.ucsb.edu/ws/index.php?pid=779>, [accessed: 24 June 2015].
- Bush, George, *Remarks to the National Endowment for Democracy*, New York, 6 October 2005, <http://www.presidency.ucsb.edu/ws/?pid=73821>, [accessed: 24 June 2015].
- Bush, George, *The President's News Conference Following the North Atlantic Treaty Organization Summit Meeting in Brussels*, Brussels, 30 May 1989, <http://www.presidency.ucsb.edu/ws/?pid=17077>, [accessed: 22 June 2015].
- Bush, George, *The President's Radio Address*, Washington, 6 October 2001, <http://www.presidency.ucsb.edu/ws/?pid=24998>, [accessed: 24 June 2015].
- Bush, George, *Remarks at the United States Military Academy in West Point*, New York, West Point, 5 January 1993, <http://www.presidency.ucsb.edu/ws/?pid=20414>, [accessed: 22 June 2015].
- Carter, Jimmy, *The President's News Conference*, Chicago, 25 May 1978, <http://www.presidency.ucsb.edu/ws/?pid=30852>, [accessed: 22 June 2015].
- Clinton, William, *Address to the Nation on Airstrikes Against Serbian Targets in the Federal Republic of Yugoslavia (Serbia and Montenegro)*, Washington, 24 March 1999, <http://www.presidency.ucsb.edu/ws/?pid=57305>, [accessed: 23 June 2015].
- Clinton, William, *Interview With Dan Rather of CBS News*, Washington, 31 March 1999, <http://www.presidency.ucsb.edu/ws/?pid=57340>, [accessed: 23 June 2015].
- Clinton, William, *Message to the Congress Transmitting a Report on Somalia*, Washington, 13 October, 1993, <http://www.presidency.ucsb.edu/ws/?pid=47197>, [accessed: 22 June 2015].
- Donald Rumsfeld, *DoD News Briefing with Secretary Rumsfeld and General Pace*, Washington, 14 June 2005, <http://archive.defense.gov/Transcripts/Transcript.aspx?TranscriptID=3854>, [accessed: 24 June 2015].
- Eisenhower, Dwight, *Farewell Radio and Television Address to the American People*, January 17, 1961, <http://www.presidency.ucsb.edu/ws/index.php?pid=12086&st=farewell&st1>, [accessed: 27 November 2015].
- Eisenhower, Dwight, *Radio and Television Address to the American People on the Need for Mutual Security in Waging the Peace*, Washington, 21 May 1957, <http://www.presidency.ucsb.edu/ws/index.php?pid=11042&st=&st1>, [accessed: 21 June 2015].
- Ford, Gerald, *Address Before a Joint Session of the Congress Reporting on the State of the Union*, Washington, 15 January 1975, <http://www.presidency.ucsb.edu/ws/?pid=4938>, [accessed: 22 June 2015].
- General William Tecumseh Sherman in a letter to the Mayor of Atlanta, 12 September 1864.

- *Interview with Lieutenant General Richard T. Tryon*, published in Joint Non-Lethal Weapons Program, *Annual Report*, 2012, p.7.
- Johnson, Lyndon, *Remarks at Syracuse University on the Communist Challenge in Southeast Asia*, New York, 5 August 1964, <http://www.presidency.ucsb.edu/ws/?pid=26419>, [accessed: 22 June 2015].
- Johnson, Lyndon, *Remarks to Committee Members on the Need for Additional Appropriations for Military Purposes in Viet-Nam and the Dominican Republic*, Washington, 4 May 1965, <http://www.presidency.ucsb.edu/ws/?pid=26938>, [accessed: 22 June 2015].
- Kennedy, John, *Inaugural Address*, Washington, 20 January 1961, <http://www.presidency.ucsb.edu/ws/?pid=8032>, [accessed: 23 June 2015].
- Kennedy, John, *Radio and Television Report to the American People on the Soviet Arms Buildup in Cuba*, Washington, October 22, 1962, http://www.jfklibrary.org/Research/Research-Aids/JFK-Speeches/Cuba-Radio-and-Television-Report_19621022.aspx, [accessed: 22 June 15].
- Medvedev, Dmitri, 'Why I had to Recognise Georgia's Breakaway Regions', *Financial Times*, 26 August 2008, <http://www.ft.com/cms/s/0/9c7ad792-7395-11dd-8a66-0000779fd18c.html#axzz3HubZT8RA>, [Accessed: 08 August 2014].
- Netanyahu, Benjamin, *Speech at the Holocaust Martyrs' and Heroes' Remembrance Day Ceremony*, 11 April 2010, <http://www.pmo.gov.il/English/MediaCenter/Speeches/Pages/speechshoa1104010.aspx>, [accessed: 5 November 2015].
- Netanyahu, Benjamin, *Speech to US Congress*, 10 July 1996, <http://mfa.gov.il/MFA/MFA-Archive/1996/Pages/PM%20Netanyahu-%20Speech%20to%20US%20Congress-%20July%2010-%201996.aspx>, [accessed: 26 October 2015].
- Nixon, Richard, *Second Annual Report to the Congress on United States Foreign Policy*, Washington, 25 February 1971, <http://www.presidency.ucsb.edu/ws/?pid=3324>, [accessed: 22 June 2015].
- Obama, Barack, *Remarks at the National Archives and Records Administration*, Washington, May 21 2009, <http://www.presidency.ucsb.edu/ws/?pid=86166>, [accessed: 24 June 2015].
- Obama, Barak, *Remarks to the United Nations General Assembly in New York City*, New York, September 24 2014, <http://www.presidency.ucsb.edu/ws/index.php?pid=107615>, [accessed: 24 June 2015].
- Putin, Vladimir, *Speech at the UN General Assembly*, 28 September 2015, <https://russian.rt.com/article/119712>, [accessed: 22 November 2015].
- Reagan, Ronald, *Election Eve Address "A Vision for America"*, Washington, 3 November 1980, <http://www.presidency.ucsb.edu/ws/?pid=85199>, [accessed: 13 June 2015].
- Reagan, Ronald, *Message to the Congress Transmitting the Fiscal Year 1984 Budget*, Washington, 31 January 1983, <http://www.presidency.ucsb.edu/ws/?pid=40539>, [accessed: 22 June 2015].
- Reagan, Ronald, *New Year's Messages of President Reagan and President Mikhail Gorbachev of the Soviet Union*, Washington, 1 January 1989, <http://www.presidency.ucsb.edu/ws/?pid=35313>, [accessed: 22 June 2015].
- Roosevelt, Franklin, *Christmas Eve Message to the Nation*, Washington, 24 December 1941, <http://www.presidency.ucsb.edu/ws/?pid=16073>, [accessed: 24 June 2015].

- Truman, Harry, *Special Message to the Congress on Greece and Turkey*, Washington, 12 March 1947, <http://www.presidency.ucsb.edu/ws/index.php?pid=12846&st=truman&st1=special+message>, [accessed: 21 June 2015].
- Vladimir Putin in an interview to CBS News, 27 September 2015, <http://www.cbsnews.com/news/vladimir-putin-russian-president-60-minutes-charlie-rose/>, [accessed: 23 November 2015].

1.2 **Russian Language:**

1.2.1 Official Documents:

- Collective Security Treaty Organization (CSTO), *Soglasheniye o Kollektivnykh silakh operativnogo reagirovaniya Organizatsii Dogovora o kollektivnoy bezopasnosti*, [Agreement on the Collective Rapid Response Forces of the Collective Security Treaty], Moscow, 14 June, 2009.
- Ministry of Foreign Affairs of the Russian Federation, *The Foreign Policy Concept of the Russian Federation-2000*, Moscow, 2000, (Russian)
- Ministry of Foreign Affairs of the Russian Federation, *The Foreign Policy Concept of the Russian Federation-2008*, Moscow, 2008, (Russian).
- Ministry of Foreign Affairs of the Russian Federation, *The Foreign Policy Concept of the Russian Federation-2013*, Moscow, 2013, (Russian).
- The Federal Law of the Russian Federation № 3-Ф3, *O Politsii*, [About Police], Moscow, 1 March 2011.
- The Ministry of Defence of the Russian Federation, The Online Version of the Military Encyclopaedic Dictionary (*Voyennyi Entsiklopedicheskiy Slovar'*), <http://encyclopedia.mil.ru/encyclopedia/dictionary/details.htm?id=7781@morfDictionary>, [accessed: 4 September 2015].
- The Ministry of Defence of the Russian Federation, *Kontseptsiya sozdaniya i primeneniya oruzhiya neletal'nogo deystviya v Vooruzhennykh Silakh Rossiyskoy Federatsii*, [The Conception to the Development and Employment of Weapons with Non-Lethal Action in the Armed Forces of the Russian Federation], Moscow, 2009.
- The Ministry of Defence of the Russian Federation, The Online Version of the Encyclopaedia of the Strategic Missile Troops (*Entsiklopediya Raketnykh Voysk Strategicheskogo Naznacheniya*), http://encyclopedia.mil.ru/encyclopedia/dictionary/details_rvsn.htm?id=13770@morfDictionary.
- The Ministry of Interior of the U.S.S.R., *Ob utverzhdenii Instruktsii po primeneniyu spetsial'nykh sredstv individual'noy zashchity Lichnogo sostava i drugikh mer bezopasnosti v organakh vnutrennikh del i Podrazdeleniya vnutrennikh voysk SSSR*, [Decree to Approve the Instructions for the Use of Special Means for the Individual Self-Defence of the Personnel and Other Security Measures by the Law Enforcement Agencies and Internal Forces of the Ministry of Interior of the U.S.S.R.], Moscow, 26 December 1978.
- The Ministry of Interior of the U.S.S.R., *Ob utverzhdenii Instruktsii o poryadke primeneniya rabotnikami militsii khimicheskogo Sredstva spetsial'nogo naznacheniya "Cheremukha-10"*,

[Decree to Approve the Instructions for the Use of Chemical Special Mean “Cheremuha-10” by Police Officers], Moscow, 19 November 1981.

- The Ministry of Interior of the U.S.S.R., *Ob utverzhdenii Nastavleniya po primeneniyu spetsial'nykh sredstv "Cheremukha"*, [Decree to Approve the Manual for the Use of Special Means “Cheremuha”], Moscow, 24 September 1970.
- The Office of the President of the Russian Federation, *Decree N 1260 "About Recognition of the Republic of Abkhazia"*, Moscow, 26 August 2008, (Russian).
- The Office of the President of the Russian Federation, *Decree N 1261 "About Recognition of the Republic of North Ossetia"*, Moscow, 26 August 2008, (Russian).

1.2.2 Speeches, Statements and Published Interviews with Officials:

- *Interview with A. Starunskii, Former Deputy Commander of the Joint Group of Forces in the North Caucasus (2002-2003)*, published in , *Zashchita i Bezopasnost'*, No. 4(47), 2008, pp. 6-8, (Russian);
- *Interview with K. Kosachev, the Chairman of the State Duma Committee on Foreign Affairs*, published in *Mezhdunarodnaya Zhizn'*, No. 4, 2010, pp. 4-9, (Russian).
- *Interview with S. Ryabkov, the Deputy Foreign Minister of the Russian Federation*, published in *Mezhdunarodnaya Zhizn'*, No. 1, 2014, pp. 4-16, (Russian).
- *Interview with S. Ryabkov, The Deputy Minister of Foreign Affairs of the Russian Federation*, published in *Mezhdunarodnaya Zhizn'*, No. 8, 2014, pp. 2-12, (Russian).
- *Interview with Sergey Lavrov, the Foreign Minister of the Russian Federation*, published in *Mezhdunarodnaya Zhizn'*, No. 9, 2012, (Russian).
- Lavrov, Sergey, ‘Kak okonchatel'no zavershit' kholodnuyu voynu?’, [‘How to finally end the Cold War?’], *Mezhdunarodnaya Zhizn'*, No. 5, 2009, pp. 3-12.
- Lavrov, Sergey, ‘Vneshnepoliticheskaya filosofiya Rossii’, [‘Russian Foreign Policy Philosophy’], *Mezhdunarodnaya Zhizn'*, No. 4, 2013.
- Lavrov, Sergey, *Speech at the First Forum of Young Diplomats*, 25 April 2014, published in *Mezhdunarodnaya Zhizn'*, No. 5, 2014, pp. 5-20, (Russian).
- Medvedev, Dmitri, *Press conference after a meeting with French President Nicolas Sarkozy*, 8 September 2008, <http://kremlin.ru/video/172>, [accessed: 09 August 2014], (Russian).
- Medvedev, Dmitri, *Russia Forward!*, 2009, <http://www.kremlin.ru/transcripts/5413>, [accessed: 08 August 2014], (Russian).
- Medvedev, Dmitri, *Statement in Relation to the Recognition of the Independence of Abkhazia and South Ossetia*, Moscow, 26 August 2008, <http://news.kremlin.ru/news/1223>, [accessed: 08 August 2014], (Russian).
- *Press-conference with Sergey Lavrov, Russian Foreign Minister*, published in *Mezhdunarodnaya Zhizn'*, No. 2, 2013, (Russian).
- Putin, Vladimir, ‘Byt’ sil'nymi: garantii natsional'noy bezopasnosti dlya Rossii’, [‘Being strong: National security guarantees for Russia’], *Rossiyskaya gazeta*, No. 5708, 17 February 2012.

- Putin, Vladimir, 2005 *The State of Nation Speech*, <http://archive.kremlin.ru/text/appears/2005/04/87049.shtml>, [accessed: 18 August, 2014], (Russian)
- Putin, Vladimir, 2006 *Speech at Meeting with the Ambassadors and Permanent Representatives of the Russian Federation*, http://archive.kremlin.ru/eng/speeches/2006/06/27/2040_type82912type82913type84779_1_07818.shtml, [accessed: 08 August 2014], (Russian).
- Putin, Vladimir, 2007 *Speech at the Munich Security Conference*, <http://www.stringer-news.com/publication.mhtml?Part=50&PubID=7070>, [accessed: 08 August 2014], (Russian).
- Putin, Vladimir, 2012 *Address to the Federal Assembly*, <http://news.kremlin.ru/video/1344>, [Accessed: 08 August 2014], (Russian).
- Putin, Vladimir, 2012 *Speech at Meeting of Ambassadors and Permanent Representatives of the Russian Federation to the International Organizations*, published in *Mezhdunarodnaya Zhizn'*, No. 7, 2012, (Russian).
- Putin, Vladimir, 2014 *Speech at Meeting the Ambassadors and Permanent Representatives of the Russian Federation*, published in *Mezhdunarodnaya Zhizn'*, No. 7, 2014, pp. 3-12.
- Putin, Vladimir, *Speech of the President of the Russian Federation, 18 March 2014*, <http://kremlin.ru/events/president/news/20603/videos>, [accessed: 08 August 2014], (Russian).

1.3 Hebrew Language:

1.3.1 Official Documents:

- Public Committee against Torture in Israel and Palestinian Society for the Protection of Human Rights and the Environment vs. The Government of Israel (High Court of Justice 769/02, December 11, 2005), (Hebrew).
- State Comptroller of Israel, *Annual Report 54A for 2003 Year*, Jerusalem, (Hebrew).
- State of Israel, *The Full Report of the Commission of Inquiry into the Events of Military Engagement in Lebanon 2006*, January 2008, (Hebrew).
- State of Israel, *The Partial Report of the Commission of Inquiry into the Events of Military Engagement in Lebanon 2006*, April 2007, (Hebrew).
- The IDF General Officer Commanding Army Headquarters, *Puma*, <http://mazi.idf.il/4986-5648-HE/IGF.aspx>, [accessed: 8 November 2015], (Hebrew).

1.3.2 Speeches and Published Interviews with Officials:

- Ben-Gurion, David, 'Israel ben ha'umot' ['Israel between the Nations'], *Israel Government Year Book*, 1952.
- *Interview with Defence Minister Yitzhak Rabin*, published in *Jerusalem Post*, February 16, 1989.

- Rabin, Yitzhak, *Speech in the Knesset Regarding the U.N. General Assembly Resolution from 10 November 1975 about Zionism*, 11 November 1975, (Hebrew), published in Telem, Inbal, Tzvaog, Shmuel, Noiberger, Benjamin, (ed.), *Medinyut ha'hutz shel Israel – kovetz mismachim*, [*The Foreign Policy of Israel – Documents Collection*], Vol. A., (Raanana: The Open University of Israel, 2004).

