TARGETING IN INTERNATIONAL LAW

COUNTERINSURGENCY AND THE LEGAL MATERIALITY OF THE PRINCIPLE OF DISTINCTION

Amin Parsa

Targeting in International Law

This book is about how distinctions are drawn between civilians and combatants in modern warfare and how the legal principle of distinction depends on the technical means through which combatants make themselves visibly distinguishable from civilians.

The author demonstrates that technologies of visualisation have always been part of the operation of the principle of distinction, arguing that the military uniform sustained the legal categories of civilian and combatant and actively set the boundaries of permissible and prohibited targeting, and so legal and illegal killing. Drawing upon insights from the theory of legal materiality, visual studies, critical fashion studies, and a dozen of military manuals he shows that far from being passive objects of regulation, these technologies help to draw the boundaries of the legitimate target.

With its attention to the co-productive relationship between law, technologies of visualisation and legitimation of violence, this book will be relevant to a large community of researchers in international law, international relations, critical military studies, contemporary counterinsurgency operations and the sociology of law.

Amin Parsa is an assistant professor in sociology of law at Halmstad University, Sweden, and an affiliate researcher of Sociology of Law Department at Lund University, Sweden. He holds a doctoral degree in public international law from Lund University. His primary research interest concerns the use of advanced digital technologies in the context of armed conflicts as well as border control practices.

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Targeting in International Law

Counterinsurgency and the Legal Materiality
of the Principle of Distinction

Amin Parsa

**To the enduring memory of my cousins
Khosrow and Khaliq.**

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Happiness is to lay under the shadow of a walnut tree in a place where the Zagros mountains are firmly on the horizon. If I had to choose, there would also be a carpet (preferably with a *Nazem* pattern) under that tree. I am not there, nor will be there anytime soon, nor have I the luxury of sitting on a garden-patterned-Qashqai carpet. I am far too distant from this place and search for it daily in my dreams.

As the years pass, happiness has become a precious little place amongst friends and colleagues who allowed me to be myself – crumbled and reorganised, anxious and willing, distant yet here, right here amongst them. You gave me trees, mountains, and a place in this world: Annika Lindberg, Mahmoud Keshavarz, Sofi Jansson-Keshavarz, Leila Brännström, Shahram Khosravi, Parvin Ardalan, Niklas Selberg, Markus Gunneflo, Gregor Noll, and Jackson Oldfield – thank you.

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Nazem – a pattern of Qashqai carpets – depicts a window opened towards a garden of trees and flowers with a small pool in the middle. If you stand on the right end of the carpet, you will be standing on a porch facing a harmonious paradise. What makes Qashqai or any other nomadic carpet unique is not just the unbelievable artistry of tying thousands of knots horizontally to make a perfect scene; it is the frequent mistakes that you find in these carpets. A flower depicted on one side with one petal fewer than its corresponding flower on the other side or a mismatch in colour or size of two trees mirroring one another on different ends of the garden. Some say mistakes are caused because there is no map or pattern guiding the weavers. The Qashqai women and girls weave these carpets from memory and pass on the patterns, heart to heart, generation after generation. Others say these are intentional mistakes by the weavers communicating: perfection is not an earthly matter. Few say these intentional mistakes are signatures of resistance from women whose names do not travel with the same reverence as their masterpieces. Laborious masterpieces that they might not have wished to make in the first place. To my family, for all your beauty, joy, and disharmony and always

with a slight sense of shame and guilt for leaving and never returning to stay; I love you, and I thank you: Azita, Siavash, Arash, Ali, Lorta, Maryam, Masoud, Amin, Mohamad, and Sam.

To Mahmoud for all the years that passed and the years to come, and from here to the gardens of Shiraz and sand beaches of Bushehr, thank you.

And to Annika, the sharpness of your observations, the brilliance of scholarship, and the strength of your hope have been daily lessons and encouragements. Thank you for the conversations and adventures. For a world to make and another to live in – together, thank you.

This book is dedicated to my cousins Khosrow and Khaliq. Khosrow was a member of a small peasant rebellion in the Qashqai mountains in south of Iran. He was murdered in a summary execution during a nation-wide purge of political prisoners in 1980's by the newly established Islamic Republic in Iran. Khosrow was serving a prison sentence when executed – per his request his name should always be remembered along with that of his Qashqai comrade; Fathoalah Niknami. Khaliq died as conscripted solider in the Iraq–Iran War in 1987. A war that was used as a pretext for the purge of political prisoner. They remain loved.

<div align="right">Amin Parsa</div>

List of Abbreviations

AABIS	Afghan Automated Biometric Information System
API	Protocol Additional to the Geneva Conventions of 1949, and Relating to the Protection of Victims of International Armed Conflicts (Protocol I) 1977
APII	Protocol Additional to the Geneva Conventions of 1949, and Relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II) 1977
BEI	Biometric-Enhanced Intelligence
BEWL	Biometric-Enhanced Watch List
CF	Coalition Forces
CIHL	Customary International Humanitarian Law
COIN	Counterinsurgency
DARPA	Defense Advanced Research Projects Agency
DPH	Direct Participation in Hostilities
EKIA	Enemy Killed in Action
FARC	Fuerzas Armadas Revolucionarias de Colombia
GCIII	Geneva Convention (III) Relative to the Treatment of Prisoners of War 1949
GCIV	Geneva Convention (IV) Relative to the Protection of Civilian Persons in Time of War 1949
IAC	International Armed Conflict
ICJ	International Court of Justice
ICRC	International Committee of the Red Cross
ICTY	International Criminal Tribunal for the Former Yugoslavia
IED	Improvised Explosive Device
IHL	International Humanitarian Law
ISAF	International Security Assistance Force
JPEL	Joint Prioritized Effects List
JSOC	Joint Special Operations Command
LOAC	Law of Armed Conflict
NCTC	National Counterterrorism Center
NIAC	Non-International Armed Conflict

NORA	Non-Obvious Relationship Awareness
OIF	Operation Iraqi Freedom
RTRG	Real Time Regional Gateway
RTS	(Serbian) Radio and Television Station
SIGINT	Signals Intelligence
SRK	Sarajevo Romanija Corps

1 Visibility, materiality, and targeting in contemporary counterinsurgency

Daud Khan lost his ten-year-old son, Khaliq, in a US drone strike at his home in North Waziristan, Pakistan. He recounts what he thinks was the reason for this devastating attack:

> The day before some Taliban had come to the house and asked for lunch. I feared them and was unable to stop them because all the local people must offer them food. They stayed for about one hour and then left. The very next day our house was hit … My only son Khaliq was killed. I saw his body, completely burned.[1]

On 23 January 2013, some thousands of kilometres away, in Sana'a, Yemen, Ali al-Qawli, a 34-year-old teacher, and his cousin Salim Jamil, a 20-year-old university student, were killed by a US drone strike on the car in which they were travelling. At the time, Ali was supporting his family through his part-time job as a driver. On that day, his car contained another passenger, Rabae Lahib. Unbeknownst to Ali, Rabae was an alleged bodyguard for Adnan al-Qadhi, an alleged member of al-Qaeda in the Arabian Peninsula.[2] Yemen's Ministry of Interior would later clear Ali and Salim of having had any connection to the passenger who rode with them that day.

In another instance in Somalia, a US drone targeted and killed Bilal Berjawi, a British al-Qaeda member who had already escaped a drone strike in 2011, shortly after he made a phone call to his wife, who was about to go into labour in a London hospital.[3] In the four months after Berjawi's targeting, several of his contacts were either killed or arrested. *The Guardian* reported that the contact history of Berjawi's mobile phone had been used to identify other targets. Berjawi's former next-door neighbour in London, who was also in Somalia, was targeted in a drone strike; another of his contacts, a Vietnamese-born individual, was arrested in Manhattan by the FBI and charged with terrorist offences. Finally, a friend of his from London, Mahdi Hashi, was detained after he travelled from Somalia to Djibouti.[4]

These are just a few of the many stories of US drones targeting individuals across the world in the pursuit of the US government's objectives in what it calls 'global counterinsurgency'. Not all these cases of targeting involve the loss of the lives of civilians like Khaliq, Ali, and Salim, nor do they involve targeting on an

active battlefield. But all the stories share one characteristic: they are the outcome of targeting practices that do not involve the conventional criteria by which human targets are recognised in warfare. Contemporary drone targeting is guided by a networked practice of big-data analysis, algorithmic calculation, and real-time video surveillance. It is a high-tech, intelligence-driven practice.

Against this background of contemporary US counterinsurgency (COIN) operations in (for the most part) Iraq and Afghanistan, this book investigates a fundamental question: how does the US military distinguish between the civilian population and targetable human enemies? This question is, inevitably, a legal one, relating to the obligation state armies have under international law to distinguish between combatants and civilians at all times and to deliberately attack only combatants: the so-called principle of distinction.

The urgency of such an enquiry becomes clear once we appreciate the extent to which COIN – the military context within which advanced targeting technologies such as drones usually operate – is an environment characterised by the indistinguishability of insurgent fighters and civilians. The indisputable supremacy of the US military over other state armies makes for an asymmetry of power that, as the US COIN Manual FM 3-24 (2006) notes, renders unconventional forms of warfare, such as insurgency, the only viable method of resistance to US military might; for this reason, such modes of warfare are likely to predominate for decades to come.[5] A defining characteristic of insurgency is that the insurgents compensate for their weaker position through a systematic refusal to observe any obligation to identify themselves to their enemies as combatants – that is, to visually self-identify. Thus, insurgents are known to fight in civilian clothing and to eschew distinctive and legally mandated attire such as military uniform and visible insignia. Consequently, the abiding difficulty for any COIN force is not the actual act of killing the enemy combatant but, first, the task of identifying and recognising the enemy combatant.

In response, the US military has adopted technological solutions that combine hyper-visualisation and surveillance of the battlefield with analytical tools such as 'pattern-of-life analysis' to identify and target enemy combatants in this new environment. The US Army Targeting Process Field Manual describes pattern-of-life analysis as an extensive, intelligence-oriented activity that establishes a physical, visualised, and tangible infrastructure of relations in the environment of operation by 'connecting the relationships between [observed] places and people'.[6] The ultimate function of such analysis is to make the invisible enemy networks 'visible and vulnerable', and in this way to '[negate] the enemy's asymmetric advantage of denying a target'.[7] In other words, everything that is seen and recorded by drones – for instance individuals' everyday activities, movements, regular visits to various locations, or regular meetings and contacts with other individuals – is analysed, and this process yields a picture of a network of relations between individuals, which in turn determines these individuals' degree of targetability.

The disposition matrix, which will be discussed at length in later chapters, is one of the technological tools deployed by the US military to compensate for the insurgent's invisibility through the use of pattern-of-life analysis. The disposition
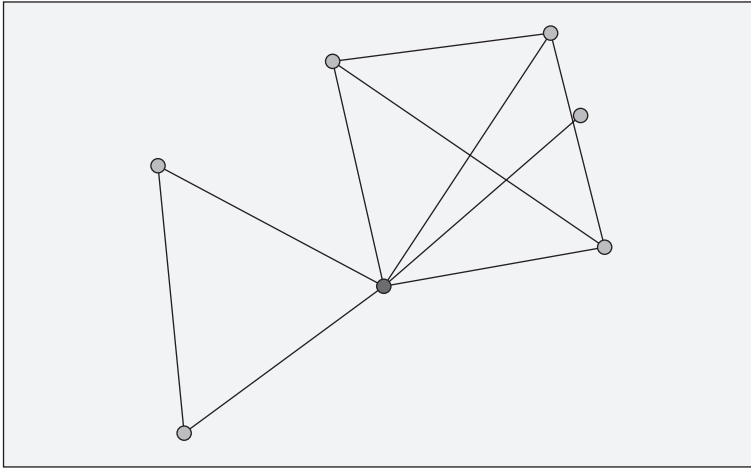
Figure 1.1 An artistic representation of the disposition matrix by James Bridle. 'A Quiet Disposition', 2013 (http://aquietdisposition.com).

Source: Image courtesy of the artist (redrawn for this publication).

matrix is a grid, created using a variety of data, that visualises all targets and all the relations between them (see Figure 1.1). In other words, the disposition matrix visualises the battlefield as an array of networks. Each network consists of various nodes and the links between them, which represent individuals and the digitalised footprints of their mutual social interactions, respectively. The intensity of the links between each node, as well as the number of links that run through a node, represents the importance of that node for the maintenance of the network.[8] These factors, in addition to the overall character of the observed network, determine the value of each node (individual) as a probable target. The disposition matrix provides alternative forms of visualisation, such as maps, target lists, individual watch lists, and interpersonal contact chains, that compensate for the insurgents' invisibility. According to General Michael Hayden – the former director of the US National Security Agency (NSA) and the US Central Intelligence Agency (CIA) – such data analysis processes are the way in which the US practises discriminate targeting on the contemporary battlefield.[9]

This interplay between different technologies of visualisation, tactics of invisibility, and targeting practices in turn raises the question of how these visualisation technologies relate to the legal categories of combatant and civilian, a question that is central to my investigation. However, in investigating the legal significance of these visual technologies, I do not focus on what is, for many, the object of fascination in this area – the drone. Instead, I ask: how does the law of armed conflict (LOAC) use visualisation and technologies of visualisation to produce legitimate targets in the first place? What is lost from the legal process of legitimising lethal violence during armed conflict when insurgents remove visual signifiers such as the military uniform and distinctive military insignia from the battlefield? This book takes the

military uniform to be law's original, analogue technology of visualisation and asks what happens to the principle of distinction and its categories without the uniform as a technology of visual distinction. In this sense, the book is an investigation of the consequences for law and for the legitimation of wartime violence of the replacement of one technology of visualisation by another.

This book makes two major original contributions to the existing literature on contemporary warfare. First, through its attention to the relation between targeting, law, and technologies of visualisation, the book proposes a novel understanding of the target as being built around the material practices of the military uniform – law's original technology of visualisation. In so doing, the book redescribes the rules and customs of war in such a way as to unpack the material process by which discriminate targeting becomes a legal matter and wartime killing becomes legitimate. 'Redescription' here is used in the sense, explained by Anne Orford, that denotes a critical practice of describing again what is seemingly given and taken for granted with the aim of making visible those meanings, processes of meaning-making and relations of force that have been rendered invisible simply by their ubiquity.[10] It is the practice of making strange, or de-familiarising, the seemingly familiar – those things that we merely notice and feel no need to investigate further. This book patiently takes apart the seemingly straightforward practice of wearing a military uniform; in so doing, it reveals that the legitimation of lethal targeting, indeed the whole structure of the principle of distinction, is an extension of the forms of (in)visibility produced by this technology.

In short, in this book, I argue that categories such as legitimate targets are products not of legal norms but, instead, of modes of knowing paired with modes of seeing – knowledge–vision composites – that originally come together in the military uniform as the legal material of the principle of distinction. In other words, the legal categories of civilian and combatant, which legitimise the use of lethal force in armed conflict, are not categories established and defined by law; instead, they derive from relations of force, political intentions, and the technologies that project those intentions on to materially destructible entities. To put it yet another way, the principle of distinction's description of the conditions for targeting humans during armed conflict merely reflects a particular stabilisation of adversarial politics (the element of knowledge) and technological conditions of visual discernability (the element of vision). These two elements are most vividly manifested in the distinctive modes of (in)visibility that the military uniform produces.

Such a redescription of the principle of distinction emphasises the normative capacity of those technologies that bring the knowledge of adversarial enmity together with wartime visual discernability. This book's second major contribution is that, by illustrating the relationship between the use of visual technology and the legitimation of violence and targeting in law, the book provides a novel understanding of the legal context in which drones operate. It is by building upon a knowledge–vision composite similar, though not identical, to that of the military uniform that drones have come to be the US military's COIN weapon of choice. This situated understanding of drone targeting allows us to appreciate that, quite apart from the question of the drone's legality or its role in facilitating increasing

violence, an important aspect of drone technology is its function in recasting as legitimate targets individuals who would otherwise be considered civilians.

War – Law – Visualisation – Weapon design

This book examines the material and visual underpinning of LOAC and the way this underpinning serves to legitimate violence. But it is also worth noting that the state's use of violence and its technologies, especially perceptual technologies, have always operated within a field of possibilities prepared by the law. The connection between the deployment of violence and modalities of seeing, or the relationship between technologies of violence and the legitimation of violence in law, is elucidated below. In the following chapters, I focus on the convergence of law, technologies of visualisation, and the use of lethal targeting in the context of contemporary warfare.

It is uncontroversial to say that the contemporary battlefield is a space saturated with technological solutions designed to counteract the invisibility of insurgents. For instance, in 2009 alone, the total amount of video and imagery collected by US drones flying over Iraq and Afghanistan amounted to 24 years of video footage, and this figure was projected to increase thirtyfold within two years.[11] Yet, as Antoine Bousquet argues in his book *The Eye of War*, the circulation of images, just as much as the movement of materials and people, has always been a logistical necessity in war.[12] Sensing, imaging, and mapping underlie the perceptual logistics of war, and drones are only one technology in a repertoire of actions and tools that includes cartographic tools, oceanography technologies, audio-visual sensors, radars, thermal cameras, aerial photography, and so on.

Because war has always been a perceptually and technologically complicated practice, there is a well-established relationship between, on the one hand, the rationalisation and authorisation of violence and, on the other, discourse, expert knowledge, and the visual logistics of war. In visual culture studies, this link between visual practices and the use of violence is called visuality. Visuality refers to a modality of power that mandates the use of violence while also providing an authorisation for such violence through the governance of vision and its associated practices. As Nicholas Mirzoeff defines it, visuality is the 'police order of aesthetics'; it orders fields of visibility by claiming the exclusive authority over both what is to be seen and how it is to be seen. The chief function of visuality is to make possible the use of violence and the exercise of power, and to lend authority to these in such a way that this authority ultimately comes to seem self-evident and natural.[13]

A vivid example of such a relationship between law and visuality is the Rodney King case. This infamous case concerned the brutal beating of King by four White Los Angeles Police Department officers on 3 March 1991. Most of the beating was videotaped, without the knowledge of the officers, by a bystander from across the street.[14] The publication of the footage sparked public outrage, and the police officers were charged with assault with a deadly weapon and excessive use of force.[15] During the proceedings, the grainy amateur footage, shot from some distance,

became the central piece of evidence around which both the prosecution and the defence built their cases. One side argued that the footage showed a brutal, savage, and racially motivated beating of a defenceless individual; the other side argued that the footage showed a controlled, measured, textbook use of force by professionally trained officers. The court case hinged, in large part, on how the video footage was to be seen. Who possessed the authority to 'see' what was shown? Which version of what was seen in the very same frames had enforceable legal authority?

The six days of rioting in Los Angeles that followed the eventual acquittal of the police officers left 63 people dead – demonstrating just how serious conflicts over different interpretations of the same set of images can be.[16] During the closing arguments, and after showing the videotape for one last time, the prosecutor asked the jurors: 'Now who do you believe, the defendants or your own eyes?'[17] Such a plea for an objective and impartial view of the footage was made necessary because the defence, instead of disputing the footage, had, surprisingly, attempted to use the footage to bolster its own case. The defence argued that the footage could be meaningfully understood only if it were seen through the eyes of a trained professional police officer.[18] In other words, the defence dismissed the authority and legitimacy of any way of seeing other than that of the authorised agents of state violence. The content of this 'professional' interpretation was, in turn, established by expert testimonies that accompanied the video, which was slowed, cut, cropped, magnified. The defence thus used expert testimony to depict what appeared in the video – the agony and distress of a person subjected to a severe beating – in a particular way, namely as images of an aggressive person attempting to retaliate.[19] Each blow of a metal baton or kick, each escalation and de-escalation of force, was then correlated with King's bodily movements as he struggled on the ground. For example, in one instance the expert speaking over a slow-motion close-up of part of the video interpreted King raising his buttocks and moving his legs as signs that he was collecting himself before retaliating – signs that in turn justified the next round of intensified beating.[20]

The fact that the seemingly simple question 'what does the video show?' was able to generate such divergent responses makes the Rodney King case a vivid example of 'how the ability to see a meaningful event is not a transparent, psychological process, but is instead a socially situated activity accomplished through the deployment of a range of historically constituted discursive practices'.[21] Neither the viewing itself nor the authority over what it is that has been viewed appears to be free from external forces seeking to advance the interests of particular groups. The low-quality amateur video that appeared to most viewers to present a clear-cut case of police brutality was reinterpreted by an expert discourse that cast King's movements instead as presenting aggression, threat, and danger.[22] If sight is a physiological phenomenon, visuality is the social fact that sight is entangled in relations of force and means of mobilising violent power.[23] Visuality refers to operationalisation of vision for ordering and narrating 'chaotic events' into 'intelligible, visualised fashion'.[24]

This is not to say, however, that the mobilisation of vision as a mechanism of violence is always bound up with discursive practices or technological modifications

that shape reality in a desired way. In her critique of Susan Sontag's *On Photography*, Judith Butler argues that our apprehension of reality is always already bound up with the frames through which the reality is presented to us. Neither the Los Angeles residents who rioted nor those who supported the police officers needed captions, technical edits, or expert commentary to perceive and interpret the political forces that mobilised the images in favour of one or the other position. As Butler points out, any framing of an image, or for that matter any field of vision, already implies decisions about where to look and what to leave out. Such an act of framing 'functions not only as a boundary to the image, but as structuring the image itself. If the image in turn structures how we register reality, then it is bound up with the interpretive scene in which we operate'.[25] Visuality – the social fact of vision – involves not only images but also imaginations, discourses, information, and insights, which together form the authority to declare what is there to be seen and what sense-making is authorised.[26] The technological and discursive forces of visuality strengthen the boundaries of a particular contested vision, to the detriment of other ways of interpreting reality, and in this way they authorise a particular claim to order, power, and violence.

The wartime technologies and discursive practices of vision are also intimately linked to the mobilisation of violence. In this regard, an often-analysed example is the infamous case of drone targeting in the Uruzgan Province of Afghanistan on 21 February 2010. The nearly five hours of communication between drone operators, sensor analysts, troops in the field, and other officials, a transcript of which was released by a *Los Angeles Times* journalist, reveals how the expansive vision offered by advanced digital technologies – and various discursive modes of socialisation between operators, technological options, legal interpretation, and military considerations – leads to violence in cases in which it would otherwise have been unimaginable.

The case involved the targeting of two SUVs and a pickup truck transporting several passengers. According to a survivor, the vehicles were travelling together so that the passengers could assist one another if one of the vehicles broke down.[27] The vehicles initially attracted the attention of an AC-130 plane flying in the area, which noticed the drivers signalling to one another with headlights. This led to the involvement of an MQ-1 predator drone, which was operated from Creech Air Force Base in Nevada, as well as sensor operators and two Kiowa attack helicopter crews, all of which were acting as support to nearby ground troops. The transcript of the communications between the actors involved exemplifies how new meanings are produced, suspicions negotiated, and doubtful claims traded as reasonable certainties – and how children are framed as adolescents, adolescents as military-aged males, and, eventually, civilians as legitimate targets.

At one critical moment in the transcript, the operator of the MQ-1 predator drone thinks the drone's infrared technology has picked up a rifle: 'See if you can zoom in on that guy … Is that a … rifle?' The camera operator replies: 'Maybe just a warm spot from where he was sitting … Can't really tell right now, but it does look like an object'. The drone operator replies: 'I was hoping we could make a rifle out … Never mind'. The drone operators cannot make targeting decisions

by themselves; they need targeting clearance from the commander on the ground, who, to positively identify an enemy target, needs assertions that are 'more than a possible'. The doubt over the rifle persists until image-screener crews spot children on board the trucks. The operator, now furious, objects to the discrepancy between the apparent certainty attached to the identification of the children and the hesitation over identifying the rifle: 'why didn't he say "possible" child? Why are they so quick to call kids and not to call a rifle?' The camera operator: 'I really doubt that children call. Man, I really … hate that … Well, maybe a teenager. But I haven't seen anything that looked that short'. From here on, the communications between the drone operator and the camera operator continue to refer to the presence of 'possible children' and 'possible rifle'. After this negotiation over what is seen, two further developments help to tip the scales in favour of a positive identification of enemy forces in the eyes of the ground troops commander. The first is an information feed from a telecommunications surveillance team. The team picks up cell phone communication, between unidentified Taliban units located in an unidentified area, that suggests that an attack is being planned. The second is that the trucks pull over and the passengers get out to begin their morning prayers. 'They're praying. They are praying … This is definitely it, this is their force … Praying? I mean, seriously, that's what they do'. The crew intelligence coordinator adds: 'They're going to do something nefarious'. By the time the targeting clearance arrives from the commander, the other personnel have already negotiated the age of the potential children – adolescents, they think – and insisted on the existence of possible rifles. In the attack, the US military killed between 15 and 23 civilians (depending on whether one accepts statistics from the US military or the locals).[28] As this example shows, civilians may become 'threats', and so targets, through the merging together of various technologically acquired pieces of information from different geographical locations.

The sense in which targetability is technologically manufactured has been also observed by Major General James O. Poss of the US Air Force: 'Technology can occasionally give you a false sense of security that you can see everything, that you can hear everything, that you know everything'.[29] However, visuality links modes of visibility not only to actions but to mechanisms for legitimising the consequences of those actions. Visuality refers to a value-setting regime that mobilises elements of knowledge and vision for the purposes of operationalising and legitimising violence. Deploying the terminology of visuality in relation to the laws of armed conflict is another way of suggesting that the legitimation of lethal wartime violence is a historically and socio-politically contingent process. As various international law scholars have shown, the legal categories of 'legitimate human target' and 'protected civilian' are not legal inventions based on a universal requirement such as humanity, nor are the contents of these categories fixed; instead, the rights and protections attached to these categories, as well as the boundary between them, are historically and politically contingent and continuously reimagined. In arguing that technologies of visualisation are one of the factors that feed into the process of mobilising and legitimising wartime

violence, this book contributes to this scholarship. The first step in this argument is to acknowledge that LOAC, far from being a means of limiting war and its destructive effects, can be seen as serving the strategic goals of the parties to a conflict – as a facilitator, organiser, and even a multiplier of military force. Many critical scholars of international law have already suggested as much. For instance, the humanitarian framing of LOAC has been contested by Chris af Jochnick and Roger Normand, who remind us that war and the extent of its brutality have always been restricted by factors other than external principles of law or morality. For one thing, they point out, the violence of war has always been moderated by the economy of force.[30]

> For complex military, political and economic reasons, belligerents tend to use the minimal force necessary to achieve their objectives. Force beyond that point – gratuitous violence – wastes resources, provokes retaliation, invites moral condemnation, and impedes post-war relations with the enemy nation.[31]

Moreover, legal principles, such as the principle of distinction, often grow out of the creation of socio-political hierarchies. Helen M. Kinsella's feminist critique of LOAC – in particular the principle of distinction – reveals that its development from its mediaeval origins to its current formulation has taken place at the intersection of discourses of race, gender, and innocence.[32] Gendered and racial understandings of personhood and political subjectivity, she points out, divide the population into 'innocent' women and children (civilians), politically active agents (the combatant, often male), and the outcasts of law (the Other, savages).[33] The law of armed conflict is intertwined with war and 'grew generally out of a utilitarian view of warfare and not from an ideological desire to preserve [non-combatants] from the horrors of war'.[34]

Similarly, Frédéric Mégret has explored the complex relation between international humanitarian law's underlying protective assumptions and the possibilities of exclusion provided by what he calls law's 'foundational ambiguities'.[35] Mégret argues that the elasticity of the categories of civilian and combatant derives in part from the deployment of a framework of civility and savagery. Mégret argues that colonial anthropologies of savagery, which facilitated law's original sin by denying the humanity of colonised populations, continue to legitimise lethal force under the banner of global anti-terrorism. In this critical retelling of the normativity of LOAC, the legitimacy of acts of violence can quite often be traced to the ways in which violence is framed and represented by and in law. In this vein, Neve Gordon and Nicola Perugini have traced the development and use of the category 'human shield', which they argue is a legal means of framing protected civilians as legally targetable humans.[36] In the case of human shields, legal framing techniques sometimes operate by presenting non-violent resistance as unauthorised participation in armed conflict (as, for example, in the case of the killing of Rachel Corrie by the Israeli army). In other cases, they argue, framing civilians as possible human

shields allows for a re-imagination of the restrictions on targeting imposed by the principle of proportionality. Moreover, contemporary warfare – a kind of technologically enhanced, everywhere, and forever war – allows for civilians to be targeted in classifications such as 'collateral damage', 'military-aged males', or 'enemy killed in action'.[37]

The overarching argument advanced by critical scholars of LOAC is that law, far from being an external force that limits lethal violence, is a landscape within which violence is used and legitimised. The particular form of collective violence that we refer to as 'war' is constituted through ever-present laws that permit and govern the use of lethal force as an acceptable mode of state interaction. War is thus best understood as a legal institution.[38] For any study of the technologies of targeting, the upshot is that the practices and technologies of war are always also concerned with forging a connection with processes that legitimise violence and thus maintain the possibility of war as a legal institution.

