UvA-DARE (Digital Academic Repository)

Non-kinetic capabilities: complementing the kinetic prevalence to targeting

Ducheine, P.

Publication date

2014

Document Version

Submitted manuscript

[Link to publication](#)

Citation for published version (APA):

Ducheine, P. (2014). *Non-kinetic capabilities: complementing the kinetic prevalence to targeting*. (Amsterdam Law School Legal Studies Research Paper; No. 2014-41). Amsterdam Center for International Law, University of Amsterdam. <http://ssrn.com/abstract=2474091>

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

NON-KINETIC CAPABILITIES:
COMPLEMENTING THE KINETIC PREVALENCE TO TARGETING

Paul Ducheine

Amsterdam Law School Legal Studies Research Paper No. 2014-41

Amsterdam Center for International Law No. 2014-26

Amsterdam Center for International Law
University of Amsterdam

RESEARCH PAPER SERIES

ACIL Research Paper 2014-26

**Non-Kinetic Capabilities:
Complementing the Kinetic Prevalence to Targeting**

Paul Ducheine

Amsterdam Center for International Law

Cite as: ACIL Research Paper 2014-26,
available at www.acil.uva.nl and [SSRN](https://ssrn.com/abstract=2474091)

Forthcoming in: Ducheine, P.A.L., Schmitt, M. & Osinga, F. (eds.), *Targeting: Challenges of Modern Warfare*, The Hague: Springer (2014)

[Amsterdam Center for International Law](http://www.acil.uva.nl), University of Amsterdam

Chapter 13

Non-Kinetic Capabilities: Complementing the Kinetic Prevalence to Targeting

Paul Ducheine*

Abstract

Targeting is used in military doctrine to describe a military operational way, using (military) means to influence a target (or addressee) in order to achieve designated political and/or military goals. The four factors italicized are used to analyse non-kinetic targeting, complementing our knowledge and understanding of the kinetic prevalence. Paradoxically, non-kinetic targeting is not recognized as a separate concept: kinetic and non-kinetic are intertwined facets of targeting.

Kinetic targeting refers to the targeted application of military force based on the release or concentration of kinetic energy against opposing forces or objects with (primarily) lethal effects in the physical domain, whereas non-kinetic targeting describes the targeted application of (other military and non-military) capabilities against addressees to generate (additional) non-kinetic effects in the non-physical and physical domain.

This chapter attempts to provide a better demarcation between kinetic and non-kinetic targeting, first by reviewing recent developments in military operations and targeting and introducing a 'full spectrum approach'. It then enumerates and analyses a number of typical non-kinetic capabilities: information activities, key leader engagement, lawfare, criminal legal action, security detention, assets freezes and cyber operations.

The chapter concludes that although non-kinetic targeting does not exist as a stand-alone concept, it is vitally important in contemporary military operations. It provides opportunities to engage and affect additional target audiences (including supporters) with less devastating effects including constructive effects), by offering additional means to conduct operations, stressing the crucial role of non-kinetic elements like information, perception, cohesion, understanding and will.

Keywords

Non-kinetic targeting, non-lethal targeting, information activities, effect based approach, evidence-based targeting, key leader engagement, cyber operations, lawfare, detention.

Table of Contents

13.1. Noting the Kinetic Prevalence and Reinventing Non-Kinetic Capabilities	3
13.2. About Goals, Means, Targets and Effects, as well as Myths	4
13.3. Setting a Myth Aside: Combining Lethal and Non-Lethal Action	6
13.4. A Discourse on 'Defining' Non-Kinetic Targeting	7
13.5. Points of Departure and Reservations	9
13.6. Some Typical Non-Kinetic Capabilities: Modalities	10
13.7. Information Activities	10

* Paul A.L. Ducheine

Associate Professor for Cyber Operations, Netherlands Defence Academy
Senior (Guest) Researcher, Amsterdam Centre of International Law, University of Amsterdam
PO Box 1030, 1000 BA Amsterdam
e-mail: p.a.l.ducheine@uva.nl

The author would like to thank Colonel (RNLA) dr. Joop Voetelink, Lieutenant-Colonels (RNLA) Edwin de Ronde and Peter Pijpers LL.M. MA, Major dr. Eric Pouw LL.M. and Lieutenant (RNLMarines) Mark Roorda LL.M. for their suggestions.

‘NON-KINETIC CAPABILITIES: COMPLEMENTING THE KINETIC PREVALENCE TO TARGETING’ IN: P. DUCHEINE, M. SCHMITT & F. OSINGA (EDS.), TARGETING: CHALLENGES OF MODERN WARFARE, THE HAGUE: SPRINGER (FORTHCOMING 2014).

13.8. Key Leader Engagement	13
13.9. Lawfare.....	14
13.10. Criminal Legal Action.....	15
13.11. Deprivation of Liberty: Security Detention.....	17
13.12. Deprivation of Liberty: Asset Freezes.....	18
13.13. Cyber Operations.....	19
13.14. Conclusions	20
13.15. References	22

13.1. Noting the Kinetic Prevalence and Reinventing Non-Kinetic Capabilities

Whether future conflict will involve another counterinsurgency campaign, a major combat operation, a stability operation, or whatever (new) description fitting to operations to come, one of the great lessons learned from the last campaigns to which western armed forces have been committed, is captured by David Kilcullen characterizing Al Qaeda's 'main effort':

In military terms, for Al Qaeda the 'main effort' is information; for us, information is a supporting effect.¹

Whereas western armed forces tend to focus on kinetic action (and thus kinetic targeting) and support that action with other lines of action (e.g., information activities), irregular armed forces have reversed this practise. Groups like Al Qaeda, Hamas, and to some extent Anonymous, place more emphasis on information activities and use physical action as a supplement.

Indeed, it may be easier, or even necessary, for irregular guerrilla forces to use information as their main 'weapon', if they lack the kinetic or physical resources possessed by western troops, or if they are less troubled by ethical, political and legal constraints in exploiting their 'main effort' to the maximum extent possible.

Nevertheless, western forces have come to reappraise the value of information as a means to achieve desired effects. Moreover, they have recognized the importance of non-physical or 'unorthodox' means to be used in the operational process to pursue military goals; that is, the use of other than 'traditional' kinetic (and lethal) military means employed in the operational process called targeting. And indeed, this is what Phillip Pratzner describes in Part I of this volume:

In the late nineties, planned operations were largely focused on lethal, or kinetic, means: a bomb [...]. Nonlethal capabilities, somewhat embryonic at this time, were discussed, but these were only supporting efforts and very insular ones at that. Fast forward to 2013. By this time, planning included far more nonlethal capabilities and in many cases, these were the main operation, with lethal options actually playing a supporting role.²

It will be argued here that kinetic targeting refers to the targeted application of military force based on the release or concentration of kinetic energy against opposing forces or objects with (primarily) lethal effects in the physical domain, whereas non-kinetic targeting refers to the targeted application of (other military and non-military) capabilities vis-à-vis addressees to generate (additional) non-kinetic effects in the non-physical and physical domain.

Although the unorthodox notion of (non-lethal and) non-kinetic targeting may sound rather new, and this might hold true for present generations of officers around the world who grew up with the traditional prevalence for kinetic targeting, for those who have studied the classic strategists or have gained experience in recent counterinsurgencies, this reappraisal probably seems to reinvent the wheel. Sun Tzu noted centuries ago, that 'subjugating the enemy's army without fighting is the true pinnacle of excellence'.³ This classic example of an 'effect-based approach' to military operations is well known, and its importance is accelerated by today's 'comprehensive approach', stressing the need for a coordinated, synchronised application of all available resources in conflict to achieve a defined end state. This notion is acknowledged in the US Army Field Manual referring to counterinsurgencies experiences: 'targets assigned to nonlethal assets are frequently more important than targets assigned to lethal assets'.⁴

¹ Kilcullen 2009, p. 300.

² Chapter 4: Pratzner 2014.

³ Sun Tzu 1994, p. 177.

⁴ US Army 2010a, p. B-1.

Decades of kinetic prevalence, however, have left their mark on military thinking, doctrine and behaviour.⁵ Although this prevalence is now officially countered, or complemented, by the reappraisal of non-kinetic capabilities, its contents may not be familiar to those who have not yet experienced some of its features.

Targeting can be defined as the application of capabilities (against targets) to generate effects to achieve objectives. While the regular military kinetic (and lethal) capabilities and their contribution to these operations, including their input in the targeting process, are well covered, non-military, non-kinetic (and non-lethal) capabilities have attracted less attention. This chapter aims to elaborate on the contribution of some typical non-kinetic capabilities to this operational process, complementing our knowledge and understanding of the kinetic prevalence.

Paradoxically however, non-kinetic targeting as such is not covered in doctrine and military literature. It is an integrated and intrinsic part of targeting. It nevertheless deserves our attention, as it has become increasingly important in recent decades. Non-kinetic targeting appears to provide opportunities to engage and affect not only opponents, but additional target audiences, including neutrals and supporters as well. It also generates less devastating effects, even adding constructive outcomes, by offering additional means to conduct operations, taking into account the crucial role of non-kinetic elements like information, perception, cohesion, understanding and will.

This chapter sets off by briefly reiterating what targeting is about and what not (para 13.2). It then continues in search of a demarcation between kinetic and non-kinetic targeting by reviewing recent developments in military operations and targeting (para 13.3), introducing a definition of 'non-kinetic targeting' (para 13.4) and stating the point of departure in doing so (para 13.5). It continues on to enumerate and analyse some of these typical modalities of non-kinetic targeting (para 13.7–13.13), ending with conclusions (para 13.14).

13.2. About Goals, Means, Targets and Effects, as well as Myths

Targeting is used in military doctrine to describe a military operational *way*, using (military) *means* to influence *targets* (or addressees) in order to achieve designated political and/or military *goals*.⁶ It involves the focused and deliberate effort in (and prior to) military operations to determine goals, identify, acquire, engage and assess specific targets that, when 'influenced' properly using all available means, contribute significantly to the success of military action. As stated in the Canadian Land Operations Manual:

Targeting considers the entire range of targets and target audiences within an environment, and plans their engagement using the full range of capabilities and activities, that is, comprehensive operations, to create complementary effects on the physical and psychological planes. The targeting of fires and influence activities together may be viewed as comprehensive targeting. It should encompass all elements of power and agencies involved.⁷

Thus, four chronologically related elements come to mind: goals, means, targets, and effects. Goals can be derived from the political and military-strategic defined ends or end states in

⁵ Kitzen 2012b based on: Lynn 2003, p. xix; Hanson 1989; Hanson 2001; Smith 2005, p. 152.