2. Secondary Literature:

2.1. English Language:

2.1.1. Books:

- Ackroyd, Carol, Margolis, Karen, Rosenhead, Jonathan, et al., *The Technology of Political Control*, Second Edition, (London: Pluto Press Limited, 1980).
- Adams, James, *The Epic of America*, (London: George Routledge & Sons Ltd., 1940).
- Adamsky, Dima, *The Culture of Military Innovation: The Impact of Cultural Factors on the Revolution in Military Affairs in Russia, the US and Israel*, (Stanford: Stanford University Press, 2010)
- Alexander, John, *Future War: Non-Lethal Weapons in 21st Century Warfare*, (New-York: St. Martin's Press, 1999).
- Allison, Graham, Kelley, Paul, Garwin, Richard, *Nonlethal Weapons and Capabilities: Report of an Independent Task Force*, (New York: Council on Foreign Relations Press, 2004).
- Alvin Toffler, Heidi Toffler, *War and Anti-War: Survival at the Dawn of the 21st Century*, (Boston: Little, Brown and Company, 1993).
- Arkin, William, *Divining Victory Airpower in the 2006 Israel-Hezbollah War*, (Maxwell: Air University Press, 2007).
- Armacost, Michael, *The Politics of Weapons Innovations: The Thor-Jupiter Controversy*, (New York: Columbia University Press, 1969).
- Arreguin-Toft, Ivan, *How the Weak Win Wars: A Theory of Asymmetric Conflict*, (Cambridge: Cambridge University Press, 2005).
- Avnery, Shlomo, *The Making of Modern Zionism*, (New York: Basic Books, 1981).
- Bacevich, Andrew, (ed.), *The Imperial Tense: Prospects and Problems of American Empire*, (Chicago: Ivan R. Dee, 2003).
- Bacevich, Andrew, Cohen, Eliot, (ed.), *War over Kosovo*, (New York: Columbia University Press, 2001).
- Bar-Joseph, Uri, (ed.), *Israel National Security Towards the 21st Century*, (London: Frank Cass, 2001).
- Barnett, Roger, *Asymmetric Warfare*, (Dulles: Brassey's, 2003).
- Barrett, Laurence, *Gambling with History: Ronald Reagan in the White House*, (Garden City: Doubleday, 1983).
- Beale, Peter, *Death by Design: British Tank Development in the Second World War*, (Stroud: The History Press, 1998).

- Benbow, Tim, *The Magic Bullet? Understanding the Revolution in Military Affairs*, (London: Chrysalis Book Group, 2004)
- Berlin, Isaiah, *The Soviet Mind: Russian Culture under Communism*, (Washington, DC: Brookings Institution Press, 2004).
- Betts, Richard, *American Force: Dangers, Delusions, and Dilemmas in National Security*, (New York: Columbia University Press, 2013).
- Bialer, Uri, “*Our Place in the World*” – *Mapai and Israel’s Foreign Policy Orientation 1947-1952*, (Jerusalem: Magnes Press, Hebrew University, 1981).
- Billington, Ray, (ed.), *The Frontier Thesis: Valid Interpretation of American History?*, (New York: Holt, Rinehart and Winston, 1966).
- Black, Jeremy, *A Military Revolution? – Military Change and European Society 1550-1880*, (London: Macmillan Press, 1991).
- Black, Jeremy, *War and the Cultural Turn*, (Cambridge: Polity Press, 2012).
- Bobb, Justin, *Non-Lethal Weaponry: Applications to AC-130 Gunships*, (Maxwell Air Force Base, Alabama: Air University, 2002).
- Boggs, Carl, (ed.), *Masters of War: Militarism and Blowback in the Era of American Empire*, (New York: Routledge, 2003).
- Bolger, Daniel, *Savage Peace: Americans at War in the 1990s*, (New York, Presidio, 1995);
- Boorstin, Daniel, *The Americans: The Colonial Experience*, (New York: Vintage Books, 1958).
- Boorstin, Daniel, *The Americans: The Democratic Experience*, (New York: Vintage Books, 1973).
- Boorstin, Daniel, *The Americans: The National Experience*, (New York, Vintage books, 1965).
- Boot, Max, *War Made New: Technology, Warfare and the Course of History, 1500 to Today*, (New York: Gotham Books, 2006).
- Bregman, Ahron, El-Tahri, Jihan, *The Fifty Years War: Israel and Arabs*, (London: Penguin Books & BBC Worldwide, 1998).
- Brom, Shlomo, (ed.), *In the Aftermath of Operation Pillar of Defense The Gaza Strip, November 2012*, (Tel-Aviv: Institute for National Security Studies, 2012).
- Brom, Shlomo, Elran, Meir, (ed.), *The Second Lebanon War: Strategic Perspectives*, (Tel-Aviv: Institute for National Security Studies, 2007).
- Builder, Carl, *The Masks of War: American Military Styles in Strategy and Analysis*, (Baltimore: John Hopkins University Press, 1989).
- Buley, Benjamin, *The New American Way of War: Military Culture and the Political Utility of Force*, (New York: Routledge, 2008).
- Burnham, Gilbert, et al., *The Human Cost of the War in Iraq: A Mortality Study, 2002-2006*, (Baltimore: Johns Hopkins University, 2006).
- Caldicott, Helen, *The New Nuclear Danger: George W. Bush’s Military-Industrial Complex*, (New York: The New Press, 2002).

- Carvin, Stephanie, Williams, Michael, *Law, Science, Liberalism and the American Way of Warfare: The Quest for Humanity in Conflict*, (Cambridge: Cambridge University Press, 2015).
- Chang, Gordon, *Friends and Enemies: The United States, China, and the Soviet Union, 1948-1972*, (Stanford: Stanford University Press, 1990).
- Chomsky, Noam, *Interventions*, (London: Penguin Group, 2007).
- Cimbala, Stephen, (ed.), *The George W. Bush Defense Program: Policy, Strategy & War*, (Washington: Potomac Books, 2010).
- Citino, Michael, *The German Way of War: From the Thirty Years' War to the Third Reich*, (Lawrence: University of Kansas Press, 2005).
- Citino, Robert, *The Quest for Decisive Victory: From Stalemate to Blitzkrieg in Europe 1899-1940*, (Lawrence: University Press of Kansas, 2002).
- Clausewitz, Carl, *On War*, edited and translated by Michael Howard and Peter Paret, (Princeton: Princeton University Press, 1989).
- Cohen, Eliot, Eisenstadt, Michael, Bacevich, Andrew, *Knives, Tanks & Missiles: Israel's Security Revolution*, (Washington: The Washington Institute for Near East Policy, 1998).
- Cohen, Raymond, *Culture and Conflict in Egyptian-Israeli Relations: A Dialogue of the Deaf*, (Bloomington: Indiana University Press, 1990).
- Cohen, Stuart, (ed.), *Democratic Societies and Their Armed Forces: Israel in Comparative Context*, (London: Frank Cass, 2000).
- Coker, Christopher, *Humane Warfare*, (London: Routledge, 2002).
- Coker, Christopher, *The Future War: The Re-Enchantment of War in the Twenty-First Century*, (Oxford: BlackWell, 2004).
- Coker, Christopher, *Warrior Geeks: How 21st Century Technology is Changing the Way We Fight and Think About War*, (London: C.Hurst & Co, 2013).
- Commager, Henry, *The Empire of Reason: How Europe Imagined and America Realized the Enlightenment*, (Garden City: Anchor Press, 1977).
- Commager, Henry, *The American Mind: An Interpretation of American Thought and Character Since the 1880's*, (New York: Yale University Press, 1950).
- Coombs, Benjamin, *British Tank Production and the War Economy 1934-1945*, (London: Bloomsbury Publishing, 2003).
- Cooper, Matthew, *The German Army, 1933-1945: Its Political and Military Failure*, (Chelsea: Scarborough House, 1997).
- Cordesman, Anthony, Burke, Arleigh, *The "GAZA WAR": A Strategic Analysis*, (Washington D.C.: Center for Strategic & International Studies (CSIS), 2009).
- Cornish, Paul, (ed.), *The Conflict in Iraq, 2003*, (New York: Palgrave Macmillan, 2004).
- Cornish, Paul, Saunders, Nicholas, (ed.), *Bodies in Conflict: Corporeality, Materiality and Transformation*, (London: Routledge, 2014).
- Corum, James, *The Roots of Blitzkrieg: Hans von Seeckt and German Military Reform*, (Lawrence: University Press of Kansas, 1992).

- Cox, Michael, *US Foreign Policy after the Cold War: Superpower Without a Mission?*, (London: Royal Institute of Foreign Affairs, 1995).
- Crabb, Cecil, Jr., *The Doctrines of American Foreign Policy*, (Baton Rouge: Louisiana State University Press, 1982).
- Crowley, Michael, *Drawing the Line: Regulation of "Wide Area" Riot Control Agent Delivery Mechanisms Under the Chemical Weapons Convention*, (Manchester: Omega Research Foundation, 2013).
- Cullen, Timothy, *Lethality, Legality, and Reality: Non-Lethal Weapons for Offensive Air Support*, (Maxwell Air Force Base: Air Command and Staff College, 2008).
- Dando, Malcolm, (ed.), *Non-Lethal Weapons: Technological and Operational Prospects*, Jane's Special Report, November 2000.
- Dando, Malcolm, *A New Form of Warfare: The Rise of Non-Lethal Weapons*, (London: Brassey's Ltd, 1996).
- Davison, Neil, *'Non-Lethal' Weapons*, (Eastbourne: Palgrave Macmillan, 2009).
- Dombrowski, Peter, Gholz, Eugene, *Buying Military Transformation: Technological Innovation and the Defense Industry*, (New York: Columbia University Press, 2006).
- Donnelly, Christopher, *Red Banner: The Soviet Military System in Peace and War*, (London: Jane's Information Group, 1988).
- Downing, Brian, *The Military Revolution and Political Change: Origins of Democracy and Autocracy in Early Modern Europe*, (Princeton: Princeton University Press, 1992).
- Echevarria, Antulio, *Towards an American Way of War*, (Carlisle: Strategic Studies Institute, 2004).
- Farrell, Theo, Terriff, Terry, (ed.), *The Sources of Military Change: Culture, Politics, Technology*, (London: Lynne Rienner, 2002).
- Farrell, Theo, Terriff, Terry, Osinga, Frans, (ed.), *Transformation Gap? : American Innovations and European Military Change*, (Stanford: Stanford University Press, 2010).
- Farrell, Theo, *The Norms of War: Cultural Beliefs and Modern Conflict*, (London: Lynne Rienner Publishers, 2005).
- Ferling, John, *A Wilderness of Miseries: War and Warriors in Early America*, (Westport: Greenwood Press, 1980).
- Finkelstein, Norman, *Beyond Chutzpah: On the Misuse of Anti-Semitism and the Abuse of History*, second edition, (London: Verso, 2008).
- Fissel, Mark, *English Warfare 1511-1642*, (London: Routledge, 2001).
- Fossum, Robert, Roth, John, *The American Dream*, (South Shields: Peterson Printers, 1981).
- Freedman, Robert, (ed.), *World Politics and the Arab-Israeli Conflict*, (New York: Pergamon Press, 1979).
- French, David, *Raising Churchill's Army: The British Army and the War Against Germany 1919-1945*, (London: Oxford University Press, (2000).
- Frieser, Karl-Henz, Greenwood, John, *The Blitzkrieg Legend: The 1940 Campaign in the West*, (Annapolis: Naval Institute Press, 2005).
- Fukuyama, Francis, *The End of History and the Last Man*, (Penguin Books, 1992).

- George, Alexander, Bennett, Andrew, *Case Studies and Theory Development in the Social Sciences*, (Cambridge, Mass.: MIT Press, 2005).
- Giglio, James, *The Presidency of John F. Kennedy*, (Lawrence: University Press of Kansas, 1991).
- Girgus, Sam, (ed.), *The American Self: Myth, Ideology, and Popular Culture*, (Albuquerque: University of New Mexico Press, 1981).
- Gordon, Philip, Shapiro, Jeremy, *Allies at War: America Europe and the Crisis over Iraq*, (New York: McGraw-Hill, 2004).
- Graebner, Norman, Burns, Richard, Siracusa, Joseph, *Reagan, Bush, Gorbachev: revisiting the end of the Cold War*, (Westport: Greenwood Publishing Group, 2008).
- Granger, Dewey, *Integration of Lethal and Nonlethal Fires: The Future of the Joint Fires Cell*, (Fort Leavenworth: Command and General Staff College, 2009).
- Gray, Colin, *Irregular Enemies and the Essence of Strategy: Can the American Way of War Adapt?*, (Carlisle: Strategic Studies Institute, 2006).
- Gray, Colin, *Making Strategic Sense of Syber Power: Why the Sky Is Not Falling*, (Carlisle: Strategic Studies Institute, 2013)
- Gray, Colin, *Modern Strategy*, (Oxford: Oxford University Press, 1999).
- Gray, Colin, *Strategy for Chaos: Revolutions in Military Affairs and The Evidence of History*, (London: Frank Cass Publishers, 2002).
- Gray, Collin. *Out of the Wilderness: Prime Time for Strategic Culture*, (Fort Belvoir: Defence Threat Reduction Agency, 2006).
- Green, James, (ed.), *Cyber Warfare: A Multidisciplinary Analysis*, (London: Routledge, 2015).
- Grenier, John, *The First Way of War: American War Making on the Frontier, 1607-1814*, (Cambridge: Cambridge University Press, 2005).
- Gross, Michael, *Moral Dilemmas of Modern War: Torture, Assassination, and Blackmail in an Age of Asymmetrical Conflict*, (New York: Cambridge Press, 2010).
- Habek, Mary, *Storm of Steel: The Development of Armour Doctrine in Germany and the Soviet Union, 1919-1939*, (New York: Cornell University Press, 2003).
- Handel, Michael, *Israel's Political Military Doctrine*, (Cambridge, MA: Harvard University Press, 1973).
- Harkabi, Yehoshafat, *The Bar Kokhba Syndrome: Risk and Realism in International Politics*, (Chappaqua: Rossel Books, 1983).
- Harris, Paul, *Men, Ideas and Tanks: British Military Thought and Armoured Forces, 1903–1939*, (Manchester: Manchester University Press, 1995).
- Harrison, Richard, *The Russian Way of War: Operational Art, 1904-1940*, (Lawrence, KS: University Press of Kansas, 2001).
- Hein, Laura, Selden, Mark, (ed.), *Living with the Bomb: American and Japanese Cultural Conflicts in the Nuclear Age*, (Armonk: M.E. Sharpe, 1997)
- Herzog, Chaim, *The Arab-Israeli Wars: War and Peace in the Middle East*, 3rd edition, revised and updated by Shlomo Gazit, (Barnsley: Frontline Books, 2010).

- Heuser, Beatrice, *Nuclear Mentalities? Strategies and Beliefs in Britain, France and the FRG*, (London: MacMillan Press, 1998).
- Heuser, Beatrice, *The Bomb: Nuclear Weapons in their Historical, Strategic and Ethical Context*, (London: Longman, 2000).
- Hundley, Richard, *Past Revolutions Future Transformation: What Can History of Revolutions in Military Affairs Tell Us about Transforming the US Military?*, (Santa Monica: RAND, 1999).
- Hunt, Michael, *Ideology and the U.S. Foreign Policy*, (New Haven: Yale University Press, 1987).
- Jason, Andress, Winterfeld, Steve, *Cyber Warfare: Techniques, Tactics and Tools for Security Practitioners*, (Waltham: Elsevier, 2013).
- Jentleson, Bruce, *American Foreign Policy: The Dynamics of Choice in the 21st Century*, 3rd edition, (New York: W.W. Norton & Company, 2007)
- Jervis, Robert, *American Foreign Policy in a New Era*, (New York: Routledge, 2005).
- Johnson, Adrian, Mueen, Saqeb, (ed.), *Short War, Long Shadow: The Political and Military Legacies of the 2011 Libya Campaign*, Whitehall Report 1-12, (London: Royal United Services Institute for Defence and Security Studies, 2012).
- Johnson, Chalmers, *Revolutionary Change*, (London: University of London Press, 1968).
- Kagan, Robert, Kristol, William (ed.), *Present Dangers: Crisis and Opportunity in American Foreign and Defense Policy*, (San Francisco: Encounter Books, 2000).
- Kagan, Robert, *Paradise & Power: America and Europe in the New World Order*, Revised and Expanded Edition, (London: Atlantic Books, 2004).
- Kane, Thomas, *Military Logistics and Strategic Performance*, (London: Frank Cass, 2001).
- Kaplan, Robert, *Imperial Grunts: The American Military on the Ground*, (New York: Random House, 2005).
- Kharkhordin, Oleg, *The Collective and the Individual in Russia*, (Berkeley: University of California Press, 1999).
- Kier, Elizabeth, *Imagining War: French and British Military Doctrine between the Wars*, (Princeton: Princeton University Press, 1997).
- Kimmerling, Baruch, *The Invention and Decline of Israeliness: State, Society, and the Military*, (Berkeley: University of California Press, 2001).
- Klieman, Aaron, *Israel & The World after 40 Years*, (McLean: Pergamon-Brassey's International Defense Publishers, 1990).
- Koistinen, Paul, *The Military-Industrial Complex*, (New York: Praeger Publishers, 1980).
- Kokoshin, Andrei, *Soviet Strategic Thought, 1917-91*, (Cambridge, MA: MIT Press, 1998).
- Koplou, David, *Death by moderation: The U.S. Military's Quest for Useable Weapons*, (New York: Cambridge University Press, 2010).
- Koplou, David, *Non-Lethal Weapons: The Law and policy of Revolutionary Technologies for the Military and Law Enforcement*, (New-York: Cambridge Press, 2006).
- Kumar, Krishan, (ed.), *Revolution: the Theory and Practice of an European Idea*, (London: Weidenfeld and Nicolson, 1971).