In effect, the popularised notion of 'lawfare' – the use of law as a weapon of war – points to the undeniable convergence of law, weapons systems, the practices of war, and the legitimation of violence that would be otherwise unacceptable. At the level of legal debate, lawfare is the practice of saturating the field with controversial and divergent legal interpretations so as to ensure that there is no single undisputed interpretation of the valid and applicable law. In the actual practice of war, one can argue that lawfare involves the deployment and development of weapons systems and their associated operational practices in manners that make such divergent legal interpretations possible. In other words, the technological development of weapons is also in part accompanied by an expectation of creative modifications of the law, its imperatives, applications, and interpretations. In our case, technologically enhanced targeting by drones and the associated practice of targeted killing may be seen as forming a political and cultural assemblage mounted upon the normal operation of international and domestic law.[39]

It should be uncontroversial to state that technologies of war carry with themselves assumptions of their own lawfulness. Article 36 of the Protocol Additional (I) to the Geneva Conventions (API) requires that any new means or method of warfare to be legally reviewed and considered in relation to LOAC.[40] Weapons and weapons systems are developed in the light of the relevant legal possibilities. As such, it is also safe to assume that the developers envisage a certain interaction between the law and the technologies of war. The legal principles seek to govern the new technologies, while at the same time these technologies are initially developed and later operationalised within the sphere of practice that the legal principles provide in the first place. At some point, this interaction ceases to operate in one direction and becomes a relation of co-constitution.

The co-constitutive relation between, on the one hand, the practices and technologies of war and, on the other, the normative foundations of war – both in the law and in society's acceptance of the destruction and violence of war as inevitable – has been noticed outside of the realm of legal studies. The relationship between the development of weaponry and the expansion of the scope

of permissible wartime killing practices was pointed out by the American designer and industrialist George Nelson. In his 1960 short film 'How to kill people: A problem of design', Nelson argued that to understand how warfare is legitimised and how its legitimised practices develop we must trace the development not of the laws of war but of the technologies of war, those technologies that make killing possible, effective, efficient, and ultimately socially acceptable. Not least because war is essentially an interaction of different technologies and designed materialities. In this sense, Nelson insists on the primacy of the designers over the military generals: 'it is the designers who win wars and not generals'.[41] In confrontations between swords and shields, or cities and fighter jets, victorious is the side that has designers who can out-design the other side. In Nelson's view, the distinction between murder and socially acceptable killing is drawn by technologies used for the purpose of killing.

In this view, the concept of the target cannot be separated from the design and development of new technologies of targeting. The evolution of weapon technology from the sword to the bow and arrow, for instance, also leads to an expansion of the field of potential targets from a specific individual in a face-to-face battle to an unspecified range of potential individuals at a distance. The invention of gunpowder, or later of fighter jets, goes hand in hand with the introduction of cities and masses as targets of lethal violence in war. New designs and technologies of targeting provide frames of targetability that are more expansive than those of previous technologies. It is in this way that we can argue that each technological development is a material negotiation of the boundaries of law that aims to include within the domain of legitimate targetability what the new technology has already made destructible.

This means that the ability of LOAC to constrain the violence of war is limited, for LOAC is itself determined by the kinds of action made possible by the very technologies of war used by the belligerents. In other words, law's ability to shape the practice of war is tied to the limits of the technologies that operationalise warfare in the first place. What is important to note is that technologies are not developed without consideration of the possibilities that the law offers, nor is the law itself operable without certain technologies that give life to its words. While each technology may challenge the boundaries of law and its categories, law itself is shaped by material practices that translate its categories and their boundaries in action. There is a mutual interaction, a relation of co-constitution, between war, the laws of war, and the technologies of war. Just as the law determines whether a particular technology may operate within a particular field, so the technology also determines the boundaries of lawful and unlawful action by providing different possibilities of action. On the one hand, then, we have the matter of determining the legality or illegality of a particular technologically facilitated action; on the other, we have the matter not so much of the determination of legality, in the black-letter sense of the word, but of how legality itself is partially constituted through the operation of the technologies of war. This second issue – that is, the intricate connections between war, law, visualisation, and technology – is the focus of this book.

Legal materiality

This book's focus on the ways in which law and its categories are formed by certain technological practices means that theories of legal materiality become central to the argument. This book is, then, a materially sensitive investigation of the production of the legitimate target in LOAC.

What we can broadly term theories of materiality range from philosophical accounts of object-oriented ontology, which upsets traditional categorical divides such as body/mind, agent/object, human/non-human, to the works of techno-sceptic theorists, the sociological insights of science and technology studies, and theories of new materiality. These theories do not necessarily cohere with one another; in fact, they contrast and diverge more than they overlap. For instance, unlike materialists such as Jane Bennett, who speaks of distributed agency between human and object,[42] object-oriented ontologies consider objects to have an autonomous reality.[43] Karen Barad argues that the autonomy of the object implies that matter and meaning are not separate and that 'meaning is not a property of individual words or groups of words' but a 'specific material reconfiguration of the world'.[44] For Barad, agency is not a property or quality per se but a possibility of acting that, given the different 'reconfiguration of material-discursive apparatuses of bodily production', has continually changing boundaries.[45] Such a position can also be found in the work of Donna Haraway, who takes technologies to be materialised figurations that generate meaning that is dependent on different arrangements and configurations.[46]

For our purposes, what is important here is the way in which all these theories distance themselves from an understanding of the material world of objects and technologies as a passive realm of purely functional instruments. A common thread that runs through these theories is the realisation that social life takes its particular form and directionality from an interaction between existing technologies, objects, and humans – that it is not the result of the conscious acts of a powerful human agent.

The sociological accounts of science and technology associated with Bruno Latour, on the other hand, are concerned with demonstrating that the distinction between nature and society, object and subject, are superficial functions of modernity. Nature as an object of scientific investigation, Latour argues, is the outcome of the scientist's translation. Translation, in turn, involves an act of invention, mediation, and displacement of meaning. It is a making of links that would not otherwise exist; it is not a simple act of representing an externally existing reality.[47] As a result, there is a network of interaction between human and non-human that makes nature knowable:

> But this nature becomes knowable through the intermediary of the sciences; it has been formed through networks of instruments; it is defined through the interventions of professions, disciplines, and protocols; it is distributed via databases; it is provided with arguments through the intermediary of learned societies.[48]

What these different accounts of materiality imply is that machines, objects, and materials not only enhance efficiency and effectiveness but also 'embody specific

forms of power and authority'.[49] This is not to say that technology merely represents or mirrors human values, or that it may be useful to those in power. The point is, more fundamentally, that artefacts themselves *have politics* in the sense that they produce order in the world.[50] Decisions to opt for one technological structure over another, Langdon Winner writes, are so consequential that they may be seen as 'similar to legislative acts or political foundings that establish a framework for public order that will endure over many generations'.[51]

In Winner's account, such public orders are sometimes designed into a technology to support a political agenda. The example he gives is the Long Island bridge built by Robert Moses, which, because it is unusually low, prevents the users of public transportation, predominantly the working class and Black populations, from accessing the parks and resorts on the other side of the bridge. In other cases, a particular technology necessitates certain orders and arrangements in order to operate and realise its purposes; for instance, green energy technology implies a different social and political order from that associated with fossil fuels.[52] Winner's view, however, ties the agential capacity of objects and technologies to conscious human intentionality. The material world appears, from this perspective, as a shapeless platform ready to be formed by human beings' political desires.

The politics of things can also be identified in the relations and interactions between the human and the non-human. 'Technological artifacts', Peter-Paul Verbeek writes, 'are not neutral intermediaries but actively coshape people's being in the world: their perceptions and actions, experience and existence'.[53] In their contributions to decision-making practices, be they moral, legal, or whatever else, technologies form part of social life; similarly, humans belong to the same material realm and are dependent on these technological means. This, for Verbeek, is the significance of technology as an agent of social order.[54]

Design scholarship uses the terminology of 'affordance' in relation to the co-constitutive relation between technologies and humans. In her book *How Artifacts Afford: The Power and Politics of Everyday Things*, Jenny Davis provides a comprehensive, cross-discipline overview of affordance theory as a theory of human–tech interaction that breaks with both technological determinism and views that place human agency at the centre of social formations.[55] Here affordance is understood as 'the "multifaceted relational structure"[56] between an object/technology and the use that enables or constrains potential behavioral outcomes in a particular context'.[57] According to affordance theory, things, objects, or technologies shape behaviours, create expectations, and carry values by way of requesting, demanding, encouraging, discouraging, refusing, and allowing actions. In this way, objects manifest political orientations with regard to different technological configurations, material formations, and contexts of deployment.

This position stands in between two more extreme positions: on the one hand, a view that takes the agential force of objects to reside simply in the inherent physical qualities of that object, independent of its situatedness, and on the other the view that takes objects as sheer surfaces upon which human will can exert itself. To adopt a standpoint in between these two positions, then, is to argue that the formative power of things resides in the relations they continually make, unmake,

and remake with their surrounding environments – namely other objects – and humans. Jane Bennett explains this situatedness in terms of human and non-human 'distributed agency', stressing that 'a material body always resides within some assemblage or other, and its thing-power is a function of that grouping. A thing has power by virtue of its operating in conjunction with other things'.[58] In other words, Moses's unconventionally low bridge can achieve its embedded political goal of excluding people with lower income from resorts on the other side of the bridge only as long as public transportation vehicles are designed to be a certain height. In other environments or in relation to different modes of transportation, those bridges may cease to have the political significance they currently have.

Once put into the world, technologies enter into various configurations with other objects. This means that various outcomes are possible, including accidental configurations and outcomes that were unintended or unforeseeable. An often-quoted example, cited originally by Peter-Paul Verbeek, is the invention of ultrasound imaging technology and its unintended contribution to the cause of the anti-abortion movement in the United States. Verbeek explains that, by making it possible to see the foetus in the womb, this technology allowed for a particularly mediated experience of the unborn. The ultrasound technology makes the foetus seem independent and separate from the environment on which it is, in truth, utterly dependent – that is, the mother's womb. This representation of the foetus seems not only to provide grounds for acknowledging it as a patient, but also to provide the foetus with an ontologically independent status that entitles it to a legal protection separate from that of the mother upon whose body the foetus is existentially dependent. By providing a so-called *window to the womb*, this technology invites us to overlook the actual vulnerability of the foetus and to engage in moral and legal arguments about its rights. For this reason, anti-abortion political movements have used these medical images, which in fact grossly distort the actual reality of a foetus in the womb (in terms of its shape and size), as a way of morally engaging their audience.[59]

But framing the socio-technical capacities, or for that matter political capacities, of a particular technology as *unintended* and *unforeseeable* is problematic, because doing so downplays, even obfuscates, the legal responsibility and accountability of tech developers and users. A classic example of such an allegedly unintended consequence is the racism displayed by automated facial recognition technologies. Just days after the release of Microsoft's Kinect motion-sensing device for the Xbox console in 2010, gamers took to the internet to accuse Microsoft of racism, after it emerged that the hardware had difficulty recognising dark-skinned users. One gaming website review claimed that whereas its dark-skinned employees had experienced repeated difficulties with the facial recognition function of the new Xbox attachment, light-skinned employees were recognised by the same machine consistently.[60] Microsoft initially played down the issue, claiming that it was caused by gamers using the console in dimly lit rooms and that it did not indicate a problem with the technology itself.[61] However, anyone who knows anything about the history of visual technologies such as film and photography knows that these technologies also originally had assumptions about the whiteness

of their subjects built into them.[62] Simply put, analogue cameras take photos by using film to capture the negative reflection of light from a subject. Because the standard user of this technology was assumed to be White, images of darker-skinned subjects were less accurate. Not much has changed with the introduction of digital technology.

> Today, the science of digital photography is very much based on the same principles of technology that shaped film photography. In 2010, one user mockingly called her Nikon Coolpix camera racist. The camera's sensor failed to recognize the particular contours of her face, a message popped on the screen inquiring whether or not the subject blinked, to which she posted a photo online replying, 'No, I'm just Asian.' Even today, in low light, the sensors search for something that is lightly colored or light skinned before the shutter is released. Focus it on a dark spot, and the camera is inactive. It only knows how to calibrate itself against lightness to define the image.[63]

Similarly, MIT researchers have shown that contemporary automated facial recognition technologies miscategorise Black women far more than they do White men: the error rate is 34 per cent for the former group and 0.8 per cent for the latter.[64]

When they are released into the world, technologies come to have their own complicated relationships with their surrounding social environments. As Sheila Jasanoff argues, this does not mean that it is altogether impossible to think about and predict the world-making abilities of technologies and things.[65] She describes the unintended consequences and failures of technology as being, at least sometimes, the result of failures of imagination, anticipation, and oversight, which in turn result mainly from a design and development process carried out undemocratically and away from public scrutiny and input.[66]

Recently, critically inclined scholars of international law have encouraged similar perspectives when analysing the impact of technology on legal thinking and norms. In this, they have adjusted the existing conceptualisation of the interaction between humans and technology to the legal context. The existing approaches appear to agree on the co-constitutive relation between international legal norms and the operation of technology, but they differ in how they understand the quality of this relation and the way it plays out. Co-constitution or co-production, Sheila Jasanoff writes, means that 'knowledge and its material embodiments are at once products of social work and constitutive of forms of social life; society cannot function without knowledge any more than knowledge can exist without appropriate social supports'.[67] To import this idiom into a consideration of international legal normativity, then, is to insist that the normative force of international law is inseparable from the social and material practices that the law attempts to regulate. This view is reflected in, for instance, Roxana Vatanparast's argument that the global infrastructure of data exchange – i.e. the underground cables – embodies and gives material existence to the global data economy while at the same time impacting, shaping, and governing the world in unequal ways, in terms of both speed and cost of data travel, through the infrastructure's uneven geography of

distribution.[68] In this account, the normative power of the material is a matter of its 'shaping' or 'affirming international law's authority'.[69] What Vatanparast identifies as the production of normativity through the material practices of global infrastructure is limited to the social orders of the global data economy and the hierarchies of access that result from the material conditionings and affordances of undersea cables.

We still have yet to understand how these material entanglements translate into legal norms. Is the entanglement of law and technology merely a platform for legal norms to reflect upon or react to? Rebecca Mignot-Mahdavi deploys the terminology of 'technolegality' in this context. On her account, the co-constitutive relation between law and technology is evident in both the embeddedness of technology in networks of regulation and the interconnections between legality and technology. Technolegality is a function of apparatuses that are 'composed of machines, forces and factors that altogether produce an activity, practice or phenomena that would not have existed were it not for this assemblage and the interaction of forces set in motion'.[70]

From the aforementioned accounts, we can identify at least three ways in which the deployment of technology produces normativity: technology provides a new platform for the law to operate upon (e.g. the global data economy), technology allows for new actions that imply a need for the law to respond by either imposing new regulation or facilitating new interpretations of existing laws (e.g. killing by semi-autonomous weapons), or technology imposes a new social order that makes new modes of governance possible.

In the accounts I have considered thus far, law and technology appear to occupy clearly separate, albeit occasionally overlapping, arenas. This book pushes our understanding of the relation between legal normativity and technological practices further. As I mentioned in my discussions of lawfare and the George Nelson film, weapons and technologies of war carry with themselves ideas of the legitimate target and of lawful targeting. Targeting technologies, for instance those deployed by drones, always enact a technolegal imaginary. However, the term 'technolegal' requires some unpacking. Whereas Mignot-Mahdavi sees technolegality as a matter of new, legally relevant actions and operations that are brought into the world, I take the normative productivity of drones to consist in their ability to enact a commonly shared understanding of legitimate violence in novel ways through possibilities afforded by technological advancement. Considering drones as technologies with legal capacities – that is, as technolegal apparatuses – implies that drones carry with themselves a vision of legitimate targeting from a distance facilitated through visual technology. This means, in turn, that drones must be enacting a presumption that wartime violence can rely on visual means to legitimise violence. In other words, what is legal about this technology is its enactment of a basic understanding of how law produces legitimacy within a newly afforded technological and material domain of possibilities.

Theories of legal materiality help us to trace this technologically facilitated yet basic understanding of how wartime violence is legitimised. This book will show how law, in its conventional manifestation, is often formed and shaped by

technological affordances. It is one thing to identify ways in which a new tech-
nology normatively shapes social action, but it is another to identify the material
affordances around which law and its normativity have already been organised.

When it comes to researching legal materiality, it is important to move beyond
the idea of law as a set of pre-existing norms that is accessible or materialised only
in language and that is independent of the material world in which it is deployed. A
legal materialist research agenda begins by asking 'whether law has any technolo-
gies at all, in the sense of material agencies that inflect or "shift" human action'.[71]

Latour pursued this type of enquiry in his ethnography of the Conseil d'État,
but he limited his investigation to law's discursive and linguistic aspects. Latour's
approach has been contested by Alain Pottage (and later by Hyo Yoon Kang and
Sara Kendall), who argues that the production of legal knowledge involves various
kinds of materials and is not reducible to a textual form; attempting so to reduce it,
Pottage argues, black boxes the law, and makes it a matter of lawyerly oratorical
practice.[72] A certain configuration of materials makes something a matter of con-
cern for law, and in this way legal meanings are produced through the contribution
of materials and things.[73] If broken down into its micro-practices, legality appears
to be mediated, negotiated, and made legible through the 'material manifestation
of its formal language and interpretation'.[74] These material manifestations include,
among other things, techniques of inscription, technologies, objects, visualisations,
performances, texts, documents, databases, archive making methods, and so on.[75]
The central point is that the objects and materials of law are not representatives of
an external reality, nor are they vessels that carry legal meaning in a symbolic man-
ner. As Kang and Kendall write, the materials of law – including elements of the
built physical environment, such as courtrooms, as well as files, archiving systems,
databases, media of inscription, and different technologies – are in fact conditions
of the possibility of legality.[76]

A legal materiality approach, then, is a form of enquiry that investigates the
processes by which those things that are considered matters of law are materialised.
In these processes, materials both articulate and shape legal differences.[77] Unless
they are made concrete, legal categories remain operative only as abstractions in
language, treaties, and conventions. What sense could we make of the notions of
discriminate targeting and the principle of distinction if they remained merely ab-
stract differentiations between 'military objectives and civilian objects, civilians
and combatants' and were not concretised in technologies of visual distinction such
as distinctive national colours, flags, uniforms, emblems, and signs, as well as in
technologies of tracing, seeing, and visualisation? It is one thing to know that, as a
matter of law, legitimate targets are those entities the destruction of which would
yield a definite military advantage, but it is another thing entirely to recognise such
categories on the battlefield.

A legal materiality approach attends to the ways in which 'different legal
materials assemble or come into relationship in a way that turns a matter into a
legal matter and into a claim or argument through contingent acts of mediation'.[78]
Unlike legal positivism, which seeks to identify and apply the relevant law to
each given condition, as though law were a force external to these conditions, a

legal materiality approach aims to demystify legality and bring concreteness and clarity to legal research by identifying the ways in which law is informed and operationalised by the materials upon which it draws.[79]

The line of enquiry pursued in this book begins with an investigation of the ways in which the legal matter of distinction and discriminate targeting gains its meaning from the contribution of the military uniform. It shows how the absence of the military uniform in insurgency situations leads other technologies of visualisation to contribute new configurations of targetability. These not only replace the military uniform but, by taking over this productive space, reconfigure the very concept of the legitimate target.

Context and conceptual framework

Non-human entities, objects, materials, and technologies form the expressive content of the law. In the case of the laws of war, it is the military uniform that traditionally informs and operationalises the requisite legal distinction between target and non-target. A defence of this claim requires a rereading of LOAC informed by a legal materiality approach. This, in turn, means that we must attend to the micropractices of law – that we must trace, from the bottom up, the seemingly inconsequential technical requirements and relations that form the structures of legality and legitimate violence in LOAC.

As I mentioned earlier, such an enquiry entails a redescription of LOAC: a rearrangement of 'what we have already known'[80] that offers 'a productive alternative' to dominant modes of critique and knowledge.[81] This practice requires us to map 'the many connections or forms of relation' between elements involved in the production of new structures of knowledge and developing practices.[82] In this book, I build my argument by redescribing the normative operation of the principle of distinction from the vantage point of the technologies of visualisation. This redescription will provide support for my overarching thesis: that the boundaries of permissible and prohibited targeting have always been, in part, a reflection of the limits and possibilities of certain technologies of visualisation in materialising the epistemological universe needed for the operation of LOAC.

If discriminate targeting requires the materialisation of abstract categories such as 'target' and 'non-target', it is the military uniform that provides such materialisation. Military uniform exercises a formative power over the content of LOAC in a variety of ways, and I will attend to these in the coming chapters. For now, it suffices briefly to point out that the military uniform projects a visual sign of enmity on to individual bodies and, as a result, creates the simplest configuration through which discriminate targeting can be imagined and mobilised as a force authorising the use of lethal violence. However, one implication of the materialist reading of LOAC offered here is that legal meanings can change once the material configurations underpinning them change. The boundaries of legal categories are malleable and dependent upon the technologies with which military objectives are achieved, and within whose frames law finds its

concrete meaning. To put it simply, the military uniform is constrained by its own materiality; it can be stolen, imitated, defaced, covered, or simply taken off and replaced. All of these are normatively productive acts made possible by the specific materiality of the military uniform.

The material manipulability of the military uniform gives rise to another set of rules within LOAC, rules aimed at securing the viability of the principle of distinction and discriminate targeting through the preservation of the particular visual order of the military uniform. This is one way in which the uniform shapes the rules that initially summoned it to the battlefield for a certain function. No case illuminates the decisive power of the military uniform better than an occasion when it is altogether absent from the battlefield. It is through its absence that the military uniform shapes war and its laws most critically. Insurgents' characteristic move of shunning military uniform creates a condition in which the continuation of war through its laws becomes impossible simply because its technology of visualisation – the very thing that materialises the matter of law and therefore authorises lethal violence – ceases to operate.

Order of visibility

The term 'target' relates to the Greek word *skopos*. The *skopos* was the one stationed on the high ground (*skopia*), watching out for and looking after a community as its guardian.[83] In military terms, the *skopos* is the one who marks objects and is therefore also the one to be marked, the one on whom one fixes one's eyes,[84] or 'the target that one has in one's sight'.[85] Thus, as the primary law governing acts of targeting, the principle of distinction is packed with visual allusions. From the point of view of the principle of distinction, when seeking to distinguish between a civilian and a combatant on a battlefield, the sole difference is that the combatant bears visually distinctive signs of membership of a regular state army, for example uniform, insignia, and openly borne arms.[86]

Furthermore, the two categories of the principle of distinction are operationalised only by a set of formal legal requirements on combatants to differentiate themselves visually from the civilian population.[87] The subversion of these visual requirements results in the enmeshed battlefield of civilians and combatants that we call an insurgency. The principle of distinction thus enacts its distinct categories and their associated rights and responsibilities through a dependence upon an order of appearance on the battlefield. I refer to this order as the 'order of visibility'. As a modality of visuality, the principle of distinction may be understood as a regime that attaches values (targetable or protected) to materially produced forms of visual difference. In this sense, the order of visibility is a material configuration of distinctive appearances on a battlefield that is reflected in a constellation of international norms of armed conflict. It is this material and visual configuration that authorises lethal violence under the banner of discriminate targeting. If the principle of distinction translates visual differences into permissions to kill or prohibitions of killing, the order of visibility is the set of legal norms that determines how individuals must appear and how appearances are to be read and sanctioned.

At the centre of this order of visibility is the requirement that combatants visually distinguish themselves from civilians. Qualified as a customary rule of international law applicable in both international and non-international armed conflicts, Article 44(3) of the API obliges combatants 'to distinguish themselves from the civilian population while they are engaged in an attack or in a military operation preparatory to an attack'.[88] Wearing a distinctive uniform and/or insignia visible from a distance traditionally fulfils this obligation. All the other norms of the order of visibility develop out of this particular obligation, and therefore they all concern the regulation of material interventions that produce visual forms of distinguishability on the battlefield. Briefly, these norms include the prohibition of perfidy and the regulation of the use and abuse of protected emblems, signs, uniforms, flags, and so on.

Knowledge–vision

One argument of this book is that the principle of distinction creates human targets by bringing together, on the one hand, the fulfilment of the strategic goals of the parties to an armed conflict with, on the other hand, an order of visibility. Whereas the fulfilment of strategic goals depends on a knowledge of the bodies and sites that contribute to the construction of the enemy's militarised and political willpower, the order of visibility ensures the recognition of those bodies and sites as distinct from other entities present on the battlefield. I refer to this twofold construction of the human target in the principle of distinction as the knowledge–vision composite. The *knowledge* aspect here has to do with a simple question: who are the human targets of the principle of distinction and what makes *them* desirable objects of destruction? *Vision* pertains to the question: how does one recognise human targets and distinguish them from non-targets? The following chapters seek to establish that the legality of lethal targeting is, in effect, a result of this particular composite of knowledge and vision, that is, of visuality.