⁶ In its Allied Joint Doctrine for Joint Targeting, NATO defines joint targeting as 'the process of determining the effects necessary to achieve the commander's objectives, identifying the actions necessary to create the desired effects based on means available, selecting and prioritizing targets, and the synchronization of fires with other military capabilities and then assessing their cumulative effectiveness and taking remedial action if necessary.' NATO 2008, p 1-1. See also US Air Force 2014, p. 3: 'Targeting is the process of selecting and prioritizing targets and matching the appropriate response to them, considering operational requirements and capabilities.'

⁷ Canada 2008, pp. 5–33.

which the military is deployed (alongside other instruments of power). Means, especially in modern operations that require an orchestrated and comprehensive use of all available instruments, refer to *all* available assets, capabilities—be they military, civilian, governmental or private.⁸ A target comprises physical (tangible) and non-physical elements that can be influenced. The NATO Allied Joint Doctrine for Joint Targeting defines a target as,

a selected geographic area, object, capability, person, or organization (including their will, understanding, and behaviour); which can be influenced as part of the military contribution to a political end-state. A target is normally not critical in and of itself but rather its importance is derived from its potential contribution to achieving the commander's military objective(s).⁹

Finally, effects are the—direct and indirect—consequences generated by influencing targets with the means available. They may be physical and tangible, but also virtual, digital or in general non-physical in nature. In short, targeting is the systematic and effects-based process of matching appropriate responses to targets.

This basic notion is nonetheless troubled by at least four myths that frequently complicate a proper understanding of targeting. First, targeting is not an exclusive air power or air force process. Instead, it refers to influencing actors with all (military) capabilities from all armed services available. Moreover, all services use targeting as an operational process.¹⁰ Second, targeting is not a typical process solely used at the strategic level of command.¹¹ Instead targeting can be found on all military command levels: strategic, operational and tactical. Third, targeting is not an exclusive enemy-centric notion. The targets or, in more neutral terms, addressees, indeed comprise opponents, but in addition also supporters and neutral entities.¹²

With respect to the term 'targets', a broader understanding the term must be used. Targets will include adversary elements, friendly and allied elements, and neutral audiences. Nothing nefarious is meant by the term, but it should be viewed in the sense of a business advertisement 'targeting' a particular audience. [...].¹³

For completeness, targets can be humans, entities (groups or organisations) and objects.

The fourth, and main, myth is related to focal point of this contribution: targeting is not limited to the application of kinetic and lethal military force. Instead, it includes the use of *all*

⁸ This element involves inter alia 'weaponeering', defined in the US Army Field Manual as 'the process of determining the quantity of a specific type of lethal or nonlethal weapons required to achieve a specific level of damage to a given target, considering target vulnerability, weapons characteristics and effects, and delivery parameters (JP 3-60).' US Army 2010a, pp. 2–17.

⁹ NATO 2008, p. 1-1. See also US Air Force 2014, p. 4: 'A target is an entity or object considered for possible engagement or other actions.'

¹⁰ See e.g. NATO (2005) Allied Joint Publication AJP-3.9.2 Land targeting.

¹¹ Operational process is used to refer to the application of this process in operations. This should not be mixed up with the command levels (strategic, operational and tactical).

¹² See the Canadian Land Operations breakdown which distinguishes between allied, supportive, friendly, neutral, unsupportive, inactive hostile and enemy audiences:

This approach requires a cultural understanding and stems in part from the need to engender support from local populations *and to engage* other elements of an environment. In order to support this approach, the knowledge base must gain insight into the psychological plane and the intent, motivations, and relationships of elements in the battlespace in order to out manoeuvre them or to move them, through an effect of influence to a position of acceptance, cooperation, or even support. The assessment and analysis that leads to this categorization supports the targeting process, *for each of the audiences on the spectrum of relative interest is assessed with respect to how they may be influenced and moved to a position of support or acceptance.*

Canada 2008, p. 43 [Emphasis added].

¹³ Canada 2008, p. 43, footnote 99.

‘NON-KINETIC CAPABILITIES: COMPLEMENTING THE KINETIC PREVALENCE TO TARGETING’ IN: P. DUCHEINE, M. SCHMITT & F. OSINGA (EDS.), *TARGETING: CHALLENGES OF MODERN WARFARE*, THE HAGUE: SPRINGER (FORTHCOMING 2014).

capabilities, military and otherwise, kinetic, lethal as well as non-kinetic and non-lethal with a great variety of effects sought: constructive and disruptive.

13.3. Setting a Myth Aside: Combining Lethal and Non-Lethal Action

Contemporary military doctrine recognizes the fallacy of this fifth myth, by stressing that ‘[t]argeting is concerned with the creation of specific desired effects through lethal and nonlethal actions’.¹⁴ This observation is the result of a period of adaption and evolution necessitated in operational environments around the world and is expressed in current military doctrine, as demonstrated by the US Army Field Manual 3-60 on Targeting:

The targeting working group must always determine the weapon system for targets of opportunity, subject to the maneuver commander's approval. *All available attack assets* should be considered. Attacking targets should optimize the capabilities of: Light and heavy ground forces; Attack aircrafts; Field artillery; Mortars; Naval gunfire; Combat air operations (both close air support and air interdiction); Electronic Warfare; Military information support operations; Civil affairs teams.¹⁵

Nonlethal targets are best engaged with civil-military operations, inform and influence activities, negotiation, political programs, economic programs, social programs, and other noncombat methods. In counter insurgency operations, nonlethal targets are just as important as lethal targets and the targeting is frequently directed toward nonlethal options.¹⁶

Today’s targeting process, as noted by Lieutenant-General Mart de Kruif, is highly dynamic and adaptive:

[t]he targeting process has evolved from having a primarily kinetic/lethal emphasis with hardly any consideration for collateral damage, to our current operational domain, characterized by operations amongst the people and heavily influenced by modern (social) media. In addition, targeting is no longer a process primarily focussing on air assets, but over the past two decades has come to incorporate a host of military engagement capabilities.¹⁷

As a result of this adaptability, targeting has advanced in a number of ways, thereby incorporating military doctrinal concepts such as the manoeuvrist approach, jointness, a comprehensive approach, an effect-based approach to operations,¹⁸ as well as societal views on warfare and technological changes. First of all, current practise utilises all military assets and capabilities—land, sea and air-power—as potential means to generate effects.¹⁹ Moreover, non-military assets and capabilities such as diplomacy, money or supplies, and information can be used to generate effects as well.²⁰ Likewise, targets to be influenced are not limited to combatants and military objectives,²¹ but extend to other persons, tangible goods and non-physical elements such as ‘the will’, ‘understanding’, or ‘information’,²² and currently also include cyber-objects and cyber-identities.²³ In addition, this supports the

¹⁴ US Army 2010a, p. 1-2.

¹⁵ US Army 2010a, p. 2-8. [Emphasis added].

¹⁶ US Army 2010a, p. 2-1.

¹⁷ See Kruif 2014, Preface.

¹⁸ Not to be confused with ‘effect based operations’, see: US Department of Defence, US Joint Forces Command, ‘Assessment of Effects Based Operations’ (14 August 2008, Gen Mattis).

¹⁹ See Chapter 4: Pratzner 2014.

²⁰ See the Strategic notion of DIME on the strategic level, and the Comprehensive Approach at the operational level, e.g. NATO, Lisbon Summit Declaration, Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Lisbon, 20 November 2010. www.nato.int/cps/en/natolive/official_texts_68828.htm. Accessed 2 April 2014.

²¹ As defined in the law of armed conflict.

²² Supra note 9.

²³ Ducheine and Haaster 2014.

‘NON-KINETIC CAPABILITIES: COMPLEMENTING THE KINETIC PREVALENCE TO TARGETING’ IN: P. DUCHEINE, M. SCHMITT & F. OSINGA (EDS.), *TARGETING: CHALLENGES OF MODERN WARFARE*, THE HAGUE: SPRINGER (FORTHCOMING 2014).

appreciation of the primacy of effects as the outcome of operations,²⁴ and reinforces the notion that desired effects can be achieved in the physical as well as the non-physical realm.²⁵ Targeting also has hugely benefitted from technological advances, such as precision weapons and intelligence-surveillance-reconnaissance (ISR) capacities. Furthermore, changes in social appreciation of military intervention and (the cost and consequences of) warfare, have resulted in a high demand for precision, low levels of damage and casualties, and minimal risks for military and warring parties.²⁶ In particular, legitimacy, real or perceived, is increasingly important as military operations require public support.²⁷

Not for the first time, these insights have resulted in the renewed appreciation of the notion that warfare (and the use of military force in general) is a means to an end, and that the use of this blunt instrument should be as bloodless and painless as possible, ideally even without having to use it at all.²⁸ However, military operations that utilize acts of force or the threat thereof to deter or coerce adversaries will remain necessary. Therefore, according to NATO, military forces must ‘be able to employ and coordinate a complex integration of *lethal and non-lethal* actions in the midst of a variety of threat environments in a wide range of operations’.²⁹

13.4. A Discourse on ‘Defining’ Non-Kinetic Targeting

Noting their long preoccupation with kinetic force and the underrated value of information and non-physical effects on the battlefield and beyond, western armed forces now have explicitly supplemented regular (kinetic) targeting with the complementary notion of non-kinetic targeting. In doing so, however, they have resorted to a great variety of descriptions and a number of different terms in an attempt to explain what exactly non-kinetic targeting means. Given the resulting inconsistencies, some sort of description of this chapter’s central theme is required to achieve its purpose: deepening our understanding of non-kinetic targeting.