- Kurz, Anat, Brom, Shlomo, (ed.), *The Lessons of Operation Protective Edge*, (Tel-Aviv: Institute for National Security Studies, 2014).
- Lamb, Timothy, *Emerging Non-Lethal Weapons Technology and Strategic Policy Implications for 21st Century Warfare*, (Carlisle Barracks: U.S. Army War College, 1998).
- Lambeth, Benjamin, *The Transformation of American Air Power*, (Ithaca: Cornell University Press, 2000).
- Larson, Eric, Savych, Bogdan, *American Public Support for U.S. Military Operations from Mogadishu to Baghdad*, (Santa Monica: The RAND Corporation, 2005).
- Larson, Eric, Savych, Bogdan, *Misfortunes of War: Press and Public Reaction to Civilian Deaths in Wartime*, (Santa Monica: The RAND Corporation, 2006).
- Larson, Robert, *The British Army and the Theory of Armoured Warfare, 1918-1940*, (London: Associated University Press, 1984).
- Leffler, Melvyn, Lergo, Jeffrey, (ed.), *To Lead the World: American Strategy after the Bush Doctrine*, (Oxford: Oxford University Press, 2008).
- Leonard, Steven, *Inevitable Evolutions: Punctuated Equilibrium and the Revolution in Military Affairs*, (Fort Leavenworth, KS: US Army Command and General Staff College, 2001).
- Lewer, Nick, (ed.), *The Future of Non-Lethal Weapons: Technologies, Operations' Ethics and Law*, (London: Frank Cass Publishers, 2002).
- Lewer, Nick, Schofield, Steven, *Non-Lethal Weapons: a Fatal Attraction? Military Strategies and Technologies for 21st Century Conflict*, (London: Zed Books, 1997).
- Lieven, Anatol, *Chechnya: Tombstone of Russian Power*, (New Haven: Yale University Press, 1999).
- Lissak, Moshe, (ed.), *Israeli Society and Its Defense Establishment: The Social Political Impact of a Protracted Violent Conflict*, (London: Frank Cass, 1984).
- Lock-Pullan, Richard, *US Intervention Policy and Army Innovation: From Vietnam to Iraq*, (London: Routledge, 2006).
- Lomsky-Feder, Edna, Ben-Ari, Eyal, (ed.), *The Military and Militarism in Israeli Society*, (New York: State University of New York Press, 1999)
- Lorell, Mark, Charles Kelly, *Casualties, Public Opinion, and Presidential Policy during Vietnam War*, (Santa Monica: The RAND Corporation, 1985).
- Lovelace, Douglas, Metz, Steven, *Nonlethality and American Land Power: Strategic Context and Operational Concepts*, (Carlisle: Strategic Studies Institute, 1998).
- Lovell, David, Primoratz, Igor, (ed.), *Protecting Civilians During Violent Conflict: Theoretical and Practical Issues for the 21st Century*, (Surrey: Ashgate Publishing Limited, 2012).
- Mahnken, Thomas, *Technology and the American Way of War Since 1945*, (New York: Columbia University Press, 2010).
- Mahnken, Thomas, *United States Strategic Culture*, (Washington: Science Applications International Corp, 2006).
- Malone, David *The International Struggle Over Iraq: Politics and the UN Security Council 1980-2005*, (Oxford: Oxford University Press, 2006).

- Mandel, Robert, *The Meaning of Military Victory*, (London: Lynne Rienner Publishers, 2006).
- May, Ernest, *Strange Victory: Hitler's Conquest of France*, (London: I.B. Tauris&Co, 2000).
- Mazarr, Michael, *The Military Technical Revolution: A Structural Framework. Final Report of the CSIS Study Group on the MTR*, (Washington: Center for Strategic and International Studies, 1993).
- Mearsheimer, John, Walt, Stephen, *The Israel Lobby and US Foreign Policy*, (New York: Penguin Books, 2007).
- Medea, Benjamin, Ehrenreich, Barbara, *Drone Warfare: Killing by Remote Control*, (New York: OR Books, 2012).
- Meernik, James, *The Political Use of Military Force in US Foreign Policy*, (Aldershot: Ashgate Publishing Limited, 2004).
- Melanson, Richard, *American Foreign Policy since the Vietnam War: The Search for Consensus from Richard Nixon to George W. Bush*, 4th edition, (New York: M.E. Sharpe, 2005).
- Merom, Gil, *How Democracies Lose Small Wars*, (Cambridge: Cambridge University Press, 2003).
- Mesloh, Charlie, Henych, Mark, Wolf, Ross, *Less Lethal Weapon Effectiveness, Use of Force, and Suspect & Officer Injuries: A Five-Year Analysis. Report to the National Institute of Justice*, (Florida Gulf Coast University, 2008).
- Metz, Steven, Kievit, James, *Strategy and the Revolution in Military Affairs: from Theory to Policy*, (Carlisle: US Army Strategic Studies Institute, 1995).
- Michaeli, Sarit, *Crowd Control: Israel's Use of Crowd Control Weapons in the West Bank*, (Jerusalem: B'tselem, 2013).
- Morris, Ian, *War – What Is Good For? The Role of Conflict in Civilisation, from Primates to Robots*, (London: Profile Books, 2014).
- Murray, Donette, *US foreign policy and Iran: American-Iranian relations since the Islamic revolution*, (New York: Routledge, 2009).
- Murray, Williamson, (ed.), *National Security Challenges for the 21st Century*, (Carlisle: US Army War College, 2003).
- Murray, Williamson, (ed.), *The Emerging Strategic Environment: Challenges of the Twenty-first Century*, (Westport: Greenwood Publishing Group, 1999).
- Murray, Williamson, Knox, Macgregor, (ed.), *The Dynamics of Military Revolution 1300-2050*, (Cambridge: Cambridge University Press, 2001).
- Nevins, Allan, Commager, Henry, *America: The Story of Free People*, (Oxford: Clarendon Press, 1966).
- Newhouse, John, *Imperial America: The Bush Assault on the World Order*, (New York: Vintage Books, 2004).
- Nicgorski, Walter, Weber, Ronald, (ed.), *An Almost Chosen People: The Moral Aspirations of Americans*, (Notre Dame: The University of Notre Dame Press, 1976).
- Nigel Bagnall, *The Israeli Experience: A Study of Quality*, (Surrey: Tactical Doctrine Retrieval Cell, Staff College, 1974).

- Norbut, Gerald, *Non-Lethal Weapons: Force Enabler for the Operational Commander Conducting Peace Operations*, (Newport: Naval War College, 2001).
- Nutley, Erik *Non-Lethal Weapons: Setting Our Phasers on Stun? Potential Strategic Blessings and Curses of Non-Lethal Weapons on the Battlefield*, (Maxwell Air Force Base, Alabama: Air University, 2003).
- Ogawa, James, *Evaluating the U.S. Military's Development of Strategic And Operational Doctrine for Non-Lethal Weapons in a Complex Security Environment*, (Fort Leavenworth: Command and General Staff College, 2003).
- Ogorkiewicz, Richard, *Armour Forces: A History of Armoured Forces and Their Vehicles*, (New York: Arco, 1970).
- Olajos, Eugene, Stopford, Woodhall, (ed.), *Riot Control Agents: Issues in Toxicology, Safety, and Help*, (Boca Raton: CRC Press LLC, 2004).
- Olsen, John, Van Creveld, Martin,(ed.), *The Evolution of Operational Art: From Napoleon to the Present*, (Oxford, Oxford University Press, 2010).
- Osgood, Robert, *Alliances and American Foreign Policy*, (Baltimore: The John Hopkins Press, 1968).
- Owens, John, Dumbrell, (ed.), John, *America's "War on Terrorism": New Dimensions in U.S. Government and National Security*, (Lanham: Lexington Books, 2008).
- Parker, Geoffrey, *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800*, (Cambridge: Cambridge University Press, 1988).
- Patterson, Eric, *Just War Thinking: Morality and Pragmatism in the Struggle against Contemporary Threats*, (Lanham, MD: Lexington Books, 2007).
- Person, Stow, *American Minds. A History of Ideas*, (New York: Henry Holt and Company, 1958).
- Peters, Ralph, *Fighting for the Future: Will America Triumph?*, (Mechanicsburg: Stackpole Books, 2001).
- Peterson, John, Pollack, Mark, (ed.), *Europe, America, Bush: Transatlantic Relations in the Twenty-First Century*, (London: Routledge, 2003).
- Pfaltzgraff, Robert, Shultz, Richard, (ed.), *War in the Information Age: New Challenges for US Security Policy*, (Washington, DC: Brassey's, 1997).
- Pinker, Steven, *The Better Angels of Our Nature: A History of Violence and Humanity*, (London: Penguin Books, 2012).
- Pinkney, Alphonso, *The American Way of Violence*, (New York: Random House, 1972).
- Porter, Bruce, *War and the Rise of the State*, (New York: The Free Press, 1994).
- Pursell, Carroll, *The Military-Industrial Complex*, (New York: Harper & Row Publishers, 1972).
- Rattray, Gregory, *Strategic Warfare in Cyberspace* (Boston: MIT Press, 2001).
- Record, Jeffrey, *Beating Goliath*, (Washington: Potomac Books, 2009).
- Rejali, Darius, *Torture and Democracy*, (Princeton: Princeton University Press, 2008).
- Richmond, Yale, *From Nyet to Da: Understanding the Russians*, (Yarmouth, ME: Intercultural Press, 1996).

- Roberts, Adam, Guelff, Richard, (ed.), *Documents on the Laws of War*, 3rd edition, (New York: Oxford University Press, 2002).
- Rogers, Clifford (ed.), *The Military Revolution Debate: Readings on the Military Transformation of Early Modern Europe*, (Oxford: Westview Press, 1995).
- Rosen, Stephen, *Winning the Next War: Innovation and the Modern Military*, (Ithaca: Cornell University Press, 1991).
- Rosner, Shmuel, Herzog, Michael, *Jewish Values and Israel's Use of Force in Armed Conflict: Perspectives from World Jewry*, (Jerusalem: The Jewish People Policy Institute, 2015).
- Schafer, Peter, (ed.), *The Bar Kokhba War Reconsidered: New Perspectives on the Second Jewish Revolt against Rome*, (Tubingen: Mohr Siebeck, 2003).
- Scott, Richard, *Conflict Without Casualties: Non-Lethal Weapons in Irregular Warfare* (Monterey: Naval Postgraduate School, 2007).
- Seliktar, Ofira, *New Zionism and the Foreign Policy System of Israel*, (Carbondale: Southern Illinois University Press, 1986).
- Seybolt, Taylor, Aronson, Jay, Fischhoff, Baruch, (ed.), *Counting Civilian Casualties: An Introduction to Recording and Estimating Nonmilitary Deaths in Conflict*, (Oxford: Oxford University Press, 2013).
- Shalev, Aryeh, *The Intifada: Causes and Effects*, (Jerusalem: Jerusalem Post, 1991).
- Shaw, Martin, *The New Western Way of War*, (Cambridge: Polity Press, 2005).
- Singer, P. W., Friedman, Allan, *Cybersecurity and Cyberwar: What Everyone Needs To Know®*, (Oxford: Oxford University Press, 2014).
- Singer, P. W., *Wired for War: The Robotics Revolution and Conflict in the 21st Century*, (New York: Penguin Press, 2009).
- Sloan, Stanley, *Permanent Alliance? – NATO and the Transatlantic Bargain from Truman to Obama*, (London: Bloomsbury Publishing, 2010).
- Smithers, A. J., *A New Excalibur: The Development of the Tank 1909-1939*, (London: Grafton Books, 1988).
- Snider, Don, Watkins, Gayle, (ed.), *The Future of the Army Profession*, (New York: McGraw Hill, 2003).
- Snyder, Jack, *The Soviet Strategic Culture: Implications for Limited Nuclear Operations*, (Santa Monica, CA: The RAND Corporation, 1977).
- Somit, Albert, Peterson, Steven, *The Dynamics of Evolution: The Punctuated Equilibrium Debate in the Natural and Social Sciences*, (Ithaca: Cornell University Press, 1992).
- Sondhaus, Lawrence, *Strategic Culture and Ways of War*, (New York: Routledge, 2006).
- Spanier, John, Hook, Steven, *American Foreign Policy since World War II*, 13th edition, (Washington: Congressional Quarterly Inc, 1995).
- Steele, Ian, *Warpaths: Invasions of North America*, (New York: Oxford University Press, 1994).
- Stone, John, *The Tank Debate: Armour and the Anglo-American Military Tradition*, (Amsterdam: Harwood, 2000).

- Strawser, Bradley, McMahan, Jeff, (ed.), *Killing by Remote Control: The Ethics of an Unmanned Military*, (New York: Oxford University Press, 2013).
- Tallett, Frank, *War and Society in Early Modern Europe, 1495-1715*, (London: Routledge, 1992).
- Taylor, George, (ed.), *The Turner Thesis: Concerning the Role of the Frontier in American History*, (Lexington: D.C. Heath and Company, 1972).
- Team Bravo/Cohort 19, *Viable Short-Term Directed Energy Weapon Naval Solutions: A Systems Analysis of Current Prototypes*, (Monterey: Naval Postgraduate School, 2013).
- Teveth, Shabtai, *Moshe Dayan: The Soldier, the Myth, the Legend*, (Steimatzky's Agency with Weidenfeld & Nicolson, 1972).
- Thomas, Mark, *Non-Lethal Weaponry: A Framework for Future Integration*, (Maxwell Air Force Base: Air Command and Staff College, 1998).
- Tilford, Earl, *The Revolution in Military Affairs: Problems and Cautions* (Carlisle, PA: Strategic Studies Institute, US Army War College, 1995).
- Tirman, John *The Deaths of Others: The Fate of Civilians in America's Wars*, (Oxford: Oxford University Press, 2011).
- Toffler, Alvin, Toffler, Heidi, *War and Anti-War: Survival at the Dawn of the 21st Century*, (Boston: Little, Brown and Company, 1993).
- Trenin, Dmitri, Malashenko, Aleksey, *Russia's Restless Frontier: The Chechnya Factor in Post-Soviet Russia*, (Washington: Carnegie Endowment for International Peace, 2004).
- Voetberg, Jeffrey, *Non-Lethal Weapons: Considerations for the Joint Force Commander*, (Newport: Naval War College, 2007).
- Ward, Barbara, *The Rich Nations and the Poor Nations*, (London: Hamish Hamilton, 1962).
- Watts, Barry, *Six Decades of Guided Munitions and Battle Networks: Progress and Prospects*, (Washington: Center for Strategic and Budgetary Assessments, 2007).
- Weigley, Russell, *The American Way of War*, (Bloomington: Indiana University Press, 1973).
- Whittemore, Ryan, *Air-delivered Non-Lethal Weapons in Counterinsurgency Operations*, (Maxwell Air Force Base: Air Command and Staff College, 2008).
- Willems, Emilio, *A Way of Life and Death: Three Centuries of Prussian-German Militarism – An Anthropological Approach*, (Nashville: Vanderbilt University Press, 1986).
- Wistrich, Robert, Ohana, David, (ed.), *The Shaping of Israeli Identity: Myth, Memory and Trauma*, (London: Fank Cass, 1995).
- Yaniv, Avner, (ed.), *National security and democracy in Israel*, (Boulder: Lynne Rienner, 1993).
- Ziks, Kimberly, *Engaging the Enemy: Organisation Theory and Soviet Military Innovation, 1955-1991*, (Princeton: Princeton University Press, 1993).
- Zinn, Howard, *The Unravelling of the Bush Presidency*, (New York: Seven Stories Press, 2007).
- Zinn, Howard, *Vietnam: The Logic of Withdrawal*, (Boston: Beacon Press, 1967).

2.1.2. Chapters in Edited Books:

- Arnold, Thomas, 'Fortifications and the Military Revolution: The Gonzaga Experience 1530-1630', in Rogers, Clifford (ed.), *The Military Revolution Debate: Readings on the Military Transformation of Early Modern Europe*, (Oxford: Westview Press, 1995).
- Asada, Sadao, 'The Mushroom cloud and national psyches', in Hein, Laura, Selden, Mark, (ed.), *Living with the Bomb: American and Japanese Cultural Conflicts in the Nuclear Age*, (Armonk: M.E. Sharpe, 1997).
- Avner Golov, 'Rethinking the Deterrence of Hamas', in Kurz, Anat, Brom, Shlomo, (ed.), *The Lessons of Operation Protective Edge*, (Tel-Aviv: Institute for National Security Studies, 2014).
- Ben-Meir, Yehuda, 'Israeli Public Opinion and the Second Lebanon War', in Brom, Shlomo, Elran, Meir, (ed.), *The Second Lebanon War: Strategic Perspectives*, (Tel-Aviv: Institute for National Security Studies, 2007).
- Ben-Yehuda, Nachman, 'The Masada Mythical Narrative and the Israeli Army', in Lomsky-Feder, Edna, Ben-Ari, Eyal, (ed.), *The Military and Militarism in Israeli Society*, (New York: State University of New York Press, 1999).
- Boggs, Carl, 'Outlaw Nation: The Legacy of U.S. War Crimes', in Boggs, Carl, (ed.), *Masters of War: Militarism and Blowback in the Era of American Empire*, (New York: Routledge, 2003).
- Boyd, David, 'The Search for Low Hanging Fruit: Recent Developments in Non-Lethal Technologies', Dando, Malcolm, (ed.), *Non-Lethal Weapons: Technological and Operational Prospects*, Jane's Special Report, November 2000.
- Campbell, John, 'The United States and the Arab-Israeli Conflict', in Freedman, Robert, (ed.), *World Politics and the Arab-Israeli Conflict*, (New York: Pergamon Press, 1979).
- Clarke, Michael, 'The Diplomacy that Led to War in Iraq', in Cornish, Paul, (ed.), *The Conflict in Iraq, 2003*, (New York: Palgrave Macmillan, 2004).
- Cohen, Eliot, 'Kosovo and the New American Way of War', in Bacevich, Andrew, Cohen, Eliot, (ed.), *War over Kosovo*, (New York: Columbia University Press, 2001).
- Coleman, Stephen, 'Discrimination and Non-Lethal Weapons: Issues for the Future Military', in Lovell, David, Primoratz, Igor, (ed.), *Protecting Civilians During Violent Conflict: Theoretical and Practical Issues for the 21st Century*, (Surrey: Ashgate Publishing Limited, 2012).
- Cornish, Paul, 'Unlawful Wounding: Codifying Interaction between Bullets and Bodies', in Cornish, Paul, Saunders, Nicholas, (ed.), *Bodies in Conflict: Corporeality, Materiality and Transformation*, (London: Routledge, 2014).
- Coupland, Robin, Loye, Dominique, 'Legal and Health Issues: International Humanitarian Law and the Lethality or Non-Lethality of Weapons', in Dando, Malcolm, (ed.), *Non-Lethal Weapons: Technological and Operational Prospects*, Jane's Special Report, November 2000.
- Evron, Yair, 'Deterrence and its Limitations', in Brom, Shlomo, Elran, Meir, (ed.), *The Second Lebanon War: Strategic Perspectives*, (Tel-Aviv: Institute for National Security Studies, 2007).