Understanding the lawful target of the principle of distinction as being the result of a specific knowledge–vision composite allows us to deconstruct the human target into its constitutive elements. That in turn provides us with a language through which we can follow the process of the construction of the human target and the legitimation of lethal violence simultaneously in both international and non-international armed conflicts. Moreover, as an analytical tool, the knowledge–vision composite emphasises that visualisation and visual technologies are integral parts of the construction of the legitimised violence of LOAC – an emphasis that is especially important in light of the growing significance of technologies of visualisation and surveillance for contemporary targeting practices. The more we learn about the role of visual technology in the production of law's human target, the clearer it becomes that law's categories are highly fluid, and that contemporary targeting technologies serve to expand the scope of the legitimately targetable.

As I mentioned earlier, there is a clear connection between the legitimation of violence and modes of seeing and sense-making. This connection has been observed, for instance, by Paul Virilio, who describes the movement of images as the

'logistics of perception', which he claims is just as important in war as traditional logistics – the movements of soldiers, weapons and weapon systems, and civilian support systems.[89] Bousquet investigates the 'logistics of perception' further, arguing that, in wars dominated by remote targeting, which involves an unprecedented mobilisation of vision, targeting follows a perceptually contained order of 'aiming, ranging, tracking and guiding'.[90]

In legal scholarship, however, targeting decisions are usually understood as being guided by tactical and strategic considerations. On this view, what makes an entity a legitimate target is the fact that its destruction would help a party to a conflict achieve the aim of undermining its adversary's militarised power to resist. Legal texts often describe this Clausewitzian conceptualisation of the aim behind legitimate targeting decisions as the 'weakening of the military force of the enemy'[91] or as the direct and definite 'military advantage' achieved through the destruction of something.[92] According to mainstream legal scholarship, knowledge of who or what might be destroyed in order to yield such advantage appears to be the sole requirement for assessing the legitimacy of the use of violence. In practice, however, the legality of such uses of force can be determined only if those individuals make themselves and their adversarial intentions visible. There is no possibility of lawful targeting, or for that matter discriminate targeting, without the construction of such a relationship between one's distinctive visual markers and one's lethal intentions and capacities – one's enmity.

For discriminate targeting to be possible, there must always be some material and/or visible expression of the potential target's enmity or hostile intent. Although this connection between the knowledge of enmity and visibility is implicit in law and legal scholarship, legal scholars' explicit discussions of it are often rather perverse – for example Thane Rosenbaum's comments on the legal significance of the Palestinian *kaffiyeh* scarf. In the summer of 2014, the Israeli Military Forces launched yet another series of attacks on Gaza. According to the United Nations Office for the Coordination of Humanitarian Affairs, the conflict ended with 1,473 civilian deaths on the Palestinian side, meaning that 70 per cent of Palestinian casualties were civilians.[93] Rosenbaum, a senior fellow at the NYU School of Law, sought to justify the disproportionate number of Palestinian civilian deaths in an article in *The Wall Street Journal*. After advancing an unsettling argument to the effect that the population of Gaza effectively renounced their civilian status by electing Hamas in the 2006 legislative elections, Rosenbaum pointed to the difficulty of applying the principle of distinction in an armed conflict in which the asymmetrically weaker side did not attempt to distinguish its combatants from the civilian population through the wearing of military uniform or other distinctive signs. In this war against an almost invisible enemy, however, there was one visual sign that could serve as such a criterion, he believed: 'with the exception of *kaffiyeh* scarves, it isn't possible to distinguish a Hamas militant from a non-combatant pharmacist'.[94] With this remark, Rosenbaum suggests a link between wearing the *kaffiyeh* and being a combatant, and as such he devises a visual order of recognition to be deployed on the battlefield – a visual order that could identify human targets in Gaza and enact the visuality of LOAC.

In the following chapters, I will discuss what makes the military uniform a legal material, as opposed to just any other material. For now, suffice it to say that not every material can be a legal material for the purposes of the principle of distinction. Projecting enmity on to a distinct and exclusive group of people on the basis of visual markers that are widely shared, as Rosenbaum does, is at bottom a kind of racism. A material is not made a legal material by simply projecting particular intentions upon a chosen surface or object. For instance, the military uniform is a legal material because it is a historically, politically, and socially charged material whose significance for war and targeting became undeniable for different parties to different conflicts at different times. The distinctive visuality of the military uniform is not generic and commonly shared; it is historically and socially coded.

The following chapters will investigate what LOAC and US COIN doctrine can tell us about the combatant (knowledge) and about how combatants are identified (vision) in the midst of an insurgency. Using the knowledge–vision composite as an analytical framework, this book reveals the complicated relationship between the visual markers of enmity, the lethal intentions of the enemy, and the legitimation of violence in LOAC.

Chapter organisation

The way targets are visualised has undergone a vast technological transformation from clothing – the military uniform – to the digital calculative machinery underlying the operation of drones. This book explores the significance of the visualisation of the human target in relation to LOAC and visualisation's role in facilitating and legitimising the use of violence. It traces the thread that connects the use of violence in warfare, technologies of visualisation, and law's conceptualisation of the legitimate human target.

The next chapter provides a detailed elaboration of the knowledge–vision composite as the operational logic of LOAC and offers a novel approach to target production in law that is applicable to both international (inter-state) armed conflict and non-international (civil war or insurgency) armed conflict. Through an examination of existing case law, this chapter questions the legal distinction between international and non-international armed conflict – the latter being a function of the coloniality of LOAC, which deprives non-Western armies, liberation movements, and anti-colonial struggles of the standard protections of law.[95] I show that, at bottom, this distinction is grounded mainly in organisational differences. This chapter proposes a novel approach to the target that reveals that the principle of distinction functions to legitimise violence on the basis of an order of visibility that allows for the signification of enmity and hostility on sight. In relation to the human target, this order initially consists of norms and regulations that follow from the material visibilities created on the battlefield by the military uniform. Chapter 3 discusses the political and historical development of the military uniform as a central artefact of modern warfare. This chapter shows that the military uniform is a perceptual and logistical material of war, an instrument for conducting as well as for preparing for war.[96] This chapter explores the legal manifestation of

the knowledge–vision composite in the laws and customs that govern permitted and prohibited (in)visibilities. Overall, Chapter 3 presents the military uniform as a politically and legally active garment that brings both the knowledge and the vision requirements of targetability together in one distinct instrument. The legal significance of the military uniform in the Geneva Conventions, their *travaux préparatoires*, commentaries, and case law, is examined alongside the historical and political development of the military uniform as a garment of war. What does the wearing of the military uniform entail? And, when it is worn, what does the military uniform do for the operation of the principle of distinction? What forms of visibility and invisibility does the military uniform produce, and how do these visibilities structure LOAC as it pertains to targeting? Answering these questions allows us to answer a further question: what is lost – apart from a piece of fabric – when insurgents avoid wearing military uniform? By the end of this chapter, the basic material logic of targetability should be clear.

The following chapters relate this material logic of targetability to the US military's COIN practices – the context in which advanced visual technologies and weapon systems came together in an object known as armed drones. Chapter 4 undertakes a detailed study of numerous US military manuals, handbooks, and official communications in order to map both the strategic objectives of US COIN and the technologies used in visualising the COIN battlefield from Iraq to Afghanistan. Automated data analysis solutions, biometrics technologies, and population management techniques are discussed as technologies that are used to counter the invisibility of the 'unsupportive' and 'irreconcilable' insurgents. Chapter 5 provides a detailed exploration of how various visual and data-driven technologies automate lethal targeting in order to bridge the legal and operational gap created by the loss of the military uniform. Empirically, this chapter shows how data-driven visual technologies come to replace law's original visual technology and as such set COIN's knowledge–vision into motion. Chapter 6 brings the book to a close by discussing the legal and practical consequences of replacing one technology of visualisation with another. If we accept that the traditional role of the military uniform was visually to signify the legitimacy of the use of lethal force against a target, then the replacement of the military uniform is bound to involve a transformation in the conditions of targetability. This book concludes by arguing that while, as many commentators have pointed out, drones and their associated technologies have transformed war ethically, politically, and geographically, they have also reshaped the legal landscape that governs targeting in wartime.

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2 Knowledge–vision

The making of a legitimate human target

This chapter provides a detailed discussion of what I call the knowledge–vision composite as both the mechanism of production of the lawful target as well as the operational logic of the act of discriminate targeting. In doing so this chapter examines relevant legislations, commentaries, and case laws only to reconfigure legal notion of target at the intersection of political willpower with the modes of visualisation. This unpacking of knowledge–vision composite explains the legitimised use of violence beyond the legal divide between international (inter-state) and non-international (civil war or insurgency) armed conflicts. Knowledge–vision composite, as an analytical tool, would further be important for understanding of the contemporary use of advanced digital technologies of surveillance and visualisation as part of the historical trajectory of laws' effort to mobilise violence through various configurations of lethal violence with visual signifiers.

The principle of distinction as knowledge–vision

An investigation of the human target of contemporary armed conflict inevitably begins with a discussion on the principle of distinction. The 'basic rule' of this principle, stated in Article 48 of the API, is that the parties to a conflict must distinguish, at all times, between the civilian population and combatants.[1] Civilians are not lawful human targets[2] in an armed conflict, except to the extent that they take a direct part in hostilities.[3] Combatants, on the other hand, may be targeted at any time.

Before entering any discussion about the human target as this concept is expressed in LOAC, I need to make one important clarificatory point regarding the applicable law in COIN. This point has to do with the legal distinction between international and non-international armed conflicts.

At the most basic level, armed conflicts can be characterised either as international armed conflicts (IAC) or as non-international armed conflicts (NIAC). Each classification has its own applicable law. Defined in common Article 2 to all the four Geneva Conventions, IAC refers to 'armed conflict, which may arise between two or more of the High Contracting Parties, even if the state of war is not recognized by one of them'. It also includes cases of total or partial occupation of the territory of a High Contracting Party,[4] as well as armed conflicts in which 'people

are fighting against colonial domination and alien occupation and against racist regimes'.[5] The applicable law in IAC is almost the entire body of law known as LOAC, as well as the relevant customary laws of armed conflict.

In contrast, NIACs are 'armed confrontations occurring within the territory of a single State and in which the armed forces of no other State are engaged against the central government'.[6] In NIAC, one side of the conflict must be a non-state actor. Compared to IAC, the applicable law for NIAC is radically limited. Apart from the applicable customary international laws, common Article 3 to the four Geneva Conventions and the 1977 Protocol Additional (II) to the Geneva Conventions (APII), very few treaty laws govern NIAC.[7]

The relevance of retaining a categorical distinction between IAC and NIAC as the framework for determining the applicability of LOAC has already been questioned in a number of ways.[8] Most significant in this respect is the Tadić case from 1995, in which the International Criminal Tribunal for the Former Yugoslavia (ICTY), referring to the increasing spread and brutality of NIAC in comparison to IAC, stated that:

> [T]he distinction between interstate wars and civil wars is losing its value as far as human beings are concerned. Why protect civilians from belligerent violence, or ban rape, torture or the wanton destruction of hospitals, churches, museums or private property, as well as proscribe weapons causing unnecessary suffering when two sovereign States are engaged in war, and yet refrain from enacting the same bans or providing the same protection when armed violence has erupted 'only' within the territory of a sovereign State? If international law, while of course duly safeguarding the legitimate interests of States, must gradually turn to the protection of human beings, it is only natural that the aforementioned dichotomy should gradually lose its weight.[9]

Other instances that cast a similar doubt on the necessity of such categorisation can be seen in the International Committee of the Red Cross's (ICRC) Study on Customary International Humanitarian Law (CIHL). This study suggests that the IAC and NIAC distinction is largely irrelevant as a matter of applicable customary international law. As Emily Crawford reports, of 161 customary rules applicable to armed conflicts, 138 rules are applicable uniformly and regardless of whether the conflict is classed as international or non-international.[10] Because I am involved in a discussion of human targets and the terminology of combatants and civilians, however, I feel the need to clarify, if briefly, the way in which the abstract notion of target that I make use of is unaffected by the dogmatic debates concerning the terminological independence of IAC and NIAC in regard to human targets.

COIN can take a variety of forms. COIN can occur as IAC if a state army adopts insurgency as a tactic. This tactic is suitable for a dispersed and/or already defeated state army.[11] COIN can also take the form of IAC when it involves anti-colonial insurgencies or wars of national liberation. Typically, however, COIN occurs as an NIAC between the organised armed forces of a state and a non-state armed

group(s), as for instance, in the case of the armed conflict between the Colombian army and Fuerzas Armadas Revolucionarias de Colombia (FARC). A single COIN campaign can also switch back and forth between NIAC and IAC and can even become an internationalised, non-international armed conflict. This is the case in what is referred to as 'the global counterinsurgency': the geographically expansive COIN campaign that primarily centred in Iraq and Afghanistan.[12] The empirical point of enquiry for this project – the US COIN campaigns in Iraq and Afghanistan – falls mainly within the NIAC category.[13]

This legal characterisation raises certain difficulties regarding the study of the lawful target. Irrespective of whether the wars in Iraq and Afghanistan are to be classified as IACs or NIACs, the principle of distinction is applicable according to customary international law.[14] The difficulty arises because of the definitional interdependence of the two categories of the principle of distinction. In LOAC, civilians are defined negatively as those who do not belong to the combatant category.[15] In other words, the principle of distinction operates by defining civilians as the opposites of clearly designated combatants. The twist, however, is that the legal category and the status of the combatant only exist in IAC, where both sides of the conflict are, typically, state armies.[16]

In NIAC, the common practice of non-state actors is to fight and use violence while rejecting the requirements that go along with the combatant category as such. Non-state actors may not organise forces in a hierarchical manner with a clear chain of command and responsibility, they wear no distinctive signs or emblems, they hide their weapons, and so they do not visibly distinguish themselves from civilians; yet they perform the essential function of combatants. The importance of the distinction between IAC and NIAC and, by extension, of the designation of one's status as a 'combatant' is, in part, a question of the privileges of the 'status' of being a combatant – for example, whether or not prisoner of war status can be extended to non-state fighters in an NIAC.[17]

The problem that this project is concerned with is that in COIN as NIAC, even though there is no 'combatant' category with respect to which 'civilians' can be negatively defined, there is still an obligation to make a distinction between targets and non-targets. The fighting and the fighter persist while the status of combatancy, and with it, the category of civilian, does not. Clearly, this poses a serious challenge for the practice of targeting, even before the question of the privileges of the status arises.

Common Article 3 to the four Geneva Conventions, Article 1 and 13(3) of the APII, the law governing the targeting process in NIAC, use terms such as 'armed forces', 'dissident armed forces' and 'those who take a direct or active part in hostilities' instead of 'combatant'.[18] However, these terms are under-developed in relation to the definitional dependencies of the two categories of combatant and civilian in the principle of distinction – to such an extent that even UN official documents and ad hoc tribunals confuse them with the terminology of IAC, i.e. 'combatant'.[19]

Such ambiguity in describing the targetable category also implies an indistinct non-target category; for if civilians are defined exclusively in contrast to the target category, the more confused the latter becomes, the more ambiguous the former will be.

Who is the human target in NIAC in contrast to whom we define the civilian? As Jann Kleffner suggests, to answer these questions we require a re-conceptualisation of the principle of distinction that is workable for both IAC and NIAC.[20] Such a re-conceptualisation demands that we dig beneath the surface of the conventional distinction between the two operative terms, combatant and civilian, to investigate the rationale of becoming a human target – a demand that LOAC scholars, Kleffner included, all too often overlook.[21]

Towards a re-conceptualisation of the lawful human target

Scholars of LOAC have offered different conceptualisations of the operationalisation of the principle of distinction in NIAC. 'Combatant status' in NIAC is often replaced by 'unlawful' or 'unprivileged combatant',[22] or by less controversial and more widely used terms such as 'fighter'[23] or 'civilians who directly participate in hostilities'.[24]

In this context, a non-state 'fighter' is an actor who takes a direct part in hostilities without benefitting from the privileges of combatant status – namely, prisoner of war status and immunity from domestic prosecution for acts of violence during the armed conflict. There are differing approaches to the question of how to conceptualise this kind of target. According to the San Remo manual on the laws of non-international armed conflict, the term 'fighter' refers to 'members of armed forces and dissident armed forces or other organised armed groups' belonging to regular state armed forces or non-state armed groups.[25] The figure of the fighter as the lawful target in this conceptualisation resembles the combatant in IAC who, by virtue of membership in the armed forces, is targetable at any time.[26] Other approaches emphasise the specific acts of individuals in NIAC. These approaches insist that the protection of civilian status should be lost only for such time that the civilian is directly taking part in hostilities.[27] The dividing line between the former *membership* approach and the latter *specific act* approach concerns whether members of a non-state armed group are 'civilians subjected to loss of protection' only for such time as they directly participate in hostilities or 'whether members of such groups are liable to attack as such',[28] by virtue of being members of an armed group and regardless of any of their particular actions.

I will return to this debate as far as it concerns the notion of 'direct participation in hostilities' later. However, as far as the re-conceptualisation of the notion of the lawful target in the principle of distinction goes, I find this debate to be incomplete. These two approaches, I suggest, reduce the question of the lawful target in NIAC to a single aspect of the principle of distinction that concerns the constitutive element of being a targetable enemy. Membership or specific act approaches mainly answer the theoretical question of who an enemy target is, by pointing at members of armed forces or at individuals who act in a certain way. Yet the operation of the principle of distinction has another element, which concerns the recognition of an imagined enemy target and their visible distinction from the rest of the population. Simply put, it is one thing to know what an enemy target can be or do and quite

another to know how to recognise and identify one amid the battle. Both elements are necessary for the operation of the principle of distinction.

For instance, to know that the Taliban consists of armed members of a group that opposes – let us say – the US military, and thus are the enemy targets of the American forces, constitutes only one part of the targeting process of the principle. The soldiers who are tasked with discriminate targeting still need to know how to recognise their targets. What does a member of an enemy armed group who wears no official sign of membership look like? How are they distinguishable from the civilian population? Is anyone who sports a particular hat, scarf, and a long beard a Taliban member, and thus a lawful target?[29] Raising such questions is to insist that the means of recognition of a constituted target is part of the practice of targeting. It is to insist that the enemy target must take a visual form in order to be distinctively constituted and to allow for the definition of its protected other. This visual recognition is no less constitutive of the legal notion of target than the more abstract dimension that defines the adversarial forces of Taliban as an enemy because of opposing *the American way of life*. The coming together of these two elements i.e. the underlying cause of enmity and the visual elements of discernability, as the process of construction of target is rather evident in the earlier example of drone targeting of a group of Afghan civilians in the Uruzgan Province of Afghanistan on 21 February 2010. In this example, the involved US soldiers persuade one another and authorise the use of lethal targeting by continuously reconfiguring and overlapping the existing hostile situation on the ground, information regarding the existence of Taliban forces in an area, with identification of certain visual cues such as group praying of military-aged men. Regardless of illegality of this targeting example, what is evident is that the authorisation of violence in the categories of target and no-target is in part visually constructed and not simply textually interpreted and then applied.

In order to clarify the importance of visibility in the production of the lawful target in NIAC – or LOAC in general, for that matter – I must note that targeting and finding lawful targets poses no difficulty when it comes to NIACs that involve more or less organised and stable armed groups consisting of fighters who regularly and visibly distinguish themselves from the civilian population by means of military uniforms or other distinctive signs. Armed groups such as FARC and the Tamil Tigers are examples in this regard.[30] Discerning the human target in NIAC becomes a problem only when the conflict involves an armed group with a fragmented and networked structure consisting of fighters who refuse visibly to display any sign of 'membership' in any armed group. This is to say that, rather than being a legal doctrinal debate about the split between NIAC and IAC, the question of lawful targeting relates to the formal, organisational, and material character of the armies involved in either of these kinds of conflict.

The organisational difference between FARC and, for instance, the Taliban is instructive here. While many may affiliate themselves with FARC, only its uniformed members are lawful targets – assuming, of course, that they engage in hostilities only when uniformed. In the case of the Taliban, it is unclear how the opposing army classifies Taliban members when there is no uniformed Taliban fighter. The membership approach simply fails to offer an answer here: how

does it determine, and on the basis of what sign does it determine, the membership of each individual in a particular armed group? This might appear less of a problem for an approach that takes particular acts as its criteria of target distinction. However, the particular act approach proves useful only in direct, face-to-face firefights, where actions are directly attributable to distinguishable actors. But direct confrontations are simply not the dominant form of engagement in contemporary armed conflict. Contemporary insurgencies are typically characterised by hostile attacks that emerge from within unexpected spaces with little possibility of attribution. Such is the case with the use of improvised explosive devices (IEDs) and suicide bombing operations. When faced with hostile acts without discernible actors, the specific act approach breaks down, and there is no option but to revert to a membership approach, which, as we have already seen, has its own problems. Further, the specific act approach only really works for defensive engagements and does not have much to say about targeting in offensive operations.

A functional redescription of the target needs to distance itself from the debates about the IAC and NIAC divide and instead acknowledge that the question of the lawful target is simultaneously a question of knowledge of the condition of enmity and a question of the visible distinguishability of those deemed to be enemy targets. Without knowledge of *what constitutes the enemy target*, any act of targeting is just a random stab in the dark – and the same goes for targeting on the basis of this knowledge but without having criteria of discernibility.

By basing its investigation on straightforward questions such as 'Who is, or what constitutes, a target?', 'Why do armies target a particular target?' and 'How is such a target recognised?' the below explains the concept of the lawful human target precisely in terms of these two elements of 'knowledge' and 'vision'. Whereas 'knowledge' pertains to the constitutive conditions of enmity, 'vision' concerns the techniques for making such knowledge distinctively visible and perceptible as a target for the operating soldiers. This will allow us on the one hand to define the concept of the target in a manner independent from the way it is conceived in NIAC and IAC. While on the other hand establishes the law's own dependency upon technologies of visualisation for producing legitimate target in the first place.

In what follows I explain 'knowledge' and 'vision' as part of the process of producing the lawful human target as it is envisaged in the principle of distinction. In this process, however, I pay special attention to the role of vision, to its technique, and regulations. This is not only because this aspect is often overlooked in the scholarship on LOAC but also because contemporary armed conflict is marked by the invisibility of the insurgents. The discussion of vision and its role in the targeting process will then form the basis for a discussion of contemporary practices of targeting by means of visual technologies. Moreover, it must be noted that although this part is largely based on the treaty rules that primarily concern IAC, as far as the lawful human target is concerned, the arguments of this part are based on customary international law. Lastly, since I deal with the categories of the principle of distinction exclusively in terms of targets and non-targets and do not base my

discussion on the privileges of combatant status, I am not further concerned with the distinction between IAC and NIAC.

'Knowledge' in the operation of the principle of distinction

Who is the human target of the principle of distinction, and what makes him, as opposed to the protected civilian, the object of lethal force? Here, I take as my point of departure the definition of the prototypical human target in LOAC, which defines this concept exclusively with reference to the state army and its members as combatants.

One clear and relevant reference in this regard is Article 4 of the Third Geneva Convention (GCIII). The first group of combatants, outlined in Article 4(A)(1) of the GCIII, are members of the armed forces of a party to a conflict in the strictest sense – meaning that medical and religious personnel are excluded.[31] The second paragraph of Article 4(A) adds another group of combatants as lawful human targets. This group includes anyone who is a member of other armed groups, militia or volunteers, who is fighting on behalf of a party to a conflict, provided that he (a) is commanded by a person responsible for his subordinates (i.e. is subjected to a hierarchical order of discipline), (b) wears fixed and distinctive signs recognisable from a distance, (c) bears arms openly, and (d) acts according to the laws and customs of war.[32]

Moreover, as Article 43(2) of the API states, inherent to the category of the combatant is the exclusive and authorised right to use weapons and weapon systems. The combatant has the right 'to participate directly in hostilities'[33] in order to kill, injure, or destroy enemy soldiers and to secure military objectives whilst enjoying immunity from prosecution for such acts.[34] Just as LOAC allows combatants lawfully to target their adversaries,[35] so it also allows that they may be targeted – indeed, that they may be targeted even whilst they sleep.[36] It is only the soldier who is himself seeking to kill who may be killed.[37] The rationale for targeting a combatant is simply that if one does not target the adversary, then one will be targeted by them. But this rationale must surely be grounded in something more substantial than mere fear or paranoia if it is to serve the purpose of finding an understanding of the human target operative in both IAC and NIAC.

For this endeavour, I suggest a return to strategic readings of war, where every act of force in an armed conflict – targeting included – is understood as part of a broader effort geared towards achieving a concrete political objective. To invoke Clausewitz's maxim: 'war is an act of force to compel our enemy to fulfil our will'.[38] According to this view, the use of force, the launching of attacks, or acts of targeting are means to the end of the submission of the enemy to our will, which is the ultimate aim.[39] The power of the enemy to resist subordination to an antagonist, to their will and its associated political arrangements, depends in turn on the strength of its own political willpower and on the extent of available means to make that willpower effective.[40] In military terms, this amalgam of means and will, which generates the power to resist, is referred to as the centre of gravity, that

is, the 'characteristics, capabilities or localities from which a nation, an alliance, a military force or other grouping derives its freedom of action, physical strength or will to fight'.[41]

For LOAC and its human targets, contribution to adversarial willpower is manifested in terms of the use of weapons and weapon systems, which, from the seventeenth century and the emergence of the army as an institution of the state, has been the exclusive right of the professional soldier, i.e. the combatant. Detached from its statised order and the associated privileges of the status, however, a combatant, like a fighter of NIAC, is nothing but a reification of the willpower that militarily and forcibly resists an adversary.

Far from being an abstraction, this conceptualisation of the human target is at work in the contemporary COIN doctrine of the US Army. FM 3-24 (2014) reaffirms that insurgencies, as the dominant form of NIAC, are a 'clash of wills and interest[s] characterized by the use of force'.[42] The same manual also implies that the human targets of these conflicts, the insurgents, are those who use organised violence to pursue their political aims:

> Elements of a population often grow dissatisfied with the status quo. When a population or groups in a population are willing to fight to change the conditions to their favor, using both violent and nonviolent means to affect [*sic*] a change in the prevailing authority, they often initiate an insurgency. An insurgency is the organized use of subversion and violence to seize, nullify, or challenge political control of a region.[43]

Therefore, the condition of being a target is grounded in knowledge of the relation of an entity to the war effort and war strategy of the belligerent forces. If this entity relates to the belligerent's war strategy in a hostile manner, then, from the point of view of the belligerent, its destruction would acquire a military value and as such it will be considered targetable. The content and the operational production of this knowledge as the relation between an entity and the war efforts of the enemy can best be explained with reference to the military's own term of art: the commander's intent.[44]

The US Joint Targeting Manual JP 3-60 defines targeting as 'a process of selecting and prioritizing targets and matching the appropriate response to them'.[45] This process as a whole begins with and depends on the commander's intent.[46] To stress this point, the Joint Targeting Manual goes on to define the target as 'an entity or object considered for possible engagement or action … to support the commander's objectives, guidance, and intent'.[47] The target is not defined exclusively in terms of its function(s), but through its function(s) in relation to the commander's intent. From a military point of view, enmity and, for that matter, targetability are relational and not necessarily predetermined states or statuses. In this way, the commander's intent becomes fundamental for carrying out targeting in any form of armed conflict, COIN included.[48]

The commander's intent is defined as 'a clear and concise expression of the purpose of the operation and the desired military end state that supports mission

command'.[49] Because the end state is understood as the state of achieving 'all military objectives for the operation',[50] the commander's intent relates, in turn, to the core political objective of the conflict as such. The result is that in identifying targets a commander first 'visualizes and describes' a condition in which the political objectives of war are achieved and then, with this desired state in mind, the staff work backwards to evaluate the targetability of objects and entities.[51] This idea of the commander's intent is an explicit expression that the knowledge of targetability of any object is given through the relation(s) it bears to the political ambitions of a party to a conflict.