NATO prefers to employ the term ‘non-lethal’ to describe non-lethal means (of attack), effects, force, capabilities, action, options and weapons,³⁰ while using ‘non-kinetic’ only sporadically in relation to non-kinetic material and solutions.³¹ The US Joint Doctrine on Targeting, JP 3-60, displays a similar approach, but adds ‘nonlethal’ assets and fires without no reference to ‘kinetic’ and ‘non-kinetic’ at all.³²

The British Joint Doctrine Publication 3-00 Campaign Execution, also exclusively relies on the lethal–non-lethal dichotomy. It offers a comprehensive description of this pair, albeit without delineating their components, by introducing what it terms ‘full spectrum targeting’:

²⁴ See NATO 2008, p. 1-5, Targeting Principles: ‘b. Effects. Targeting is concerned with supporting the creation of effects to achieve the JFC’s objectives’; and NATO 2008, p. 1-9, para 0119: ‘The effects-based approach to operations (EBAO) is an evolving philosophy that is defined as ‘the coherent and comprehensive application of the various instruments of the Alliance, combined with the practical cooperation along with involved non-NATO actors, to create the effects necessary to achieve planned objectives and ultimately the NATO end state.’

²⁵ NATO 2008, p. 1-9, para 0119: ‘At the operational level, an effects based approach involves the selective combination of actions, coordinated with the activities of other organizations to create lethal and non-lethal effects in order to achieve operational objectives in support of this end state.’

²⁶ See Chapter 3: Coker 2014 and Chapter 4: Pratzner 2014.

²⁷ Ducheine and Pouw 2012, p. 33.

²⁸ See Sun Tzu 1994 *supra* note 3.

²⁹ NATO 2008, p. 1-1 [Emphasis added].

³⁰ NATO 2008 throughout.

³¹ NATO 2008, pp. 3-6, A-10.

³² US Department of Defense 2013. See also US Air Force 2014 and US Army 2010a.

‘NON-KINETIC CAPABILITIES: COMPLEMENTING THE KINETIC PREVALENCE TO TARGETING’ IN: P. DUCHEINE, M. SCHMITT & F. OSINGA (EDS.), *TARGETING: CHALLENGES OF MODERN WARFARE*, THE HAGUE: SPRINGER (FORTHCOMING 2014).

If influence is the overall outcome, a holistic approach to targeting is required from the outset. This is enabled by a deep understanding of target systems and their critical vulnerabilities. With this understanding planners will be better able to select the most effective and appropriate activity, *lethal or non-lethal*, to apply.³³

In essence, through the combination of manoeuvre, information and outreach activities and fires, effects are to be realised in the physical, virtual and cognitive domains.³⁴ Thus, ‘fires’ are defined as:

the deliberate use of *physical and virtual* means to achieve the realisation of, primarily, *physical* effects. They can be both *lethal and non-lethal*, and conducted in both the *physical and virtual* domains. They are mainly focused on an actor’s capability (through destruction and attrition) including that which enables his understanding. However, they may also be employed to directly, or indirectly, realise a wide range of psychological effects by shattering cohesion, degrading capability and thus impacting on will.³⁵

The British holistic approach is acknowledged in the Netherlands Defence Doctrine by stating that ‘[e]ffects can be achieved in *both* the physical and the psychological sphere’.³⁶ The Doctrine continues:

It is not only the employment of armed force that produces these effects; influencing opponents by damaging their information and information infrastructure, their financial sources and their support base is a broader application. Other forms of fires are the targeted employment of assets to support favourably disposed actors and the provision of measured support to the local population. Fires are thus produced by bringing effectors to bear in the physical and psychological spheres. They are divided into firepower, which is used to achieve physical and psychological effects, and the capability of influencing the understanding of target groups or individuals. This influencing of understanding takes the form of [inter alia] information activities (key leader engagement, psychological operations, deception, electronic warfare, etc) and the development or restoration of government functions (e.g., training of police and military capacities as part of security sector development), thus enabling the local population to provide its own security. Public affairs and other methods of enhancing the security situation can also contribute to this effect.³⁷

In the same vein, the Canadian Doctrine for Land Operations states:

The combination of physical and psychological effects in striking the adversary must be complementary. If not carefully considered in comprehensive planning and targeting, the effects of physical activities may undermine those of influence activities generated through information operations.³⁸

These British, Canadian and Dutch full spectrum approaches demonstrate that a sharp demarcation between kinetic and non-kinetic targeting does not exist. Rather, most (if not all) doctrines recognize the two are complementary. They refer to various distinct but interrelated facets in the application of military power or targeting:³⁹

- non-lethal and lethal activities, by using
- physical (kinetic) and virtual (non-kinetic) means, to influence
- physical (humans or objects) and non-physical targets (will, understanding, cohesion), to generate

³³ UK Ministry of Defence 2009, p. iv [Emphasis added].

³⁴ UK Ministry of Defence 2009, p. 3-5.

³⁵ UK Ministry of Defence 2009, p. 3-6, para 317 [Emphasis added].

³⁶ Ministerie van Defensie 2013, p. 103. See also Canada 2008, pp. iii, 5-2 ff.

³⁷ Ministerie van Defensie 2013, p. 104.

³⁸ Canada 2008, p. 4-24.

³⁹ Cheng Hang 2010.

- lethal and non-lethal effects
- in physical and non-physical domains.

The common denominator however, is the notion that kinetic and non-kinetic targeting (whether not the lethal/non-lethal dichotomy is used) jointly refer to a spectrum of means and methods, employed to influence targets throughout the physical and non-physical dimensions, generating kinetic as well as non-kinetic effects. Hence, defining or describing non-kinetic targeting proves complicated. Since this chapter aims to elaborate on this very notion a point of reference is needed. Whereas kinetic targeting refers to the targeted application of military force based on the release or concentration of kinetic energy against opposing forces or objects with (primarily) lethal effects in the physical domain, non-kinetic targeting describes the targeted application of (other military and non-military) capabilities against addressees to generate (additional) non-kinetic effects in the non-physical and physical domain.⁴⁰

13.5. Points of Departure and Reservations

Before embarking on the modalities of non-kinetic targeting, seven preliminary points should be made. First, this chapter will introduce a non-exhaustive list of typical forms of non-kinetic targeting. These forms use a variety of means against a variety of targets to generate either constructive or disruptive effects. Second, as all effects are designed to be advantageous to the applicant, this constructive and disruptive categorization is from the target's or addressee's perspective.⁴¹

Third, it should be noted that not all means considered are military in nature given that the comprehensive approach is taken as a point of reference.⁴² It goes without saying that non-military means will mostly be employed to generate constructive or disruptive effects for addressees, which can be taken into account in the targeting process. Financial support to key leaders, whether funded by military or non-military sources, could serve as an example.

Fourth, reflecting on current (and future) conflict zones this chapter also acknowledges that not only are adversaries potential targets and addressees, but so too are neutral parties and supporters, whether in a conflict zone, or domestically.⁴³

Fifth, it will be clear that the conflict environment as well as the configuration of the military forces in that environment will, to a large extent, define the availability, applicability and feasibility of the various capabilities. In some cases, non-kinetic targeting in, for example stability operations, may significantly contribute to an overarching strategic purpose of enhancing the local rule of law, whereas in other situations kinetic solutions will prevail.

Sixth, this chapter refers specifically to the operational process called targeting which can be found on all levels of command, and within all services, while noting the distinct characteristics of the various other processes. It does not refer to the operational design of campaigns.

Finally, the reader should realise that by elaborating on non-kinetic targeting issues, and enumerating some of the modalities involved, his or her focus 'tends to move directly to [this

⁴⁰ Note the US reservation made to the NATO Allied Joint Doctrine for Information Operations: 'Kinetic and non-kinetic activities have no defined meaning in NATO doctrine. Kinetic is a scientific idea commonly applied to motion and energy related descriptions. Kinetic and non-kinetic (non-motion or non-energy activities) do not fit the context of the publication.' NATO 2009, p. xi.

⁴¹ It remains to be seen whether this dichotomy should be complemented with 'neutral' effects for the target/addressee.

⁴² A comprehensive approach, as it is used within NATO, the EU and member States. See Allied Command Operations (NATO) 2010; European Commission 2013; Smith-Windsor 2008.

⁴³ See also note 12 *supra*.

enumeration] at the expense of the rest of the verbiage'.⁴⁴ To counter the latter risk, it should be stressed that the essence of targeting is to achieve designated effects and pursue stated goals, by whatever legitimate means: kinetic or non-kinetic.

13.6. Some Typical Non-Kinetic Capabilities: Modalities

Contemporary military doctrine, research and evaluations, as well as (other) publications dedicated to operational art and military strategy, reveal a wide range of non-kinetic capabilities. These capabilities include: (a) 'public affairs, key leader, engagement, civil-military operations, and military information support operations';⁴⁵ (b) 'inform and influence activities, negotiation, political programs, economic programs, social programs, and other noncombat methods';⁴⁶ (c) 'military deception, public affairs, EW activities';⁴⁷ (d) 'presence, profile & posture, media, psychological operations, deception, CIMIC [Civil-Military (relations)]';⁴⁸ and, (e) political, economic, and social programs'.⁴⁹

Enumerating these capabilities runs the risk of delineating the whole subset of means and methods and draws too much attention to cataloguing and too little to the concept as such. It thereby limits commanders and their staff in the operational art of planning and executing military operations and contributing to the desired strategic and operational effects.⁵⁰ Rather, '[b]y explicitly excluding a laundry list of capabilities, the definition is no longer self-limiting since the tools available are now constrained only by the imagination of the commander and his staff'.⁵¹

To stimulate thought and discussion, it is nevertheless useful to present and discuss some general subcategories of typical non-kinetic courses of actions or means and methods:

- Information Activities;
- Key Leader Engagement;
- Lawfare;
- Criminal Legal Action;
- Deprivation of Liberty: Security Detention;
- Asset Freezes;
- Cyber Operations.

Keeping in mind the ultimate purpose of targeting—to create designated effects in pursuance of defined goals, we will define and analyse some of these capabilities. In doing so, we will use, to the extent possible, a fixed set of parameters: goals, targets/addressees, means & methods and desired effects.

13.7. Information Activities

While western armed forces generally use information operations to support regular kinetic actions, (modern) violent non-state actors use kinetic action to support their 'main effort', being information (activities). Reflecting on recent conflicts in Afghanistan and Iraq,

⁴⁴ Murphy 2009, p. 2.

⁴⁵ US Department of Defense 2013, p. II-16.