- Farrell, Theo, Terriff, Terry, 'Military Transformation in NATO: A Framework for Analysis', in Farrell, Theo, Terriff, Terry, Frans Osinga, (ed.), *Transformation Gap?: American Innovations and European Military Change*, (Stanford: Stanford University Press, 2010).
- Fidler, David, 'Non-Lethal Weapons and International Law: Three Perspectives on The Future', in Lewer, Nick, (ed.), *The Future of Non-Lethal Weapons: Technologies, Operations, Ethics and Law*, (London: Frank Cass Publishers, 2002).
- Heal, Charles, 'The Quest for the Magic Bullet', in Dando, Malcolm, (ed.), *Non-Lethal Weapons: Technological and Operational Prospects*, Jane's Special Report, November 2000.
- Heller, Mark, 'Israeli Deterrence in the Aftermath of Protective Edge', in Kurz, Anat, Brom, Shlomo, (ed.), *The Lessons of Operation Protective Edge*, (Tel-Aviv: Institute for National Security Studies, 2014).
- Heller, Mark, 'The International Dimension: Why So Few Constrains on Israel?', in Brom, Shlomo, Elran, Meir, (ed.), *The Second Lebanon War: Strategic Perspectives*, (Tel-Aviv: Institute for National Security Studies, 2007).
- Herring, G. K., 'The War in Afghanistan: A Strategic Analysis', in Murray, Williamson, (ed.), *National Security Challenges for the 21st Century*, (Carlisle: US Army War College, 2003).
- Kober, Avi, 'The Rise and Fall of Israeli Operational Art, 1948–2008', in Olsen, John, Van Creveld, Martin, (ed.), *The Evolution of Operational Art: From Napoleon to the Present*, (Oxford, Oxford University Press, 2010).
- Kimmerling, Baruch, 'Making Conflict a Routine: Cumulative Effects of the Arab-Jewish Conflict Upon Israeli Society', in Lissak, Moshe, (ed.), *Israeli Society and Its Defense Establishment: The Social Political Impact of a Protracted Violent Conflict*, (London: Frank Cass, 1984).
- Landau, Emily, Bermant, Azriel, 'Iron Dome Protection: Missile Defense in Israel's Security Concept', in Kurz, Anat, Brom, Shlomo, (ed.), *The Lessons of Operation Protective Edge*, (Tel-Aviv: Institute for National Security Studies, 2014).
- Littlewood, Jez, 'NLWs and Urban Warfare: Aspects of US Thinking', in Dando, Malcolm, (ed.), *Non-Lethal Weapons: Technological and Operational Prospects*, Jane's Special Report, November 2000.
- Lock-Pullan, Richard, 'U.S. Military Strategy, Strategic Culture, and the "War on Terror"', in Owens, John, Dumbrell, John, (ed.), *America's "War on Terrorism": New Dimensions in U.S. Government and National Security*, (Lanham: Lexington Books, 2008).
- Lupsha, Peter, 'American Values and Organized Crime: Suckers and Wiseguys', in Girgus, Sam, (ed.), *The American Self: Myth, Ideology, and Popular Culture*, (Albuquerque: University of New Mexico Press, 1981).
- Lynn, Lohn, 'The trace italienne and the Growth of Armies: The French Case', in Rogers, Clifford (ed.), *The Military Revolution Debate: Readings on the Military Transformation of Early Modern Europe*, (Oxford: Westview Press, 1995).
- Metz, Steve, 'Non-Lethality and the Revolution in Military Affairs', in Dando, Malcolm, (ed.), *Non-Lethal Weapons: Technological and Operational Prospects*, Jane's Special Report, November 2000.
- Mintz, Alex, 'The Military-Industrial Complex: The Israeli Case', in Lissak, Moshe, (ed.), *Israeli Society and Its Defense Establishment: The Social Political Impact of a Protracted Violent Conflict*, (London: Frank Cass, 1984).

- Murray, Williamson, 'Introduction', in Murray, Williamson, (ed.), *The Emerging Strategic Environment: Challenges of the Twenty-first Century*, (Westport: Greenwood Publishing Group, 1999).
- Murray, Williamson, 'May 1940: Contingency and Fragility of the German RMA', in Murray, Williamson, Knox, Macgregor, (ed.), *The Dynamics of Military Revolution 1300-2050*, (Cambridge: Cambridge University Press, 2001).
- Murray, Williamson, 'Transformation and Professional Military Education: Past as Prologue to the Future', in Murray, Williamson, (ed.), *National Security Challenges for the 21st Century*, (Carlisle: US Army War College, 2003).
- Murray, Williamson, Knox, Macgregor, 'Thinking about Revolution in Warfare', in Williamson Murray, Macgregor Knox, (ed.), Murray, Williamson, Knox, Macgregor, (ed.), *The Dynamics of Military Revolution 1300-2050*, (Cambridge: Cambridge University Press, 2001).
- Parker, Geoffrey, 'In Defense of The Military Revolution', in Rogers, Clifford (ed.), *The Military Revolution Debate: Readings on the Military Transformation of Early Modern Europe*, (Oxford: Westview Press, 1995).
- Power, Samantha, 'Legitimacy and Competence', in Leffler, Melvyn, Lergo, Jeffrey, (ed.), *To Lead the World: American Strategy after the Bush Doctrine*, (Oxford: Oxford University Press, 2008).
- Quille, Gerrard, 'The Revolution in Military Affairs Debate and Non-Lethal Weapons', in Lewer, Nick, (ed.), *The Future of Non-Lethal Weapons: Technologies, Operations, Ethics and Law*, (London: Frank Cass Publishers, 2002).
- Quintana, Elizabeth, 'The War from the Air', in Adrian Johnson, Saqeb Mueen, (ed.), *Short War, Long Shadow: The Political and Military Legacies of the 2011 Libya Campaign*, Whitehall Report 1-12, (London: Royal United Services Institute for Defence and Security Studies, 2012).
- Roberts, Adam, Guelff, Richard, 'Introduction by the Editors', in Roberts, Adam, Guelff, Richard, (editors), *Documents on the Laws of War*, 3rd edition, (New York: Oxford University Press, 2002).
- Roberts, Michael, 'The Military Revolution, 1560-1660', in Rogers, Clifford (ed.), *The Military Revolution Debate: Readings on the Military Transformation of Early Modern Europe*, (Oxford: Westview Press, 1995).
- Rogers, Clifford, "'As if a New Sun Had Arisen": England's Fourteenth-Century RMA', in Murray, Williamson, Knox, Macgregor, (ed.), *The Dynamics of Military Revolution 1300-2050*, (Cambridge: Cambridge University Press, 2001).
- Rogers, Clifford, 'The Military Revolution in History', in Rogers, Clifford, (ed.), *The Military Revolution Debate: Readings on the Military Transformation of Early Modern Europe*, (Oxford: Westview Press, 1995).
- Shapir, Yiftah, 'Iron Dome: The Queen of Battle', in Brom, Shlomo, (ed.), *In the Aftermath of Operation Pillar of Defense The Gaza Strip, November 2012*, (Tel-Aviv: Institute for National Security Studies, 2012).
- Sharp, Jane, 'The US-UK 'Special Relationship' after Iraq', in Cornish, Paul, (ed.), *The Conflict in Iraq, 2003*, (New York: Palgrave Macmillan, 2004).

- Smelser, Marshall, 'An Understanding of the American Revolution', in Nicgorski, Walter, Weber, Ronald, (ed.), *An Almost Chosen People: The Moral Aspirations of Americans*, (Notre Dame: The University of Notre Dame Press, 1976).
- Stanley-Mitchell, Elizabeth, 'The Digital Battlefield: What Army Transformation Efforts Say about its Professional Jurisdiction', in Snider, Don, Watkins, Gayle, (ed.), *The Future of the Army Profession*, (New York: McGraw Hill, 2003).
- Stone, John, 'The British Army and the Tank', in Farrell, Theo, Terriff, Terry, (ed.), *The Sources of Military Change: Culture, Politics, Technology*, (London: Lynne Rienner, 2002).
- Turner, Frederic, 'Later Explanations and Developments', in Billington, Ray, (ed.), *The Frontier Thesis: Valid Interpretation of American History?*, (New York: Holt, Rinehart and Winston, 1966).
- Turner, Frederic, 'The Significance of the Frontier in American History', in Taylor, George, (ed.), *The Turner Thesis: Concerning the Role of the Frontier in American History*, (Lexington: D.C. Heath and Company, 1972).
- Vickers, Michael, 'The Revolution in Military Affairs and Military Capabilities', in Pfaltzgraff, Robert, Shultz, Richard, (ed.), *War in the Information Age: New Challenges for US Security Policy*, (Washington, DC: Brassey's, 1997).
- Webb, Walter, 'The Frontier and the 400 Year Boom', in Taylor, George, (ed.), *The Turner Thesis: Concerning the Role of the Frontier in American History*, (Lexington: D.C. Heath and Company, 1972).
- Yadlin, Amos, 'The Strategic Balance of Operation Protective Edge: Achieving the Strategic Goal Better, Faster, and at a Lower Cost', in Kurz, Anat, Brom, Shlomo, (ed.), *The Lessons of Operation Protective Edge*, (Tel-Aviv: Institute for National Security Studies, 2014).
- Yaniv, Avner, 'A question of survival: The military and politics under siege' in Yaniv, Avner, (ed.), *National security and democracy in Israel*, (Boulder: Lynne Rienner, 1993).
- Zerubavel, Yael, 'Bar Kokhba's Image in Modern Israeli Culture', in Schafer, Peter, (ed.), *The Bar Kokhba War Reconsidered: New Perspectives on the Second Jewish Revolt against Rome*, (Tubingen: Mohr Siebeck, 2003).
- Zerubavel, Yael, 'The Multivocality of a National Myth: Memory and Counter-Memories of Masada', in Wistrich, Robert, Ohana, David, (ed.), *The Shaping of Israeli Identity: Myth, Memory and Trauma*, (London: Fank Cass, 1995).

2.1.3. Academic Articles, Proceedings to Conferences and unpublished PhD Dissertations :

- 'The Goldstone Report', *Journal of Palestine Studies*, Vol. 39, No. 2, 2010, pp. 60-121.
- "X" [George Kennan], 'The Sources of Soviet Conduct', *Foreign Affairs*, Vol. 25, No. 4, 1947, pp. 566-582.
- Aftergood, Steven, 'The Soft-Kill Fallacy', *The Bulletin of the Atomic Scientists*, Vol. 50, Issue 5, 1994, pp. 40-45.
- Alexander, John, 'Shoot, But Not to Kill – Non-Lethal Weapons Have Yet to Establish a Military Niche', *Jane's International Defense Review*, 1 June 1996.
- Alkhuzai, Amir, et al., 'Violence-Related Mortality in Iraq from 2002 to 2006', *New England Journal of Medicine*, Vol. 358, No. 2, 2008, pp. 484-93.

- Arkin, William, 'Smart Bombs, Dump Targeting?', *The Bulletin of the Atomic Scientists*, Vol. 56, No. 3, 2000, pp. 46-53.
- Åslund Anders, 'An Assessment of Putin's Economic Policy', *CESifo Forum*, No. 9 (2), pp. 16-21, 2008.
- Barnes, John 'The Intransigent Israeli?', British Embassy, Tel-Aviv, 18 November 1971, republished in Shmuel Bar, 'The Intransigent Israeli? – A document from the Archives of the British Foreign Office (FCO/17 1554)', *Israel Journal of Foreign Affairs*, Vol. 4, No. 1, 2010, pp. 103-113.
- Barry, John, Everett, Michael, Peck, Allen, 'Nonlethal Military Means: New Leverage for a New Era', *Harvard University, John F. Kennedy School of Government, National Security Program Policy Analysis Paper*, No. 94-01, 1994.
- Baruch, Pnina, 'Operation Protective Edge: Legality and Legitimacy', *INSS Insight*, No. 577, 2014.
- Bazak, Yuval, 'Responding to the Need for International Legitimacy: Strengthening the IDF Strike Force', *Military and Strategic Affairs*, Vol. 3, No.2, 2011, pp. 3-17.
- Ben-Horin, Roi, 'Non-Lethal Weapons: Theory, Practice, and what Lies Between', *Strategic Assessment*, Vol. 2, No. 4, 2001, pp.21-27
- Ben-Meir, Yehuda, 'Operation Cast Lead: Political Dimensions and Public Opinion', *Strategic Assessment*, Vol. 11, No. 4, 2009, pp. 29-34.
- Bennett, Andrew, Elman, Colin, 'Complex causal relations and case study methods: the example of path dependence', *Political Analysis*, Vol. 14, No.3, 2006, pp. 250-267.
- Berman, Lazar, 'Capturing Contemporary Innovation: Studying IDF Innovation against Hama and Hizballah', *Journal of Strategic Studies*, Vol. 35, No.1, 2012, pp. 121-147.
- Berzi, Tamas, 'European Reactions to Israel's Gaza Operation,' Jerusalem Center for Public Affairs, *Articles on Europe & Israel*, Vol. 8, No. 20, 2009.
- Bialer, Uri, 'Top Hat, Tuxedo and Cannons: Israeli Foreign Policy from 1948 to 1956 as a Field of Study', *Israel Studies*, Vol. 7, No. 1, 2002, pp. 1-80.
- Boher, Ziv, Osiel, Mark, 'Proportionality in Military Force at War's Multiple Levels: Averting Civilian Casualties vs. Safeguarding Soldiers', *Vanderbilt Journal of Transnational Law*, Vol. 46, No. 747, 2013, pp. 747-822.
- Boot, Max, 'The New American Way of War', *Foreign Affairs*, Vol. 82, No. 4, 2003, pp. 41-58.
- Carafano, James, 'The Future of Anti-Terrorism Technologies', *Heritage Lectures*, No. 885, 2005.
- Cohen, Amichai, Cohen Stuart,, 'Israel and International Humanitarian Law: Between the Neo-Realism of State Security and the "Soft Power" of Legal Acceptability', *Israel Studies*, Vol. 16, No. 2, 2011, pp. 1-23.
- Dobbins, James, 'Iraq: Winning the Unwinnable War', *Foreign Affairs*, Vol. 84, No. 1, 2005, p. 16-25.
- Duncan, James, 'A Primer on the Employment of Non-Lethal Weapons', *Naval Law Review*, Vol. 45, 1998, pp. 1-55.