In LOAC, this *ex ante* relation of a target to an expected end state is formulated as the 'anticipation of achievement of military advantages'.[52] One example is in the definition of the military objective – the non-human target – as it appears in Article 52(2) of the API:

> Those objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage.[53]

The idea of anticipated military advantage as the requisite knowledge prior to an attack resurfaces in Article 51(5)(b) and 57 of the API as they codify the principle of proportionality. Accordingly, parties to an armed conflict are obliged to refrain from launching attacks – against humans or non-humans – 'which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated'.[54]

In LOAC, then, the military advantage forms the content of the knowledge required for positing targets. What exactly the military advantage is, and what exactly is supposed to be anticipated, is debatable, however. On one side of this debate, we find the US military, with a broad understanding of military advantage according to which it is sought within 'the enemy's war-fighting or war-sustaining capability'.[55] On the other side, a narrower reading insists that objects, in order to qualify as military targets, need cumulatively to 'contribute to the military action' of the enemy, and that targeting must yield a definite and direct military advantage.[56] Moreover, the only acceptable military advantage to seek is the 'weakening of the military force of the enemy'.[57] No matter how we define the notion of 'military advantage', it is accepted that military advantage is to be anticipated in a way that takes into consideration 'the tactical and strategic goals of the belligerent'.[58] Similarly, CIHL says that states generally understand military advantage as the anticipation of advantages that only occur in the context of 'a military attack considered as a whole and not only from isolated or particular parts of that attack'.[59] Or, as the United States Department of Defense puts it, military advantage is linked 'to the full context of a war strategy'.[60]

Here, we have come full circle. War is an instrument used to achieve political goals; targets of war are selected according to the commander's intention of

achieving military advantages, which are in turn defined with respect to the political goals and the desired end state of a particular armed conflict. This is the content of the requisite knowledge of targetability of an object as expressed in strategic theories of war, military handbooks, and LOAC.

As far as the human target is concerned, the targetability of the uniformed combatant is presupposed and does not need the above processing. This is because the relation between the targeting of a uniformed combatant and the achievement of the political goals – military advantage – is already given in the relation of an institutionalised army and a state. What remains for a commander in terms of deciding whether or not to target a uniformed combatant are simply considerations of economy of force and prioritisation.

There is one instance in the body of international law that best explains the central function of knowledge, as defined here, in the production of targetable humans: namely, the International Court of Justice's (ICJ) Advisory Opinion on Nuclear Weapons. In this case, the ICJ takes the view that the targetability of an individual depends wholly on knowledge of the relation of the individual to the desired end state of the adversary. It concludes that if the goal is something as serious as 'the survival of a nation', then the limits on targetability are also radically redrawn, insofar as such a goal may permit the recasting of a whole population as targetable with a weapon that is inherently incapable of making distinctions between combatants and civilians. Just as 'knowledge' defines the boundaries of the principle of distinction, so it can also obliterate them.

> However, in view of the current state of international law, and of the elements of fact at its disposal, the Court cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defence, in which the very survival of a State would be at stake.[61]

Another example in this connection comes from NATO's aerial campaign in Kosovo. In a reflection piece on the NATO bombing of Kosovo, the staff judge advocate for US Air Forces Col. Charles Dunlap made 'the innocence of civilians' conditional on the military's desired goals. He argued that since contemporary militaries are increasingly dependent on civilian systems for technological support and strength,[62] it is too restrictive to limit military activity by only targeting those 'who are formally part of a military organisation'.[63] Instead, he called for the inclusion of entirely new categories of targetables into LOAC, based on the simple principle that whatever hinders the achievement of the political goals of the military should be targetable. Accordingly, he argued that civilian objects like factories; plants; shops; cultural, historical, and educational sites that provide psychological support to a nation – all things that would otherwise be protected – become targetable once they are framed as bolstering the political willpower of the enemy.[64] A third example that illustrates the foregoing point about the 'knowledge' of targetability is found in the final report of the committee reviewing the NATO bombing of the former

Yugoslavia.[65] In affirming the legality of one of the most disputed targeting events of the conflict, the NATO bombing of the Serbian Radio and Television Station (RTS) in Belgrade and the civilian population in its immediate vicinity, the report stated:

> The committee finds that if the attack on the RTS was justified by reference to its propaganda purpose alone, its legality might well be questioned by some experts in the field of international humanitarian law. It appears, however, that NATO's targeting of the RTS building for propaganda purposes was an incidental (albeit complementary) aim of its primary goal of disabling the Serbian military command and control system and to destroy the nerve system and apparatus that keeps Milošević in power.[66]

What this means is that what that matters with respect to targeting are the goals to which various acts of violence are related. Whilst neutralising enemy propaganda cannot justify the targeting of an object and the civilians in its vicinity, targeting the very same object can be justified if such targeting is framed in terms of another goal – here, that of disabling the Serbian military command and control system. In other words, the ways in which knowledge of enmity is framed and presented is determinative of the boundaries of the targetable.

'Vision' in the operation of the principle of distinction

Essential to the condition of being a lawful human target is also visual distinguishability: the representation of the oppositional will of the enemy – knowledge – needs to be made immediately perceptible for the soldiers on the ground. The target is produced when the abstract knowledge of enmity takes on a visual and material form. Further, the lawfulness of a target is also derivative of this visual distinguishability. This is the second element necessary for the construction of the lawful human target.

The initial expression of visibility as a requirement with respect to the lawful target is in two of the four listed criteria for combatants in Article 4 (A)(2) of the GCIII,[67] which require a combatant to be visibly recognisable from a distance by 'wearing fixed and distinctive sign[s]' and by means of 'openly borne arms'.[68]

It is worth pointing out that although these four criteria, especially those concerning visual distinguishability, appear only in the second paragraph of Article 4(A), they are equally applicable to the 'members of the regular armed forces' mentioned in the first paragraph of Article 4(A). In fact, they are deemed to be inherent requirements for the regular forces of a state.[69]

> The Geneva Conventions do not explicitly prescribe the same qualifications for regular armed forces. It is generally assumed that these conditions were deemed, by the 1874 Brussels Conference and the 1899 and 1907 Hague Peace Conferences, to be inherent in the regular armed forces of States … It seems clear that regular armed forces are inherently organized, that they

are commanded by a person responsible for his subordinates and that they are obliged under international law to conduct their operations in accordance with the laws and customs of war.[70]

The implicit requirement of visibility in Article 4 (A)(2) of the GCIII is made explicit in Article 44(3) of the API.

> In order to promote the protection of the civilian population from the effects of hostilities, combatants are obliged to distinguish themselves from the civilian population while they are engaged in an attack or in a military operation preparatory to an attack.

The combatant has 'the fundamental obligation' to visually self-identify so that his adversary can target discriminately and so that he can enjoy the privileges of combatant status.[71]

This part of the Article, referred to by the CIHL Rule 107 as the 'requirement of visibility', has the status of customary international law applicable in both to regular and irregular forces.[72] There is a twofold rationale for this unambiguous imposition of an obligation to visibly self-identify in Article 44(3). Firstly, the main concern of this Article is to clarify the existence of such requirements for guerrilla warriors in *times of attack* and during *operations preparatory to attack*.[73] Secondly, it is only in compliance with the requirement of visibility that one's adversary can effectively act in accordance with Article 48 in making a distinction between lawful targets and protected civilians.[74] As such, Article 44(3) should not be seen as superfluous in relation to Article 4 of the GCIII but as an indication that the operation of the principle of distinction is conditioned upon the requirement of visibility, as this requirement is set out in Article 4(A)(2) of the GCIII.

Responsibility in a functioning system of distinction, therefore, rests chiefly with the combating forces. A combatant must not only make a distinction between civilian and enemy combatants; in order to kill lawfully and in order to make the use of discriminate violence against himself possible, he must also distinguish himself from the civilian populations of both sides.

Combining the visual characteristics of the combatant (Article 4 of the GCIII) and the requirement of visibility (Article 44(3) of the API) results in the basis of an order concerning the visual appearance of individuals in the battlefield that operationalises the principle of distinction. The obligations, recommendations and traits of recognition for combatants given in the articles above are effectively a series of material and organisational interventions in the battlefield that yield a conspicuous visualisation and distinction of the enemy's hostile willpower in terms of physical entities called *combatants*, or, for that matter, *fighters* or *lawful human targets*. Beyond these legal and material interventions, there are no other ways of distinguishing one category from another, apart from simply holding fire until being fired upon, which would limit an army to a purely defensive and reactive mode of engagement. The requirement of visibility is so indispensable for the functioning of the principle that even the *levée en masse* – the spontaneous armed resistance of the

civilian residents of an area not yet occupied – is required to demonstrate a certain level of visibility by openly bearing arms, unless they wish to forgo privileges such as prisoner of war status.[75]

A whole other body of recommendations, obligations, and practices exists in order to complement, enforce, and elaborate the requirement of visibility of the principle of distinction. For example, in order to maintain the distinguishability of the human targets, practices such as human shielding; the feigning of protected status, emblems, and uniforms; or the participation of civilians in hostilities are prohibited.[76] Another example concerns non-human targets. Article 58(b) of the API requires state parties to avoid locating and constructing military targets near civilian areas. This Article, analogous to the requirement of visual self-identification for combatants, is simply an urban design policy recommendation to states in order visibly and materially to separate their military establishments from civilian ones and, as such, make the principle of distinction operable.

In other instances, the requirement of visibility is put into effect through recommendations and regulations for states that compel them to make their presence visible in material terms by, for example, painting distinctive signs and emblems on their weapons, weapons systems, and flags. These regulations, which are often very detailed and technical, specify the size, colour, pattern, shape, or even the material used in the production of such signs.[77]

To provide still more examples: a flashing blue light signal with a recommended flashing rate of sixty to one hundred flashes per minute denotes medical aircrafts and vehicles.[78] The protected vehicles themselves must be painted in white and bear a distinctive sign.[79] Works and installations containing dangerous forces are signified by three bright orange circles of equal size, placed on the same axis, with a certain distance between them.[80] Military uniforms and other national visible signs and emblems are traditionally used for the purpose of visually distinguishing combatants from civilians and must be visible to adversaries.[81] The size and dimensions of emblems and flags, displayed over a building or painted on weapons systems are also regulated in order to maintain optimal visibility in the dark, both from a distance and from above.[82]

The requirements of this body of information may seem technical, trivial or even absurd in comparison to the claims and objectives of the Geneva Conventions. However, these regulations are the instruments that institute the requirement of visibility that, in turn, is necessary for the operation of the principle of distinction. In fact, such detailed attention to the techniques of visibility indicates that the requirement of visibility is not only an indispensable part of the operation of the principle of distinction; more importantly, the technological developments that either enhance or impede such visibility are inseparable from the process of the production of targets in this principle itself.

One example of this deep relation is found in the preparatory works of the API, which reveal that even the wording of the principle of distinction in its current form is a reflection of what, when the API was being written, was a growing concern amongst states over the impact of various technological developments on matters of visibility. In particular, the development of a field

of expertise and knowledge pertaining to the possibility of deception, and the subsequent emergence of the camouflaged uniform, played a significant, if not a decisive, role in making it that the requirement to wear military uniform was kept implicit whilst the requirement for the combatant to wear 'a distinctive and visible sign' was explicit.[83] The worry was that developments in camouflage technology would make the military uniforms of different armies look more and more similar and as such undermine the visual function of laws technology of visualisation i.e. the military uniform. Therefore, the wearing of the object itself was made an implicit obligation whilst its function – creating distinctive visibility – was highlighted.

> The devastating fire power of modern armies eventually led to the adoption of military uniforms in colours which merged with the background to such an extent that nowadays the colour of all uniforms is more or less similar. This could obviously not constitute a breach. As a result the insignia become even more important.[84]

Another example is the historical role of the military uniform itself as a technique of making and organising visibilities required for the operation of the principle of distinction (to which the next chapter attends). But what comes below is an example illustrating how the condition of being a lawful target is constructed both by a knowledge of enmity and, in part, by a series of visual requirements and practices that illuminate the battlefield and divide it into spaces and bodies, some of which may permissibly be attacked and some of which must be protected.

The ICTY Judgment in the Galić case provides a vivid example of how the practical operation of the principle of distinction during wartime and its subsequent adjudication is very much an optical activity structured by, and connected to, a visual order engendered by the principle.[85] At the actual time of attack, the principle and its visual order establish a system of interpretation of perception that makes it possible immediately to target individuals; uniform-wearing and or arms-bearing individuals are lawful targets on sight. In the post-attack situation, the same order serves as the criterion with reference to which the legality of each instance of targeting is to be judged.

Between 1992 and 1994, Sarajevo found itself under siege by a unit of the Bosnian Serb Army, the Sarajevo Romanija Corps (SRK), commanded at the time by Stanislav Galić. The siege would prove to be a period of some of the most abominable attacks of the war.

During the siege, the SRK's strategy was to launch a widespread campaign of sniper and shelling attacks, which would eventually lead to the deaths of thousands of civilians.[86] Many of the attacks were launched from strategic positions overlooking Sarajevo – positions from which the perpetrators had a clear, detailed, and commanding view of the city and its civilian population.[87]

The victims of those attacks were mainly civilians who were targeted whilst trying to go about their daily business under a military siege. The prosecutor claimed that the SRK routinely and deliberately targeted, killed, and injured civilians whilst

they were fetching water, gathering wood, queuing for bread, tending vegetable plots, and even when staying indoors (by firing bullets through windows).[88]

Galić was subsequently charged with war crimes and crimes against humanity for conducting the protracted attack on the civilian population and causing death and injury to civilians with the primary purpose of spreading terror among the civilian population.[89]

The defence team in this case, however, contested the allegation that there had been a gross violation of the principle of distinction. They argued that the civilian deaths were inevitable and accidental casualties of a legitimate military campaign, which took place in a confined and intertwined urban labyrinth, and not the result of a deliberate attack on the civilian population.

The issue for the prosecutor to prove and for the court to establish was, then, whether or not the civilian deaths resulted from a deliberate violation of the principle of distinction. For that, it needed to be proved that a) the death and injury of civilians was attributable to the SRK forces, and b) the SRK forces targeted the civilian population despite knowing about the civilian status of their victims.[90]

The case inevitably involved a detailed assessment of the components of the principle of distinction. The principal question of the case was how to ascertain an individual's status as a civilian or a combatant prior to launching an attack. In other words, what were the criteria – at the time of the attacks – that could prove the SRK carried out their targeting campaign despite knowing of the protected status of the victims?

To answer this question, the chamber relied on a reconstruction of the visual conditions of each and every instance of sniper fire. This involved an extensive examination of evidence: eyewitness testimonies, expert reports on ballistics, maps, videos, and panoramic and 360-degree photographs of different attack locations.

Whilst reconstructing the visual conditions of each attack

[T]he Trial Chamber gave particular attention to questions of distance between the victim and the most probable source of fire; distance between the location where the victim was hit and the confrontation line; combat activity going on at the time and the location of the incident, as well as relevant nearby presence of military activities or facilities; appearance of the victim as to age, gender, clothing; the activity the victim could appear to be engaged in; visibility of the victim due to weather, unobstructed line of sight or daylight.[91]

This constellation of factors took the form of an examination of the existing visual conditions at the time of attacks, which then allowed the judges to determine whether each of the instances of sniping mentioned in the indictment was deliberate.

For example, in assessing one such incident the majority of the judges asserted:

The activity the victim was engaged in, the fact that civilians routinely fetched water at this location and her civilian clothing were indicia of the

civilian status of the victim. At a distance of 1100 meters, the perpetrator would have been able to observe the civilian appearance of Zametica [the victim], a 48 year old civilian woman, if he was well equipped, or if no optical sight or binoculars had been available, the circumstances were such that disregarding the possibility that the victim was civilian was reckless.[92]

In another example, the chamber followed the same pattern of scrutinising the visual conditions of the attack. In sniping incident No. 8, the majority of judges were convinced of the deliberate nature of the attack after taking into account the expected level of light on a July morning, the absence of military activities in the area of the incident, and the later examination of a panoramic photograph and video of the area of attack that indicated an unobstructed line of sight from the place where the victim was injured to the source of gunfire.[93]

With all the other incidents, the trial chamber used the same visual toolbox when deciding on the determinability of the civilian status of each victim. Factors such as the level of light, the victim's clothes, the distance between the shooter and the victim, and whether there was an unobstructed line of sight proved crucial to the final conclusion of the chamber, namely, that there was a deliberate campaign waged against civilians during those desperate twenty-four months.

Of all of the incidents mentioned in the Galić case, one sniping account, No. 20, stands out as a graphic example of how the act of targeting and the principle of distinction are dependent on and intertwined with instruments and technologies of visibility. In January 1994, the Mukanović family – Akif, Hatema, and their teenage children – were living on the first floor of an apartment block with windows facing the confrontation line, which was located approximately 800 metres away from their residence. Well aware of the visual order that conditions life in times of war and knowing the vital importance of remaining invisible in an environment in which visibility is punishable by death, the Mukanović family used both blinds and blankets to cover their apartment's windows in order to reduce the risk of being spotted at night by SRK forces.

It was already dark outside when Akif returned home from work at 7 p.m. on 11 January 1994. He remembers his wife, Hatema, his two children, and a neighbour waiting for him at the dining room table. With no electricity, the dining room was illuminated by a single candle. He remembers Hatema sitting with her back to the window. He also remembers that even though the blinds were down, the window had not been covered with blankets that night.

What he remembered next, according to his testimony before the tribunal, is the following: 'There wasn't any shooting, there wasn't any fighting, or anything like that. There was just this bang, and we all jumped up. […] And my wife at that point just got up and said, 'I'm finished'. She took a step forward […] went all pale and sunk to the floor'.[94]

The defence contested the claim that this was a deliberate act of targeting, arguing that 'she was not visible from SRK positions … the victim was probably hit by accident by a stray bullet fired during on-going combat'.[95] The forensic investigations, however, proved that two bullets were shot from an SRK position

in Hrasno. In addition, the visual evidence presented to the chamber showed that there was an unobstructed line of sight between the Mukanović residence and the SRK position.[96] Moreover, although it was never proved that SRK forces were using their infrared sights that night, given that there was no military activity in the vicinity of the apartment, and that there was a pattern of sniping of civilians in the area of Hrasno, the majority of the chamber were satisfied that the targeting of Hatema had been deliberate.

> The fact that there were no soldiers inside or in the proximity of the building and no combat activity was underway at the time, the attacker should have known that, by deliberately targeting a window (with a light) of an apartment in a residential block of flats, only civilian casualties would result.[97]

In its judgment, the chamber mentioned that the pattern of targeting civilians in the area of Hrasno and the consequences of being seen in that area were well known to the Mukanović family – hence their using blankets to make themselves invisible. The responsibility for applying the principle of distinction, the chamber concluded, rests with the sniper, who, if not using infrared sights, must interpret what he sees in connection with other factors, such as location, gender, clothes, the existence of military activity in the vicinity, etc., that allow him to distinguish between civilians and combatants.

In this case, the ICTY cast the vision element of the principle of distinction almost as a game of hide-and-seek between the one being targeted and the one doing the targeting. In doing this, the court took into serious consideration each side's means and instruments of visibility. The Galić case demonstrates that vision and its technologies – whether they are infrared goggles or simply a blanket to hide behind – not only become matters of life and death but also function as measures of the legal assessment of targeting according to the principle of distinction. Technologies of visualisation are discursively required for the law in its production of discriminate targeting, practically needed for the operating forces to pursue political objectives through violent means, and technically indispensable for courts to evaluate the legality of acts of targeting.

Notes

1 Article 48 of the API; Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 1, p. 3.
2 Note that in this project the term 'lawful human target' refers to what in international armed conflict is called a 'combatant'; in other words, this term refers to the prototypical human target of an armed conflict. There are other groups that can, in certain circumstances, be considered lawful human targets that are not objects of enquiry for this project. For instance, a civilian population whose death or injury is deemed proportionate in relation to the military advantage sought can also be called a lawful human target, but this kind of target falls outside the ambit of this project.
3 Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 6, p. 19.
4 Common Article 2 to the four Geneva Conventions.

5   Article 1(4) of the API.

6   Michael N. Schmitt, Charles H.B. Garraway, and Yoram Dinstein, *The Manual on the Law of Non International Armed Conflict With Commentary* (Sanremo: International Institute of Humanitarian Law, 2006), p. 2.

7   As to treaty law governing NIAC, we can refer to The Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict 1954 (14 May 1954); Second Protocol to the Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict 1954 (1999); Convention on Certain Conventional Weapons (10 October 1980); Rome Statute of the International Criminal Court (1 July 2002); Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction (The Ottawa treaty) (18 September 1997); Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (1993).

8   See Michael W. Reisman and James Silk, "Which Law Applies to the Afghan Conflict?", *American Journal of International Law* 82, no. 459 (1988); Emily Crawford, "Blurring the Lines between International and Non-International Armed Conflicts - The Evolution of Customary International Law Applicable in Internal Armed Conflicts", *Australian International Law Journal* 15, no. 1 (2008).

9   Prosecutor v. Tadić, No. IT-94-I-AR72 (International Criminal Tribunal for the Former Yugoslavia (ICTY) 2 October 1995), para 97.

10 Emily Crawford, "Unequal Before the Law: The Case for the Elimination of the Distinction between International and Non-international Armed Conflicts ", *Leiden Journal of International Law* 20 (2007), p. 457.

11 US War Department, *Field Service Regulations: Operations FM 100-5* (15 June 1944, 1944), p. 284.

12 David Kilcullen, "Countering Global Insurgency", *Journal of Strategic Studies* 28, no. 4 (August 2005).

13 The armed conflict in Afghanistan as of June 2002 and after the election of the new Afghan government can be seen an NIAC. The classification of Operation Iraqi Freedom during different periods of the war, especially from June 2004 and at the end of the occupation, is contested. For a discussion about the classification of the Iraq war, see David Turns, "The International Humanitarian Law Classification of Armed Conflicts in Iraq Since 2003", in *The War in Iraq: A Legal Analysis*, ed. Raul A. Pedrozo (Newport, RI: US Naval War College, 2010), pp. 97–123.

14 Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 3, p. 11; US Department of Defense, *Department of Defense Law of War Manual*, ed. US Department of Defense (June 2015), p. 1029.

15 Article 50(1) of the API.

16 Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 3, p. 11.

17 It must be noted that even the matter of whether enemy prisoners enjoy differential treatment as a result of the different categorisations of armed conflicts is questioned and appears not to be a particularly sustainable position. See Derek Jinks, "The Declining Significance of POW Status", *Harvard International Law Journal* 45, no. 2 (2004).

18 Common Article 3 to the Four Geneva Conventions, Article 1 and 13 (3), Protocol Additional to the Geneva Conventions of 12 August 1949, Relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II), (8 June 1977) (Hereafter APII). Common Article 3 uses the phrase 'civilian taking active part in hostilities', whilst Article 13 (3) of the APII uses 'taking a direct part in hostilities'. It is asserted, however, that the two terms 'active or direct' do not indicate any difference. See also Prosecutor v. Jean-Paul Akayesu (International Criminal Tribunal for Rwanda (ICTR), Trial Chamber 2 September 1998), p. 629. Schmitt, Garraway, and Dinstein, *The Manual on the Law of Non International Armed Conflict With Commentary*; Jann K. Kleffner, "From 'Belligerents' to 'Fighters' and Civilians Directly Participating in

Hostilities — On the Principle of Distinction in Non-International Armed Conflicts One Hundred Years after the Second Hague Peace Conference", *Netherlands International Law Review* 54, no. 2 (2007).

19 Such ambiguity has led to inaccurate use of the term 'combatant' in official documents relating to NIAC. For example, see Respect for Human Rights in Armed Conflicts (9 December 1970); Prosecutor v. Kayishema and Ruzindana, (International Criminal Tribunal for Rwanda (ICTR) 21 May 1999). The ambiguity and inability to define such terms relates to states' desire to preserve their exclusive right of using organised violent force as well as to their reluctance to recognise a legal status for the non-state armed groups that they oppose.

20 Kleffner, "From 'Belligerents' to 'Fighters' and Civilians Directly Participating in Hostilities — On the Principle of Distinction in Non-International Armed Conflicts One Hundred Years after the Second Hague Peace Conference", p. 323.

21 The most recent example of the reluctance to investigate the rationale of becoming a target in NIAC is visible in Claus Kreβ's position in the ICRC debate piece between C. Kreβ and F. Mégret from 8 May 2015: Claus Kreβ and Frédéric Mégret, "The Regulation of Non-International Armed Conflicts: Can a Privilege of Belligerency Be Envisioned in the Law of Non-International Armed Conflicts?", *International Review of the Red Cross* 96, no. 893 (2014).

22 For an encounter with the terminology of 'unlawful combatant', see W. Hays Parks, "Combatants", *International Law Studies. US Naval War College* 85, no. 1 (2009).

23 For encounter with the terminology of 'fighter', see Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*; Kleffner, "From 'Belligerents' to 'Fighters' and Civilians Directly Participating in Hostilities — On the Principle of Distinction in Non-International Armed Conflicts One Hundred Years after the Second Hague Peace Conference"; Schmitt, Garraway, and Dinstein, *The Manual on the Law of Non International Armed Conflict With Commentary*.

24 Nils Melzer, *Interpretive Guidance on the Notion of Direct Participation in Hostilities under International Humanitarian Law* (Geneva: International Committee of the Red Cross, 2009).

25 Schmitt, Garraway, and Dinstein, *The Manual on the Law of Non International Armed Conflict With Commentary*, p. 4.

26 See Schmitt, Garraway, and Dinstein, *The Manual on the Law of Non International Armed Conflict With Commentary*; Kleffner, "From 'Belligerents' to 'Fighters' and Civilians Directly Participating in Hostilities — On the Principle of Distinction in Non-International Armed Conflicts One Hundred Years after the Second Hague Peace Conference", p. 330.

27 Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 6, p. 21. Kleffner, "From 'Belligerents' to 'Fighters' and Civilians Directly Participating in Hostilities — On the Principle of Distinction in Non-International Armed Conflicts One Hundred Years after the Second Hague Peace Conference", p. 331. There is also a position that mixes the two approaches, namely, Michael N. Schmitt's position in Michael N. Schmitt, "The Status of Opposition Fighters in a Non-International Armed Conflict", in *Non-International Armed Conflict in the Twenty-first Century*, ed. Kenneth Watkin and Andrew J. Norris (Newport, RI: US Naval War College, 2012). This position makes use of both approaches by dividing non-state fighters into two groups: those who are members of an armed group and those who act individually. He then clearly applies the membership approach to the members of armed groups and the direct participation test to 'individuals' acting on their own.

28 Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, p. 19.