⁴⁶ US Army 2010a, p. 2-1.

⁴⁷ US Army 2010a, p. 3-7.

⁴⁸ UK Ministry of Defence 2009, p. 3B-7.

⁴⁹ US Army 2010a, p. B-1.

⁵⁰ Matthijssen 2010, p. 521.

⁵¹ Murphy 2009, p. 2.

‘NON-KINETIC CAPABILITIES: COMPLEMENTING THE KINETIC PREVALENCE TO TARGETING’ IN: P. DUCHEINE, M. SCHMITT & F. OSINGA (EDS.), *TARGETING: CHALLENGES OF MODERN WARFARE*, THE HAGUE: SPRINGER (FORTHCOMING 2014).

Kilcullen notes: ‘for Al Qaeda the “main effort” is information; for us, information is a supporting effect’.⁵²

Western forces appear to have captured that idea to some extent as well. Recent operations have led to the recognition of the increased importance of the informational dimension in human behaviour and social interaction, including violent behaviour and armed conflict.⁵³ This restatement of the value of the information environment is key to modern military doctrines, and is evidenced by emphasising the process of ‘influencing’ actors as the heart of military operations.⁵⁴

Information activities, covering a variety of actions and subsets, is described by NATO:⁵⁵

Information activities seek to degrade, disrupt, deceive, destroy or deny those capabilities that allow adversary decision-makers to increase their understanding; bolster, impose, apply and sustain their will and to exercise effective command. In concert with other military and governmental actions, information activities also seek to attack the source of the adversary decision-maker’s power base, splitting internal and external groupings and alliances. The aim is to influence adversary decision-making processes, thereby preventing them from taking the initiative.

Information activities also aim to protect those capabilities, for example friendly command, control and communication infrastructure, that allow us to exercise effective command, seize and maintain the initiative. NATO may seek to protect approved parties’ capabilities directly by providing materiel and advice, or indirectly by targeting those adversary capabilities that could be used to attack an approved party’s capability.⁵⁶

The goal, as recognized by NATO, refers to three inter-related activity areas:

- changing, influencing, or reinforcing perceptions and attitudes;
- preserving and protecting freedom of manoeuvre in the information environment by defending the data and information;
- countering command functions and capabilities by affecting data and information of others.⁵⁷

The target audiences are quite diverse; depending on the designated goals, they could consist of opponents, neutral groups and supporters (including leadership and cadre, as well as population at home and abroad from various branches of society). In the early days of Iraqi Freedom, Iraq’s political and military received messages via letters, faxes, phone calls and emails ‘urging them to stage coups, betray secrets, order troops to desert, and otherwise act in

⁵² Kilcullen 2009, p. 300.

⁵³ Caldwell et al. 2009.

⁵⁴ See e.g. NATO 2008, pp. 1-2–1-3: ‘From the strategic to the tactical level and across the range of military operations, information plays a vital role in the manner in which decisions are made. In military operations the ability to defeat adversaries or potential adversaries may rest on the perception of all actors involved, particularly the local population. There is therefore considerable benefit to be gained by affecting the flow of information through a decision-maker and his understanding of that information.’. See also US Department of Defense 2012, p. II-1 (stating, ‘[i]nfluence is at the heart of diplomacy and military operations’); UK Ministry of Defence 2009, pp. 3-5, 3A-2; Canada 2008, p. 2-2; Koninklijke Landmacht 2014, p. 2-9 (in Dutch). For the ramifications and complications of effectively countering insurgents’ information campaigns, see Pijpers 2014.

⁵⁵ Taking a slightly different (enemy centric) approach, the US defines it as: ‘the integrated employment, during military operations, of [information-related capabilities] in concert with other lines of operation, to influence, disrupt, corrupt, or usurp the decision making of adversaries and potential adversaries while protecting our own.’ US Department of Defense 2012, p. iii.

⁵⁶ NATO 2009, p. 1-5.

⁵⁷ NATO 2009, p. 1-7.

ways that would disrupt Saddam's political and military [command and control instruments]'.⁵⁸ In the same vein, supporters could be approached constructively.

The means and methods available could be 'any capability or activity that can exert influence, affect understanding or have a counter-command effect', noting that 'the extent is only limited by imagination, availability, policy, [...] and legal constraints'.⁵⁹ Basic capabilities are:⁶⁰ the use of force; electromagnetic and cyber assets; psychological operations; presence, posture and profile; deception; key leader engagement;⁶¹ economic and diplomatic assets; commercial, cultural and private enterprise assets.⁶² Delegitimizing a non-state actors campaign by communicating a counter-narrative could be one of the methods used. As explained by Wilner:

'Al-Qa'eda's use of suicide terrorism, for example, is legitimized by relying on religious decrees that justify and sanitize the taking of one's own life. [...] Of importance, however, is that suicide is an otherwise blasphemous act under Islamic law and Al-Qa'eda's objectives are refuted by a vast majority of those that share the Muslim faith'.⁶³

The effects of information activities range from constructive (e.g. when the understanding of supporters is enhanced by providing assistance or information) to disruptive, (such as when the target's understanding is troubled as a result of disinformation, deception, or when public support is influenced). Wilner notes that al-Qa'eda, confronted with the counter-narratives, was compelled to expend half its airtime defending its legitimacy.⁶⁴

Looking at the diversity in means and methods, and considering the various strategic and operational objectives involved, the coordination between the comprehensive efforts deserves attention in order to prevent 'fratricide' between the different actions. This comprehensive effort is attained with, *inter alia*, strategic communication, a 'whole of government' approach, driven by interagency processes and integration of efforts in order to effectively communicate national strategy.⁶⁵ Strategic communication can be defined as the focused 'efforts to create, strengthen, or preserve conditions favourable for the advancement of national interests, policies, and objectives by understanding and engaging key audiences through the use of coordinated programs, plans, themes, messages, and products synchronized with the actions of all instruments of national power'.⁶⁶

Considering modern complex, hybrid, multi-faceted and multinational operations, it will be obvious that synchronising and reinforcing the various lines of actions is a complicated but essential process. Failure in this respect runs the risk of creating adverse or detrimental effects. Harsh kinetic actions generating severe collateral damage amongst local populations is difficult to reconcile with gaining trust and respect from the same villagers through humanitarian or economic aid programmes.

As the aforementioned means and methods are rather diverse, some of the subsequent and separately analysed non-kinetic capabilities also fit into the broad definition. This applies to key leader engagement, lawfare, cyber operations, and to some extent, to evidence-based operations.

⁵⁸ Andres 2009, p. 74.

⁵⁹ NATO 2009, p. 1-8 (maintaining that the enumeration also contains doctrine as a constraint for information activities). The present author rejects this reading, as doctrine is meant to provide guidance for commanders and staff officers/planners, not be a constraint.

⁶⁰ NATO 2009, p. 1-8.

⁶¹ NATO 2009, pp. 1-8–1-9.

⁶² NATO 2009, pp. II-3 to II-4.

⁶³ Wilner 2011, p. 26.

⁶⁴ Wilner 2011, p. 30.

⁶⁵ NATO 2009, p. II-5; Matthijssen 2010.

⁶⁶ NATO 2009, p. II-5.

13.8. Key Leader Engagement

Generally regarded as a subset of information operations, key leader engagement is frequently used in the context of stability and counterinsurgency operations.⁶⁷ However, engaging and affecting the 'attitudes of key local and/or regional leaders' is today considered to be fundamental for military effectiveness in missions in general.⁶⁸ It can be defined as the 'deliberate and planned engagements between military (and civil) leadership and the leaders of foreign audiences'.⁶⁹

The goals sought could be diverse, such as promoting change in current policy or stimulating a favourable attitude towards on-going military operations, as long as they are supportive, or at least not detrimental.⁷⁰ These engagements can be used to shape and influence the will, attitude and understanding of the target audience—foreign leaders at the strategic, operational, and tactical levels. Such operations may also be directed toward specific groups, such as religious, academic or tribal leaders, to solidify trust and confidence in the operations involved.⁷¹

As stated, the means comprise various forms of information, ranging from the information (or message) that follows from the use of force, to information through engagement otherwise. One of the means available is the allocation of resources, financial and/or material support, to these key leaders.⁷² Engagements could be initiated on grounds of diplomatic, governmental, economic, social, security and military issues. In fact, they involve 'an effective collaboration strategy [...] focused on co-option of these [...] power-holders who traditionally command the high ground of the human terrain'.⁷³ The methods used to prepare and initiate engagements are conversation and communication.

Key leader engagement follows targeting procedures as described by Kitzen and amended by van Haaster: Defining end states and objectives; Identifying power-holders; Assessing key-leaders; Tailoring engagement profile; Decision making; and Evaluating.⁷⁴ This is supported in doctrine:

The same process used to determine when a radar system should be attacked with the Army Tactical Missile System is also used to determine when building a new sewer system will influence local leaders to support friendly objectives.⁷⁵

Conducting (and considering) key leader engagement clearly requires knowledge, skills and competencies.

The desired effects resulting from key leader engagement are generally assessed as constructive. By backing, or even 'creating' key leaders, supporters can be gathered, created or assisted. In general, favourable conditions are created to reinforce other lines of action, to ensure freedom of movement, support and force protection. Such engagement is particularly able to serve non-military lines of action, such as economic development, governance and public security.

⁶⁷ US Joint Forces Command 2010, p. III-7.

⁶⁸ US Joint Forces Command 2010, p. III-7.

⁶⁹ NATO 2009, p. II-13.

⁷⁰ In general, Key Leader Engagement, entails generating constructive effects, although theoretically one could also aim at disruptive effects vis-à-vis selected stakeholders.

⁷¹ NATO 2009, p. II-13. See also note 58 supra.

⁷² US Army Center for Army Lessons Learned 2009, p. i. See also the role of CERP (Commander's Emergency Response Program) at p. 13 ff, arguably signalling particular advantages for this capability in counterinsurgencies, as it 'is defeating COIN targets without creating collateral damage'.

⁷³ Kitzen 2012a, p. 716.

⁷⁴ Kitzen 2012a, pp. 727–728; Haaster 2014. See also US Army 2010a, pp. 2-8, 2-1, and the text accompanying footnotes 15-16 supra.

⁷⁵ US Army 2010a, p. 3-7.