- Dunlap, Charles, 'Law and Military Interventions: Preserving Humanitarian Values in 21st Conflicts', *The Proceedings to the Humanitarian Challenges in Military Intervention Conference*, Carr Center for Human Rights Policy Kennedy School of Government, Harvard University, Washington, 29 November 2001.
- Eran, Oded, 'International Aspects of Operation Pillar of Defence', *INSS Insight*, No. 386, 2012.
- Fidler, David, 'Non-Lethal Weapons and international law – Three perspectives on the future', *Medicine, Conflict and Survival*, Vol. 17, No.3, 2001, pp. 194-206.
- Fidler, David, 'The International Legal Implications of "Non-Lethal" Weapons', *Michigan Journal of International Law*, Vol. 21, No.51, 1999, pp. 51-100.
- Fidler, David, 'The Meaning of Moscow: "Non-Lethal" Weapons and International Law in the Early 21st Century', *International Review of the Red Cross*, Vol 87, No. 857, 2005, pp. 525-552.
- Fridman, Ofer, 'Are We Ready for the Revolution of Non-Lethal Weapons? – Using a Comprehensive RMA Model to Examine the Current Strategic Situation', *Comparative Strategy*, Vol. 32 No. 3, 2013, pp. 192-206.
- Gad, Yair, 'Israeli Existential Anxiety: Cultural Trauma and the constitution of National Character', *Social Identities: Journal of the Study of Race, Nation and Culture*, Vol. 20, No. 4-5, 2014, pp. 346-362.
- Gray, Colin, 'National Style in Strategy: The American Experience', *International Security*, Vol. 6, No.2, 1981, pp. 21-47.
- Gross, Michael, 'The Second Lebanon War: The Question of Proportionality and the Prospect of Non-Lethal Warfare', *Journal of Military Ethics*, Vol. 7, No. 1, 2008, p. 1-22.
- Heuser, Beatrice, 'Denial of Change: The Military Revolution as Seen by Contemporaries', *International Bibliography of Military History*, Vol. 32, No 1, pp. 3-27.
- Hirsch, Adam, 'The Collision of Military Cultures in Seventeenth-Century New England', *Journal of American History*, Vol. 74, No. 4, 1988, pp. 1187-1212.
- Howard, Michael, 'What's in a Name? How to Fight Terrorism', *Foreign Affairs*, Vol. 81, No. 1, 2002, pp. 8-13.
- Huntington, Samuel, 'The Erosion of American National Interests', *Foreign Affairs*, Vol. 76, No. 5, 1997, pp. 28-49.
- Ikenberry, John, 'America's Imperial Ambitions', *Foreign Affairs*, Vol. 81, No. 5, 2002, pp. 44-60.
- Jabbour, Kamal, 'CyberVision and Cyber Force Development', *Strategic Studies Quarterly*, Vol. 4, No. 1, 2010, pp. 63-73.
- Jochnik, Chris, Normand, Roger, 'The Legitimation of Violence: A Critical History of Laws of War', *Harvard International Law Journal*, Vol. 35, No. 1, 1994, pp. 49-95.
- Kaplinsky, Moshe, 'The IDF in the Years before the Second Lebanon War', *Military and Strategic Affairs*, Vol. 1, No. 2, 2009, pp. 25-37.
- Karr, Ronald, "'Why Should You Be So Furious?": The Violence of the Pequot War', *Journal of American History*, Vol. 85, No. 2, 1998, pp. 876-909.

- Klar, Yechiel, Schori-Eyal, Noa, Klar, Yonat, 'The 'Never Again' State of Israel: The Emergence of the Holocaust as a Core Feature of Israeli Identity and Its Four Incongruent Voices', *Journal of Social Issues*, Vol. 69, No. 1, 2013, pp. 125-143.
- Knickerbocker, Brad, 'The Fuzzy Ethics of Nonlethal Weapons', *Christian Science Monitor*, 14 February 2003, <http://www.csmonitor.com/2003/0214/p02s01-usmi.html>, [accessed: 28 November 2015].
- Kober, Avi, 'The Intellectual and Modern Focus in Israeli Military Thinking as Reflected in *Ma'arachot* Articles, 1948-2000', *Armed Forces & Society*, Vol. 30, No. 2, 2003, pp. 141-160.
- Kober, Avi, 'The Israel Defence Forces in the Second Lebanon War: Why the Poor Performance?', *The Journal of Strategic Studies*, Vol. 30, No. 1, 2008, pp. 3-40.
- Kober, Avi, 'What Happened to Israeli Military Thought?', *Journal of Strategic Studies*, Vol. 34, No. 5, 2011, pp. 707-732.
- Koplow, David, 'Red-Teaming NLW: A Top Ten List of Criticisms about Non-Lethal Weapons', *Case Western Reserve Journal of International Law*, Vol. 47, Issue 1, 2015, pp. 229-238.
- Krepinevich, Andrew, 'Cavalry to Computer: The Pattern of Military Revolutions', *National Interest*, No. 37, 1994, pp. 30-42.
- Kuperman, Raanan, 'The impact of Internal Politics on Israel's Reprisal Policy During the 1950s', *Journal of Strategic Studies*, Vol. 24, No.1, pp. 1-28.
- Lindsay, James, 'George W. Bush, Barack Obama and the future of US global leadership', *International Affairs*, Vol. 87, No. 4, 2011, pp. 765-779.
- Lorenz, F.M., 'Non-Lethal Force: The Slippery Slope to War?', *Parameters*, Vol. XXVI, No. 3, 1996, pp.52-62.
- Lowenheim, Oded, Heimann, Gadi, 'Revenge in International Politics', *Security Studies*, Vol. 17, No. 4, pp. 685-724.
- Luz, Ehud, "'Jewish Ethics'" as an Argument in the Public Debate Over the Israeli Reaction to Palestinian Terror', *Israeli Studies*, Vol. 7, No. 3, 2002, pp. 134-156.
- Mack, Andrew, 'Why Big Nations Lose Small Wars: the Politics of Asymmetric Conflict', *World Politics*, vol. 27, no. 2, 1975, pp. 175-200.
- Mahnken, Thomas, 'The American Way of War in the Twenty-first Century', *The Review of International Affairs*, Vol. 2, No. 3, 2003, pp.73-84.
- Marshal, Andrew, 'Some Thoughts on Military Revolutions', *Office of Net Assessment memorandum*, 1993.
- Massingham, Eve, 'Conflict without Casualties ... A Note of Caution: Non-Lethal Weapons and International Humanitarian Law', *International Review of the Red Cross*, Vol. 94, No. 886, 2012, pp. 673-685.
- McNab, Robert, Scott, Richard, 'Non-Lethal Weapons and the long tail of warfare', *Small Wars & Insurgencies*, Vol. 20, No. 1, 2009, pp. 141-159.
- Merget, Frederic, 'Non-Lethal Weapons and the Possibility of Radical New Horizons for the Laws of War: Why Kill, Wound and Hurt (Combatants) at All?', *Social Science Research Network*, July 1, 2008, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1295348, [accessed: 1/12/2013].

- Metz, Steven, 'Non-Lethal Weapons: A Progress Report', *Joint Force Quarterly*, Vol. 28, 2001, pp. 18-22.
- Mockaitis, Thomas, 'Winning Hearts and Minds in the 'War on Terrorism'', *Small Wars & Insurgencies*, Vol. 14, No.1, 2003, pp. 21-38.
- Muciano, Gil, 'A Matter of Honour: A Review of Israeli Decision Making during the Second Lebanon War', *The Atkin Paper Series*, The International Centre for the Study of Radicalisation and Political Violence, March 2011.
- Mueller, John, 'Public Opinion as a Constraint on U.S. Foreign Policy: Assessing the Perceived Value of American and Foreign Lives', *unpublished text prepared for presentation at National Convention of International Studies Association at Los-Angeles, California*, 14-18 March, 2000.
- Murray, Williamson, 'The Future of American Military Culture: Does Military Culture Matter?', *Orbis*, Vol. 43, Issue 1, 1999, pp. 27-42.
- Murray, Williamson, 'Thinking about Revolution in Military Affairs', *Joint Force Quarterly*, Vol. 16, 1997, pp. 69-76.
- Ofer, Dalia, 'We Israelis Remember, but How?: The Memory of the Holocaust and the Israeli Experience', *Israel Studies*, Vol. 18, No. 2, 2013, pp. 70-85.
- Orbons, Sjef, 'Non-Lethal Weapons: Peace Enables or Troublesome Force? Assessing the Role of CS and Baton Rounds in the Northern Ireland Conflict', *Small Wars & Insurgencies*, Vol. 22, No.3, 2011, pp. 467-494.
- Orbons, Sjef, 'Non-Lethality in Reality: a Defence Technology Assessment of its Political and Military Potential', (PhD Dissertation, The University of Amsterdam, 2013).
- Orgen, Kenneth, 'Humanitarian Law in the Articles of War Decreed in 1621 by King Gustavus II Adolphus of Sweden', *International Review of the Red Cross*, No. 313, 1996, pp. 438-442.
- Ornstein, Norman, 'Foreign Policy and the 1992 Elections', *Foreign Affairs*, Vol. 72, No. 3, 1992, pp. 1-16.
- Owens, William, 'The American Revolution in Military Affairs', *Joint Force Quarterly*, Vol. 10, 1996, pp. 37-38.
- Palmer, Diego Ruiz, 'The NATO-Warsaw Pact Competition in the 1970s and 1980s: A Revolution in Military Affairs in the Making or the End of a Strategic Age', *Cold War History*, Vol 14, No. 4, 2014, pp. 533-574.
- Petrelli, Niccolo, 'Israel's Struggle Against Hamas', (PhD Dissertation, Roma Tre University, 2014).
- Pressman, Jeremy, 'Israeli Unilateralism and Israeli-Palestinian Relations 2001-2006', *International Studies Perspectives*, No. 7, 2006, pp. 360-376.
- Prothero, Donald, 'Punctuated Equilibrium at Twenty: A Paleontological Perspective', *Skeptic*, Vol. 1, No. 3, 1992, pp. 38-47.
- Regev, Motti, 'To have a Culture of Our Own: on Israeliness and Its Variants', *Ethnic and Racial Studies*, Vol. 23, No. 2, 2000, pp. 223-247.
- Robinson, Julian, 'Non Lethal Warfare and the Chemical Weapons Convention', *A further HSP submission to the OPCW Open-Ended Working Group on Preparations for the Second*

CWC Review Conference, 24 October 2007, <http://www.sussex.ac.uk/Units/spru/hsp/Papers/421rev3.pdf>, [accessed: 01/12/2013].

- Rogers, Clifford, 'The Military Revolutions of the Hundred Years' War', *The Journal of Military History*, Vol. 57, No. 2, 1993, pp. 241-278.
- Ronald Sutherland, 'Chemical and Biochemical Non-Lethal Weapons', *Stockholm International Peace Research Institute (SIPRI) Policy Paper*, No. 23, 2008.
- Rosen, Stephen, 'Military Effectiveness: Why Society Matters', *International Security*, Vol. 19, No. 4, 1995, pp. 5-31.
- Rosen, Stephen, 'The Impact of the Office of Net Assessment on the American Military in the Matter of the Revolution in Military Affairs', *Journal of Strategic Studies*, Vol. 33, No. 4, 2010, pp. 469-482.
- Rosenberg, Barbara, '"Non-Lethal" Weapons May Violate Treaties', *The Bulletin of the Atomic Scientists*, Vol. 50, No. 5, 1994, pp. 44-45.
- Sade, Sharon, 'Israel's Defence Industry in the 21st Century: Challenges and Opportunities', *Strategic Assessment*, Vol. 7, No. 3, 2004, pp. 31-40.
- Schwartz, Barry, et al., 'The Recovery of Masada: A Study in Collective Memory', *The Sociological Quarterly*, Vol. 27, No. 2, 1986, pp. 147-164.
- Scott, Richard, 'Nonlethal Weapons and the Common Operating Environment', *Army Magazine*, Vol. 60, No. 4, 2010, pp. 21-26.
- Selivanov, V., Leonov, V., Bagdasaryan, N., 'Social Aspects of NLW Development', in *Proceeding to the 3rd European Symposium on Non-Lethal Weapons*, (Ettlingen: Fraunhofer-Institut für Chemische Technologie ICT, 2005).
- Shain, Yossi, Rogachevsky, Neil, 'Between JDate and J Street: US Foreign Policy and the Liberal Jewish Dilemma in America', *Israel Journal of Foreign Affairs*, Vol. 3, 2011, pp. 37-48.
- Shalom, Zaki, 'Is the IDF Prepared to Face a Regular War against the Arab States?', *Military and Strategic Affairs*, Vol. 1, No. 1, April 2009, pp. 17-23.
- Shishkina, O., 'Post-Soviet Foreign Policy Foundations: State Interests vs. Identities', *Moscow State Institute of International Relations (MGIMO) Blog - Govoryat Eksperty MGIMO*, 9 June 2014, <http://www.mgimo.ru/news/experts/document253273.phtml>, [accessed: 07 August 2014].
- Siboni, Gabriel, 'War and Victory', *Military and Strategic Affairs*, Vol. 1, No. 3, 2009, pp. 39-49.
- Silliman, Stephen, 'The "Old West" in the Middle East: U.S. Military Metaphors in Real and Imagined Indian Country', *American Anthropologist*, Vol. 110, Issue 2, 2008, pp. 237-247.
- Siltman, Frank, Frisbie, John, 'Fire Support Just Got Harder: Adding Nonlethal Fires as a Core Competency', *Fires Bulletin*, July-September 2008, pp. 6-8.
- Siniscalchi, Joseph, 'Non-Lethal Technologies: Implications for Military Strategy', *Center for Strategy and Technology Occasional Paper*, No. 3, 1998.
- Sofer, Sasson, 'Towards distant frontiers: the course of Israeli diplomacy', *Israel Affairs*, Vol. 10, No. 1-2, 2004, pp. 1-9.

- Stanton, Martin, 'What Price Sticky Foam?', *Parameters*, Vol. XXVI, No. 3, 1996, pp. 63-68.
- Steinberg, Gerald, 'Lawfare', *Hamas, the Gaza War and Accountability, under International Law, Updated Proceedings to an International Conference, 18 June 2009*, Jerusalem Center for Public Affairs and the Konrad Adenauer Stiftung, Jerusalem, 2013.
- Swett, Charles, *Strategic Assessment: Non-Lethal Weapons*, Office of the Assistant Secretary of Defense for Special Operations and Low-Intensity Office, 9 November 1993.
- Tafolla, Tracy, Trachtenberg, David, Aho, John, 'From Niche to Necessity: Integrating Non-Lethal Weapons into Essential Enabling Capabilities', *Joint Force Quarterly*, Vol. 66, 2012, pp. 71-79.
- Trenin, Dmitri, 'Putin's Biggest Challenge Is Public Support', *Carnegie Moscow Center*, 15 January 2015, <http://carnegie.ru/2015/01/15/putin-s-biggest-challenge-is-public-support/hz15>, [accessed: 2 September 2015].
- Van Aelst, Peter, Walgrave, Stefaan, 'New Media, New Movements? The Role of the Internet in Shaping the 'Anti-Globalization' Movement', *Information, Communication & Society*, Vol. 5, No. 4, 2002, pp. 465—493.
- Vickers, Rhiannon, 'Harold Wilson, the British Labour Party, and the War in Vietnam', *Journal of Cold War Studies*, Vol. 10, No. 2, 2008, pp. 41-70.
- Vilke, Gary, Chan, Theodore, 'Less Lethal Technology: Medical Issues', *Policing: An International Journal of Police Strategies & Management*, Vol. 30, No. 3, 2007, pp. 341-357.
- Walzer, Michael, 'The Ethics of Warfare in the Jewish Tradition', *Philosophia*, Vol. 40, 2012, pp. 633-641.
- Weizman, Eyal, 'Lawfare in Gaza: Legislative attack', *Open Democracy*, <https://www.opendemocracy.net/article/legislative-attack>, [accessed: 28 October 2015].
- Wilmoth, Gregory, 'False-Failed Innovations', *Joint Force Quarterly*, Vol. 22, 1999, pp. 51-57.
- Yair, Gad, Odom-Weiss, Sharona, 'Israeli Diplomacy: The Effects of Cultural Trauma', *The Hague Journal of Diplomacy*, No. 9, 2014, pp. 1-23.

2.1.4. Newspaper Articles:

- "'36 killed" in raids on Baghdad', *TheGuardian*, 27 March 2003, <http://www.theguardian.com/world/2003/mar/27/iraq.sallybolton>, [accessed: 18 June 2015].
- 'Bowe Bergdahl release: US parties clash on Afghan deal', *BBCNew*, 2 June 2014, <http://www.bbc.co.uk/news/world-asia-27658821>, [accessed: 18 June 2015].
- 'Infinite Justice, out - Enduring Freedom, in', *BBCNews*, 25 September 2001, <http://news.bbc.co.uk/1/hi/world/americas/1563722.stm>, [accessed: 24 June 2015].
- 'More than 1,000,000 Iraqis Murdered', *Opinion Research Business*, September 2007.
- 'Netanyahu Holocaust remarks: Israeli PM criticised', *BBCNews*, 21 October 2015, <http://www.bbc.co.uk/news/world-middle-east-34594563>, [accessed: 27 October 2015].
- 'Obama Apologises to MSF President for Kunduz Bombing', *BBCNews*, 7 October 2015, <http://www.bbc.co.uk/news/world-us-canada-34467631>, [accessed: 22 November 2015].