29 Colby Buzzel, a former US Army soldier in Iraq, faced the same question when, for the first time, he drove into the city of Baghdad. He posed this legal question

differently, however: 'That was really the first time that we actually drove through a densely populated area. I hate to say this because it's extremely racist, but every single fucking person there looked like a goddamn terrorist to me. Every single one of them'. In Colby Buzzell, *My War: Killing Time in Iraq* (London: Corgi Books, 2006), p. 91. See also Hays Parks and Thane Rosenbaum in, respectively, W. Hays Parks, "Special Forces' Wear of Non-Standard Uniforms", in *Issues in International Law and Military Operations*, ed. Richard B. Jaques (Newport, RI: US Naval War College, 2003) and Rosenbaum, "Hamas's Civilian Death Strategy: Gazans Shelter Terrorists and Their Weapons in Their Homes, Right Beside Sofas and Dirty Diapers".

30 Jann Kleffner uses this example; however, he does not discuss visibility criteria as the constitutive element of a target. See Kleffner, "From 'Belligerents' to 'Fighters' and Civilians Directly Participating in Hostilities — On the Principle of Distinction in Non-International Armed Conflicts One Hundred Years after the Second Hague Peace Conference".

31 Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 3, p. 11. Article 43 (2) of the API; Article 4 (1) of the GCIII.

32 Article 4 of the GCIII; Article 43 and 44 (3) of the API; also see Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 4, p. 15.

33 Article 43(2) of the API.

34 Michael Bothe et al., *New Rules for Victims of Armed Conflicts: Commentary on the Two 1977 Protocols Additional to the Geneva Conventions of 1949* (The Hague: Nijhoff, 1982), p. 243.

35 Dieter Fleck, *The Handbook of International Humanitarian Law* (Oxford: Oxford University Press, 2008), p. 81.

36 Michael N. Schmitt, "Targeting and International Humanitarian Law in Afghanistan", in *The War in Afghanistan: A Legal Analysis*, ed. Michael N. Schmitt (Newport, RI: US Naval War College, 2009), p. 316; Martijn Jurgen Keeman, "Is Formalism a Friend or Foe? Saving the Principle of Distinction by Applying Function over Form", *Journal of International Humanitarian Legal Studies* 4, no. 2 (2013), p. 357; Gary D. Solis, *The Law of Armed Conflict: International Humanitarian Law in War* (Cambridge: Cambridge University Press, 2010), p. 188.

37 Ganesh Sitaraman, "Counterinsurgency, the War on Terror, and the Laws of War", *Virginia Law Review* 95, no. 7 (2009), p. 1757; Ian Henderson, *The Contemporary Law of Targeting: Military Objectives, Proportionality and Precautions in Attack under Additional Protocol I* (Leiden: Martinus Nijhoff Publishers, 2009), p. 81.

38 Carl Clausewitz, *On War*, The Book of War (New York: Modern Library, 2000 [1832]), p. 265.

39 Clausewitz, *On War*, p. 267; Nick Mansfield, *Theorizing War: From Hobbes to Badiou* (Hampshire: Palgrave Macmillan, 2008), p. 34.

40 Clausewitz, *On War*, p. 267.

41 NATO Standardization Agency, *NATO Glossary of Terms and Definitions, AAP-6 (2010)* (22 March 2010), p. 44, in a briefer but similar definition, explains the centre of gravity as the source of power that provides moral or physical strength, freedom of action, or will to act.

42 US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, pp. 1–2.

43 Ibid., pp. 1–1 and 1–2.

44 Commander's intent is also referred to as 'commander's visualisation'. In order to avoid confusion with the discussion below of vision and material visualisation by means of military uniform, I use the term commander's intent.

45 Joint Chiefs of Staff US Department of Defense, *Joint Targeting Manual, JP 3-60*, ed. US Department of Defense (13 April 2007), p. I-5. A similar description also appears in Solis, *The Law of Armed Conflict: International Humanitarian Law in War*, p. 519.

46 US Department of Defense, *Joint Targeting Manual, JP 3-60*, p. I-1.

47 Ibid.

48 US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, p. 6-3.

49 Joint Chiefs of Staff US Department of Defense, *Department of Defense Dictionary of Military and Associated Terms, Joint Publication 1-02 (As Amended Through 15 March 2012)* (8 November 2010), p. 60, which defines 'commander's intent' as a clear and concise expression of the purpose of the operation and the desired military end state that supports mission command. The same manual, on page 237, also defines 'objective' as the clearly defined, decisive, and attainable goal toward which every operation is directed. Cf. *NATO Standardization Agency, NATO Glossary of Terms and Definitions, AAP-6 (2010),* p. 2-E-4, which defines 'end state' as the political and/or military situation to be attained at the end of an operation, which indicates that the objective has been achieved. And at page 2-O-1, the NATO Glossary of Military Terms and Definitions defines 'objective' as a clearly defined and attainable goal for a military operation, for example seizing a terrain feature, neutralizing an adversary's force or capability or achieving some other desired outcome that is essential to a commander's plan and towards which the operation is directed.

50 US Department of Defense, *Joint Targeting Manual, JP 3-60*, p. II-3.

51 US Department of Army, *Tactics in Counterinsurgency FM 3-24.2*, ed. US Department of the Army (April 2009), pp. 4–14.

52 As to the *ex ante* nature of this process, see The Public Committee against Torture in Israel v. The Government of Israel (Judgement), No. HCJ 769/02 (The Supreme Court Sitting as the High Court of Justice 11 December 2005), para. 46, where it states: 'Prior to any instances of targeting a meticulous examination and anticipation of military advantage is required'.

53 Article 52(2) of the API.

54 Article 51(5)(b) and 57 of the API; Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 14, p. 46.

55 US Department of the Navy et al., *The Commander's Handbook on the Law of Naval Operations* (July 2007), para. 8-2, p. 8-1; *US Department of Defense, Joint Targeting Manual, JP 3-60,* p. E-2.

56 Henderson, *The Contemporary Law of Targeting: Military Objectives, Proportionality and Precautions in Attack under Additional Protocol I*, p. 52; Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, para 2024.

57 The St. Petersburg Declaration on Renouncing the Use, in Times of War, of Explosive Projectiles under 400 Grams Weigh (29 November–11 December 1868), provides that: 'The only legitimate object during war is to weaken the military force of the enemy'. See also Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, para. 2218, where it states that 'military advantage can only consist in ground gained and in annihilating or weakening the enemy armed forces'.

58 Fleck, *The Handbook of International Humanitarian Law*, p. 180.

59 Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, p. 549.

60 US Department of Defense, *Conduct of the Persian Gulf War: Final Report To Congress* (April 1992), https://www.globalsecurity.org/military/library/report/1992/cpgw.pdf, p. 699.

61 See Legality of the Threat or Use of Nuclear Weapons (International Court of Justice (ICJ) 1996), para.105 (2.E), p. 44.

62 Michael N. Schmitt, "Bellum Americanum: The US View of Twenty-First-Century War and Its Possible Implications for the Law of Armed Conflict", in *The Law of Armed Conflict in the Next Millennium*, ed. Michael N. Schmitt and Leslie C. Green (Newport, RI: US Naval War College, 1998).

63 Charles J. Dunlap, "The End of Innocence: Rethinking Noncombatancy in the Post-Kosovo Era", *Strategic Review* 28 (2000), p. 10.

64 Dunlap, "The End of Innocence: Rethinking Noncombatancy in the Post-Kosovo Era", p. 14.

65 International Criminal Tribunal for the Former Yugoslavia (ICTY), *International Criminal Tribunal for the Former Yugoslavia (ICTY): Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign against the Federal Republic of Yugoslavia*, The American Society of International Law (2000), http://www.icty.org/x/file/Press/nato061300.pdf.

66 International Criminal Tribunal for the Former Yugoslavia (ICTY), *International Criminal Tribunal for the Former Yugoslavia (ICTY): Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign against the Federal Republic of Yugoslavia*, para. 76.

67 The four criteria are the wearing of distinctive signs or emblems, bearing arms openly, adherence to the laws and customs of armed conflict and being commanded by a commander responsible for his subordinates.

68 As to the other two criteria, whilst 'acting according to the laws and customs of war' is the law of armed conflict's self-referential way of securing its own application, 'being commanded by a person responsible for his subordinates' can be seen as internalisation of the organisational structure of the statised army. Moreover, it can also be argued that the hierarchical order of the statised army, in fact, has a visual aspect. This army is usually defined as a pyramid structure that possesses a material and visual manifestation not only in the battlefield, but also through material instruments of visibility such as different rankings of military uniform.

69 William H. Ferrell III, "No Shirt, No Shoes, No Status: Uniforms, Distinction, and Special Operations in International Armed Conflict", *Military Law Review* 178 (2003), p. 101.

70 Bothe et al., *New Rules for Victims of Armed Conflicts: Commentary on the Two 1977 Protocols Additional to the Geneva Conventions of 1949*, pp. 234–5.

71 Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 106, p. 384. See also Article 44(3) of the API. This obligation is referred to as a fundamental obligation of combatants in Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, p. 527.

72 Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 106, p. 385. In later chapters, I will attend to the controversy that surrounds paragraph 3 of this Article. However, suffice it to say that the controversy caused by states such as the US and Israel strengthens my argument rather than undermining it. Israel did not subscribe to this Article, for instance, because it 'could be interpreted as allowing the combatant not to distinguish himself from the civilian population, which would expose the latter to serious risks and was contrary to the spirit and to a fundamental principle of humanitarian law'. See Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, p. 389. The fundamentally important matter here is that I refer to this Article not because of its relation to the privileges of the 'status' but to the prerequisites of being targeted.

73 Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, para. 1693, p. 527.

74 Ibid., para. 1695, p. 528.

75 Article 4 (A)(6) of the GCIII. See also Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 5 and 107, pp. 18 and 386–7.

76 See Article 37 and 51 (7) of the API, Article 23 of the GCIII and Article 18 of the Fourth Geneva Convention Relative to the Protection of Civilian Persons in Time of War, (12 August 1949), (Hereafter GCIV).

77 See Gérald Cauderay, "Visibility of the Distinctive Emblem on Medical Establishments, Units, and Transports", (19 April 2010). https://www.icrc.org/eng/resources/documents/article/other/57jn4k.htm, originally published in French as Gérald Cauderay, "Visibilité Du Signe Distinctif Des Établissements, Des Formations Et Des Transports Sanitaires", *Revue Internationale de la Croix-Rouge* 72, no. 784 (August 1990).

78 Annex I to API, Regulation Concerning Identification, (Hereafter Annex I API) Chapter III Distinctive Signals, Article 7.

79 Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, para. 3931, p. 1143.

80 Article 17, Annex I of the API, Chapter VI Works and Installations Containing Dangerous Forces.

81 Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, p. 468.

82 Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*; Cauderay, "Visibility of the Distinctive Emblem on Medical Establishments, Units, and Transports".

83 Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, p. 465.

84 Ibid.

85 *Prosecutor v. Stanislav Gali*ć, No. IT-98-29-T (International Criminal Tribunal for the Former Yugoslavia (ICTY) 5 December 2003).

86 *Prosecutor v. Stanislav Gali*ć, No. IT-98-29-I (International Criminal Tribunal for the Former Yugoslavia (ICTY)), para. 4(a).

87 *Prosecutor v. Stanislav Gali*ć, para. 2.

88 Ibid., para. 4(b).

89 *Prosecutor v. Stanislav Gali*ć.

90 Daniela Kravetz, "The Protection of Civilians in War: The ICTY's Galić Case", *Leiden Journal of International Law* 17, no. 3 (September 2004), p. 522.

91 *Prosecutor v. Stanislav Gali*ć, para. 188 (320-1/ 355).

92 *Prosecutor v. Stanislav Gali*ć, para. 355.

93 Ibid., paras. 519–23.

94 Ibid., para. 278.

95 Ibid., para. 281.

96 Ibid., para. 280.

97 Ibid., para. 283.

3   Military uniform as a technology of visuality

In this chapter, I will move on to discuss the practical, societal, and legal functions of military uniform as it distinguishes civilian values, lives, and bodies from those of the combatants. In order to do that, this chapter provides an account of the military uniform as a politically and legally significant garment that combines the knowledge and vision requirements of targetability in one distinct instrument. International relation's scholars, such as Guillaume, Andersen, and Vuori, have already noted that military uniform takes part in the operation of a conflict and is co-constitutive of the battlefield by forming the social imaginaries of armed conflict.[1] In what follows, I expand on this observation with reference to the role of the military uniform in organising the fundamental act of any conflict, i.e. lethal targeting and its associated laws.

Taking the analytical framework of visuality into account, this means that military uniform is an instrument of production of legitimacy for acts of lethal violence as it materialises a regime of visual appearance along with adversarial political willpower. This chapter enriches the materialist focus and argument of the book by detailing the ways in which social, political, and visual qualities of the military uniform have historically formed the practice of war logistically as well as legally. It will be explained that the emergence and development of military uniform played a central role in institutionalisation of war as a regular practice and a regularised prerogative of the modern nations-states. In following how military uniform puts in motion a visual regime of setting differentiated values upon bodies, I will show that military uniform simultaneously affords a whole range of practical, political, and legal possibilities: it attracts recruits, trains, and disciplines bodies, embodies the political will of the nation-state and serves to distinguish targets from non-targets. This is to understand uniform not just as a soldier's work clothes, but in its significance as the performer of multiple and – at times – contradictory tasks for both the laws and the actual practice of armed conflicts. Some of these complicated functions are, it must be noted, of a contingent character. The custom of wearing a military uniform emerged within the same historical context as did the modern army structure. In seventeenth-century France, a simple military uniform appeared: a cloth of a particular colour, tied around a soldier's waist, to allow for the immediate identification of friendly and hostile forces in a chaotic battlefield.[2] Later, however, it was realised that military uniform had other uses, such as disciplining

forces and nationalising armies. It is along this trajectory that the later adoption of military uniform as a technology of distinction in LOAC can be understood for its particular ability to operate as a distinctive visual link between particular bodies and the political intentions of states.

After establishing the social, disciplinary, and visual affordances of the military uniform this chapter redescribes the international law and customs of targeting as a derivative of the various modes of (in)visibility that this technology produces in a battlefield. Describing military uniform as a legal material is to unpack the constitutive function of (visual) technologies for production categories of targetable and protected humans and subsequently the legitimation of lethal targeting.

'John, can you see yourself wearing an Army uniform?': Military uniform and recruitment

The immediate function of a 'uniform' is given in the literal meaning of the term: a uniform refers to a standardised, unified form; when materialised in clothing, a uniform creates similarities out of an otherwise dissimilar group of people, whether they be at school, work or in the military.[3] A group that dons a uniform shares an identity and purpose: one represents all, and all of them represent a single unity, functioning and behaving in coherence and order.

The shared identity, purpose, and function produced by a uniform largely depend on the visual aesthetic of sameness that a uniform creates. This sameness serves as an instrument of 'managing interpretation and perception', and it makes certain kinds of association self-evident.[4] Whatever is associated with an army – strength, honour, and order, or brutality, masculinity, and oppression – is transmitted on an aesthetic level into the interpretative register of the onlooker. The culture of the military is thus, in part, projected in a unified manner by the wearing of the military uniform.

The direction of this projection is both inwards and outwards. While the image of a uniformed soldier communicates the message of belonging to an ordered institution, the uniform itself projects into the body of its wearer the idea of belonging to a military culture and embodying all of its characteristics. The aesthetic appeal of a military uniform and its outward imagery, in turn, has the advantage of producing a desirable image that entices prospective recruits and creates an appealing, masculine military culture. A uniform's visual appeal thus plays a crucial role in forming armed conflicts even before any conflict takes place.

In an engaging study on the emergence of British khaki service uniform in the First World War, Jane Tynan shows that the simple, sharp look of this popular military uniform played a role in determining the course of the First World War. The Khaki uniform, as her study shows, helped in overcoming recruitment problems, but it also contributed to the decline in recruitment between 1914 and 1915.[5]

She reports that there was a series of successful poster visualisation campaigns in which men in khaki uniforms were glamorised as brave, patriotic, desirable, and attractive. The khaki uniform and its imagery helped to create a desirable ideal of wartime masculinity. This masculine ideal proved incredibly useful in mobilising

ordinary men and transforming them into soldiers through working on registers of nationalism, class, and bravery, as well as through the simultaneous imputation of shame and guilt to those who refused to sign up.[6]

The visual culture of men in uniform, she reports, was so spectacularly successful in drawing in recruits that eventually the supply of uniforms could not keep pace with the influx of volunteers. After a short success, this mismatch between the appeal of the imagery of the uniformed men and the supply issues resulted in a crisis of recruitment. 'The reality was that the army failed in its promise to turn out smartly dressed soldiers … the problem of inadequate supply punctured a symbolic system built around the invigorating effects of khaki'.[7]

Men who wanted the classy, sharp, and smart look of khaki uniform were given a range of differently coloured and ill-fitting replacement uniforms – a far cry from what was promised in the advertisements. Whilst these replacements may have been adequate in the short term, the loss of the khaki uniform led to a crisis of recruitment, morale, and discipline. This crisis became so severe that, eventually, the matter had to be dealt with in parliament.[8]

The story of the khaki uniform demonstrates that the visual distinction that uniforms make between military and civilians, even in times of peace, has the effect of creating an appealing social grouping that attracts individuals into joining the military culture.

Even during the eighteenth and nineteenth centuries, it was common practice for the distinctive imagery of the military uniform to be exploited as a way of attracting recruits.

> It was common for free labourers to hang about the fairs and markets in the hope of finding work. The military recruiters would take advantage of this arrangement and dressed in the finest uniforms, luring recruitees by the accompanying military music. For these ordinary men, the uniform could symbolize the potential for a far more exciting life and power that was not attainable in civilian life.[9]

Today, in what is known as 'area canvassing', army recruiters visit popular hangouts, schools, community centres, and social events. The details of this practice are elaborated in the US Army Recruiter Manual, USAREC manual 3-01.[10] Recruiters, who must 'demonstrate Army values, live the warrior ethos, and are responsible for initiating the transition of volunteers from civilian to soldier',[11] must 'always attend [recruiting] events in uniform'.[12] As an interview technique, the manual suggests that the recruiter 'take full advantage of every opportunity to ask questions that assuredly will get a positive response'. One of the suggested questions for recruiters – 'John, can you see yourself wearing an Army uniform?' – clearly aims to play on the alluring image of the military uniform.[13]

Thus, a uniform is not just a soldier's clothing; it is an instrument employed by an army for logistical purposes. It is an instrument for the 'preparation for war through transfer of the nation's potential to its armed forces in times of peace as in times of war'.[14]

Uniform as an instrument of discipline, political organisation, and legal distinction

In different contexts, military uniform has come to serve various social and political functions. One such function is to attract people to wear them through the way they exploit ideals of masculinity. Another is the formation, shaping, and training of the body and mind of the one who wears it through the disciplinary capacity of the uniform. A third is the way it functions to symbolise the centralised, unified power of the state on the battlefield.

One immediate consequence of wearing a uniform is the replacement of the order and normativity of the body with that of the uniform.[15] Military uniform imposes its own order and subordination in accordance with concepts of seniority and rank. This embedded order at times replaces some (but not all) of the societal hierarchies of civilian life, such as those of class, gender, and race, whilst at other times it reproduces them.[16] It is central for both disciplining soldiers in barracks and for forming the boundaries of lawful targeting.

From the point of view of LOAC, military uniform ascribes to its wearer an exceptional legal normativity, permitting him to carry out acts that would otherwise be strictly prohibited. By wearing a uniform legitimately, and thus becoming a combatant during an armed conflict, an individual is able lawfully to use violence in order to kill or injure, whilst exposing himself to the same violence from his enemy. The military uniform transfers its wearer into a legal state of emergency in which the prohibition on the arbitrary deprivation of life is suspended or, to be precise, conditioned.

Moreover, during an armed conflict a person wearing uniform is subject to a completely different pattern of legality and illegality than they are subject to when wearing civilian clothing. For instance, a civilian taking a direct part in hostilities, causing death and injury to the enemy, will, if captured, not enjoy the privileges of prisoner of war status, which is reserved solely for uniformed combatants. The same uniformed combatant, if engaging in warfare without his military uniform, according to Article 37 of the API, might be prosecuted for perfidy.[17] Crimes perpetrated by uniformed soldiers, such as rape, may result in their investigation as war crimes; but if the same crime were to have been committed by a civilian, the investigation would be of a different nature. The uniform is thus the link between the body and the acts of a soldier in its exposure to LOAC.

Wearing a military uniform is different from wearing other pieces of clothing. The fit of a uniform, and the behaviours befitting it, have their own detailed regulations and procedures. These regulations form a combination of manners and movements that are known as 'dress practices'.[18] The dress practices of military uniform refer to the ways in which a military uniform practises its authority upon a body and the ways in which a body practises in a uniform. This dynamic forges a relationship between an active body and an acting garment that constitutes much of the disciplinary purposes of an army.

As a piece of clothing that requires a uniquely different way of acting, military uniform has generated a large body of information, knowledge, and practices in

order to instil discipline in the bodies of soldiers. There are elaborate instructions and military manuals about how to care for and keep the uniform; how to wear the uniform; how to compose and wear insignia on a uniform; when and on what occasion to wear which uniform; and how to act, behave and present oneself when wearing a uniform.[19] Through ostentatious rituals, sequences, and orders that are integral to military discipline, the uniform becomes an instrument for regulating, controlling, shaping, and conditioning the body that wears it. Such is the extent of this control that it becomes appropriate to ask: 'do bodies wear uniforms or do uniforms wear bodies?'[20]

The regulations on the wearing of uniforms train soldiers to produce a certain form of appearance that matches the desired military culture. In this process, the visual aspects of the uniform are vital. The strength, discipline, and order of an army are judged in part on the basis of the manner in which a uniform fits, the visual appearance it produces and the movement it creates.[21] As the US Army Regulation on 'Wear and Appearance of Army Uniforms and Insignia' (AR 670-1) states:

> A neat and well-groomed appearance by all soldiers is fundamental to the Army and contributes to building the pride and esprit essential to an effective military force. A vital ingredient of the Army's strength and military effectiveness is the pride and self- discipline that American soldiers bring to their Service through a conservative military image. Pride in appearance includes soldiers' physical fitness and adherence to acceptable weight standards.[22]

In a detailed and lengthy set of regulations, AR 670-1 exercises the authority of the uniform over the body of its wearer. The private and the personal are removed from the wearer of a military uniform and are replaced by the homogenous looks and behaviours that such a uniform requires. Soldiers in uniform, for instance, are not allowed to have certain hairstyles or certain kinds of tattoo. For example, tattoos visible above the A-class uniform collar are prohibited.[23] Drinking alcohol whilst in uniform is regulated.[24] The wearing of decorative or non-decorative accessories, such as glasses, wristwatches, jewellery, religious symbols, and attire, along with their colours, shapes, and sizes, are also regulated according to the look and aesthetics of the worn uniform.[25]

Moreover, the uniform expresses its authority beyond the external regulation of its fit. There are also bodily adjustments that are imposed, not by any explicit regulations, but instead by the texture of the uniform itself. The very materiality of the uniform, its design, and knitting affect the body of its wearer. Uniforms are knitted and composed differently according to the different occasions on which they are supposed to be worn.[26] Ceremonial, mess, and combat uniforms are made differently in order to produce different bodily movements that are suited to each specific occasion. Elegance and symbolism requires one style; comfort and agility whilst operating weapons in the battlefield requires another.

As a result of the different fabrics, design, composition of pieces, and tightness of a particular uniform, not to mention the fact that wearing it means one is subject

to various orders, the body of the wearer is eventually pressured into the distinctive forms of movement that are recognisable as part of the military culture.[27]

This network of entangled material and bodily regulations locks the uniform and the body of its wearer into a relationship of force that 'shapes the physique and the bearing of [an] individual, whose autonomy conditions his docility and whose obedience transforms individual strength into collective power'.[28] Such ways of sanctioning, shaping, and manipulating the body and the limits of its activity through techniques of exerting subtle coercion with different instruments are exemplary of the practices Foucault refers to as 'disciplines'.

Discipline, as a modality of exercising power, works through micro-practices and through rather simple, seemingly innocent, and inconsequential instruments, in order to control and shape movements and posture, optimise skills and increase the power of a body.[29] Foucault explains that in the eighteenth century, as a result of the realisation that the body could be manipulated and disciplined in order to make it docile or utilisable, the body emerged as the main target and object of disciplinary power.[30] Not surprisingly, one site for developing and exploiting such techniques of producing effectual and yet domesticated and obedient bodies was within the emerging military institutions.

Prior to the emergence of the organisational drills and discipline of the modern state army, the soldier was a figure easily recognisable on account of his natural and essential traits – bodily strength, physical fitness, and a courageous attitude. The only thing he needed to learn was the basics of the profession – working with weapons and different military tactics.[31] This soldier was a heroic and individualistic kind of warrior, whose drive for glory or gain was of a personal character.[32] He was a sought-after figure.

This was an era of overt sovereign dependence on private figures, mostly organised as private armies and mercenaries. A sovereign's dependence on such forces made it quite vulnerable. Sovereigns could not be fully assured that they could trust the mercenaries to perform their actions with the utmost courage and loyalty.[33] After all, the private armies were guided by personal objectives, or were hired forces that could easily be bought off by an adversary. Moreover, finding individuals with the desired intrinsic characteristics of a warrior was not easy.

However, the development of disciplinary practices that could shape civilian bodies into soldiers afforded the sovereign independence from such private figures. A new form of production emerged that turned ordinary people into war-ready soldiers.

> By the late eighteenth century, the soldier has become something that can be made; out of a formless clay, an inapt body, the machine required can be constructed; posture is gradually corrected; a calculated constraint runs slowly through each part of the body, mastering it, making it pliable, ready at all times, turning silently into the automatism of habit; in short, one has 'got rid of the peasant' and given him the air of a soldier.[34]

In this process of replacing private individuals [the peasant] with the soldier, the uniform's disciplinary capacity proves to be a valuable instrument on several different

levels. Firstly, the requirement of wearing a uniform trains the body to pay detailed attention to instructions, even mundane ones, and to follow them at all times. To take one example, it is prohibited by the US Army to wear a backpack using its two shoulder straps whilst on post.[35] This helps to constitute a disciplined appearance, instil control, and enforce hierarchy. Secondly, the uniform traps the body, not just within military regulations or legal obligations but also within the limits and extents of certain movements and behaviours. Thirdly, traits that were once deemed essential characteristics of the warrior, such as courage, power, and pride, are systematically projected and produced – inwardly and outwardly – by the visual aspects of the uniform.

Most importantly, in particular from the perspective of the legal principle of distinction, the universal spread of the uniform was 'an outwardly visible statement that the state had brought military affairs under its direct control',[36] and that making war was now to be an activity of unified soldiers representing an organised polity that was no longer dependent on hired forces but instead was capable of organising and producing soldiers.

The introduction and imposition of uniform directly connects the body of its wearer to the organised order of a state as a distinctive unity formed around a particular political organisation of life. Through these connections, uniformed bodies are charged with representing the state's monopoly on the use of violence. It is precisely because of this symbolic and representational linkage between the body of the soldier and the state's use of violence that it is the soldiers, and only the soldiers, who constitute the will and the power of a state in the battlefield – and thus are rendered the only lawful human targets. Military uniform is a signifier of a political predisposition and contribution of force to a party to an armed conflict. The direction of this predisposition is perceptible according to the colour, pattern, and other visual indicators of this peculiar garment.