13.9. Lawfare

Lawfare, a concept introduced by Charles Dunlap,⁷⁶ can be defined as 'the strategy of using—or misusing—law as a substitute for traditional military means to achieve an operational objective'.⁷⁷ The goal of lawfare is to create effects that serve 'an operational purpose': a designated effect that contributes to overarching military or non-military goals, for instance to delegitimize participation in missions and operations at the strategic level, or to distract military and political leadership from the primary processes of these missions and operations.⁷⁸

The desired effects may vary from disruptive to constructive. Disruptive lawfare could be used when opponents are addressed to degrade the reputation of an opposing commander or force, thereby weakening his or its military power. The result could be that a commander is distracted from operations by responding to allegations, or that the public support for the operations or the military decomposes as these allegations are voiced. As demonstrated by Dunlap, 'the mere perception of [law of armed conflict] violations can significantly impact operations'.⁷⁹ Constructive lawfare could be used to counter destructive lawfare, for example, by releasing to the public genuine information related to allegations voiced by others.⁸⁰ It is evident that lawfare as well as counter-lawfare coincide with information operations.

The target audience, or addressees, ultimately includes the public opinion in general, judicial organs and, in particular the media, as intermediate targets. The focal point, the target itself, is the perception of groups and individuals. Instead of addressing public opinion, one could also consider addressing 'key leaders' directly, such as members of parliament, politicians, military commanders and other influential groups, organisations and individuals. Therefore, the target audience not only includes direct targets (such as opponents, neutrals and supporters), but also intermediate targets. Lawfare can be used to influence the perception (public support) of the population in troop-contributing countries as well as in the conflict zones: 'Practitioners of lawfare try to destroy an opponent's will to fight by undermining the public support that is indispensable when democracies [...] conduct military interventions'.⁸¹

In some cases the target could be an individual, a group or a particular course of action, as was the case in the Gaza Freedom Flotilla (2011).⁸²

The means are composed of pieces of information, false or true.⁸³ The content of that information could be about inappropriate behaviour in battle, ranging from (alleged) disrespect for elementary humanitarian or ethical rules, violations of the laws of war or rules of engagement, ordinary criminal behaviour to undisciplined conduct in general.⁸⁴ The content could refer to the (alleged) conduct itself, or to the responses of commanders and authorities involved. In addition to allegations of criminal or ethical misconduct, civil procedures may be applied to restrict the use of media, the access to resources, or freedom of

⁷⁶ Dunlap 2001; Dunlap 2009; Dunlap 2010.

⁷⁷ Dunlap 2008, p. 146.

⁷⁸ The present author also rejects the neo-conservative view that even the legitimate use of (international) law by opponents qualifies as 'lawfare'. See, e.g. Goldstein and Meyer 2009; Goldstein 2014.

⁷⁹ Dunlap 2001.

⁸⁰ See NATO's response to questions from the UN's Human Rights Council related to Operation Unified Protector (Libya, 2011) in UN Human Rights Council 2012.

⁸¹ Banks 2011.

⁸² Wright 2011.

⁸³ For a manipulated impression of a battlefield situation, see the Valhalla incident in Iraq (2006) as described by Dauber 2009, p. 13 ff and Dungan 2008.

⁸⁴ For examples of the potential use of lawfare, see e.g. Shirbon 2014; Liljas 2014. See also UK House of Commons 2013.

movement or speech.⁸⁵ In the Gaza Flotilla case, lawfare was used instead of another physical raid. The ‘Israeli government and its front organizations, American Israeli Public Affairs Council (AIPAC) and the Shurat HaDin Law Center, us[ed] lawsuits filed against insurance and satellite telephone companies that may [have sold ...] equipment to the flotilla organizers and against citizen activist groups that [...] raised funds to purchase ships as strategies to attempt to stop the flotilla’.⁸⁶

These methods could also be applied conversely, to enhance access to press and assets or to enable freedom of movement and speech. Lawfare offers opportunities that, when seeking initiative, force the side countering the charges to respond in defence.

13.10. Criminal Legal Action

Criminal legal action distinguishes from lawfare. As a specific branch of law, it is legitimately used to generate beneficial effects alongside other operations and activities. As such, its primary (operational)⁸⁷ goal is to generate disruptive effects. It generally reduces mobility, freedom of movement, resources and ultimately (fighting) power of—most likely—opponents, by initiating criminal procedures and enforcement powers (for instance by detaining individuals and removing them from the ‘battlefield’ using law). This type of targeting, is also described as ‘warrant-based targeting’,⁸⁸ ‘conviction-focused targeting’,⁸⁹ or ‘evidence-based operations’.⁹⁰ Such action might serve as an alternative to physical action or attacks, instigated for a variety of reasons, such as the illegality of physical attack because the target does not constitute a legitimate military objective under the law of armed conflict (LOAC).⁹¹ As demonstrated in Iraq and Afghanistan,⁹² the importance of criminal legal action as an alternative to kinetic targeting increases significantly in stability operations and occupation in general, and when sovereignty has been transferred to the indigenous government after an occupation in particular.⁹³ Yet, even during the early days of intervention and occupation,⁹⁴ law enforcement actions will be quite essential alongside kinetic actions, for instance when kinetic targeting (or attacking) with lethal capabilities would be illegal and violating the law of armed conflict.⁹⁵

In addition, a strategic secondary goal of criminal legal action is to generate constructive effects that promote the rule of law through the stimulation of host-nation judicial processes in post-conflict situations. This also contributes to State-building efforts during stability operations⁹⁶ and serves training purposes in military assistance, training and advisory missions.⁹⁷

⁸⁵ Twitter Suspends Account of Hamas’ Military Wing 2014.

⁸⁶ Wright 2011.

⁸⁷ Operational or tactical goals are used in contrast to strategic goals (i.e. goals at strategic command levels in operations).

⁸⁸ Govern 2012.

⁸⁹ Berlin 2010.

⁹⁰ Voetelink 2013; Herrera 2013.

⁹¹ See for instance the discussion on the legality to target (kill) individuals that could be related to the narcotic industry in Afghanistan: Pouw 2013, p. 288–289; Koelbi 2009; Schmitt 2009.

⁹² Govern 2012, p. 477.

⁹³ Based on the consent by the sovereign Host Nation, as expressed in i.a. Status of Forces Agreements (SOFAs).

⁹⁴ Regulations Respecting the Laws and Customs of War on Land, annexed to Convention No. IV Respecting the Laws and Customs of War on Land, 18 October 1907, 36 Stat. 2227, Art. 42 [hereinafter Hague IV Regulations].

⁹⁵ Based on the Hague IV Regulations, *idem.*, Art. 43. See e.g. Pouw 2013; Dinstein 2009.

⁹⁶ Chesney 2011, p. 477.

⁹⁷ Herrera 2013.

The primary (operational) targets in criminal legal actions will, by definition, be 'suspects', particularly adversarial stakeholders. Criminal legal action is conditional on the availability of actionable and appropriate information related to criminal conduct or involvement of those targets. Without criminal evidence that is eligible to the (host-nation's) criminal process, this particular type of information about the target/suspect has to be gathered. Available intelligence may serve as a basis, although a complicated and delicate declassification process might be required. The secondary (strategic) target is the host-nation's judicial system, with a particular focus on various police and security organisations and different types of magistrates, such as public prosecutors, defence lawyers, courts and judges and the detention system.⁹⁸

A number of means and methods are available to initiate or undertake criminal legal action, including evidence, detention, searches and seizure. By bringing forward relevant criminal information (evidence), legal action by appropriate host-nation authorities could be undertaken. This evidence might serve as the basis for criminal proceedings and investigations, which may ultimately result in the apprehension or conviction of suspects (targets). Cooperation with local security and law enforcement organisations can also have the additional effect of promoting the rule of law.⁹⁹ With an adequate legal basis troops may also detain individuals, search places, seize evidence, gather evidence packages, and transfer suspects and evidence to the appropriate national or international judicial authorities. The legal basis required to detain, search and seize may stem from either LOAC, a UN Security Council authorisation, or from an arrest warrant issued by host-nation authorities, international organisations (European Union)¹⁰⁰ or International Tribunals (ICC).¹⁰¹

Criminal legal action—as well as lawfare—is not without cost; it places a strain on the regular forces. As noted by Voetelink, 'this particular approach requires military operations, which are generally intelligence driven, at some point to key in on the host state's criminal justice system'.¹⁰² This will affect the military operations in various ways. Evidence-based operations, warrant-based or conviction-focussed targeting requires alternative skills and competencies. As observed by Govern and Morris:

These skills include the use of forensics prior to and during the apprehension; that is, the collection, preservation and analysis of evidence such as chemistry (for the identification of explosives), engineering (for examination of structural design) or biology (for DNA identification or matching).¹⁰³

To enable prosecution, adjudication and imprisonment of suspects, information related to the suspects and their criminal behaviour, has to be secured and converted to make it admissible in the (host nation's) criminal legal system.¹⁰⁴ The 'package' may include personal data, data from communications (email, overview of telephone taps, text-messages, whatsapps), biometric evidence, thumbprints, witness statements, etc. Declassification of military intelligence may also call for extra procedures before it may be used as evidence in criminal procedures.

⁹⁸ Evidence-based operations 'are operations where Afghan law enforcement authorities, supported by ISAF, effectively investigate, apprehend, search and seize criminal suspects and affiliated property in accordance with Afghan law'. Voetelink 2013, p. 198.

⁹⁹ And vice versa.

¹⁰⁰ European arrest warrant: European Union 2002

¹⁰¹ Rome Statute of the International Criminal Court, 17 July 1998, 2187 UNTS 90, Art. 58 Rome Statute (Statute of the International Criminal Court).

¹⁰² Voetelink 2013, p. 195.

¹⁰³ Govern 2012, p. 484.

¹⁰⁴ See US Army 2010b; US Army Center for Army Lessons Learned 2010.