- Parsons, Dan, 'Army, Marine Corps Succeed in Rapidly Fielding Specialized Individual Weapons (UPDATED)', *National Defence*, January 2013, <http://www.nationaldefensemagazine.org/archive/2013/January/Pages/Army,MarineCorpsSucceedinRapidlyFieldingSpecializedIndividualWeapons.aspx>, [accessed: 24 December 2015].
- Ricks, Thomas, 'Rotation Policy: Iraq & Afghanistan Were Really the Wars We Fought 1 Year at a Time', *Foreign Policy*, 27 May 2015.
- 'Russia's Unguided Weapons in Syria Could Ricochet on Moscow', *Time*, 2 October 2015, <http://time.com/4059442/russia-bombing-syria-isis-assad/>, [accessed: 22 November 2015].
- 'SPIEGEL Interview: Merkel: Guantanamo Mustn't Exist in Long Term', *Spiegel International Online*, January 09, 2006, <http://www.spiegel.de/international/spiegel-interview-merkel-guantanamo-mustn-t-exist-in-long-term-a-394180.html>, [accessed: 24 June 2015].
- 'Text of George Bush's speech', *The Guardian*, <http://www.theguardian.com/world/2001/sep/21/september11.usa13>, [accessed: 18 June 2015].
- 'Ties between Israel and US 'worst in 35 years'', *BBCNews*, 15 March 2010, <http://news.bbc.co.uk/1/hi/8567706.stm>, [accessed: 26 October 2015].
- 'To Israel with love', *Economist*, 3 August 2006, <http://www.economist.com/node/7255198>, [accessed: 26 October 2015].
- 'World Court Tells Israel to Tear Down Illegal Wall', *Guardian*, 10 July 2004, <http://www.theguardian.com/world/2004/jul/10/israel3>, [accessed: 26 October 2015].
- Bender, Bryan, 'USAF Seeks Air-Dropped Non-Lethal Weapons', *Jane's Defence Weekly*, 24 March 1999.
- Bolton, Doug, 'French warplanes bombard Isis Raqqa strongholds two days after Paris attacks', *Independent*, 18 November 2015, <http://www.independent.co.uk/news/world/middle-east/french-warplanes-bombard-isis-strongholds-in-raqqa-two-days-after-paris-attacks-which-killed-132-a6735636.html>, [accessed: 29 November 2015].
- Booth, William, 'Israeli government to refugees: Go back to Africa or go to prison', *The Washington Post*, 14 May 2015, https://www.washingtonpost.com/world/middle-east/toughening-its-stance-toward-migrants-israel-pushes-africans-to-leave/2015/05/14/e1637bce-f350-11e4-bca5-21b51bbdf93e_story.html, [accessed: 5 November 2015].
- Craig, Tim, Ryan, Missy, Gibbons-Neff, Thomas, 'By Evening, a Hospital. By Morning, a War Zone', *Washington Post*, 10 October 2015, https://www.washingtonpost.com/world/national-security/story-of-how-a-kunduz-hospital-was-shelled-by-us-gunship-in-question/2015/10/10/1c8affe2-6ebc-11e5-b31c-d80d62b53e28_story.html, [accessed: 22 November 2015].
- Harkov, Lahav, 'Former British commander in Afghanistan: No army acts with as much discretion as IDF does', *Jerusalem Post*, 9 April 2014.
- Khoury, Jack, et al., 'Israel Girds for Diplomatic War Over 'Biased' UN Gaza Report', *Ha'aretz*, 15 September 2009, <http://www.haaretz.com/israel-girds-for-diplomatic-war-over-biased-un-gaza-report-1.7831>, [accessed: 29 October 2015].

- Knickerbocker, Brad, 'The Fuzzy Ethics of Nonlethal Weapons', *Christian Science Monitor*, 14 February 2003, <http://www.csmonitor.com/2003/0214/p02s01-usmi.html>, [accessed: 07 August 2014].
- Marcus, Jonathan, 'Russians urged to stop 'vacuum' bombings', *BBCNews*, 15 February 2000, <http://news.bbc.co.uk/1/hi/world/europe/644087.stm>, [accessed: 14 March 2016].
- McGlaun, Shane, 'U.S. Military Demonstrates "Active Denial System" Non-Lethal Weapon', *DAILYTECH*, 12 March 2012, <http://www.dailytech.com/US+Military+Demonstrates+Active+Denial+Syste%20m+NonLethal+Weapon+/article24208.htm>, [accessed: 10 September 2015].
- Milbank, Dana, 'At UN, Bush Is Criticised over Iraq', *The Washington Post*, 24 September 2003, <http://www.washingtonpost.com/archive/politics/2003/09/24/at-un-bush-is-criticized-over-iraq/a8b7d7eb-15be-4b47-a197-6275867a26e7/>, [accessed: 24 June 2015].
- Rubin, Alissa, 'The Conflict in Iraq: 40 Killed in U.S. Attack on Iraqi Border Village', *Los Angeles Times*, May 20, 2004, <http://articles.latimes.com/2004/may/20/world/fg-iraq20>, [accessed: 18 June 15].
- Saletan, William, 'Israel's Unprecedented Steps to Avoid Civilian Casualties', *The National Post*, 16 July 2014.
- Sofer, Roni, 'Lieberman: Goldstone Report Meant to Destroy Israel's Image', *Yedioth Ahronoth*, 17 September 2009, <http://www.ynetnews.com/articles/0,7340,L-3778143,00.html>, [accessed: 29 October 2015].
- Sofer, Roni, 'Peres: Goldstone Report Makes Mockery of History', *Yedioth Ahronoth*, 16 September 2009, <http://www.ynetnews.com/articles/0,7340,L-3777814,00.html>, [accessed: 29 October 2015].
- Spillius, Alex 'Barack Obama 'proposes to move terrorists suspects from Guantanamo Bay'', *The Telegraph*, 10 Nov 2008, <http://www.telegraph.co.uk/news/worldnews/northamerica/usa/3417913/Barack-Obama-proposes-to-move-terrorists-suspects-from-Guantanamo-Bay.html>, [accessed: 24 June 2015].
- Stokes, Bruce, '70 Years after Hiroshima, Opinions Have Shifted on Use of Atomic Bomb', *PewResearchCenter*, 4 August 2015, <http://www.pewresearch.org/fact-tank/2015/08/04/70-years-after-hiroshima-opinions-have-shifted-on-use-of-atomic-bomb/>, [accessed: 19 December 2015].
- Swinnen, Maud, 'Gaza EU statement is a misunderstanding, says Czech Minister', *The European Jewish Press*, 5 January 2009, <http://www.eurojewcong.org/Improving%20EU-Israel%20relations/3345-gaza-eu-statement-is-a-misunderstanding-says-czech-minister.html>, [accessed: 29 October 2015].

2.1.5. Documentaries:

- Eugene Jarecki, *Why We Fight*, (Axiom Films, 2005).

2.2. Russian Language:

2.2.1. Books:

- Alabin, Peter, *Trehvnikovaya godovshchina goroda Samary*, [*Three-Century-Old Anniversary of the City of Samara*], (Samara: Gubernskaya Zemskaya Tipografiya, 1887).
- Berdyaev, Nikolai, *Novoye Srednevekov'ye - Razmyshleniya o sud'be Rossii i Yevropy*, [*New Middle Ages: Reflections on the Destiny of Russia and Europe*], (Moscow: Feniks-HDS Press, 1991).
- Berdyaev, Nikolai, *Sud'ba Rossii*, [*The Destiny of Russia*], reprint edition from 1918 publication, (Moscow: Filosofskoye Obshchestvo SSSR, 1990).
- *Brockhaus and Efron Encyclopedic Dictionary*, Petersburg, 1907, Vol. XVI, (Russian).
- Burenok, V., Leonov, A., Pronin, A., *Voyenno-Ekonomicheskiye i Innovatsionnyye Aspekty Integratsii Netraditsionnykh Vidov Oruzhiya v Sostav Sistemy Vooruzheniya*, [*Military-Economic and Innovative Aspects of the Integration of Non-traditional Weapons*], (Moscow: Izdatel'skaya Gruppya Granitsa, 2014).
- Dostoyevsky, Fyodor, 'Vlas', *Polnoye sobraniye sochineniy v 30 tomakh. Tom 21- Dnevnik pisatelya 1873 god*, [*The Omnibus in Thirty Volumes. Volume 21 – Writer's Diary 1873*], (Leningrad: Nauka, 1980).
- Dostoyevsky, Fyodor, *Dnevnik pisatelya*, [*A Writer's Diary*], (Kaliningrad: Yantarnii Rasskaz, 2005).
- Dzyaloshinskiy, I., Dzyaloshinskaya M., (ed.), *Rossiyskiye SMI: kak sozdayetsya obraz vraga*, [*Russian Mass Media: How the image of enemy is created*], (Moscow: Moskovskoe Byuro po Pravam Cheloveka "Academia", 2008).
- Fedotov, Georgii, *Sud'ba i grekhi Rossii*, [*The fate and the sins of Russia*], Volume II, (Saint-Petersburg: Sofiya, 1991).
- Gubanov, V., *Russkiy natsional'nyy kharakter v kontekste politicheskoy zhizni Rossii*, [*Russian National Character in the Context of the Russian Political Life*], (Sent-Petersburg: Izdatel'skiy Tsentr SPbGMGU, 1999).
- Ilyin, Ivan, *Natsional'naya Rossiya nashi zadachi*, [*National Russia: Our Goals*], (Moscow: Algoritm, 2007).
- Ilyin, Ivan, *Natsional'naya Rossiya, nashi zadachi*, [*National Russia, Our Goals*], (Moscow: Eskimo Algoritm, 2011).
- Ilyin, Ivan, *Puti Rossii*, [*Russian Ways*], (Moscow: Vagrius, 2007).
- Ilyin, Ivan, *Sushchnost' i svoyeobraziye Russkoy kul'tury*, [*Essence and peculiarity of Russian culture*], (Moscow: Russkaya Kniga-XXI Vek, 2007).
- Inosemzev, Vladislav, *Poteryannoye desyatiletie*, [*The Lost Decade*], (Moscow: Moskovskaya shkola politicheskikh issledovaniy, 2013).
- Lenin, Vladimir, *Sotsializm i vojna*, [*Socialism and War*], (Moscow: Partizdat TsK VKPb, 1937).
- Lipman, M., (ed.), *Povestka dnya dlya novogo prezidentstva*, [*Agenda for the New Presidency*], (Moscow: Moscow Carnegie Centre, Rossiyskaya Politicheskaya Entsiklopediya, 2012).

- Lossky, Nikolay, *Kharakter Russkogo naroda – Kniga 1*, [The Character of the Russian people- Book 1], (Frankfurt Main: Possev-Velrlag, 1957).
- Lyaschenko, V., *Torgovlya Oruzhiyem: oruzhiye neletal'nogo deystviya, sozdaniye, proizvodstvo, primeneniye, operatsii na mirovom rynke*, [Trade in Weapons: Weapons with Non-Lethal Action, Development, Production, Employment, Operations on the World Market], (Moscow: Ekonomika, 2011).
- Novikova, L., Sizemskaya, I., (ed.), *Mir Rossii - Yevraziya: Antologiya*, [The World of Russia - Eurasia: An Anthology], (Moscow: Vysshaya shkola, 1995).
- Panarin, Alexander, *Rossiya v tsivilizatsionnom protsesse: (mezhdru atlantizmom i yevraziystvom)*, [Russia in the civilisation process (between Atlanticism and Eurasianism)], (Moscow: Istitut filosofii RAN, 1995).
- Rudnitskaya, E., (ed.), *Mirotvorchestvo v Rossii - Tserkov', Politika, Mysliteli, ot rannego srednevekov'ya do rubezha XIX-XX stoletiy*, [Peacemaking in Russia: The Church, Politics, Thinkers: from the early Middle Ages to the Boundary between the 19th and 20th Centuries], (Moscow: Nauka, 2003).
- Shakleina, T., *Rossiya i SSHA v mirovoy politike*, [Russia and the USA in the World's Politics], (Moscow: Aspekt Press, 2012).
- Shmelev, N., (ed.), *Rossiya v mnogoobrazii tsivilizatsiy*, [Russia in the Diversity of Civilizations], (Moscow: Ves' Mir, 2011).
- Sikorskii, Ivan, *Cherty iz psikhologii slavyan - rech' na torzhestvennom zasedanii Slavyanskogo blagotvoritel'nogo obshchestva 14 maya 1895 goda*, [Lines from the Psychology of Slavs- A Speech at the Ceremonial Meeting of the Slavic Charitable Society on 14 May 1895], (Kiev: Tipografiya imeni Chokolova, 1895).
- Smul'skii, S., Abramova, O., Buyanov, V., (ed.), *Vneshnyaya politika Rossii: teoriya i praktika*, [The Foreign Policy of Russia: Theory and Practice], (Moscow: Kniga i Biznes, 2013).
- Solonevich, Ivan, *Narodnaya Monarkhiya*, [People's Monarchy], (Moscow: Algoritm, 2011).
- Solonevich, Ivan, *Zagadka i razgadka Rossii*, [The Riddle and the Key of Russia], (Moscow: "FondIV", 2008).
- *The XXI Century Encyclopaedia – Russian Arms and Technologies, Volume XII: Ordnance and Munition*, (Moscow: Arms and Technologies, 2006), pp. 754-765, (Russian/English).
- *The XXI Century Encyclopaedia – Russian Arms and Technologies, Volume XV: Security and Law Enforcement Facilities*, (Moscow: Arms and Technologies, 2007), (Russian/English).
- Vladimirov, Alexander, *Osnovy Obshchey Teorii Voyny*, [Fundamentals of General Theory of War], (Moscow: Moskovskiy Finansovo-Promyshlennyi Universitet "Sinergiya," 2013).

2.2.2. Chapters in Edited Books:

- Arbatov, A., Dvorkin, V., 'Voyennaya reforma: proshchety i puti ikh ispravleniya', ['Military Reform: Miscalculations and the Ways to Their Correction'], in Lipman, M., (ed.), *Povestka dnya dlya novogo prezidentstva*, [Agenda for the New Presidency], (Moscow: Moscow Carnegie Centre, Rossiyskaya Politicheskaya Entsiklopediya, 2012).

- Buyanov, V., 'Rossiya v globaliziruyushchemsya mire: politicheskiy aspekt', ['Russia in the Globalizing World: Political Aspect'], in Smul'skii, S., Abramova, O., Buyanov, V., (ed.), *Vneshnyaya politika Rossii: teoriya i praktika*, [*The Foreign Policy of Russia: Theory and Practice*], (Moscow: Kniga i Biznes, 2013).
- Dzyaloshinskiy, I., 'Kul'tura, zhurnalistika, tolerantnost'', ['Culture, Journalism, Tolerance'], in Dzyaloshinskiy, I., Dzyaloshinskaya M., (ed.), *Rossiyskiye SMI: kak sozdayetsya obraz vruga*, [*Russian Mass Media: How the image of enemy is created*], (Moscow: Moskovskoe Byuro po Pravam Cheloveka "Academia", 2008).
- Florovskii, Georgii, 'Yevraziyskiy soblazn', ['Eurasian Temptation'], in Novikova, L., Sizemskaya, I., (ed.), *Mir Rossii - Yevraziya: Antologiya*, [*The World of Russia - Eurasia: An Anthology*], (Moscow: Vysshaya shkola, 1995).
- Rudnitskaya, E., Lisovoi, N., 'Mirotvorcheskaya paradigma russkoy mysli', ['The Peacemaking Paradigm of the Russian Thought'], in Rudnitskaya, E., (ed.), *Mirotvorchestvo v Rossii - Tserkov', Politika, Mysliteli, ot rannego srednevekov'ya do rubezha XIX-XX stoletiy*, [*Peacemaking in Russia: The Church, Politics, Thinkers: from the early Middle Ages to the Boundary between the 19th and 20th Centuries*], (Moscow: Nauka, 2003).
- Smirnov, A., 'Kontseptsii vneshney politiki Rossiyskoy Federatsii: sravnitel'nyy analiz', ['The Foreign Policy Concept of the Russian Federation – Comparative Analysis'], in Smul'skii, S., Abramova, O., Buyanov, V., (ed.), *Vneshnyaya politika Rossii: teoriya i praktika*, [*The Foreign Policy of Russia: Theory and Practice*], (Moscow: Kniga i Biznes, 2013).
- Zhurkin, V., Nosov, M., Danilov, D., 'Voprosy mezhdunarodnoy bezopasnosti', ['Questions of International Security'], in Shmelev, N., (ed.), *Rossiya v mnogoobrazii tsivilizatsiy*, [*Russia in the Diversity of Civilizations*], (Moscow: Ves' Mir, 2011).

2.2.3. Academic Articles, Proceeding to Conferences and Unpublished PhD dissertations:

- Alekseyev, Veniamin, 'Ekaterinburg', *Rodina*, No.8, 2003, pp. 100-145, (Russian).
- Antipov, V., Novichkov, S., 'K voprosu o razrabotke i primenenii neletal'nykh sredstv porazheniya na khimicheskoy osnove', ['Regarding the Question about the Development and Employment of Non-Lethal Means Based on Chemicals'], *Voennaya Misl'*, No. 9, 2009, pp. 54-61.
- Averkov, V., 'Prinyatiye vneshnepoliticheskikh resheniy v Rossii', ['Foreign Policy Decision-Making in Russia'], *Mezhdunarodnyye Protsessy*, Vol. 10, No. 2(29), 2012, pp. 59-70.
- Baev, P., 'Trayektoriya voyennoy reformy v Rossii', ['The Trajectory of the Military Reform in Russia'], *Pro et Contra*, Vol. 16, Issue 4-5, 2012, pp. 171-184.
- Baranovskii, V., 'Osnovnyye parametry sovremennoy sistemy mezhdunarodnykh otnosheniy – chast' III', ['The Major Parameters of the Modern System of International Relations – Part III'], *Polis: Politicheskii Issledovaniya*, No. 5, 2012, pp. 148-156.
- Bogaturov, A., 'Tri pokoleniya vneshnepoliticheskikh doktrin Rossii', ['The three generations of the Russian Foreign Policy Doctrines'], *Mezhdunarodnyye Protsessy*, Vol. 5, No. 1(3), 2007, pp. 54-69.