In making such a predisposition visually apparent, military uniform stabilises and solidifies the notion of the target and limits it to a recognisable group. It stabilises targets by linking a delimited group to a single polity and solidifies targets by limiting the political willpower of a state to a designated physical body. Consequently, if worn on the battlefield, military uniform produces the legal presumption of targetability.

Simply put, the fabric of the military uniform embodies all that the principle of distinction seeks to impose in terms of the use of discriminate violence. Article 4 of the GCIII lists organised forces and the subscription to a vertical line of command and hierarchy as vital criteria for combatants. Military uniform unifies, organises, and subjects individuals to such organisation and adds the order of rank and hierarchy. Article 4 of the GCIII also demands visibility from the combatant. Combatants must bear arms conspicuously and wear visible insignia. By virtue of its particular materiality, military uniform visibly distinguishes those who belong to an army from those who do not. Moreover, military uniforms signify the presence of different states on the battlefield – a requirement that is manifested in LOAC as 'belonging to the armed forces of a party to an armed conflict'.

In conclusion, and to return to the point made in the previous chapter, the military uniform is the instrument that displays the configuration of the lawful human target – 'knowledge–vision' – in a material manner. If the military uniform as a

visual technology of the principle of distinction brings the elements of knowledge and vision together in one distinctive piece of clothing, then it should be possible to redescribe norms relating to the construction of the human target exclusively through the acts and functions of the uniform. In what follows I will discuss, in detail, the process and norms through which the military uniform elaborates the requirement of vision in constituting the lawful human target of LOAC.

Laws of permitted and prohibited visibility

Military uniform produces various forms of visibility. In the first instance, a military uniform makes the willpower nexus extremely visible and as such distinguishes its wearer from the civilian population. However, the relation of the principle of distinction to military uniform immediately raises further questions. What constitutes a military uniform? When should a soldier wear a uniform? Must a soldier wear all of the parts of a uniform in order to comply with the regulation of visibility?

Even before we get to these questions, however, the very fact that the military uniform is a piece of clothing introduces more legal complexities. A military uniform can be taken off effortlessly and replaced with civilian clothing. A military uniform can also be stolen and worn by an enemy soldier in order to deceive his enemy. Through the simple act of donning new clothing, one can adopt the visual aspects of a target or a protected entity.

When a soldier wears the uniform of his adversary, he produces an illicit visibility that simultaneously renders him *in*visible. The same kind of ill-placed trust and confidence can also be achieved when a combatant changes from uniform into civilian clothing or into any form of clothing belonging to a protected group. These forms of illicit visibilities can constitute violations of LOAC, as they are forms of invisibility that disturb the visual order of the principle of distinction.

Moreover, whilst certain forms of invisibility, like wearing an enemy uniform, are disallowed, there is nevertheless a huge amount of investment in the technologies of producing camouflaged uniforms that can help the combatant to hide and blend in with various types of terrain. The camouflaged uniform is a multibillion-dollar business that, ironically, works legally towards *reducing* the visibility of an instrument whose legal *raison d'être* is the *production* of visibility.[37]

As a result, the military uniform, as much as it is an instrument of producing visibility, can also be an instrument of creating forms of invisibility. The constellation of visibilities and invisibilities produced by the uniform is, of course, regulated by LOAC. These regulations, together with the visual tendencies of LOAC explained above, fortify the operation of the principle of distinction and eventually found the visual order of LOAC.

Laws of required visibility

As I have explained, the operation of the principle of distinction is tied to an order of visibility, which primarily appears at the intersection of Article 44(3) of the API and Article 4 of the GCIII. Article 44(3) demands visual self-identification from

combatants and Article 4 mentions the wearing of visible insignia as part of the requirements imposed on combatants.

Even though the drafters of the GCIII did not find it necessary to specify in detail what constitutes a sign of visual distinguishability, it is noted that it is 'the duty of each State to take steps so that members of its armed forces can be immediately recognized as such and to see to it that they are easily distinguishable from members of the enemy armed forces or from civilians'.[38]

For regular armed forces, the wearing of military uniform traditionally fulfils this requirement of visibility. The practice of wearing uniforms by regular forces has historically been so prevalent that it is now referred to as part of customary international law.[39] For irregular forces, which traditionally do not wear military uniform, the commentary to the GCIII states that 'distinctive signs recognisable at a distance replace a uniform'.[40] In any case, the yardstick for the required visibility, however it may be created, is the material affordance of a traditional military uniform. In order to avoid imposing a uniform on irregular forces, the commentary to the GCIII says: 'In our view, the distinctive sign should be recognizable by a person at a distance not too great to permit a uniform to be recognized'.[41]

Legally acceptable uniforms

Despite all the practical utility of the military uniform for the principle of distinction, neither the Geneva Conventions nor their commentaries intend strictly to define what constitutes a military uniform.[42] The description of a military uniform is taken for granted, apparently due to its long history. However, it is possible to extract, at least in outline, the elements of attire that are required for clothing to qualify as a uniform from the elaboration of the legal commentaries on the 'fixed and distinctive signs visible from distance' requirement for irregular forces.

With regard to this requirement, the commentary to Article 4 of the GCIII considers 'items such as a cap (even though it can frequently be taken off and doesn't seem fully adequate), a coat, a shirt, an emblem or a coloured sign worn on the chest' to suffice.[43] This commentary is typically accompanied by a quotation from the ICRC commentary on Article 39 of the API, which states:

> In temperate climates it is customary for a uniform to consist of regulation headdress, jacket and trousers, or equivalent clothing (flying suits, specialist overclothes etc.). However, this is not a rule, and 'any customary uniform which clearly distinguished the member wearing it from a non-member should suffice'. Thus a cap or an armlet etc. worn in a standard way is actually equivalent to a uniform.[44]

Neither of the commentaries intends to provide an authoritative list of the items that constitute a uniform. The point, however, is that any material intervention – be it an ordinary military uniform or other pieces of clothing – must be the same for all members of an army and must visibly make a distinction between civilians and combatants.

The key element for the function of material visualisation lies in the phrase 'fixed and distinctive sign recognisable from distance' that is mentioned in Article 4A (2)(b) of GCIII. The meaning of 'fixed and distinctive' is, rather typically, left unresolved. The debate appears mainly to revolve around the meaning of the term 'fixed'. Hays Parks, exploiting the ambiguity of the term, focuses on the temporal aspect of 'a fixed visually distinctive sign' and, as such, reasons that 'fixed' does not necessarily mean permanent or constantly worn.[45]

Another view, proposed by Major William H. Ferrell III, refers to the ICRC commentary on the GCIII and the deliberations during the Council of Government Experts drafting process, during which the proposal to use the phrase 'habitually and constantly display a fixed and distinctive sign' was rejected.[46] The reason for this rejection was, firstly, to retain consistency with the language of the Hague Regulation in the use of the phrase 'fixed and distinctive'. Secondly, the drafters found 'habitually and constantly' to be redundant, although they stated that they did not wish 'to set aside this interpretation of the term "fixed" which moreover coincided with the intention of the drafters of the Regulations'.[47] Thus, this view takes 'fixed' to mean that a sign or emblem not only is shared by all members of an armed group but also is constantly worn and not conveniently removed by the combatant to blend in with the local population.[48] This opinion seems more reasonable since the specific matter of 'when' to wear a uniform or distinctive sign is dealt with elsewhere in LOAC.[49]

It is possible to deduce from the functional requirements of 'fixed and distinctive signs' that a military uniform must at least be conspicuous from a distance, elaborate enough to not be too easy to remove and, of course, uniformly shared by the members of the same armed group.

For LOAC, military uniform need not be defined or recognised by its constitutive elements or by means of a list of different pieces of clothing. Instead, military uniform is understood in terms of its essential function of serving visually to distinguish different groups from one another. As long as this function is performed, it is not necessary for a uniform to be consisting of various pieces that cover the wearer from head to toe.

In the Kassem case, the Israeli Military Court sitting in Ramallah dealt with this question of military uniform and manifested the same understanding of it. In dealing with the question of extending prisoner of war status to members of the Popular Front for the Liberation of Palestine, the court held that the defendants had sufficiently fulfilled the requirement of distinguishing themselves by wearing mottled caps and green clothes, as this was not the usual attire of the inhabitants of the area in which they were captured.[50]

As such, in certain cases, a less-than-complete uniform, or a non-traditional uniform, suffices as a legally recognised instrument of visual self-identification.[51] The fundamentally important matter here is just that there must exist a visual linkage between those who represent the willpower of an adversary. As long as this system of representation remains intact, the principle of distinction can produce lawful military targets.

It is precisely because of this order that as soon as a military uniform ceases meaningfully and effectively to act as the representational instrument of military antagonism, the wearer also ceases to be a lawful target. A clear example of a condition in which the military uniform ceases to function as a signifier of a lawful human target is the legal category of *hors de combat*.

Those who are *hors de combat* – the wounded, sick, shipwrecked or those who have surrendered – are not to be attacked. Article 41 of the API defines this category as an enemy combatant who: 'a) Is in the power of an adverse Party; b) Clearly expresses an intention to surrender or c) Has been rendered unconscious or is otherwise incapacitated by wounds or sickness, and therefore is incapable of defending himself'.[52]

Clearly, such combatants have not lost their status. What lost when a combatant becomes *hors de combat* is, rather, the capacity to carry out an intention to attack and the idea of a correlation between the uniform and its wearer as a representative of the enemy's militarised willpower. When the link between the visual distinction, enemy representation, and the foreseeability of violence is broken, the visual significances of uniform are, in effect, lost and, as such, the target is no longer lawful.

Imagine a case in which a soldier on the battlefield targets and kills a number of individuals in the distance clad in enemy uniform. According to LOAC, nothing is wrong with this action, even if, as the soldier proceeds forward, it emerges that the targeted individuals were, in fact, civilians wearing military uniform – because of the cold weather, say. From the point of view of LOAC, this is a risk the civilians took upon themselves by wearing the visually distinctive signs that signify a lawful human target, even though as civilians they are precisely not targets. The potentially deadly consequences of uniforms visual affordance and the complete methodological dependence of the principle of distinction upon this visual order is admitted in the commentary to the API:

> [A] journalist risks losing effective protection (even if he does not lose the *right* to protection to which civilians are entitled) if he closely follows a military unit engaged in action or if he gets too close to a military objective, since these are both legitimate objectives for attack. In the same vein, if he wears clothing which too closely resembles military uniform, he will incur risks of a similar nature. In all these cases he therefore acts at his own risk: in exposing himself to danger in this way he would forfeit protection *de facto*.[53]

Imagine the same civilians wearing enemy uniform because of the cold weather but suppose this time that the soldier shoots and misses. The civilians scream: 'Don't shoot! We are civilians. We wore this uniform because we are cold'. Perhaps the soldier would respond: 'Then why that uniform?' The civilians, who must find a way to convince the soldier, must either point to the better quality of the enemy uniforms compared to the one the soldier is wearing, or else argue that they did not

want to disrespect the dead body of a soldier belonging to the onlooking soldier's army. Whatever reason the civilians give eventually to persuade the soldier of their protected status, it will be a reason that, firstly, is not included in the visual order of targeting and, secondly, disrupts the knowledge–vision logic of the principle of distinction. The same could be said if the uniformed individuals in this imaginary case were, in fact, enemy soldiers holding a white flag, the universal sign of surrender.[54] Such soldiers would no longer be lawful targets, because the white flag would have added a new layer of visibility to their uniform. The flag signals a suspension of the intention to attack and of the contribution to enemy willpower that is normally signified by the military uniform, and as such, it ensures protected status for individuals who would otherwise be lawful targets. This is how LOAC orders the distinction of targets and non-targets through the deployment of the order of visibility enacted by the military uniform.

When does the law require the wearing of a uniform?

When must a soldier produce the required visibility? The answer to this question is also provided in Article 44(3) of the API. Combatants are required to meet criteria of visibility 'while they are engaged in an attack or in a military operation preparatory to an attack'. One must bear in mind that even though the main focus of Article 44(3) is guerrilla operations, this Article also applies to members of regular armed forces.[55]

The first clause, 'while they are engaged in an attack', seems clear; however, the meaning of 'military operation preparatory to an attack' is not explained and thus is open to interpretation.[56] The ICRC commentary to the API seems to take the phrase to mean 'any action carried out with a view to combat'.[57] In spite of this ambiguity, the phrase 'military operation preparatory to an attack' clearly does not mean simply 'a split second before the attack'.[58]

In this regard, Ferrell provides the most detailed reading. To give an account of the required time of visibility for a combatant, he interprets the 'operation preparatory to an attack' by connecting it to the second sentence of the Article, where another temporal phrase is used. The combatants are required to show their arms openly 'during each military engagement, and during such time as he is visible to the adversary while he is *engaged in a military deployment* preceding the launching of an attack in which he is to participate'.[59] Unlike 'military operation preparatory to an attack', the phrase 'military deployment' has a clearer meaning thanks to the broadly accepted definition proposed by the German delegation to the drafting process. Accordingly, 'military deployment preceding the launching of an attack' is taken to mean 'any movement towards the point from which an attack is to be launched'.[60] Thus, combatants are required to visually self-identify during an attack, as well as whilst preparing for an attack, which 'likely encompasses making final preparations in an assembly area before beginning an operation as well as movement to a final assembly area before commencing an attack'.[61]

Laws of permitted invisibilities

Article 44(3)

As Article 44(3) of the API proceeds, many controversial questions are raised.[62] Immediately after stating that combatants need to visually self-identify 'while they are engaged in an attack or in a military operation preparatory to an attack', the Article mentions exceptions to the rule:

> Recognizing, however, that there are situations in armed conflicts where, owing to the nature of the hostilities an armed combatant cannot so distinguish himself, he shall retain his status as a combatant, provided that, in such situations, he carries his arms openly: a) During each military engagement, and b) During such time as he is visible to the adversary while he is engaged in a military deployment preceding the launching of an attack in which he is to participate.[63]

This part of Article 44(3) appears to relax the legal requirement of visual self-identification quite radically, in that it recognises and permits certain forms of invisibility. It acknowledges exceptional situations in which the practice of visual self-identification is deemed simply unsuitable. Most importantly, the fourth paragraph of Article 44 disrupts the link between the privileges of prisoner of war status and the fundamental responsibility of combatants to distinguish themselves from civilians.

> A combatant who falls into the power of an adverse Party while failing to meet the requirements [of visual self-identification] shall forfeit his right to be a prisoner of war, but he shall, nevertheless, be given protections equivalent in all respects to those accorded to prisoners of war.[64]

Prior to Article 44(3) and 44(4), the privileges of a combatant, such as prisoner of war status, were to be granted to those who fulfilled the four requirements of Article 4 of the GCIII.[65] However, Article 44(3) and 44(4) of the API reduce the requirement of visual self-identification from the wearing of fixed and distinctive signs visible from a distance to the mere requirement to bear arms openly only during an attack or in deployment for an attack, whilst at the same time still retaining the equivalent privileges of a prisoner of war even in cases where a soldier fails to self-identify.[66]

Gary D. Solis, along with a handful of other scholars of LOAC, took issue with the alterations introduced by these articles. He argues that such a relaxation of the visual order puts the civilian population in greater danger during armed conflict.[67]

> Declaration of belligerent status is essential to the protection of the civilian population. If … a combatant can disguise himself as a civilian and be immune from the use of force against him until he opens fire, this will prejudice the legal protection of all citizens. Unless a clear line can be drawn between combatants, who fight openly, and civilians, who are to be protected, all civilians will be put at peril.[68]

Other scholars took this alteration as a legal encouragement for states to practise armed conflict without adhering to the requirement of visual self-identification for combatants.[69] If combatants who fail to distinguish themselves from civilians can continue to enjoy the rights of uniform-wearing soldiers, then no combatant in his right mind would expose himself to additional, unnecessary risk through visual self-identification.

On the opposing side of this debate are the ICRC's narrative and the commentary to the API. Members of this camp emphasise the opening line of the second sentence of Article 44(3) – '*Recognizing, however, that there are situations in armed conflicts where, owing to the nature of the hostilities*' – and insist that the relaxation of the conditions applies only in very exceptional situations.[70] These situations are 'wars of national liberation', including 'people fighting against colonial domination and alien occupation and against racist regimes in exercise of their right of self-determination'.[71] Thus, the relaxation only applies to those conditions that qualify as a 'war of national liberation', wars which are traditionally fought in an irregular manner, such as through guerrilla warfare.[72]

Moreover, paragraph 7 of Article 44 states: 'This Article is not intended to change the generally accepted practice of States with respect to the wearing of the uniform by combatants assigned to the regular, uniformed armed units of a Party to the conflict'.[73] As such, the relaxation of paragraphs 3 and 4 does not apply to regular forces, who are traditionally required to wear military uniform 'unless an exception under Article 44(3), second sentence, API is applicable'.[74]

Camouflage

Any act of producing visibility relies on the corresponding forms of invisibility. On 5 February 2003, the then US Secretary of State Colin Powell was making his case for the invasion of Iraq at the UN headquarters in New York. To make this case, Powell led the world through a PowerPoint presentation filled with photographs taken by satellites, showing the world what they would not have seen otherwise and asking them to see what he wanted them to see.[75] Ironically, before Powell was scheduled to reveal these secrets – making the invisibles visible – UN officials were engaged in the contrary – in producing invisibilities. On the morning Powell addressed the world, UN officials covered the full-size tapestry replica of Picasso's famous anti-war painting *Guernica* with a curtain, on the wonderful pretext of 'providing a less distracting backdrop for film and photographs'.[76]

This was not the only time that modern art had been linked so directly to war. As a well-known anecdote has it, when the giants of Cubism – Picasso and Braque – saw camouflaged tanks and ships for the first time (see Figure 3.1), Picasso told Braque: 'We are the ones who did that'.[77]

The advancement of military camouflage is closely bound up with twentieth-century art movements. The question of which came first – the destruction brought about by war, or the deconstruction of fields of perception and vision brought about by modern art – is not of importance here. The important point is that military camouflage is, just like cubism, a form of deconstruction of the material world, one that
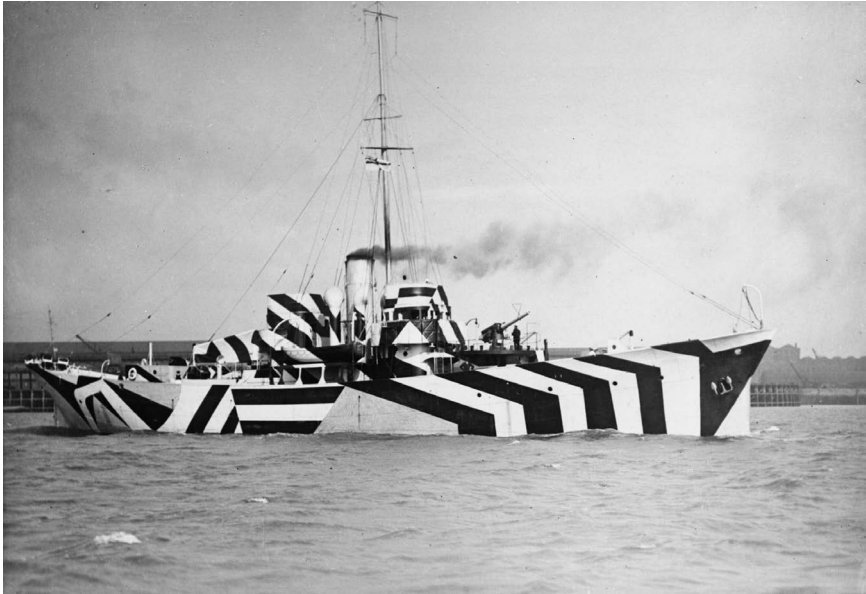
Figure 3.1 Gunboat HMS Kildangan in dazzle camouflage, 1918.

Source: ©Imperial War Museum (Q 43387).

is printed and painted upon weapons and fabrics in order to manipulate vision and produce deception and invisibility.

An elaborate military uniform, with its unusual patterns and colours, inevitably, and at a glance, separates its wearer from others, whether in times of peace or war. In wartime, such visibility obviously increases the risk of detection and targeting. The act of targeting, in turn, consists of observation, surveillance, and reconnaissance. Training someone to target is also training him to observe, detect, and aim. This dynamic of seeing and targeting, being seen and being targeted, simplifies the soldier's task. To survive as a soldier, he needs to target the enemy first, which means detecting the enemy before they detect him. A soldier needs not only to see and observe whilst hiding but also to have in-depth knowledge of the techniques and instruments that his enemy may use in order to hide. '[T]raining in concealment [is] inseparable from training in observation: the practice of one invariably demand[s] knowledge of the other'.[78] The art of concealment and camouflage emerges from this dynamic. Thus, it should be of no surprise that the history of deception and concealment in war runs parallel with the history of the advancement of wartime technologies of vision, surveillance, and observation.

The First World War and the introduction of aerial warfare drastically changed wartime surveillance and reconnaissance, to the extent that one commentator has referred to it as 'the most optical war yet'.[79] In exploiting the air, the First World War formed an indispensable relationship with the newly emerging and rapidly advancing political technologies of vision, centred around aerial reconnaissance,

aerial photography, and industrialised cartography.[80] This, in turn, transformed the battlefield into what Virilio refers to as a 'field of perception'. As Gregory would put it, the battlefield was transformed into a highly regulated, quasi-mathematical space for war that became highly dependent on geospatial intelligence.[81]

Aerial surveillance extended the possibility of seeing and exposing the enemy beyond the front line and beyond the immediate and limited capacities of human vision. Such an unprecedented view could then be translated into increased accuracy of artillery attacks and increased possibilities of targeting, which all meant an unprecedented level of vulnerability for the enemy. Given this environment, it seems inevitable that a new strategy of defence anchored in concealment and invisibility would have arisen.

During the First World War, at the same time that the armies were developing their photographic gaze over the battlefield, they were also recruiting biologists, zoologists, and artists in order to devise effective camouflage techniques. Throughout the First and Second World Wars, the British Army established the basis of its modern military camouflage by recruiting and collaborating with artists such as Solomon J. Solomon and Norman Wilkinson and zoologists and biologists such as Graham Kerr and Hugh Cott.[82] The American artist and naturalist Abbott Thayer and his study of animal colouration also proved central to the establishment of the principles of modern camouflage, which involve a synthesis of various skills and kinds of expertise, ranging from cubism to natural ecology, zoology, and biology.[83]

The science of zoology was particularly important in the development of modern camouflage. The way certain animals are able to blend into the surrounding environment, in particular through the kinds of starkly contrasting colouration and patterns one finds in zebras, leopards, and giraffes, served as an inspiration for the creation of modern camouflage, which aims in various ways to adopt, mimic and transfer the terrain's background onto a surface – be it the surface of a uniform, a weapon, or the geographical terrain itself.[84]

Contemporary digitalised and pixelated camouflage is an advance in this technology. By focusing on a mixture of artistic intervention and scientific calculation, digitalised camouflage aims not just to blend its wearer into the background by using the most prevalent colours of the environment in which a soldier operates but also, as Guy Cramer explains,[85] to incorporate the neurophysiology of the human eye in order to deceive the brain and eye into 'interpret[ing] patterns as part of the background'.[86]

Principally, camouflage is the representation of a background as a surface or foreground, which amounts to the concealment of certain objects and movements. LOAC refers to such forms of manufactured invisibility and deception as permitted 'ruses of war', which mislead the enemy or lead him to act recklessly. Camouflage is not understood as contradicting the visual logic of the principle of distinction. Article 37(2) of the API reads:

> Ruses of war are not prohibited. Such ruses are acts which are intended to mislead an adversary or to induce him to act recklessly but which infringe

no rule of international law applicable in armed conflict and which are not perfidious because they do not invite the confidence of an adversary with respect to protection under that law. The following are examples of such ruses: the use of camouflage, decoys, mock operations and misinformation.[87]

Bearing in mind the insistence of LOAC on the visual self-identification of combatants, it seems flatly contradictory that the very instrument which is meant to produce combatant visibility, i.e. military uniform, can be legally manipulated so as to blend in with the environment, thus becoming a means of producing *in*visibility. How can we make sense of this invisibility, given that military uniform is an instrument of visualisation? For some scholars, the contradictory development of camouflage indicates a turning point: a shift from institutionalised armed conflict, from making war, to an individualised form of conflict, a kind of hunting. These commentators tend not to see military uniform as an instrument that reveals the visual logic of targeting, but rather to see the development of camouflaged uniform as an indication of a continuous and steadily escalating use of invisibility in practising violence. Guillaume, Andersen, and Vuori argue that the more invisible combatants become, the deeper the change in the social imaginary of war, in the battlefield and its required modes of action, which in turn makes it harder to differentiate between war and other forms of organised violence.[88] In other words, for them, it is the emergence of camouflage that affects the shift in how war is conducted.

By contrast, I see the lack of distinction between civilian and combatant, or the so-called move from war to individualised hunting, as not exactly due to the development of camouflage but rather as related to the question of vision as such. Because uniform possesses a different materiality from civilian clothing – a materiality intensified by its social, political, and legal functions – it enacts a different form of visibility and differing practices of sense-making, regardless of whether it is camouflaged or not.

The changing social imaginary of war, changes in the battlefield and changes in the battlefield's modes of action are not novelties brought about by camouflage. Military uniform *itself*, camouflaged or not, produces different meanings, modes of action, and norms in different contexts and in relation to the other constitutive elements of the battlefield. The uniform can serve as a technology of discriminate targeting only as long as such discriminate targeting is desired in the first place.

Further, we have to take into consideration the physical environment surrounding the camouflaged military uniform as contributing to its utility. For instance, the use of woodland camouflage in a predominantly desert terrain or desert camouflage in an urban battlefield can hardly explain a turn to hunt rather than traditional war and targeting.[89]

Guillaume, Andersen, and Vuori are right to relate the changing modes of action and targeting in contemporary armed conflict to visual practices. Yet they go wrong when they identify these practices *just* with the history of colouring and camouflage, thus reducing military uniform to the latter.

It is true that camouflage produces a certain level of invisibility and, as such, imposes different modes of targeting, invites the invention of technologies of

surveillance, and introduces new and intrusive methods and technologies of seeing into the targeting process. And consequently, it reinvents – even if only to a limited extent – the conduct of warfare. But, it does not indicate a break with the order of visibility that organises targeting as a practice and a legal category. The most advanced and inconspicuous camouflage is still a part of the visuality of the battlefield.