Because not all military forces have the skills and competencies required to gather and secure information of this kind, advisory teams from, or training by, law-enforcement officials could be beneficial.¹⁰⁵ As pointed out by Govern:

Despite past military operations in which war crimes or other offenses were investigated after the fact, the practical challenge of applying warrant-based targeting oriented 'forensics' on the battlefield, especially with regards to building a case for prosecution, comes with the developing experience of military members outside of the military police and criminal investigative branches with regards to securing evidence.¹⁰⁶

Of vital importance is the transfer of information (i.e. physical and forensic evidence). In this respect, it has become standard practise to equip troops with photo or video cameras and other specialised equipment to safeguard gathered and seized evidence.¹⁰⁷ Special attention is required to safeguard the chain-of-custody as criminal evidence is only admissible if it is gathered and preserved in accordance with local (or international) criminal law and regulations.¹⁰⁸ This constraint applies not only to physical and forensic evidence, including electronic or digital information derived from modern communications, but also to that gathered from crime scenes. Safeguarding *locus delicti* may require troops to extend their presence for law enforcement purposes, whereas they would normally return to their bases or continue their operations elsewhere.

Some of these operations, particularly those that aim to apprehend or arrest suspects,¹⁰⁹ thus require an amended logistical and organisational footprint. Specialists may be called on to conduct arrests, search places and objects, and to process and guard detainees as well as evidence or investigate crimes scenes. Apart from detention facilities, one would also need medical examination capabilities, appropriate transportation, translators (with criminal law expertise), biometrical expertise and advisors with knowledge of criminal law, forensics and biometrics.¹¹⁰

13.11. Deprivation of Liberty: Security Detention

In designated circumstances outside the framework of criminal legal action, the liberty of individuals could be restricted for security reasons.¹¹¹ The prisoner of war is perhaps the best-known illustration of 'security detention',¹¹² although limited to situations of international armed conflict.¹¹³ In non-international armed conflict and other situations of violence, 'detention' in the form of internment (or administrative detention) has also become routine for the military. Internment is defined as the deprivation of liberty of individuals, initiated or ordered by (organs of) the executive branch of government outside the law enforcement framework, in order to protect the security (of the State) or public order in designated circumstances.¹¹⁴

The primary goal of security detention—in designated circumstances—is disruptive: to prevent individuals from participating in activities that may pose a threat to public safety,

¹⁰⁵ Neuteboom 2014 (Forthcoming).

¹⁰⁶ Govern 2012, p. 484.

¹⁰⁷ See e.g. Voetelink 2013, p. 199 and Herrera 2013, pp. 94–108.

¹⁰⁸ Herrera 2013, p. 94.

¹⁰⁹ These are often referred to as 'detention' operations. This term however, will be reserved for 'security detention' (see *infra*).

¹¹⁰ Berlin 2010, pp. 2, 8 (referring to 'prosecution support teams' that should be established).

¹¹¹ Pouw 2013, p. 18.

¹¹² The term 'operational detention' is also used.

¹¹³ See Convention (III) relative to the Treatment of Prisoners of War (Geneva, 12 August 1949) 75 UNTS 135.

¹¹⁴ See Pejic 2005, p. 375. For 'operational detention', see Kleffner 2010, p. 465.

public order or the security of (local or international) personnel of governmental organs and international (military and civil) forces that are present in conflict areas.¹¹⁵ Security detention offers an alternative to lethally targeting individuals in specific situations. This may serve secondary goals, such as a favourable public perception toward the legitimacy of military operations in both host nation and back home. The need to consider this option may be found in legal, diplomatic or operational reasoning. Civilians who do not directly participate in hostilities may not be directly physically attacked. However, even when they lose their protection as a civilian, and so are targetable for that time (due to their direct participation in hostilities)¹¹⁶, diplomatic or operational considerations may prevent a State from physical attacks.

The primary target is an individual that poses a designated threat. The secondary target for detention operations is the public opinion as it might promote the legitimacy of the military operation by reducing the number of casualties as the number of physical attacks can be reduced.

‘Arrests’ or ‘detention operations’ that deprive persons of their liberty can be seen as a method of targeting individuals. Human rights obligations and/or customary LOAC necessitate that a lawful ground exist for this type of targeting.¹¹⁷ In military operations, detention is based on either the Security Council’s authorisation ‘to use all necessary means’, on LOAC, on Status of Forces Agreements or on Host Nation legislation. In all cases, dedicated Rules of Engagement (ROE) will be formulated to provide guidance. Combined and interagency detention operations are commonplace, as are operations undertaken in coordination with indigenous civil or military forces. The latter offers additional opportunities to enhance the rule of law in post-conflict environments as an advantageous side effect.

13.12. Asset Freezes

Using the authority provided for by appropriate (international) bodies such as the Security Council or Host Nation institutions, operations with the aim of depriving individuals of (their) assets can be found in the financial realm, for instance by seizing or freezing (financial) assets and resources.¹¹⁸ The primary goal is to incapacitate or control individuals by blocking or restricting their access to resources. The secondary goal lies in the reduced availability of resources for warring parties or violent non-State actors in post-conflict zones, thereby breaking their logistic and financial support for prolonging conflicts or violence.

The targets are (members of) rebel groups and non-State actors or selected individuals participating in conflict and violence.¹¹⁹ The means/methods are the freezing, seizure or revelation of financial assets and resources.¹²⁰ As such this also serves law enforcement and information operations purposes. More specifically, this method has been used in the sphere of counter-terrorism sanctions after the 9/11 attacks.¹²¹

¹¹⁵ In general, see: Cole e.a. 2009; Gill and Fleck 2010, p. 465. For a specific operation: Innenriks 29 January 2004.

¹¹⁶ Or when s/he fulfils a ‘continuous combat function’, resulting in a loss of protection from attack throughout that period.

¹¹⁷ Kleffner 2010, pp. 469–470, mentioning a Security Council Resolution, LOAC, self-defence, the prevention of breaches of international (criminal) law; and Agreements with the Host Nation.

¹¹⁸ Noorda 2014.

¹¹⁹ See the model presented by Brooks 2002, p. 19; Drezner 2011.

¹²⁰ See the activities of the UK based NGO Global Witness, www.globalwitness.org/campaigns/corruption/oil-gas-and-mining/Afghanistan. Accessed 25 May 2014.

¹²¹ See UK Government, Current List of Designated Persons, Terrorism and Terrorist Financing (update 11 April 2014). www.gov.uk/government/publications/current-list-of-designated-persons-terrorism-and-terrorist-financing. Accessed on 25 May 2014.

This route, at least when asset freezing is involved, requires the application of a comprehensive approach at the (inter)national level given that international approval is generally necessary. Disclosure and seizure as a method are available at the operational level as soon as authorisation through ROE is available.

The effects generated are disruptive in nature, as the 'freedom of movement' of groups, organisations and individuals is restricted, and resources are restrained. The backlash of asset freezing lies in a reduced information position as financial transactions can be monitored and provide valuable information. Without the transactions, the targets will be forced to resort to other potentially less monitored resources. In addition, the addressees might be forced to resort to other – less traceable – resources.¹²²

13.13. Cyber Operations

Military cyber operations can be defined as 'the employment of cyber capabilities with the primary purpose of achieving military objectives by influencing actors in or by the use of cyberspace'.¹²³ The goal of cyber operations is to influence actors either constructively or disruptively. Opponents will most likely have to face disruptive effects aimed at disruption, reduction and availability of their resources, including information. Neutral and supportive actors can be engaged in a constructive manner, enhancing their sources of power.

Targets can be found in particular layers of the digital domain (or cyberspace).¹²⁴ Cyberspace contains—apart from the physical layers of geographic locations, persons and tangible objects—two virtual layers. First, the cyber persona layer consists of cyber identities, i.e. the virtual reflection of persons (e-mail addresses, Facebook-accounts). Second, the logical network layer contains so-called cyber objects, in contrast with tangible objects in the physical dimension. Examples of cyber objects include applications (software or code) and IP-addresses. By addressing (or targeting) cyber identities and cyber objects, disruptive and constructive effects can be achieved.¹²⁵ The physical layers of cyberspace (i.e. tangible objects and persons) can be affected indirectly through the intermediate activities against the cyber identities and cyber objects.¹²⁶

Taking into account diplomatic and operational limitations, the means and methods for cyber operations are only restricted by one's imagination and skills to develop tools or use cyberspace. Cyber capabilities employed to conduct operations may be rather basic, such as Denial of Service, or advanced, such as Stuxnet. Although often advocated otherwise, disruptive cyber operations can be repeatedly used, even against the same targets. This may be the result of innovative amendments by the 'targeteers', or because the victim (target) fails to fix vulnerabilities. Constructive cyber operations, assuming that the target (audience) is approved, may be repeated until further notice.

Obviously, generic targeting procedures are also applicable to the planning and execution of cyber activities.¹²⁷ Moreover, cyber operations, as defined may be used to accelerate information operations and to conduct counter-lawfare operations as well. As demonstrated by Dauber, modern media covering military operations abroad relies heavily on footage provided by a variety of actors: local population (bystanders), military (through social

¹²² See Barrett 2012, p. 723; Basile (2004).

¹²³ Ducheine 2014 Forthcoming, based on Schmitt 2013, p. 258, referring to this notion as 'cyber warfare': 'employment of cyber capabilities with the primary purpose of achieving [military] objectives *in or by* the use of cyberspace' [Emphasis added].

¹²⁴ Ducheine and Haaster 2014, p. 309-310.

¹²⁵ Ducheine 2014 Forthcoming. See also note 58 *supra*.

¹²⁶ Ducheine and Haaster 2014, p. 313-314

¹²⁷ Ducheine and Haaster 2014, p. 320-323.

media) and violent non-State actors involved in conflict. In fact, Dauber observes that 'American television networks, unable for a variety of reasons to obtain usable combat footage on a regular basis, all depend on insurgents for visual products.'¹²⁸ Footage of insurgent attacks, staged, filmed, and posted by them, is used as news footage 'as if it had been filmed by Western photojournalists'.¹²⁹ For procedural and bureaucratic reasons, it then proves extremely difficult for western governments to counter the perception that was created by the use of this footage.

Apart from the fact that investigations into alleged misconduct should be completed as soon as possible, armed forces may need to act in a more proactive way to prevent this course of events by engaging in 'rapid response or, if at all possible, to get out ahead of stories that are predictable'.¹³⁰

It is not about satisfying the press, an annoyance that interferes with the mission. If the story has the potential to erode public support, either domestically or internationally, then it is, in fact, mission critical.¹³¹

In this respect, cyber operations could be used to pre-empt opposing information operations or lawfare. By releasing footage, information or statements as soon as possible after actions, or where possible even before operations are launched, the initiative could be seized.