- Burenok, V., Korchak, V., Smirnov, S., ‘Oruzhiye neletal’nogo deystviya - sostavnaya chast’ sistemy vooruzheniya budushchego’, [‘Weapons with Non-Lethal Action – The Constitutive Part of the Future Weaponry System’], *Vestnik Akademii Voyennykh Nauk*, No. 4, 2007, pp. 117-127.
- Burutin, A., Zaitsev, D. Mastruk, D., et al., ‘Sistematizatsiya tipovykh skhem primeneniya oruzhiya neletal’nogo deystviya’, [‘The Systematisation of Typical Scenarios of the Implementation of Weapons with Non-Lethal Action’], *Strategicheskaya Stabil’nost’*, No. 2 (51), 2010, pp.18-26.
- Chernichenko, S., ‘Dvoynnye Standarty’, [‘Double Standartds’], *Mezhdunarodnaya Zhizn’*, No. 12, 2008, pp. 63-71.
- Chuvatkin, N., ‘Irritanty v sredstvakh neletal'nogo deystviya’, [‘Irritant in Non-Lethal Means’], *Proceeding to the International Conference ‘Special Means of Non-Lethal Action’*, Moscow, 2012.
- Efremov, E., ‘Matematicheskoye modelirovaniye primeneniya oruzhiya neletal’nogo deystviya v mirotvorcheskikh operatsiyakh’, [‘The Mathematical Simulation of the Employment of Weapons with Non-Lethal Action during Peacemaking Operations’], *Voennaia Misl’*, No. 4, 2012, pp. 39-43.
- Gromyko, A., ‘Mirovoy poryadok i pravoporyadok’, [‘World Order and the Rule of Law’], *Mezhdunarodnaya Zhizn’*, No. 3, 2012, pp. 18-31.
- Gudkov, Lev, ‘Pamyat’ o voyne i massovaya identichnost’ rossiyan’, [‘Memory of War and the Russian Identity’], *Neprikosnovennyy Zapas*, No. 2-3 (40-41), 2005.
- Gudkov, Lev, ‘God chechenskoy voyny v obshchestvennom mnenii Rossii’, [‘A Year of Chechen Way in the Russian Public Opinion’], *Druzhiba Narodov*, No. 2, 1996.
- Gudkov, Lev, ‘Tsinizm "neperekhodnogo" obshchestva’, [‘Cynicism of “Non-transitional” Society’], *Vestnik obshchestvennogo mneniya. Dannyye. Analiz. Diskussii*, Vol. 2 [76], 2005, pp. 43-82.
- Harvardt, A., Zaitsev, D., Moiseev, V., et al., ‘Perspektivy primeneniya oruzhiya neletal'nogo deystviya v urbanizirovannom rayone’, [‘The Perspectives of the Employment of Weapons with Non-Lethal Action in Urban Area’], *Strategicheskaya Stabil’nost’*, No. 1(61), 2014, pp.64-71.
- Ilyin, L., Rikhlin, V., ‘Inkapsitanty kak oruzhiye neletal'nogo deystviya’, [‘Incapacitants as Weapons with Non-Lethal Action’], *Voennaia Misl’*, No. 9, 2014, pp. 37-42.
- Khlobustov, Oleg, ‘Chechnya, Terrorizm i Kontrterroristicheskiye Operatsii v Zerkale Obshchestvennogo Mneniya’ [‘Chechnya, Terrorism and Counter-Terrorism Operations in the Mirror of Public Opinion’], *Vlast’*, No. 5, 2003, pp. 54-59.
- Korchak, V., Smirnov, S., ‘Regulirovaniye normativno-pravovykh otnosheniy pri sozdaniy oruzhiya neletal'nogo deystviya’, [‘The Legislative Regulation Regarding the Development of Weapons with Non-Lethal Action’], *Kompetentnost’*, No. 4-5 (45-46), 2007, pp. 3-10.
- Kotlyar, V., ‘”Otvetsvennost’ pri zashchite” i “Arabskaya Vesna”’, [‘”The Responsibility to Protect” and the “Arab Spring”’], *Mezhdunarodnaya Zhizn’*, No. 9, 2012, pp. 99-114.
- Lapkin, V., Pantin, V., ‘Dinamika obraza Rossii i tsikly reform-kontrreform’, [‘The Dynamics of Russia and the reform/counter-reform cycles’], *Rossiya i musul'manskiy mir*, No.5, 2008, pp. 15-22.

- Levinson, Aleksey, 'Voyna, voyny, voyne...', ['War, Wars, to War...'], *Neprikosnovennyy Zapas*, no. 2-3 (40-41), 2005.
- Moiseev, A., 'O nekotorykh mezhdunarodno-pravovykh pozitsiyakh po ukrainskomu voprosu', ['About Some International Law Positions on the Ukrainian Issue'], *Mezhdunarodnaya Zhizn'*, No. 5, 2014, pp. 53-65.
- Moiseev, V. Orlyanskii, V., 'Oruzhiye neletal'nogo deystviya i printsipy taktiki', ['Weapons with Non-Lethal Action and the Principles of Tactics'], *Voennaia Misl'*, No. 6, 2011, pp. 26-33.
- Muranov, Artem, 'Administrativno-pravovoy rezhim oruzhiya neletal'nogo deystviya: problemy formirovaniya i realizatsii', ['The Regulatory System of Weapons with Non-Lethal Action: Problems of Formulation and Implementation'], (PhD thesis, The All-Russian Research Institute of the Ministry of Internal Affairs of the Russian Federation, 2008).
- Nagovitsyn, A., 'Ispol'zovaniye oruzhiya neletal'nogo deystviya kollektivnymi silami ODKB', ['The Employment of Weapons with Non-Lethal Action by CSTO Forces'], *Zashchita i Bezopasnost'*, No. 3(58), 2011, pp.2-3.
- Nagovitsyn, A., Grudzinskii, A., Sporykhin, A., 'Oruzhiye neletal'nogo deystviya i perspektivy yego ispol'zovaniya v interesakh sil Organizatsii Dogovora o kollektivnoy bezopasnosti', ['Weapons with Non-Lethal Action and the Perspectives of Their Employment in the Interest of Collective Security Treaty Organization'], *Voenaya Misl'*, No.3, 2011, pp. 51-59.
- Ovchinnikov, V., 'Lokal'nyye vooruzhennyye konflikty i bezopasnost' Rossii', ['Local Armed Conflicts and the Security of Russia'], *Zashchita i Bezopasnost'*, No. 4(47), 2008, pp. 9-11.
- Pantelev, S., 'Attraktory vrazhduyushchikh storon v lokal'nykh konfliktakh s primeneniyyem sredstv neletal'nogo vozdeystviya', ['Attractors of the Sides Fighting in Local Conflicts with the employment of Weapons with Non-Lethal Action'], *Voennaia Misl'*, No. 4, 2012, pp. 11-16.
- Pantin, Vladimir, 'Istoricheskaya rol' rossii mezhdum zapadom i vostokom', ['The Historical Role of Russia between the West and the East'], *Istoriya i sovremennost'*, No. 2, 2012, pp. 93-112.
- Petrosyan, Levon, 'Konflikt mentalitetov kak osnovaniye protivostoyaniya politicheskikh kul'tur (Rossiya i severoatlanticheskiy soyuz v mire posle kholodnoy voyny)', ['The Conflict of Mentalities as a Basis for the Political Cultures Stand-Off: Russia and The North Atlantic Treaty Organization in the Post-Cold War World'], (PhD thesis, Moscow State Pedagogical University, 2003).
- Primakov, E., 'Vneshnyaya politika vo vse bol'shey stepeni napravlyayetsya na vosstanovleniye Rossii v kachestve derzhavy mirovogo klassa', ['Foreign Policy is More Directed to the Restoration of Russia as a World-class Power'], *Mezhdunarodnaya Zhizn'*, No. 1-2, 2008, pp. 48-51.
- Pronin, A. Leonov, A., Kaplyarchuk, L., 'Osnovnyye kriterii voyenno-ekonomicheskoy otsenki oruzhiya neletal'nogo deystviya', ['The Major Criteria of Military-Economic Evaluation of Weapons with Non-Lethal Action'], *Voennaia Misl'*, No.10, 2012, pp. 43-50.

- Rabotyazhev, N., Solov'yev, E., 'Ot "Vozvrashcheniya v Mirovuyu Tsivilizatsiyu" k "Suverennoy Demokratii": Evolyutsiya vneshnepoliticheskikh kontseptsiy Rossiyskikh "Partiy Vlasti"', [From the "Comeback to the World Civilization" to the "Sovereign Democracy": An Evolution of the Foreign Policy Conceptions of the Russian "Parties in Power"]], *Politiya*, No. 1(68), 2013, pp. 36-54.
- Rogov, K., 'Sverkhbol'shinstvo dlya sverkhprezidentstva', [Supermajority for Superpresidency], *Pro et Contra*, Vol. 17, Issue 3-4, 2013, pp. 102-125.
- Savrasov, S., 'Kontseptsiya primeneniya oruzhiya neletal'nogo deystviya v boyevykh operatsiyakh sukhoputnykh voysk VS SSHA', [The Policy of the U.S. Army's Employment of NLWs in Combat Operations], *Zarubezhnoe voennoe obozrenie*, No. 10, 2009, pp. 37-44.
- Selivanov, V., 'Oruzhiye neletal'nogo deystviya kak sredstvo bor'by s terrorizmom, obespecheniya mirotvorcheskikh operatsiy i operatsiy po pravoprinuzhdeniyu', [Non-Lethal Weapons as Means for Struggle against Terrorism, Provision on Peacekeeping and Law Enforcement Operations], *Vestnik Rossii'skoi' Akademii Estestvennih Nauk*, No. 4, 2005, pp.1-11.
- Selivanov, V., Levin, D., Ilyin, I., 'Metodicheskiye osnovy programmno-tselevogo upravleniya razvitiyem oruzhiya neletal'nogo deystviya', [Methodological Basics of Management by Objectives of Non-Lethal Weapons Development], *Voprosy Oboronnoy Tekhniki, Seriya 16*, No. 3-4 (69-70), 2014, pp. 36-50.
- Selivanov, V., Levin, D., Lyuwin, S., 'Arkhitektura i realizatsiya bazy dannykh "Oruzhiye Neletal'nogo Deystviya"', [The Architecture and Realisation of the data-base "Weapons with Non-Lethal Action"]], *Voprosi Oboronoj Tehniki – Seriya 16*, No. 7-8, 2012, pp. 63-76.
- Shakleina, T., 'Obshchnost' i razlichiya v strategiyakh Rossii i SSHA', [Common Ground and Divergences in the Strategies of Russia and the U.S.A.], *Mezhdunarodnyye Protsessy*, Volume 11, No. 2(33), 2013, pp. 6-19.
- Shetopal, E., 'Tsennostnyye kharakteristiki rossiyskogo politicheskogo protsessa i strategiya razvitiya strany', [The characteristics of Values of the Russian Political Process and the Country's Development Strategy], *Polis: Politicheskii Issledovaniya*, No. 2, 2014, pp. 61-71.
- Silnikov, A., 'Vidy spetsial'nykh sredstv sostoyashchikh na vooruzhenii OVD, i ikh klassifikatsiya', [Types and Classification of Special Equipment Adopted by the Russian Interior Ministry Units], *Vestnik Sankt-Peterburgskogo universiteta MVD Rossii*, No. 3(51), 2011, pp. 66-70.
- Snigur, V., 'Ovladet' gorodom bez zhertv i razrusheniy', [To Capture a City without Casualties or Damage], *Armei'skii' Sbornik*, No. 12, 2006, pp. 50-52.
- Solonevich, Ivan, 'Doklad o mezhdunarodnom polozhenii', [Report about the International Situation], *Nasha Strana*, No. 60, 1950, p. 1-2.
- Solonevich, Ivan, 'Tak chto zhe yest' demokratiya?', [So, What is Democracy?], *Nasha Strana*, No. 35 (p. 1-2), No. 36 (p.1-2), No. 38 (p. 1-2), 1950.
- Stupitskiy, E., Kuznetsova, L., 'Issledovaniye vozmozhnosti sozdaniya sredstv elektroshokovogo neletal'nogo vozdeystviya na bioob'yekty na bol'shikh rasstoyaniyakh', [The Research of the Possibility to Create Means for Non-Lethal Electroshock Impact on Biological Objects from Significant Distance], *Voenaya Misl'*, No. 4, 2013, pp. 38-46.

- Umbrashko, K., 'Istoricheskiy obzor: "novonikolayevskaya guberniya – novosibirskaya oblast': lyudi, sobytiya, fakty"', ['Historical Overview: "Novonikolayevsk Province - Novosibirsk Region: People, Events, Facts"', published in *Proceedings to the 2nd Russian Scientific-Practical Conference Dedicated to the 90th Anniversary of the Novonikolayevsk Province*, Part 1, Novosibirsk, 25 October 2011.
- Vladimirov, V., 'Sovremennaya voyna i grazhdanskaya oborona', ['Contemporary War and Civilian Defence'], *Strategiya Grazhdanskoy Zashchity: Problemy i Issledovaniya*, Vol. 2, No. 1, 2012, pp. 471-481.
- Vladimirov, V., Chernikh, G., 'Sostoyaniye i osnovnyye napravleniya razvitiya oruzhiya neletal'nogo deystviya, sredstv i sposob zashchity ot nego', ['The Status and the Major Development Directions of the Weapons with Non-Lethal Action, and Means and Ways of Protection Against Them'], *Strategiya Grazhdanskoy Zashchity: Problemy i Issledovaniya*, Vol. 2, No. 1, 2012, pp. 13-22.
- Voronin, E., 'Problema legitimnosti vooruzhennogo vmeshatel'stva. Liviyskiy Casus Belli', ['The Problem of Legitimacy of Armed Intervention. Libyan Casus Belli'], *Mezhdunarodnaya Zhizn'*, No. 8, 2012, pp. 107-118.
- Zaitsev, D., Kozlov, A., Moiseev, V., et al., 'Rol' i mesto oruzhiya neletal'nogo deystviya v konfliktakh nizkoy intensivnosti', ['The Role and the Place of Weapons with Non-Lethal Action in the Low-Intensity Conflicts'], *Strategicheskaya Stabil'nost'*, No. 4(61), 2012, pp.27-35.
- Zaitsev, D., Kudrjashov, A., Maystruk, D., et al., 'Perspektivy primeneniya kompleksov oruzhiya neletal'nogo deystviya na osnove KVCH-izlucheniya v spetsial'nykh operatsiyakh po presecheniyu masovykh besporyadkov' ['The Prospects for the Application of Millimeter-Wave NLW in Operations for the Suppression of Mass Riots'], *Strategicheskaya Stabil'nost'*, No. 2(55), 2011, pp. 54-59.
- Zaitsev, D., Martishev, S., Sergeev, S., et al., 'Porazhayushchiye faktory oruzhiya neletal'nogo deystviya - fizicheskiye osobennosti, biologicheskkiye efekty i taktika primeneniya', ['The Hitting Factors of Weapons with Non-Lethal Action: Physiological Features, Biological Effects and Employment Tactics'], *Strategicheskaya Stabil'nost'*, No. 3(64), 2013, pp.2-11.
- Zaitsev, D., Soskov, D., Foteev, A., 'Oruzhiye neletal'nogo deystviya na osnove izlucheniya - fizicheskiye osobennosti i perspektivy primeneniya', ['Weapons with Non-Lethal Action Based on Radiation: Physical Characteristics and Employment Perspective'], *Voennaya Misl'*, No. 4, 2013, pp. 30-37.
- Zemlyanko, A., Rozhkov, V., 'Poteri v lokal'nykh boyevykh deystviyakh', ['Losses in Local Armed Operations'], *Zashchita i Bezopasnost'*, No. 4(47), 2008, pp. 18-19.

2.2.4. Newspaper Articles:

- 'Minoborony: Na Forume "Armiya-2015" Pokazhut Netraditsionnyye Vidy Oruzhiya', ['Ministry of Defence: Non-Traditional Types of Weapons Will be Demonstrated at "Army-2020" Show'], *RiaNovosti*, 21 April, 2015,
- 'Voyennaya politsiya VVO poluchila partiyu travmaticheskikh pistoletov "Osa"', [Military Police Received Traumatic Pistols "OSA"], *RiaNovosti*, 13 February 2014, http://ria.ru/defense_safety/20140213/994703801.html, [accessed: 12 July 2014].

- Foht, Elizabeth, 'Rossiyskiye korabli v Kaspiyskom more nanesli udary po pozitsiyam IG v Sirii', ['Russian Ships in the Caspian Sea Attacked the Positions of ISIS in Syria'], *RBC*, 7 October 2015, <http://www.rbc.ru/politics/07/10/2015/561502039a7947add1998f52>, [accessed: 22 November 2015].
http://ria.ru/defense_safety/20150421/1059915256.html, [accessed: 4 September 2015].
- Petrov, I., 'Oruzhiye nesmertel'nogo deystviya', ['Weapons with Non-Lethal Action'], *Vecherniaia Moskva*, No. 190, October 08, 2004.

2.2.5. Documentaries:

- Kondrashev, Andrey, *Krim. Put' na Rodinu*, [*Crimea. The Way Home*], (Vserossiyskaya Gosudarstvennaya Televizionnaya i Radioveshchatel'naya Kompaniya, 2015), (Russian).
- Vladimir Solov'yev, *President*, (Masterskaya Movie Company, 2015), (Russian).