The reason that LOAC can accommodate camouflage as part of the legal logic of armed conflict is that, at bottom, a camouflaged uniform is still a *uniform*. As such, it still has all the legal and political affordances that one would expect of a uniform woven into it. Camouflage does not deceive about the linkage to the sovereign's willpower, but it does deceive about the visual markers of the linkage to the sovereign's willpower. A camouflaged uniform can at best hide and conceal the physical body of the soldier and skew the enemy's interpretation of what he sees; what camouflage cannot conceal is the unavoidable, visible association of the uniformed soldier with the enemy's political antagonism. That is, while camouflage reduces visibility, it cannot conceal the link between what is seen and the required knowledge of targetability. Once spotted, a camouflaged uniform is no different from a non-camouflaged uniform: the distinct pattern and colour of this attire, even if obscure, still immediately enact the visuality of a lawful target. The link between camouflaged uniform, the body of its wearer and a state army is taken as self-evident and is made in a split second. No amount of camouflage can break this link. The only thing that can break it is the non-use of uniform, which separates vision from the sense that is to be made of the sighted object. It is only the absence of the military uniform as such that amounts to the loss of vision as it structures targeting and LOAC. As far as the invisibility of camouflage is concerned, Article 37(2) of the API puts it clearly: camouflage 'does not invite the confidence of an adversary with respect to protection under the law', and as such this form of invisibility is permitted.

Laws of prohibited visibility

On 2 April 2014, less than a week before the Afghan presidential election, a Taliban suicide bomber disguised in an Afghan police uniform killed six police officers and left four more wounded just outside the Ministry of Interior Affairs building in Kabul.[90] Exploiting the colours of the uniform, the suicide bomber easily passed through three layers of security in what was allegedly the safest area of Kabul and detonated his bomb.[91]

Similar attacks occurred in Iraq during the national election in April 2014. By the end of April, an estimated fifty people were killed in suicide attacks outside polling stations and at political gatherings.[92] The strategy for the Iraqi suicide bombers was of a similar nature to those in Afghanistan: the hostile militant disguises himself in a police or army uniform, infiltrates a crowd or an official building, and detonates a bomb.

In addition to these examples, there have been increasing instances of so-called 'green-on-blue attacks', which follow the same dynamic of exploiting the friendly

and trusted colours of the military or police uniform. 'Green-on-blue attacks' are attacks on the International Security Assistance Forces (ISAF) by their counterparts in the Afghan security forces. The colour-coded language of green and blue does not refer to the colours of the military uniforms, but rather to the colours that ISAF forces use in distinguishing different forces on maps: blue refers to the friendly forces, red to hostile, yellow to unknown, and green to neutral forces – in this case, Afghan national security forces.[93]

For the simple reason that in most cases the perpetrators either kill themselves in the process, or are gunned down, the motivations behind green-on-blue attacks are not fully known. Whether it is personal animosity, enemy infiltration or a combination of the two that generates these attacks is unclear and is to some extent a confidential matter.[94] One NATO commander attributed 90 per cent of green-on-blue attacks to hostility caused by personal or cultural friction between the Afghans and their ISAF counterparts and credited enemy infiltration of the Afghan national security forces with the remaining 10 per cent.[95] By contrast, ISAF Commander General John Allen claimed that the Taliban directly or indirectly caused 25 per cent of the green-on-blue attacks, either through the infiltration or coercion of Afghan forces.[96]

The sharp increase of such attacks since 2011 (coinciding with Obama's announcement of withdrawal from Afghanistan by the end of 2014), the regular endorsement of these attacks by the Taliban and the official call for infiltration by the Taliban's leaders suggest that the insurgent forces favour such a tactic as an efficient, even a guaranteed, means of harming the adversary.[97]

Quite apart from the debate about the numbers, any green-on-blue attacks that are undoubtedly conducted by enemy forces (10 or 25 per cent of all such attacks) exploit the trust generated by a certain uniform's colour in just the same way as did the suicide bombers in the above examples. In this way, it can be said that green-on-blue attacks are a systematic, long-term, and effective manipulation of the visual order of LOAC. The enemy militants make their enmity and hostile intentions invisible by simply adopting the visibility of a friendly force in order to achieve, in the long run, the close proximity required for targeting and inflicting extensive harm that they otherwise would lack. When the very logic of protection and of lawful targeting is organised around a visual order, then what tactic could be better for the asymmetrically weaker insurgents than exploiting the enemy's trust by simply making themselves look like them?

In the midst of this systematic manipulation of visibilities by the insurgents, it would be understandable, but wrong, to attribute all instances of producing false visibility to the insurgent forces or other non-state actors. The strategic and tactical advantages gained by operating while invisible are so effective that state armies, too, engage in such conduct, regardless of its legality or illegality.[98]

Since I am focused on the material conditions of visibility in terms of the legal requirement of visual self-identification through military uniforms and distinctive insignia, I here adduce examples of cases in which state forces adopt the same practices of invisibility as mentioned above with reference to insurgent forces. The

most iconic example is that of US Army Special Operations Forces adopting civilian clothing and Afghan dress at certain points during their operation in Afghanistan. One instance that generated legal debate was a report from *Médecins Sans Frontières* in Kandahar in 2002. In this report, the NGO staff stated that they had repeatedly observed international coalition forces operating in civilian clothes with or without concealed weapons.[99] Others mentioned cases in which the US soldiers were operating whilst wearing jeans, T-shirts, and baseball caps.

On other occasions, US Special Operation Forces operated alongside the Afghan Northern Alliance while dressed in Afghan civilian attire.[100] In a more detailed admission of such practices, Petty Officer Marcus Luttrell, a US Navy SEAL, not only confirmed the wearing of civilian clothes but also spoke of other ways in which they sought to mimic the appearance of the Afghan civilians: 'Each one of us had grown a beard in order to look more like Afghan fighters. It was important for us to appear non-military, to not stand out in a crowd'.[101]

Another example is the hostage rescue operation of the Colombian Army, Operation Jaque, conducted against FARC on 2 July 2008. This internationally celebrated and commended operation involved the rescue of fifteen hostages from FARC insurgents, among them the former Colombian presidential candidate Ingrid Betancourt, who had been kidnapped six years earlier.[102] The operation was successfully conducted with no civilian casualties.

In this unprecedented operation, the Colombian military and intelligence forces posed as civilian members of an imaginary international humanitarian NGO, on the pretext of acting as facilitators sent by the new FARC chief Alfonso Cano in order to move the hostages to a new camp. The Colombian forces flew into the rebels' hideout with a military helicopter painted white and bearing the emblem of the fictitious NGO. For the purposes of this operation, the Colombian soldiers dressed in civilian clothing, some wearing Che Guevara T-shirts, some wearing emblems resembling that of the ICRC. The operation ultimately succeeded in rescuing the hostages. In the process of doing so, the Colombian forces also captured two of the FARC members, including the commander of the camp, Gerardo Aguilar Ramirez.[103]

This meticulously planned operation raises questions for LOAC, since the Government of Colombia has been in an ongoing armed conflict with FARC rebels for the last couple of decades.[104] More importantly, this operation was conducted whilst the military and combatant forces of the Colombian Army operated without visually identifying themselves as members of the armed forces, instead bearing emblems and signs of a fictitious humanitarian NGO.

All the aforementioned cases – the Taliban suicide bombers wearing police uniforms, the American Special Forces wearing civilian and Afghan clothing, or the Colombian soldiers faking the status of NGO workers – are operations that principally manipulate the visual order of LOAC in order to gain a tactical advantage over the enemy.

In terms of the military strategy adopted, these cases are equivalent – even if they each give rise to differing views about their implications from the standpoint

of LOAC. The insurgents or the state army soldiers in these cases can successfully operate because of breaking the visual order of LOAC. This, in turn, afforded them a proximity to the enemy, disrupted the connection between their visibility and their true association to a specific party to the conflict, and at times produced a misplaced confidence about their supposed protected or friendly status. The upshot is that they were able to capture, kill, or injure the adversary. These practices are all about hiding the actual status of an individual or, in other words, making the soldier's status invisible by concealing him with another visual order of appearance, to which the soldier himself does not, in fact, belong.

LOAC relates in various ways the above cases. They are either classed as a prohibited act of perfidy or as specifically prohibited acts that violate the principle of good faith. All these separate prohibitions, to be discussed below, are yet further rules within the visual order of being a lawful human target that pulls together the principle of distinction.

The prohibition of perfidy

This legal prohibition concerns forms of visibility that 'invite the trust and confidence of an adversary to lead him to believe that he is entitled to, or is obliged to accord, protection under the rules of international law applicable in armed conflict, with intent to betray that confidence, that is to kill, capture or injure the adversary'.[105] Prohibition of perfidy holds the status of a customary international law of armed conflict and as such is applicable in both IAC and NIAC.[106] Moreover, since acts of perfidy seriously undermine the protection of the civilian population, they can constitute grave breaches of LOAC under Article 85 of the API if they involve killing or seriously injuring enemy forces. Under the Rome Statute – Article 8(2) (b)(xi) and Article 8(2)(e)(ix) – to 'kill or wound treacherously a combatant adversary' in either IAC or NIAC amounts to a war crime. The following are some examples of perfidy mentioned in Article 37(1) of the API:

a The feigning of an intent to negotiate under a flag of truce or of a surrender;
b The feigning of an incapacitation by wounds or sickness;
c The feigning of civilian, non-combatant status; and
d The feigning of protected status by the use of signs, emblems, or uniforms of the United Nations or of neutral or other States not Parties to the conflict.[107]

The CIHL takes 'the invitation to obtain and then breach the adversary's confidence, i.e., an abuse of good faith' as the essence of the act of perfidy.[108] As a result, the constitutive elements of perfidy are (a) inviting the confidence of the enemy in one's protected status, (b) intending to breach that confidence, and (c) breaching that confidence by killing, injuring, or capturing the enemy.[109] One point of clarification is that if perfidious acts result in the death or serious injury of the enemy, they constitute a grave breach of LOAC, but if they result only in capture, it is a violation of LOAC.[110]

Moreover, the breach of the confidence and trust of the enemy, i.e. the intention to kill, injure or capture, separates perfidy from any other improper way of exploiting the enemy's confidence. For instance, combatants who wear civilian clothing whilst engaging in combat are acting perfidiously. But the mere wearing of civilian clothing, without engaging in an attack, does not amount to perfidy but instead to a loss of combatant status.[111] Operating (but not attacking) whilst under civilian cover, which results in the loss of the privileges of combatant status, implies the same legal conditions as apply to categories such as spies and saboteurs.[112]

The underlying rationale of the prohibition of perfidy is that there is a 'modicum of mutual trust which must exist even between enemies'.[113] This degree of trust is usually based on the immediate perception of particular organised and ordered visual signals. A combatant, respecting the laws and customs of armed conflict, does not target an adversary carrying a white flag or an individual wearing civilian clothes; he simply trusts that such visibilities signal no connection to the enemy's willpower and its potentially lethal means. If this visually based trust is repeatedly abused, then combatants will find it very difficult to apply the principle of distinction in reality, for attacks may or may not emerge from sources that would otherwise have seemed trustworthy, such as individuals clad in civilian clothes.

In addition to the above, and according to Article 38(1) of the API – again a customary rule (rule 59 CIHL) of international humanitarian law (IHL) applicable in both IAC and NIAC – the same prohibition exists with regard to the improper use of the distinctive emblem of the Red Cross; other emblems, signs, and signals that are listed in the Geneva Conventions; and other internationally recognised protective emblems, signs or signals.[114] Perfidious use of these emblems, signs, and signals may also amount to grave breaches of LOAC if they result in the death or serious injury of the enemy.[115]

To return to the Colombian hostage rescue operation: on the practical level, a simple manipulation of the material order of visibility made it possible for the complicated rescue operation to succeed without producing even a single casualty, something that would have been practically impossible if it had been conducted through the traditional visual order of the armed forces.

With respect to the legal assessment of the case, we can now appreciate the delicate line between legal prohibition and permission that results from switching from one order of visibility to another. It is important to recall that in the operation, the Colombian forces posed as an imaginary humanitarian NGO, wearing civilian clothing and using certain emblems, signs, and signals – for instance, the ICRC emblem and a helicopter painted in white – and managed to rescue the hostages and capture two FARC members.

If the operation was concluded without the capture of the FARC insurgents or was conducted without the use of protected emblems and signs but just on the pretext that the Colombian forces were a humanitarian NGO, then one could argue that this example was a textbook case of an army making use of the permissible ruses of war.[116] Recall that ruses of war, such as using camouflage, decoys, mock operations, etc., are permissible activities that involve misleading the adversary

and inducing them to act recklessly, but without breaching any rules of LOAC. However, the case, in fact, involved both the prohibited use of the ICRC emblem and an exercise of force by a party to a conflict – capturing the FARC members – and, as such, it falls into the category of prohibited perfidy.[117]

The delicate line between permitted and prohibited invisibilities can now be explained. The substantial difference between perfidious forms of invisibility and permitted forms of invisibility lies within the object that is made invisible in each of these instances.

Camouflage reduces the visibility, or deceives the eye into not seeing the physical body of a uniformed combatant. However, as soon as this combatant is spotted there is no doubt about his status as a lawful target. In other words, the linkage between vision and knowledge remains unchanged in these cases.

By contrast, a combatant feigning civilian status or abusing protected signs and emblems is, physically speaking, quite visible – indeed, he needs to be if he is to produce the desired confidence in his enemy. What he makes invisible underneath the feigned clothes or signs is his association to an adversarial willpower and, more importantly, the intention to materialise that willpower by killing, injuring, or capturing.

In camouflage, the visual deception facilitates the later exercise of the violent willpower of a party to the conflict; but in perfidy, the visual deception is inseparable from such an exercise of willpower. The same pattern of legal assessment is also applicable to the case involving US soldiers wearing civilian and Afghan clothing.[118]

Use of the enemy uniform

The legal assessment of the green-on-blue attacks brings into play another rule of LOAC that concerns the visual order produced by materiality of the military uniform. Article 39(2) of the API prohibits the use of 'the flags or military emblems, insignia or uniforms of adverse Parties while engaging in attacks or in order to shield, favour, protect or impede military operations'.[119] Such practices, if they result in the death or serious injury of individuals, constitute war crimes under the Statute of the International Criminal Court.[120]

The commentary to the API mentions that this prohibition also covers the preparatory stages of an attack.[121] Gary D. Solis takes '*while engaging in attacks or in order to shield, favour, protect or impede military operations*' even more broadly to prohibit the use of enemy uniform in effectively any circumstances.[122] His view appears to find support in the Swedish IHL manual.

The Swedish IHL manual recalls the debates during the diplomatic conference of 1974–1977, in which the great military powers were aiming to retain the possibility of making use of enemy uniform – much to the objection of the smaller states. The manual goes on to assert that the current prohibition accommodates the position of the smaller states. Furthermore, it emphasises the importance of maintaining the direct relation between visibility and knowledge of hostility by stating that, while the prohibition 'can be interpreted to mean that enemy uniform

may be used only as personal protection, for example under extreme weather conditions', in fact, it 'may never be used in connection with any type of military operation'.[123]

However, other states, such as Belgium, the United States, and the United Kingdom, are not so restrictive, and envisage uses of the enemy uniform that may fall within the permitted ruses of war.[124] What is agreed is that there is a prohibition on engaging in an attack whilst wearing the enemy's uniform – as, for instance, in those green-on-blue attacks that were the result of enemy infiltration. Whether this constitutes perfidy is, again, a matter of dispute.

Exploiting the visual aspects of the enemy's uniform certainly invites a level of trust and confidence – at times, even more than civilian clothing. This is certainly the case in insurgencies in which insurgents are known to be launching attacks from within civilian areas. However, the CIHL is reluctant to describe the improper uses of the enemy uniform as clear-cut cases of perfidy. It states that it is not sure how using the enemy uniform can generate specific protection, even though it does invite confidence.[125] As such, although wearing the enemy uniform is prohibited and constitutes a violation of LOAC and a breach of good faith, it does not, in the strictest sense of the word, amount to perfidy.[126]

In contrast to this position, one might argue that during an armed conflict, where exceptional risks and threats to life are integral to the combatant status, the appearance of belonging to the same army effectively invites protection, for which reason some armies take the wearing of the enemy uniform to be a perfidious action.[127] Solis is of the same view – namely, that launching attacks while wearing the uniform of the enemy constitutes perfidy.[128]

The rise of green-on-blue attacks certainly increases distrust amongst forces that are fighting alongside one another. However, as mentioned above, perfidy is prohibited as it endangers civilian life, and it endangers civilian life because it disturbs the linkage of vision and knowledge and is a manipulation of a protected visibility. A militant attacking whilst wearing civilian attire makes the knowledge of the peaceableness of civilians more doubtful, and as such undermines an otherwise trusted visibility. But a uniformed combatant who dons the enemy uniform does not cast doubt upon the knowledge of peaceableness embodied in civilian attire, but rather upon the connection between a particular uniform and the willpower of the adversary that it represents. A Taliban soldier who dons the uniform of the Afghan National Forces with the aim of attacking ISAF soldiers may very well be mistakenly assumed to be an enemy target by other Taliban forces and gunned down. The aim in wearing the enemy uniform is to produce trust. From the enemy's position, the uniform must still be productive of the knowledge–vision composite if the ruse is to work. For that reason, it is more consistent with the overarching visual order of the principle of distinction to regard such practices merely as violations of LOAC and not as perfidy.

Once we examine laws of targeting from the standpoint of its technology of visualisation, then protected categories such as civilians and combatant appear as statuses emanating from framing within laws' knowledge–vision composite. The primary function of the principle of distinction and its associated legal norms is not

to produce these categories but instead to legally acknowledge and preserve this visual order or legitimation of lethal force. In other words, understanding LOAC for the standpoint of its materiality then reveals the principle of distinction as a modality of visuality.

Notes

1 Xavier Guillaume, Rune S. Andersen, and Juha A. Vuori, "Paint it Black: Colours and the Social Meaning of the Battlefield", *European Journal of International Relations* (8 April 2015), p. 9.
2 Jennifer Craik, "The Cultural Politics of the Uniform", *Fashion Theory: The Journal of Dress, Body and Culture* 7, no. 2 (2003), p. 131.
3 Toni Pfanner, "Military Uniforms and the Law of War", *International Review of the Red Cross* 86, no. 853 (2004), p. 93.
4 See Sharon Peoples, "Embodying the Military: Uniform", *Critical Studies in Men's Fashion* 1, no. 1 (2014).
5 Jane Tynan, *British Army Uniform and the First World War: Men in Khaki* (Basingstoke: Palgrave Macmillan, 2013).
6 Ibid., p. 29.
7 Ibid., pp. 46–7 and 50. This is not to say that mere attractiveness draws recruits or lack of it result crisis of recruitment. Of course, there are many factors playing in why individuals are attracted or discouraged from participating in wars. The point here is to highlight the undeniable social and cultural affordances of military uniform for logistics of war.
8 Tynan, *British Army Uniform and the First World War: Men in Khaki*, p. 50.
9 Peoples, "Embodying the Military: Uniform", p. 17.
10 US Army Recruiting Command Headquarters, *Recruiter Handbook: USAREC Manual 3-01* (Fort Knox: Kentucky, 22 November 2011), p. 2-2.
11 Ibid., p. 4-2.
12 Ibid., p. 6-2.
13 Ibid., p. B-9.
14 Virilio and Lotringer, *Pure War*, p. 32.
15 Guillaume, Andersen, and Vuori, "Paint it Black: Colours and the Social Meaning of the Battlefield", p. 8.
16 For instance, see Tynan, *British Army Uniform and the First World War: Men in Khaki*, pp. 130–57, where she discusses the racialisation of, among others, the Indian and the black soldiers in the British Army during the Second World War through various uses of the military uniform.
17 Article 37 of the API.
18 Peoples, "Embodying the Military: Uniform", pp. 8 and 11.
19 For regulations of the fit of uniform, see US Department of Army, *Fitting of Uniforms and Footwear, Technical Manual 10-227* (30 December 2000).
20 Craik, "The Cultural Politics of the Uniform", p. 129.
21 US Department of Army, *Uniform and Insignia: Wear and Appearance of Army Uniforms and Insignia, Army Regulation AR 670-1* (3 February 2005), p. 2.
22 US Department of Army, *Uniform and Insignia: Wear and Appearance of Army Uniforms and Insignia, Army Regulation AR 670-1*.
23 Ibid., p. 5.
24 Ibid., p. 17.
25 Ibid., pp. 2, 3 and 9.
26 See US Department of Army, *Fitting of Uniforms and Footwear, Technical Manual 10-227*.
27 Peoples, "Embodying the Military: Uniform", p. 11.

28 Daniel Roche, *The Culture of Clothing: Dress and Fashion in the Ancien Regime* (Cambridge: Cambridge University Press, 1996), pp. 228–9, quoted in Craik, "The Cultural Politics of the Uniform", p. 132.
29 Michel Foucault, *Discipline and Punish: The Birth of the Prison* (New York: Vintage Books, 1995).
30 Ibid., p. 136.
31 Ibid., p. 135.
32 Alain Badiou, *Philosophy for Militants*, trans. Bruno Bosteels (London: Verso, 2012), p. 46.
33 Herfried Münkler, *The New Wars* (Oxford: Polity, 2004), pp. 55–61.
34 Foucault, *Discipline and Punish: The Birth of the Prison*, p. 135.
35 Buzzell, *My War: Killing Time in Iraq*, p. 33.
36 Münkler, *The New Wars*, p. 55.
37 For example, within an eight-year time period the US Army had invested 5 billion dollars in the production of a universal camouflage pattern that can function in different terrains, such as desert, urban battlefield, woodland, and jungle. For more information on this project, see Caitlin Dickson, "The Army's $5 Billion New Uniform Already Being Replaced", (14 October 2013). http://www.thedailybeast.com/the-hero-project/articles/2013/10/14/the-army-s-5-billion-new-uniform-already-being-replaced.html.
38 Jean S. Pictet et al., eds., *Commentary on the Third Geneva Convention Relative to the Treatment of Prisoners of War* (Geneva: International Committee of the Red Cross, 1960), p. 52.
39 Fleck, *The Handbook of International Humanitarian Law*, p. 90.
40 Pictet et al., *Commentary on the Third Geneva Convention Relative to the Treatment of Prisoners of War*, p. 59.
41 Ibid., p. 60.
42 Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, p. 468.
43 Pictet et al., *Commentary on the Third Geneva Convention Relative to the Treatment of Prisoners of War*, p. 60.
44 Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, p. 468.
45 Parks, "Special Forces' Wear of Non-Standard Uniforms", p. 79.
46 Ferrell III, "No Shirt, No Shoes, No Status: Uniforms, Distinction, and Special Operations in International Armed Conflict", p. 106.
47 Pictet et al., *Commentary on the Third Geneva Convention Relative to the Treatment of Prisoners of War*, p. 60.
48 Ferrell III, "No Shirt, No Shoes, No Status: Uniforms, Distinction, and Special Operations in International Armed Conflict", p. 107.
49 Hays Parks' opinion on this matter should be seen in the context of his attempt to justify the use of what he calls 'un-standard uniform' by US forces in Afghanistan.
50 Military Prosecutor v. Omar Mahmud Kassem and Others (Israeli Military Court sitting in Ramallah 13 April 1969), p. 386.
51 US Department of the Air Force, "The Conduct of Armed Conflict and Air Operations, US Air Force Pamphlet 110–31 International Law", (1976), para. 3, as quoted in Pfanner, "Military Uniforms and the Law of War", p. 107.
52 Article 41 of the API; Article 23(c) Regulations Annex to The Hague Convention (IV) Respecting the Laws and Customs of War on Land and Its Annex: Regulations Concerning the Laws and Customs of War on Land (18 October 1907).
53 Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, p. 922.
54 Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 47, p. 168. Other visual signs of surrender include putting down one's weapon and raising both hands.

55 Ferrell III, "No Shirt, No Shoes, No Status: Uniforms, Distinction, and Special Operations in International Armed Conflict", p. 110; Bothe et al., *New Rules for Victims of Armed Conflicts: Commentary on the Two 1977 Protocols Additional to the Geneva Conventions of 1949*, pp. 251–2; Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, p. 527.

56 Solis, *The Law of Armed Conflict: International Humanitarian Law in War*, p. 126.

57 Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, p. 527.

58 Hans Blix quoted in Bothe et al., *New Rules for Victims of Armed Conflicts: Commentary on the Two 1977 Protocols Additional to the Geneva Conventions of 1949*, p. 254.

59 Article 44(3) of the API.

60 Fleck, *The Handbook of International Humanitarian Law*, p. 92; Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 106, p. 388.

61 Ferrell III, "No Shirt, No Shoes, No Status: Uniforms, Distinction, and Special Operations in International Armed Conflict", p. 113.

62 Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, para. 1684.

63 Article 44(3) of the API.

64 Article 44(4) of the API.

65 Prior to Article 4 of the GCIII, these requirements were also mentioned in Article 1 Regulations, Annex: The Hague Convention (IV) Respecting the Laws and Customs of War on Land and Its Annex: Regulations Concerning the Laws and Customs of War on Land (18 October 1907).

66 Solis, *The Law of Armed Conflict: International Humanitarian Law in War*, p. 126.

67 In raising his objection, Solis (in Solis, *The Law of Armed Conflict: International Humanitarian Law in War*) refers to Richard R. Baxter, "So-Called Unprivileged Belligerency: Spies, Guerrillas, and Saboteurs", *British Year Book of International Law* 28 (1951); Philip Sutter, "The Continuing Role for Belligerent Reprisals", *Journal of Conflict & Security Law* 13, no. 1 (2008); Abraham D. Sofaer, "The US Decision Not to Ratify Protocol I to the Geneva Conventions on the Protection of War Victims", *American Journal of International Law* 82, no. 4 (October 1988). For more on this, see also W. Michael Reisman, "Holding the Center of the Law of Armed Conflict", Editorial, *American Journal of International Law* 100, no. 4 (2006); Eric Talbot Jensen, "The ICJ's "Uganda Wall": A Barrier to the Principle of Distinction and an Entry Point for Lawfare", *Denver Journal of International Law & Policy* 35, no. 2 (2007). Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 106, p. 387, report that the UK delegation to the drafting process put forward the same argument.

68 Richard Baxter et al., *Humanizing the Laws of War: Selected Writings of Richard Baxter* (2013), p. 174, as quoted in Solis, *The Law of Armed Conflict: International Humanitarian Law in War*, p. 127.

69 See Jensen, "The ICJ's "Uganda Wall": A Barrier to the Principle of Distinction and an Entry Point for Lawfare".

70 See Fleck, *The Handbook of International Humanitarian Law*, pp. 91–3; Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 106, pp. 387–9; Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, pp. 529–31.

71 Article 1(4) of the API.

72 Fleck, *The Handbook of International Humanitarian Law*, p. 93; Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 106, p. 388; Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, pp. 529–31.