13.14. Conclusions

This chapter set out to complement the kinetic prevalence for targeting by introducing some of the non-kinetic capabilities available in modern military operations. The four elements of targeting (a military operational *way*, using military *means* to influence a *target* or addressee in order to achieve designated political and/or military *goals*) served as a red line throughout the chapter. Paradoxically, despite the fact that the chapter describes and analyses the underrated non-kinetic side of targeting, it should be noted that non-kinetic targeting as such does not exist as a standalone concept. There is only targeting which refers to a spectrum comprising kinetic and non-kinetic elements.

Noting the paradox, kinetic targeting is about the targeted application of military force based on the release or concentration of kinetic energy against opposing forces or objects with (primarily) lethal effects in the physical domain; non-kinetic targeting refers to the targeted application of (other military and non-military) capabilities against addressees to generate (additional) non-kinetic effects in the non-physical and physical domain.

Non-kinetic targeting complements the (existing) kinetic arsenal and capabilities, and is limited only by our imagination, political, ethical and legal norms, and operational policy. In the context of complex modern operations, whether taking the comprehensive approach, in a counterinsurgency, stabilisation or classic interstate warfare, it is evident that all available (and legitimate) capabilities could be used as means to influence other actors. The targets potentially comprise opponents, neutral groups and supporters. The means and methods (and targets) used will depend on the effects sought; they should contribute to the strategic and military goals set out.

Non-kinetic targeting thus offers some definite advantages. It opens up the classic target audience for military operations. Additional opposing forces that are somehow protected from direct kinetic (lethal) attack may also be affected. The same goes for supporters and neutrals, whether in the battlefield at home or abroad. Non-kinetic targeting

¹²⁸ Dauber 2009, p. v-x.

¹²⁹ Dauber 2009, p. v-x.

¹³⁰ Dauber 2009, p. v-x.

¹³¹ Dauber 2009, p. v-x.

also offers alternatives to kinetic means and methods, and supplements the legitimate arsenal available to commanders and forces. The effects generated complement traditional kinetic and disruptive effects, including constructive ones. Moreover, even when causing detrimental effects for the addressees/targets, the damage or disruption might be less severe than kinetic targeting, offering preferable options and mitigating collateral damage. Non-kinetic targeting could also provide favourable options for avoiding the negative (physical or psychological) backlash of kinetic action, for the freedom of movement, public support and force protection. As such, in some situations, non-kinetic targeting could be more effective, efficient and opportune. As stated in the US Joint Publication on targeting:

Nonlethal capability use can also influence adversary decision maker's choice of actions, local public condemnation of adversary actions, and directly impact domestic and international support of the adversary. [...] The scalability, selectability, and responsiveness of nonlethal capabilities provide the JFC the means to engage all target types: facilities (e.g., to clear a facility of personnel, thus stopping its function), individuals (e.g., detaining an individual), virtual targets (through cyberspace), equipment (e.g., through seizure), and organizations (e.g., revoking a license to engage in commerce).¹³²

When using these various assets and lines of actions—kinetic and non-kinetic—it is essential to harmonize and synchronize all output at all levels in order to prevent detrimental effects from one course of action to another. In military headquarters sec, this is commonplace. In multidimensional operations using a comprehensive approach, the need to synchronize becomes even more relevant. Special attention is needed to harmonize all full spectrum efforts, especially the 'message' accompanying these actions. Strategic communication therefore is key, particularly in full spectrum operations and if and when western forces would be inclined to stress the importance of information alongside physical action.¹³³

The various non-kinetic targeting modalities may require different legal bases and are governed by a variety of legal regimes. Warfighting and attacks on the one hand may find their bases in international self-defence and the law of armed conflict, whereas other actions, such as asset freezing may call for additional foundation at the strategic level. The different modalities also demand the ability for the military to apply the various applicable legal regimes:, for instance, criminal law, law of armed conflict, human rights when it comes to detention, as well as sufficient knowledge of local regimes when cooperating with domestic authorities.

In order to make full use of the entire arsenal, true comprehensive approaches will be required, as some of the means and methods needed are not allocated within the military chain of command. Multinational and joint operations are necessary in order to benefit from the potential of true full spectrum operations. Looking at the modalities and capabilities needed, much of non-kinetic targeting focuses on the human domain, physical as well a psychological.¹³⁴ The human social and cognitive element is essential, whether for influencing physical behaviour or affecting understanding. This has consequences for the force composition and footprint. Additional expertise and knowledge may be required; this will not necessarily result in fewer numbers of deployed (military and civilian) staff. The experts will most often deploy with land forces and joint headquarters in general.

¹³² US Department of Defense 2013, p. II-16.

¹³³ It goes beyond the focus of the chapter to elaborate on the notion of strategic communication. See e.g., NATO Military Concept for Strategic Communications 2010, p. 1, defining strategic communication as 'the coordinated and appropriate use of NATO communications activities and capabilities – Public Diplomacy, Public Affairs, Military Public Affairs, Info Ops and PsyOps – in support of Alliance policies, operations and activities, and in order to advance NATO's aims'.

¹³⁴ Cyber operations, however, are partially different.

It has not, however, been analysed whether the targeting procedures used for kinetic targeting are also suitable for non-kinetic avenues. This seems to be the case with key leader engagement and cyber operations, considering that the targeting process is adaptive in nature, and in essence is about achieving goals with allocated means. The composition of targeting boards will differ, depending on the modality of non-kinetic targeting considered. Yet, while means and effects may vary, the ultimate goals remain very much the same.

When evaluating the western prevalence of kinetic targeting, it should also be noted that some actors have developed better skills and gained more proficiency in non-kinetic targeting than have western armed forces. Although specific guidance is on the rise, the conclusion that '[a]t present, weaponeering is more developed to support munitions than nonlethal actions' is probably still valid.¹³⁵ However, considering the latest military doctrine, a shift in thinking appears to be emerging; instead of classically addressing (attacking) enemy forces and objects, modern publications now acknowledge that targeting also very much focuses on the will (psyche), situational awareness, choices, mental resilience, understanding and behaviour. Most recently, cyber identities and cyber objects could be added to this list. For westerners, it is of worth noting that our non-kinetic efforts quite often are in support of kinetic action. In other parts of the world, the reverse is true!

13.15. References

- Allied Command Operations (NATO) (2010) Comprehensive Operations Planning Directive.(COPD) V1.0 Mons: Supreme Headquarters Allied Power Europe (7 December 2010)
- Andres RB (2009) Deep attack against Iraq. In: Mahnken, TG, Keaney, TA (eds.) *War in Iraq: Planning and Execution (Strategy and History)* Routledge, London, pp. 69-96
- Banks WC (2011) *New battlefields / old laws: critical debates on asymmetric warfare.* Columbia University Press, New York
- Barrett R (2012) Preventing the financing of terrorism. *Case Western Reserve Journal of International Law* 44(3):719-736
- Basile M (2004) Going to the source: why al Qaeda's financial network is likely to withstand the current war on terrorist financing. *Studies in Conflict & Terrorism* 27(3):169-185
- Berlin SD (2010) Conviction-focused targeting: targeting violent extremists while developing rule of law capacity. *Small Wars Journal* (24 August 2010)
- Brooks RA (2002) Sanctions and regime type: what works, and when? *Security Studies* 11(4):1-50
- Caldwell WBI, Murphy DM, Menning A (2009) Learning to leverage new media: the Israelian Defense Forces in recent conflicts. *Military Review* 89(3):2-10
- Canada ND (2008) B-GL-300-001/FP-001 Land Operations
- Cheng Hang T (2010) Non-kinetic warfare: the reality and the response. *Pointer Journal of the Singapore Armed Forces* 36(1):45-57
- Chesney R (2011) Iraq and the military detention debate: firsthand perspectives from the other war, 2003-2010. *Virginia Journal of International Law* 51(3):549-636
- Coker C (2014) The context of modern targeting. In: Ducheine PAL, Osinga F, Schmitt MN (eds) *Targeting: the challenges of modern warfare.* TMC Asser Press, The Hague
- Cole A, Drew P, McLaughlin R, Mandsager D (eds) (2009) *Rules of engagement handbook.* International Institute of Humanitarian Law, San Remo

¹³⁵ US Department of Defense 2013, p. II-15.

- 'NON-KINETIC CAPABILITIES: COMPLEMENTING THE KINETIC PREVALENCE TO TARGETING' IN: P. DUCHEINE, M. SCHMITT & F. OSINGA (EDS.), *TARGETING: CHALLENGES OF MODERN WARFARE*, THE HAGUE: SPRINGER (FORTHCOMING 2014).
- Dauber C (2009) YouTube war: righting in a world of cameras in every cell phone and photoshop on every computer. Strategic Studies Institute, U.S. Army War College
- Dinstein Y (2009) *The international law of belligerent occupation*. University Press, Cambridge
- Drezner DW (2011) Sanctions sometimes smart: targeted sanctions in theory and practice. *International Studies Review* 13(1):96-108
- Duchaine PAL (2014 Forthcoming) The notion of cyber operations in international law. In: Tsagourias N, Buchan R (eds) *Research handbook on international law and cyber space*. Edward Elgar Publishing, Cheltenham
- Duchaine PAL, Haaster Jv (2014) Fighting power, targeting and cyber operations. In: *Proceedings of the 6th International Conference on Cyber Conflict (2014)*. CCDCOE, Tallinn, pp. 303-327
- Duchaine PAL, Pouw EH (2012) Legitimizing the use of force: legal bases for Operation Enduring Freedom and ISAF. In: Meulen Jvd, Vogelaar A, Beeres R, Soeters J (eds) *Mission Uruzgan: collaborating in multiple coalitions for Afghanistan*. Amsterdam University Press, Amsterdam, pp 33-46
- Dungan P (2008) Fighting lawfare at the special operations task force level. *Special Warfare*, 21(2):10-15
- Dunlap CJ (2001) Law and military interventions: preserving humanitarian values in 21st conflicts. *Humanitarian Challenges in Military Intervention Conference*, Carr Center for Human Rights Policy, Kennedy School of Government, Harvard University Washington, D.C. (29 November 2001)
- Dunlap CJ (2008) Lawfare today: a perspective. *Yale Journal of International Affairs* (Winter):146-154
- Dunlap CJ (2009) Lawfare: a decisive element of 21st century conflicts? *Joint Forces Quarterly* 54:34-39
- Dunlap CJ (2010) Does lawfare need an apologia? *Case Western Reserve Journal of International Law* 43:121-143
- European Commission (2013) *Joint Communication to the European Parliament and the Council, The EU's comprehensive approach to external conflict and crises*. JOIN(2013) 30 final, Brussels 11 December 2013
- European Union (2002) Council Framework Decision 2002/584/JHA of 13 June 2002 on the European Arrest Warrant and the Surrender Procedures Between Member States, 2002 O.J. (L 190/2) 1 (EU)
- Gill TD, Fleck D (2010) *The handbook of the international law of military operations*. Oxford University Press, Oxford
- Goldstein B (2014) What is lawfare? www.thelawfareproject.org. Accessed 15 April 2014
- Goldstein B, Meyer AE (2009) Legal jihad: how Islamist lawfare tactics are targeting free speech. *ILSA Journal of International & Comparative Law* 15:395-410
- Govern KH (2012) Warrant-based targeting: prosecution-oriented capture and detention as legal and moral alternative to targeted killing. *Arizona Journal of International & Comparative Law* 29(3):477-516
- Haaster Jv (2014) Key-leader engagement in or through cyberspace. Essay, Netherlands Defence Academy (on file with the author)
- Hanson VD (1989) *The western way of war - infantry battle in Classical Greece*. Hodder & Stoughton, London
- Hanson VD (2001) *Why the west has won: carnage and culture from Salamis to Vietnam*. Anchor Books, New York