2.3. Hebrew Language:

2.3.1. Books:

- Avidor, Gidon, (ed.), *Hamashmauyot haben 'leumiyot, hamishpatiyot vehamusriyot belehima bekerev uh 'lusiya ezrahit*, [*The International, Legal and Moral Consequences of Warfare in Civil Environment*], (Latrun: The Zvi Meitar Institute for Land Warfare Studies, 2010).
- Bar-Tal, Daniel, *Lechiot im ha 'sichsuch: nituah psichologi-havrati shel' he'hevra ha'yehudit be'israel*, [*Living with the Conflict: Socio-Psychological Analysis of the Jewish Society in Israel*], (Jerusalem: Karmel, 2007).
- Ben-Israel, Yitzhak, *Milchemet tilim Harishona: Israel – Hizballa (kaitz 2006)*, [*The First Missile War: Israel – Hezbollah (2006)*], (Tel Aviv: Tel Aviv University Press, 2007).
- Ben-Meir, Dov, *Mediniyut Hutz*, [*Foreign Policy*], (Tel-Aviv: Yedioth Ahronot and Chemed Books, 2011).
- Gad, Yair, *Tzofen ha'isareliyut: aseret ha'dibrot shel' shnot he'al'paiim*, [*The Code of Israeliness: The Ten Commandments for the 21st century*], (Jerusalem: Keter Books, 2011).
- Gazit, Shlomo, *Hamakel vehagezer: hamimshal haisraeli be'yehuda veshomron*, [*The Stick and the Carrot: The Israeli Government in Judea and Samaria*], (Tel-Aviv: Zmora-Bitan, 1985).
- Igar, Moshe, Guvrin, Yosef, Oded, Rei, (ed.), *Misrad ha'hutz – 50 ha-shanim ha'rishonot* [*The Foreign Affairs Office – the 50 First Years*], (Jerusalem, Keter, 2002).
- Inbar, Efraim, *Israel eina mevudedet*, [*Israel Is not Isolated*], (Tel-Aviv: Begin-Sadat Center for Strategic Studies, 2013).
- Leon, Dan, Adlin, Yehuda, (ed.), *Chaim Weizmann: Statesman of the Jewish Renaissance*, (Jerusalem: Alpha Press, 1974).
- Noiberger, Benjamin, Gronik, Arie, (ed.), *Mediniut Hutz bein imut le'esderim – Israel 1948-2008*, [*The Foreign Policy between Conflict and Agreement – Israel 1948-2008*], (Raana: The Open University of Israel, 2008).

- Ofer, Zvi, Kober, Avi, (ed.), *Ichut ve'kamut: dilemot be'bniyat ha'koah ha'tzvai*, [*Quality and Quantity: Dilemmas of Building a Military Force*], (Tel Aviv: Ma'arachot, 1985).
- Pedro, Sharon, *Utzma raka ke'nehes leumi*, [*Soft Power as a National Asset*], (Jerusalem: The Jewish People Policy Planning Institute, 2004).
- Sofer, Sason, *Lidata shel ha'mah'shava hamedinit be'israel*, [*The birth of the Political Thought in Israel*], (Jerusalem: Shoken, 2001).
- Tal, Israel, *Bitachon leumi: meatim mul rabim*, [*National Security: Few against Many*], (Tel Aviv: Dvir, 1996).
- Telem, Inbal, Tzvaog, Shmuel, Noiberger, Benjamin, (ed.), *Mediniyut ha'hutz shel Israel – kovetz mismachim*, [*The Foreign Policy of Israel – Documents Collection*], (Raanana: The Open University of Israel, 2004).

2.3.2. Chapters in Edited Books:

- Bein, Yohanan, 'Israel, ha'um ve'ha'ma'araha le'shalom' ['Israel, the U.N. and the Struggle for Peace'] in Igar, Moshe, Guvrin, Yosef, Oded, Rei, (ed.), *Misrad ha'hutz – 50 ha-shanim ha'rishonot* [*The Foreign Affairs Office – the 50 First Years*], (Jerusalem, Keter, 2002).
- Gronik, Arie, 'Yahasei Israel ve'um – shalosh tkufot ve'shalosh she'elot', ['The Israel-U.N. Relations – Three Periods and Three Questions'] in Noiberger, Benjamin, Gronik, Arie, (ed.), *Mediniut Hutz bein imut le'esderim – Israel 1948-2008*, [*The Foreign Policy between Conflict and Agreement – Israel 1948-2008*], Vol. B, (Raanana: The Open University of Israel, 2008).
- Manor, Jonatan, 'Kishalon ha'asbara or kishalon ha'mediniyut?', [A Failure of the Hasbara or a Failure of the Policy?], in Noiberger, Benjamin, Gronik, Arie, (ed.), *Mediniut Hutz bein imut le'esderim – Israel 1948-2008*, [*The Foreign Policy between Conflict and Agreement – Israel 1948-2008*], (Raanana: The Open University of Israel, 2008).

2.3.3. Academic Articles:

- Albek, Yehuda, 'Pizur hafganot seder: ha'etgar ve'hama'ane', ['Riot Control: The Challenge and the Solution'], *Ma'arachot*, Vol. 449, 2013, pp. 24-29.
- Ben-Horin, Roi, 'Neshek Al-Hereg: Ha'alaha, Hama'ase ve-mashebenehem', ['Non-Lethal Weapons: Theory, Practice, and what Lies Between'], *Idkun Astrategi*, Vol. 4, No.1, 2001, pp. 18-24.
- Ben-Israel, Yitzhak, 'Neshel al-heger', ['Non Lethal Weapon'], *Ma'arachot*, Vol. 363, 1999, pp. 20-24.
- Ben-Israel, Yitzhak, 'Torat ha'yahasut shel bniyat ha'koah', [The Theory of Relativity of the Military Build-up], *Ma'arachot*, Vol. 352-353, 1997, pp. 33-42.
- Ben-Shalom, Uzi, "'Faser lematzav ham'em": mah'shevot al neshek pahot katlani be'sde hakrav', ["'Faser switched to Shock": Thoughts on Less Lethal Weapons on the Battlefield'], *Be'yabasha*, No. 15, September 2010.
- Bialer, Uri, 'Ben-Gurion ve'she'elat ha'orientatziya ha'beinleumit shel' Israel 1948-1956', ['Ben-Gurion and the Question of the International Orientation of Israel 1948-1956'], *Cathedra*, No. 43, 1987, pp. 145-172.

- Dayan, Moshe, 'Peulot Tzvayiot be'yemei shalom', ['Military Operations in Peacetime'], *Ma'arachot*, Vol. 119, 1959, p. 55-63.
- Dotan, Amos, 'Technologiyat meil' ruach: yoter mi'mahapecha technologit be'lechimat shir'yon', ['The Technology of Meil' Ruach: More than a Revolution in Armour Warfare'], *Ma'arachot*, Vol. 448, 2013, pp. 68-74.
- Grinfeld, Gabi, 'Lean halchu ha'lekhachim kulam?', ['Where Did All Lessons Go To?'], *Ma'arachot*, Vol. 380-381, 2001, p. 83.
- Harkabi, Yehoshafat, 'Hir'urim al torat ha'bitachon ha'leumi', ['Thoughts about the National Security Doctrine'], *Ma'arachot*, No. 270-271, 1979, pp. 42-45.
- Lieutenant Colonel Y. and Colonel Y., 'Mischakei milchama memuchshavim be tzal', ['Computerised War-games in the IDF'], *Ma'arachot*, Vol. 343, 1995, pp. 28-31.
- Mantzur-Karmel, Tamir, 'Likrat hel hagana mirchavit', ['Towards a Territorial Defence Force'], *Ma'arachot*, Vol. 459, 2015, pp. 20-27.
- Merom, Dror, 'Hamasokim neged hafganot hamoniyot' [Helicopters against Massive Demonstrations], *Bit'aon Hel' Avir*, No. 67 (168), 1989, pp. 14-15.
- Noiman, Noam, 'Lohamat mishpat: iumim ve'hizdamnuyyot', ['Lawfare: Threats and Opportunities'], *Ma'arachot*, No. 449, 2013, pp. 16-23.
- Peled, Tal, 'Am bone tzava bone am – ha'umnam?', ['Nation Builds Military That Builds Nation – Is That So?'], *Ma'arachot*, Vol. 442, 2012, pp. 68-72.
- Rodnik, Rafael, 'Haderch le'hasagat legitimatziya', ['The Way to Achieve a Legitimacy'], *Ma'arachot*, Vol. 449, 2013, pp. 9-15.
- Sagi, Raz, 'Mi'tzava ha'hagana le'tzava ha'hagana ha'mishpatit', ['From the Defence Force to the Legal Defence Force'], *Ma'arachot*, Vol. 462, 2015, pp. 56-59.
- Shachar, Amihud, 'Ha'baya eina be'tzal', ['The Problem is not in the IDF'], *Ma'arachot*, Vol. 380-381, 2001, pp. 88-89.
- Sharvit, Moshe, 'Mekoma shel ha'technologia be'doktrina shel tzal', ['The Place of Technology in the IDF's Doctrine'], *Ma'arachot*, Vol. 393, 2004, pp. 81-83.
- Sher, Yonatan, 'Hafsad lo ba' be'hashbon', ['A Riot Is not an Option'], *Be'yabasha*, No. 24, 2010.
- Shtultz, Guy-Zahar, 'Haf'alat koah medureget be'imutim besviva ezrahit' [The Employment of Graduate Force in Conflicts within Civilian Environment], *Ma'arachot*, Vol. 438, 2011, pp. 8-17.
- Tzur, Yaakov, 'Haim hiskil tzal lehafik et lekhei milhamotav ve'le'yasmam?', ['Whether Did the IDF Succeed to Generate the Lessons from Its Wars and Learn from Them?'], *Ma'arachot*, Vol.378-379, pp. 12-19.

2.3.4. Newspaper Articles:

- 'Eduto shel' nitzav Alik Ron bephnei va'adat Or, 3 september 2001, helek shlishi', ['The Testimony of Major General Alik Ron to the Or Commission, 3 September 2001, Part 6'], *Ha'arets Online*, 4 September 2001, <http://www.haaretz.co.il/misc/1.1555776>, [accessed: 24 September 2015].

- 'Yaladim palestiniim ganvu tziyud tzvai mitank', ['Palestinian Children Stole Military Equipment from a Tank'], *Yedioth Ahronoth*, 2 January, 2002, <http://www.ynet.co.il/articles/0,7340,L-1489428,00.html>, [accessed: 28 September 2015].
- Azulai, Yuval, 'Technologiya hal-hereg: haim hayah nitan limnoa hasa'ara be"marmara"', [Non-Lethal Technology: Whether Was It Possible to Prevent the "Marmara" Storm?], *Globes*, 20 September 2011, <http://www.globes.co.il/news/article.aspx?did=1000683960>, [accessed: 28 September 2015].
- Ben-Simhon, Kobi, 'Hatargil hamasriah; hamafginim mi'Na'alim tzrihim liknot deodorant', ['A Stinky Hoax; The Rioters from Na'alim Have to Buy Deodorant'], *Ha'aretz Online*, 4 September 2008, <http://www.haaretz.co.il/misc/1.1347475>, [accessed: 28 September 2015].
- Ben-Yosef, Moriya, 'Muetzet Hait'tztaidut Beneshek Pahot Katlani', ['The Employment of Non-Lethal Weapons is Speeding Up'], *Israel Defense*, 5 June 2011, <http://www.israeldefense.co.il/he/content/%D7%9E%D7%95%D7%90%D7%A6%D7%AA-%D7%94%D7%94%D7%A6%D7%98%D7%99%D7%99%D7%93%D7%95%D7%AA-%D7%91%D7%A0%D7%A9%D7%A7-%D7%A4%D7%97%D7%95%D7%AA-%D7%A7%D7%98%D7%9C%D7%A0%D7%99>, [accessed: 29 September 2015].
- Danieli, Michal, 'Noal' Khanibal: adif hayal harug ni'asher hayal hatuf?' ['Khanibal Procedure: Is a dead soldier preferable to a kidnapped soldier?'], *Mako*, 17 October 2011, <http://mobile.mako.co.il/pzm-magazine/Article-d4a692186511331006.htm&sCh=3d385dd2dd5d4110&pId=1093150966>, [accessed: 7 November 2015].
- Grinberg, Hanan, 'Ha'til she'kofef et egrof ha'plada', ['The Missile that Bended the Iron Fist'], *Ynet*, <http://www.ynet.co.il/articles/0,7340,L-3297389,00.html>, [accessed: 08 November 2011].
- Ha'rel, Amos, 'Tzal inase lefazer hafganot hamoniyot bepagazei tankim im k'liey plastik sh'osim rak ra'ash', ['The IDF Will Try to Disperse Massive Riots with Tanks' Shells with Plastic Warheads that Make Noise Only'], *Ha'aretz Online*, 28 February, 2005, <http://www.haaretz.co.il/misc/1.1505848>, [accessed: 28 September 2015].
- Kaspi, Dan, 'Shuv yesh lanu oiev meshutaf' ['We Have a Mutual Enemy Again'], *Ynet*, 31 July 2009, <http://www.ynet.co.il/articles/0,7340,L-3753712,00.html>, [accessed: 5 November 2015].
- Lapid, Efraim, 'Haintifada harishona, ha'avanim she'banu et heskem Oslo' ['The First Intifada, the Stones that Built the Oslo Agreements'], *Israel Defense*, 8 December, 2013, <http://www.israeldefense.co.il/he/content/%D7%94%D7%90%D7%99%D7%A0%D7%AA%D7%99%D7%A4%D7%90%D7%93%D7%94-%D7%94%D7%A8%D7%90%D7%A9%D7%95%D7%A0%D7%94-%D7%94%D7%90%D7%91%D7%A0%D7%99%D7%9D-%D7%A9%D7%91%D7%A0%D7%95-%D7%90%D7%AA-%D7%94%D7%A1%D7%9B%D7%9D-%D7%90%D7%95%D7%A1%D7%9C%D7%95>, [accessed: 28 September 15].
- Levy, Shai, 'Ason ha'nagmashim: lama tzal meshtamesh be'kli lo memugan mi-1971?', ['The Disaster of APCs: Why does the IDF uses vehicles with no armour from 1971?'], *Mako*, 22 July 2014, <http://mobile.mako.co.il/pzm-israel-wars/operation-protective-edge/Article-2fab4a8f83e5741006.htm>, [accessed: 8 November 2015].

- Levy, Shai, 'Neshek (Hal) Hereg', ['(Non) Lethal Weapons'], *Mako*, <http://www.mako.co.il/pzm-magazine/Article-c4b5b1a6475a531006.htm>, [accessed: 28 September 2015].
- Oren, Amir, 'Nishkal shigur "Bo'esh" leknesiyat hamolad', ['It was considered to deploy "Skunk" to the Church of the Nativity'], *Ha'aretz*, 12 April 2002, <http://news.walla.co.il/item/208321>, [accessed: 28 September 2015].
- Rapaport, Amir, 'Metach gavoha', ['High Tension'], *Israel Defense*, 26 April 2011, <http://www.israeldefense.co.il/he/content/%D7%9E%D7%AA%D7%97-%D7%92%D7%91%D7%95%D7%94>, [accessed: 28 September 2015].
- Seger, Idan, 'Ei'n makom letaiyyot: kah tzal' metkonen lemehumot', ['There Is No Place for Mistakes: This Is the Way, in which the IDF Prepares itself for the Riots'], *Mako*, 20 September 2011, <http://www.mako.co.il/pzm-magazine/Article-c7ddcfef4e18231006.htm>, [accessed: 28 September 2015].
- Shelah, Ofer, 'Mekavim letov, mitkonenim le r'a', ['Hoping for Good, Preparing for Bad'], *NRG*, 17 September 2011, <http://www.nrg.co.il/online/1/ART2/286/345.html>, [accessed 29 September 2015].
- Simchayoff, Elad, Segal, Udi, 'Doh ha'um al mivtza "tzuk eitan" ushar, rak aratzot habrit hitnagda' [The UN Report about Operation Protective Edge Was Approved, only the U.S. Was Against'], *Mako*, http://www.mako.co.il/news-military/israel-q3_2015/Article-268b8dec0445e41004.htm?sCh=31750a2610f26110&pId=786102762, [accessed: 28 October 2015].
- Vais, Efrat, 'Lerishona: Magav Pizer Mafginei Smol' betotah sirahon', ['For the First Time: The Border Police Dispersed Leftist Demonstrators with a Stinky Cannon'], *Yedioth Ahronoth*, 10 August 2008, <http://www.ynet.co.il/articles/0,7340,L-3580288,00.html>, [accessed: 28 September 2015].
- Vitman, Noam, '4 shanim le'oferet yatzuka: ktzinei ha'uchlusiya hafchu le'helek integrali mi'hakoach ha'lochem', ['4 Years after the Cast Lead: Population-during-Warfare Officers Have Become an Integral Part of the Fighting Forces'], *IDF Website*, <http://www.idf.il/1133-17987-he/Dover.aspx>, [access: 10 November 2015].
- Zino, Aviram, 'Ha'mishor ha'mishpati: keitzad ne'erechet Israel le'yom she'le'achar ha'mivtza be'haza', ['The Legal Dimension: How Israel Prepares Itself for the Day after the Operation in Gaza'], *MaarivOnline*, 9 August 2014, <http://www.maariv.co.il/news/new.aspx?pn6Vq=E&0r9VQ=FMMFL>, [accessed: 10 November 2015].