- 'NON-KINETIC CAPABILITIES: COMPLEMENTING THE KINETIC PREVALENCE TO TARGETING' IN: P. DUCHEINE, M. SCHMITT & F. OSINGA (EDS.), *TARGETING: CHALLENGES OF MODERN WARFARE*, THE HAGUE: SPRINGER (FORTHCOMING 2014).
- Herrera P (2013) Evidence based operations: a guide for intelligence professionals to operate in conjunction with the rule of law in Afghanistan. NATO Operational Headquarters (on file with author)
- Innenriks (29 January 2004) The rules of engagement: stridsreglene. <http://www.nrk.no/nyheter/innenriks/3462304.html>. Accessed 22 April 2014
- Kilcullen D (2009) *The accidental guerilla*. University Press, Oxford
- Kitzen M (2012a) Close encounters of the tribal kind: the implementation of co-option as a tool for de-escalation of conflict: the case of the Netherlands in Afghanistan's Uruzgan Province. *Journal of Strategic Studies* 35(5):713–734
- Kitzen M (2012b) Western military culture and counter-insurgency, an ambiguous reality. *Scientia Militaria: South African Journal of Military Studies* 40(1):123–134
- Kleffner J (2010) Operational detention and the treatment of detainees. In: Gill TD, Fleck D (eds) *The handbook of the international law of military operations*. Oxford University Press, Oxford, pp 465–479
- Koelbi S (2009) Battling Afghan drug dealers: NATO High Commander issues illegitimate order to kill (28 January 2009). *Der Spiegel*
- Koninklijke Landmacht (2014) Doctrinepublicatie Landoptreden. www.defensie.nl/binaries/defensie/documenten/publicaties/2014/02/11/militaire-doctrine-voor-het-landoptreden/DP+3.2.pdf. Accessed 29 April 2014
- Kruif Md (2014) Preface. In: Ducheine PAL, Osinga F, Schmitt MN (eds) *Targeting: the challenges of modern warfare*. TMC Asser Press, the Hague
- Liljas P (2014) Top U.K. defense officials accused of war crimes: International Criminal Court receives huge dossier of allegations relating to British conduct during war in Iraq (13 January 2014). *Time*. <http://world.time.com/2014/01/13/top-u-k-defense-officials-accused-of-war-crimes/>. Accessed 16 May 2014
- Lynn J (2003) *Battle: a history of combat and culture from ancient Greece to modern America*. Westview Press, Boulder
- Matthijssen CJ (2010) Strategic communication. *Militaire Spectator* 179(10):517–531
- Ministerie van Defensie (2013) Netherlands Defence Doctrine. http://www.defensie.nl/binaries/defensie/documenten/publicaties/2013/11/20/defence-doctrine-en/defensie-doctrine_en.pdf. Accessed 16 March 2014
- Morris VR (2010) Battlefield forensics: dynamic adaptation of the company-level task force. *Infantry* 99(Nov/Dec):6
- Murphy DM (2009) Talking the talk: why warfighters don't understand information operations. Issue Paper, Center for Strategic Leadership, US Army War College
- NATO (2008) Allied Joint Doctrine for Joint Targeting (AJP-3.9)
- NATO (2009) Allied Joint Doctrine for Information Operations (AJP-3.10)
- NATO (2010) NATO Military Concept for Strategic Communications (27 July), Enclosure 1 to MCM-0085-2010 Revised, dated 11 August 2010, <http://www.docstoc.com/docs/136613988/NATO-Military-Concept-for-Strategic-Communications>
- Neuteboom P (2014 Forthcoming)) Beyond borders: the role of the Netherlands Army in public security during crisis management operations (diss. University of Tilburg)
- Noorda H (2014) Preventive deprivations of liberty: asset freezes and travel bans. Amsterdam Law School Research Paper No 2014-20. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2400390. Accessed 25 May 2014
- Pejic J (2005) Procedural principles and safeguards for internment/administrative detention in armed conflict and other situations of violence. *International Review of the Red Cross* 87(858):376

- 'NON-KINETIC CAPABILITIES: COMPLEMENTING THE KINETIC PREVALENCE TO TARGETING' IN: P. DUCHEINE, M. SCHMITT & F. OSINGA (EDS.), *TARGETING: CHALLENGES OF MODERN WARFARE*, THE HAGUE: SPRINGER (FORTHCOMING 2014).
- Pijpers PBMJ (2014) De twitterende tegenstanders: een discours over de rol van mediacultueren in het conflict (org. Dutch). *Militaire Spectator* 183(6):300-314
- Pouw EH (2013) International human rights law and the law of armed conflict in the context of counterinsurgency - with a particular focus on targeting and operational detention (diss. UvA)
- Pratzner P (2014) The current targeting process. In: Ducheine PAL, Osinga F, Schmitt MN (eds) *Targeting: the challenges of modern warfare*. TMC Asser Press, the Hague
- Schmitt MN (2009) Targeting narcoinsurgents in Afghanistan: the limits of international humanitarian law. *Yearbook of International Humanitarian Law* 12:301–320
- Schmitt MN (ed) (2013) *Tallinn manual on the international law applicable to cyber warfare*. Cambridge University Press
- Shirbon E (2014) Campaigners ask ICC to investigate alleged UK war crimes in Iraq (12 January 2014). Reuters
- Smith-Windsor B (2008) Hasten slowly: NATO's effects based and comprehensive approach to operations. NATO Research Paper 38 (NATO Defence College)
- Smith R (2005) *The utility of force*. Allen Lane, London
- Sun Tzu (1994, translated by Sawyer R) *The art of war*. Westview Press, Boulder
- Twitter suspends account of Hamas' military wing (2014) (14 January 2014). Haaretz
- UN Human Rights Council (2012) Report of the International Commission of Inquiry on Libya (UN Doc nr. A/HRC/19/68)
- UK House of Commons DC (2013) *UK Armed Forces Personnel and the Legal Framework for Future Operations*. Twelfth Report of Session 2013-14, HC 931, Published on 2 April 2013.
- UK Ministry of Defence (2009) Joint Doctrine Publication 3-00 (JDP 3-00) (3rd Edn) Campaign Execution. Development, Concepts and Doctrine Centre (DCDC). https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/33697/20111130jdp001_bdd_Ed4.pdf. Accessed 17 March 2014
- US Air Force (2014) Annex 3-60 Targeting <https://doctrine.af.mil/download.jsp?filename=3-60-Annex-TARGETING.pdf>. Accessed 6 April 2014
- US Army Center for Army Lessons Learned (2009) *Commanders Guide to Money as a Weapon System*. Handbook 09-27 (March)
- US Army, Center for Army Lessons Learned (2010) *Forensics and Warrant-Based Targeting*. 10-35 (March)
- US Army (2010a) Field Manual (FM 3-60) *The Targeting Proces* (November 2010) Department of the Army
- US Army (2010b) *Site Exploitation Operations* ATTP No. 3-90.15 (FM 3-90.15)
- US Department of Defense (2012) Joint Publication Information Operations (JP 3-13). Joint Chiefs of Staff. http://www.dtic.mil/doctrine/new_pubs/jp3_13.pdf. Accessed 6 April 2014
- US Department of Defense (2013) Joint Publication Targeting (JP 3-60). Joint Chiefs of Staff. http://cfr.org/content/publications/attachments/Joint_Chiefs_of_Staff-Joint_Targeting_31_January_2013.pdf. Accessed 6 April 2014
- US Joint Forces Command (2010) *Commander's Handbook for Strategic Communication and Communication Strategy*. Suffolk: U.S. Joint Warfighting Center
- Voetelink JED (2013) Evidence-based operations: how to remove the bad guys from the battlefield. *Journal of International Law of Peace and Armed Conflict* 4:194–201
- Wilner AS (2011) Deterring the undeterrable: coercion, denial, and delegitimization in counterterrorism. *Journal of Strategic Studies* 34(1):3-37

‘NON-KINETIC CAPABILITIES: COMPLEMENTING THE KINETIC PREVALENCE TO TARGETING’ IN: P. DUCHEINE, M. SCHMITT & F. OSINGA (EDS.), *TARGETING: CHALLENGES OF MODERN WARFARE*, THE HAGUE: SPRINGER (FORTHCOMING 2014).

Wright A (2011) Lawfare: Israeli-AIPAC attack on the Gaza Freedom Flotilla (13 June 2011). Sabbah.biz. sabbah.biz/mt/archives/2011/06/13/aipac-israel-attack-gaza-flotilla/. Accessed 29 April 2014