73 Article 44(7) of the API.

74 Fleck, *The Handbook of International Humanitarian Law*, p. 93.
75 For the full transcript of Colin Powell's speech, see Colin Powell, "Full Text of Colin Powell's Speech", *The Guardian* (5 February 2003). http://www.theguardian.com/world/2003/feb/05/iraq.usa.
76 See Maev Kennedy, "Picasso Tapestry of Guernica Heads to UK", *The Guardian* (26 January 2009). http://www.theguardian.com/artanddesign/2009/jan/26/picasso-tapestry-guernica.
77 Paul Virilio and Sylvère Lotringer, *The Accident of Art*, Foreign agents series (Cambridge, MA: Semiotext(e), 2005), p. 14.
78 D. J. C. Wiseman, *Special Weapons and Types of Warfare, Volume III: Visual and Sonic Warfare* (London: War Office, 1951–1953), p. 167, as quoted in Isla Forsyth, "Subversive Patterning: The Surficial Qualities of Camouflage", *Environment and Planning A* 45, no. 5 (May 2013), p. 1038.
79 Paul K. Saint-Amour, "Modernist Reconnaissance", *Modernism/modernity*, no. 2 (2003), p. 354, as quoted in Derek Gregory, "Gabriel's Map: Cartography and Corpography in Modern War", in *Geographies of Knowledge and Power*, ed. Peter Meusburger, Derek Gregory, and Laura Suarsana (Springer, 2015), p. 91.
80 See Gregory, "Gabriel's Map: Cartography and Corpography in Modern War".
81 Ibid., p. 91.
82 See Forsyth, "Subversive Patterning: The Surficial Qualities of Camouflage".
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84 Forsyth, "Subversive Patterning: The Surficial Qualities of Camouflage", p. 1042. For the manipulation of geographical terrain as a means of camouflage, see Isla Forsyth, "Designs on the Desert: Camouflage, Deception and the Militarization of Space ", *Cultural Geographies* 21, no. 2 (2014).
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86 See King, "The Digital Revolution: Camouflage in the Twenty-First Century". Cf. Kelsey Campbell-Dollaghan, "The History of Invisibility and the Future of Camouflage", *GIZMODO* (28 January 2014). http://www.gizmodo.com.au/2014/01/the-history-of-invisibility-and-the-future-of-camouflage/.
87 Article 37(2) of the API.
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109 Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, p. 435.
110 Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 65, p. 225.
111 Michael N. Schmitt, "War, Technology and the Law of Armed Conflict", in *The Law of War in the 21st Century: Weaponry and the Use of Force* ed. Anthony M. Helm, International Law Studies (Newport, RI: US Naval War College, 2006), p. 151.
112 Article 46 of the API.
113 Yoram Dinstein, *The Conduct of Hostilities under the Law of International Armed Conflict* (Cambridge: Cambridge University Press, 2004), p. 198.
114 Article 38(1) of the API stats: 'It is prohibited to make improper use of the distinctive emblem of the Red Cross, Red Crescent or red lion and sun or of other emblems, signs or signals provided for by the Conventions or by this Protocol. It is also prohibited to misuse deliberately in an armed conflict other internationally recognized protective emblems, signs or signals, including the flag of truce, and the protective emblem of cultural property'. Also see Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 59, p. 207.
115 Article 85(3)(f) of the API. See also Article 8(2)(b)(vii) of Rome Statute of the International Criminal Court, (1 July 2002).
116 Dehn, "Permissible Perfidy? Analysing the Colombian Hostage Rescue, the Capture of Rebel Leaders and the World's Reaction", p. 633.
117 Cf. Dehn, "Permissible Perfidy? Analysing the Colombian Hostage Rescue, the Capture of Rebel Leaders and the World's Reaction"; Solis, *The Law of Armed Conflict: International Humanitarian Law in War*, p. 422.
118 W. Hays Parks, in his article Parks, "Special Forces' Wear of Non-Standard Uniforms", defends such practices, and absurdly refers to the wearing of Afghan civilian clothing as the wearing of 'non-standard uniform', on the basis of the mistaken claim that the wearing of Masoud *Pakols* (a round brown or grey wool cap) and Masoud checkered scarves by the US soldiers did not make them appear as civilians but rather as members of the Northern Alliance. He wrongly assumes that this attire is worn only by Alliance forces, whereas it is in fact commonly worn by Tajik and Pashtun men in Afghanistan. The fact that this attire has come to be named after Ahmad Shah Masoud, the late commander of the Northern Alliance, does not imply that it is military attire, either standard or 'non-standard'. Other than this, Parks does admit that such attire was used to reduce visibility and the risk of being targeted while operating alongside the Afghan forces. T. Pfanner – the then editor-in-chief of the *International Review of the Red Cross* – responded to this idea of 'non-standard uniform' in Pfanner, "Military Uniforms and the Law of War", and called Parks' term a euphemism for civilian clothing.
119 As to the customary status of this prohibition, see Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 62, p. 214, which says: 'State practice establishes the customary nature of this rule in international armed conflicts. It can be argued that it should also apply in non-international armed conflicts when the parties to the conflict do in fact wear uniforms'.
120 Article 8(2)(b)(vii), Rome Statute of the International Criminal Court (1 July 2002).
121 Commentary on Article 39(2) of the API in Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, p. 467.
122 Solis, *The Law of Armed Conflict: International Humanitarian Law in War*, p. 222.
123 Swedish IHL manual as quoted in: Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 62, p. 216.

124 Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 62, pp. 215–16.
125 Ibid., Rule 62, p. 215.
126 See Fleck, *The Handbook of International Humanitarian Law*, p. 230. Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 62, p. 215, mentions that the Argentinian Manual takes the wearing of enemy uniform to be a breach of good faith but not perfidy.
127 Henckaerts and Doswald-Beck, *Customary International Humanitarian Law Vol. 1, Rules*, Rule 62, p. 214, refers to French, Israeli, Romanian, Swiss and Hungarian IHL manuals.
128 Solis, *The Law of Armed Conflict: International Humanitarian Law in War*, p. 223.

4 Targeting in counterinsurgency

So far, I have argued that in the encounter with the coming together of advanced technologies of visualisation and targeting in weapon systems such as drones, instead of asking: what does this technology do to law or practice of war, or what does law have to say about these technologies? one must first ask: Does law have a technology of visual identification of target? What does such technology do for law, and how does it operate? It is in asking this question that we can navigate the so-called technolegal ground upon which advanced digital weapon systems are developed. Asking such a question would amount to a redescription of the principle of distinction – the legal mechanism of defining categories of target and non-targets – at the intersection of forms knowledge and modes of production of material visibilities in the battlefield. In doing so I showed that the principle must best be understood as a modality of visuality, i.e., a materiality dependant regime of setting values upon modes of appearance and visibility in an area of battle, with the view to legitimation of use of lethal violence. Military uniform, I have showed, is the analogue visual technology of targeting that puts in motion law's visuality by materially linking knowledge of adversarial will power with distinctive and highly regulated material modes of visibility. The main function of the principle of distinction is thus setting up a normative structure – an order of visibility – for maintaining the linkage that military uniform has made possible. Drones as digital visual technologies of targeting belong to this trajectory of recognition of targets and legitimation of targeting. Drones have found their historical momentum in the context of a form of warfare, that is COIN, in which the military uniform as law's visual technology of target production has been abandoned by a party to the armed conflict. Subsequently in order to understand what drones do to the law and the practice of armed conflict, we need to understand the warring context of COIN. What is the history and political objective of counterinsurgencies? And how, in the absence of the military uniform, the targeting forces of COIN reproduce the knowledge–vision composite needed for mobilisation of law's visuality? In the following sections, I will answer these questions through an empirical and detailed study of various US military's manuals and operational practices. In unpacking the knowledge–vision composite that operates in the US COIN practice and manuals, we will be able to see how drones

are enacting their own modality of visuality in which civilians are continuously recast as a legitimate target.

A brief history of the development of US COIN manuals and practice

A brief overview of military history reveals that COIN operations have been used in a wide variety of situations.[1] They have been used as a method of controlling an occupied territory[2]; as a means of counter-revolutionary policing;[3] as a response to internal rebellion or civil war[4]; or simply as a part of an ongoing armed conflict.[5] In the US military, COIN is therefore referred to using different names according to the different historical functions and characteristics of this general strategy: counter-guerrilla, counter-revolutionary (or counter-insurrectionary), low-intensity warfare, intensified police operations, foreign internal defence, and Cold War operations are but a few of the names by which both military historians and military manuals refer to COIN operations.[6] This wide range of uses (as well as the colourful nomenclature) attests to the fact that COIN has developed over time and in response to specific historical events and necessities. In a recent book, Joseph MacKay provides a new intellectual history of COIN where after consideration of various scopes of operation, purpose, and political projects behind the historical COIN, he identifies 'conservative worldmaking' as a constant in counterinsurgents' imaginaries.[7] It is to say that what is common to all COIN operations is that they are military and political deployments in contexts in which popular discontent has developed into an armed resistance.

With respect to the US military, the history of the development of comprehensive field manuals for COIN is a story of a rapid growth, an even faster decline, a long interval, and a celebrated renaissance. The first manual was 'Operations against Guerrilla Forces FM 31–20', in the 1950s.[8] The heyday of American COIN doctrine came in the 1960s, in particular during the Vietnam War years.[9] Predictably, considering the outcome of that invasion, during the 1980s COIN doctrine entered a period of decline. Army Field Circular 'Low Intensity Conflicts – FC 100-20' of 1986 remained largely intact and no new versions were written. The US COIN manual FM 3-24 (2006) and its updated version FM 3-24 (2014) thus inaugurated a period of re-emergence for COIN doctrine in the US military after two decades being held in abeyance.[10] Tracing the history of COIN in US military field manuals is important because the strategic principles of contemporary COIN doctrine as set out in the 2006 and 2014 field manuals – namely, the unity of effort, the importance of intelligence and information operations, the primacy of the civilian and political over the military and of civilian support over combating[11] – are redolent of and at times reproduce verbatim the words of 1960s' manuals, think tank pieces and other writings on counterinsurgency from this period.

As military historian Andrew J. Birtle shows, prior to the emergence of specialised field manuals and comprehensively worked-out doctrines, COIN was a marginal topic in US military academies' curriculums.[12] To take one example, the US War Department's Field Service Regulations: Operations FM 100-5 of 1944 dealt with insurgencies or partisan warfare very briefly and under the rubric of 'Special

Operations', under which heading it also dealt with topics such as 'combat in snow and extreme cold', 'combat in woods' and 'jungle operations'.[13] At this point, COIN was not considered a separate form of warfare but an 'aftermath of the defeat of the main forces of modern armed opponents … or occupation of a territory'.[14] Consequently, counter-partisan warfare was seen as nothing but 'vigorous and bold action by mobile forces', much as one would find in conventional warfare.[15]

In the context of the polarised state of international relations from 1945 up until the end of 1980s, however, there was a series of developments that eventually led to the re-emergence of discussions of COIN in field manuals. After the Second World War and throughout the Cold War, COIN techniques were utilised by the US Army predominantly as a way of countering the perceived threat of communism or to help subdue nationalist movements around the world.[16]

These COIN campaigns effectively incorporated two different approaches: on the one hand, they were political and economic advisory missions, and on the other, they were active, direct military engagements in foreign territories. The main purpose of these engagements was the establishment of an effective government that exercised control over the territory.[17] In a similar vein, Lt. Col. John Nagl writes that 'annihilating versus turning the loyalty of the people' are 'the two approaches to COIN to which armies have turned throughout history'.[18] Birtle reminds us the political and economic advisory role of the United States in Iran during the 1940s, which led up to the US- and UK-orchestrated *coup d'état* in 1953; the unsuccessful advisory mission to Chiang Kai-shek's regime in opposition to Mao's insurrectionary movement during 1945–1949; and the continual interferences of the US in South America – especially during the 1960s and 1970s – were all forms of COIN operations, just as much as were the armed engagements in Korea, Vietnam, and Lebanon between the 1950s and 1970s.[19]

These two distinct modes of operation constitute the basis of the current COIN doctrine. On the one hand, COIN may include military invasion and a physical and long-term presence in a foreign territory with light or heavy combat operations, whilst on the other hand, it may involve a merely advisory role and apparently civilian missions with no direct military presence. To put it in the words of FM 3-24 (2006), COIN can be used 'before, during or after an armed conflict'.[20]

Yet up until the 1950s, these two modes were practised separately and independently of one another. The Korean war of 1950–1953 was the first instance in which the socio-political and economical advisory missions were practised alongside military intervention in a single territory. This development was accompanied in 1951 by the publication of FM 31-20 on 'Guerrilla Warfare'; the first US Army field manual dealing exclusively with insurgency and COIN.[21]

That said, however, actual armed practices in Korea were not fundamentally different from those in other wars. Military historians categorise the Korean War as a conventional war with counter-guerrilla operations serving only as an 'adjunct' to the broader operation.[22] The socio-political aspects of COIN were only treated as tactical considerations and as such were subordinated to the basic military principles of conventional war, namely, direct military attack against enemy command-and-control centres and territorial occupation.[23]

The heyday of COIN doctrine was yet to come. In April 1962, in the wake of the US's continuing loss of ground to its communist enemies, the RAND Corporation, a think tank of the US Armed Forces, hosted a symposium on COIN with the particular purpose of distilling practical lessons and insights from past insurgencies in order to inform and shape the US campaign in Vietnam.[24] The event included officers – mainly French and British – detailing the lessons learned during their experiences of the most important colonial COIN operations after World War II in Algeria, China, Kenya, Laos, Malaya, Oman, South Vietnam, and the Philippines.[25] The star of the event was the retired French colonial officer David Galula, who had served in the major COIN theatres of the time: the Chinese communist insurrection, the Greek civil war and, of course, the Algerian war of independence. It was two years after this symposium that Galula wrote his *Counterinsurgency Warfare: Theory and Practice*, now a classic of the COIN literature. Not coincidentally his book was republished in the year of the publication of FM 3-24 (2006) and has heavily influenced the authors of the current US COIN manuals, Gen. David Petraeus and Lt. Col. John A. Nagl.[26]

At the end of the week-long symposium, the participants concluded that the main objective of a COIN campaign is to 'control the population' and that this is only possible when the civilian population invests their 'trust' in the central government and lends their 'support' to counterinsurgent forces and programmes.[27] Achieving this goal in practice, the participants concluded, requires a subordination of the military to the civilian and political mission.[28] 'Winning the population politically' is the immediate path to defeating the insurgents.[29]

Two months after the RAND symposium, John F. Kennedy, in an address to the graduating class of the US Military Academy, announced the need to account for and adapt to a different form of warfare against those he described as guerrillas, subversives, insurgents and assassins. In his words, COIN is 'new in its intensity, ancient in its origins' and requires 'a whole new kind of strategy, a wholly different kind of force and training'.[30] Well before this announcement, however, Kennedy had commissioned a secret panel – involving the Department of State, the Department of Defense, and the CIA – called the 'Special Group (Counterinsurgency)' to investigate the dynamics of this new type of war.[31] These developments set the scene for the emergence of various field manuals on COIN between the late 1960s and the early 1980s.

A significant and enduring outcome of all these developments was the merger of the two branches of US foreign policy – political and economic advisory missions and combat operations – into a single hybrid military doctrine. Above all this meant that insurgency was no longer seen as an extension of conventional war but as a form of war in its own right.

The field manuals of the 1960s – FM 100-5 (1962) and FM 31-16 (1963) – claimed that insurgencies are grounded in people's attitudes towards dominant political, social, and economic conditions and practices of power.[32] The source and cause of insurgency, FM 31-16 concluded, is 'the real, imagined, or incited

dissatisfaction of a portion of the population with prevailing political, social, or economic conditions'.[33] This, in turn, meant that the aim of responding to the population's grievances was to be of the same strategic importance as 'rigorous attack'. Most notably, FM 31-16 structured the military strategy around the socio-economic and political underpinnings of insurgency.[34] The lessons presented at the RAND symposium had now become an official military manual.

In practice, the mixture of military and civilian operation was translated – in Vietnam, for instance – into the inclusion of inter-agency 'pacification committees' in every battalion.[35] Pacification committees – taking their lead from Galula's suggestions during the RAND symposium[36] – implemented 'local security, programs to distribute food and medical supplies as well as lasting reforms such as land redistribution' in order to secure 'the government's influence and control in an area beset by insurgents'.[37]

Although the 1960s were not by any means a successful era for US COIN operations, the lessons and understandings formed during this period laid the foundation for the contemporary understanding of COIN doctrine as '[the] complete range of measures that governments take to defeat insurgencies. These measures may be political, administrative, military, economic, psychological, or informational, and are almost always used in combination'.[38]

Framing the new COIN manuals as a protection-centric war doctrine

When the US military identified civilian grievances as the real cause of insurgency, it followed that a campaign of armed resistance could not be sustained solely through military means. The US military now realised that the centre of gravity of an insurgency is popular dissatisfaction with ruling political, economic, and social conditions. To mirror this, 'the center of gravity' of COIN, as Gen. David Petraeus puts it, 'is the [civilian] population'.[39]

Accordingly, the COIN manuals of the twenty-first century (FM 3-24 2006 and 2014) assert that war is no longer to be fought predominantly against the enemy's military capabilities but 'amongst the civilian population'.[40] Moreover, unlike conventional wars, victory in COIN, both manuals note, is more dependent on winning the civilian population's support and acceptance rather than on defeating the enemy insurgents militarily.[41] In COIN, heavy artillery and heavy-handed approaches in general give way to measured force, and sometimes even to no force. As some of the oft-quoted maxims of modern COIN have it: 'some of the best weapons for counterinsurgents do not shoot', or 'doing nothing is sometimes the best action'.[42]

Gen. Petraeus, in a tactical directive as the commander of ISAF forces in Afghanistan in 2010, rationalises the manuals' restrictive approach to the use of lethal force by stating that 'every Afghan civilian death diminishes our cause. If we use excessive force or operate contrary to our counterinsurgency principles, tactical victories may prove to be strategic setbacks'.[43]

Similarly, Gen. Stanley McChrystal, in his tactical directive as the commander of ISAF forces, called for 'internalizing' measured and discriminate violence at all command levels. Emphasising the importance of civilian support, he writes:

> While this [causing civilian casualties or excessive damage] is also a legal and moral issue, it is an overarching operational issue – clear-eyed recognition that loss of popular support will be decisive to either side in this struggle. The Taliban cannot militarily defeat us – but we can defeat ourselves.[44]

Consequently, by elevating the safety and security of the civilian population to the level of a strategic objective, the COIN manuals of 2006 and 2014 frame themselves as protection-centric warfare.[45] In this framing, the imperatives of LOAC and strategic command overlap to such an extent that adherence to one is indispensable to the realisation of the other. For mainstream international law scholars, such a correlation between the law and practice of armed conflict is the holy grail. Praise for FM 3-24 (2006) poured in following its publication. Sarah Sewall, then director of the Carr Center for Human Rights Policy at Harvard University, wrote the preface to the University of Chicago Press edition of the manual. She described the manual as unlike any other, a 'radical field manual' that prioritises 'the political over the military', 'involves the civilian in almost all operational levels' and puts strategic value on the protection of civilians.[46] Others claimed that the manual changes the US way of operating in war[47] by shifting the focus from 'kill/capture to civilian protectionism'.[48]

For some legal scholars, such a reframing of LOAC as part of the strategic command objectives actually increases compliance with LOAC.[49] Michael N. Schmitt argues that in COIN war-fighters and humanitarianism are in 'lockstep' and that the counterinsurgents 'often adopt restrictions on their operations that far outstrip those found in the law'.[50] Similarly, Geiß and Siegrist suggest that the 'strategic self-interests' of counterinsurgents impose rules of engagement upon forces 'that partially exceed, to some extent, the limitation imposed by IHL'.[51] In other words, COIN's strategic necessities are more exacting than the obligations and limitations of LOAC. One might as well forget about LOAC, then, and instead obey COIN strategic commands.[52] Perhaps LOAC is applied most effectively, these scholars seem to suggest, when its imperatives are not treated as legal obligations but rather as the strategic commands of a COIN commander – to the extent that LOAC itself becomes superfluous.

This peculiar relationship between LOAC and COIN is not just expressed at the scholarly level. In fact, as will be shown in what follows, the case for the protection-centric claims of COIN is made by reference to the bureaucratic form that the application of LOAC takes in contemporary US military operations.

Protection-centrism in the age of lawfare

In the armed conflicts conducted by the US nowadays, law – specifically LOAC – is ubiquitous. Legal considerations have to be borne in mind at every step of the targeting cycle, during the intelligence-gathering process, during the planning

phase, during the process of selecting weapons, and during the eventual execution phase. This omnipresence is manifested above all by the presence of military legal advisors at various points in the chain of command.[53]

Military legal advisors examine the planned list of targets, devise legal arguments for and against a particular attack, and review post-attack reports. But further, their advice is sought during live and unscheduled targeting missions,[54] during which times lawyers end up playing more of a decision-making role than a merely advisory one.[55] As Janina Dill reports, such procedures were routine for US forces during Operation Iraqi Freedom (OIF), which began in 2003.[56] According to Dill, this procedure typically begins with the gathered executive intelligence about a target and the computer-based collateral damage estimation being put in a folder, which is then vetted by (sometimes numerous) legal advisors. The folder will sometimes be sent back and forth between the legal department and the intelligence specialists until such time as the targets are deemed both militarily and legally suitable for 'prosecution', at which point the legal advisor gives the green light to the military commander, who then decides whether or not to proceed with an attack.[57] But the role of lawyers does not end there. As Ganesh Sitaraman writes, legal advisors are now fully integrated into the kill chain and work around the clock as 'lawyer–warriors'.[58] Thanks to the possibility of real-time communication between the various layers of the chain of command, any important change of circumstances on the ground with respect to a potential target can be communicated up the chain of command, from which point it takes only four to seven minutes to acquire a new legal opinion on the target.[59] In the COIN in Iraq, Dill reports, this process engaged nearly 4,000 legal experts, Judge Advocates, attorneys, and paralegals at various levels of the command structure.[60] For Dill, this is an indication of 'a growing sense of legal obligation' amongst military decision-makers.[61] The same sentiment is voiced, with even more enthusiasm, by Michael N. Schmitt, who refers to OIF as 'the most precise air campaign in the history of warfare'.[62]

By contrast, I take the legalistic, protection-centrist approach to COIN to be an attempt to exploit the flexibility of the law in order to facilitate exceptionally expansive practices of violence. As war has become 'an institution of law' it has come to be fought with a view to, and compelled by considerations of, legality.[63] Such considerations, or what Dill refers to as the 'growing sense of legal obligation', come to determine conduct on every inch of the battlefield, to the point that it becomes impossible, irrelevant, and counterproductive to distinguish where law begins to rule over the conduct of armed conflict and where the conduct of armed conflict is, in fact, an enactment of the law. Furthermore, such intensified presence of legal practice during the targeting process is yet another evidence of the argument of this book that the legality of targeting is a derivative of the forms of visibilities that are produced during an armed conflict. Here the intensification of wartime visual surveillance practices goes hand in hand with the increase in legal evaluation and review of scenarios and ultimately an increase in the declaration of legitimacy of targetings.

A demonstrative example of this point (even if not an example of US COIN strategy) is a set of military practices that Eyal Weizman refers to as 'technologies of

warning': a series of technological interventions in the civilian space that have the purpose of devising 'legal' possibilities for lethal engagement. During the 2008–2009 war in Gaza, Israeli Army lawyers developed the legal rationale for precautionary measures such as 'knock-on-the-roof' warnings and pre-recorded, automated phone call warnings. 'Knocking on the roof' meant firing low-explosive 'teaser' bombs on the rooftops of designated Palestinian houses as a way of warning the inhabitants of an impending lethal attack and thus ordering them to evacuate.[64] According to an Israeli military lawyer, the legal rationale is that by dropping such bombs the army fulfils its legal responsibility under the principle of precaution to give civilians an effective warning prior to a lethal attack. The military lawyer argues that as a result of such precautionary measures, persons who disregard the warnings by remaining or entering the building voluntarily act as human shields and as such 'do not have to be taken into account in terms of injury to civilians … from the legal point of view, I [the military lawyer] do not have to show consideration for them'.[65] The same rationale was applied to warning phone calls: 'as one picks up his or her phone, to hear a recorded warning message of an approaching lethal attack', or upon the impact of an attenuated bomb on the rooftop of his or her household, 'one's legal designation might change from an "uninvolved civilian", protected by LOAC, to a voluntary human shield, or even to a person taking part in hostilities who could be killed as a legitimate target'.[66] Through the proactive application of LOAC – here the principle of precaution – the Israeli Army effectively transforms an otherwise protected individual or building into a legitimate military target. Here, the moment of the 'execution' of the law – that is, the moment of the impact of a teaser bomb or the moment of the phone call – precipitates a new interpretation of legal categories such as protected civilian, targetable human shield or civilian directly participating in hostilities.

Lisa Hajjar refers to these practices of legality as 'state lawfare'. Lawfare, a term coined by a former Deputy Judge Advocate General in the US Air Force, refers to 'the use of law' by the asymmetrically weaker non-state actors 'as a weapon of war'.[67] Lisa Hajjar turns this term against the asymmetrically more powerful state actors, using 'state lawfare' to refer to state practices which instead of 'ignoring inconvenient international laws' engage in 'forging original interpretations to project the legality of state practices'.[68] The practice of state lawfare implies that the exponential growth of lawyer–warriors in COIN can be read both as a sign of 'progress' in promoting a protection-centric warfare and as a strategic turn to occupy a battlefield – that of law – that otherwise could be used as a weapon *against* the asymmetrically powerful states.[69]

As the example of 'technologies of warning' shows, one consequence of 'state lawfare' is an effective expansion of sites of possible violence through a deepening of the grey areas of law that takes place 'by offering contentious legal scholarship'[70] resulted from technological interventions. In the words of the former head of the International Law Division of the Israeli Army Daniel Reisner:

> What we are seeing now is a revision of international law. If you do something for long enough, the world will accept it. The whole of international law is now based on the notion that an act that is forbidden today becomes permissible if

executed by enough countries … so there is no connection between the question 'Will it be sanctioned?' and the act's legality. After we bombed the reactor in Iraq, the Security Council condemned Israel and claimed the attack was a violation of international law. The atmosphere was that Israel had committed a crime. Today everyone says it was preventive self-defense.[71]

In this sense, then, the 'protectionist turn' of the US COIN manuals in 2006 and 2014 – manifested in the aims of 'establishing rule of law, including fundamental human rights of the host nation population as a key goal and end state of counter-insurgent operations'[72] – can be looked upon on as an institutionalisation of 'state lawfare'.[73] In fact, framing US COIN's approach to LOAC as an instance of the institutionalisation of 'state lawfare' is consistent with the colonial underpinnings of this doctrine. Here is David Galula, during the RAND COIN symposium of 1962, lecturing his American peers on the use and importance of the rule of law as part of COIN operations:

The French in Algeria had been very much aware of this [the civil liberties of the Algerians], and had gone to extraordinary lengths to maintain the appearance of lawful processes. Until 1958, for example, every unit had a team of gendarmes attached to it, whose function was to follow the men into action and, after the shooting, count the dead and make a report of 'manslaughter' against the commanding officers. In a legal farce the case would go to court, there to be dismissed.[74]

Even if farcical, such rituals are fundamental for carrying out a COIN campaign, because, as the 2006 and 2014 COIN manuals put it, the 'judicious use of lethal force' is a force multiplier.[75]

Whereas in Algeria lawyers 'followed' the troops in order to secure the exercise of wartime violence, in OIF and US COIN doctrine the integration of LOAC and its practitioners has developed to such a degree that the imperatives of the law have become merely a reflection of the strategic orders and goals of the commander. The extreme end of such integration is evident in the development of 'knock-on-the-roof' bombing. Even though this is not practised in US COIN, it is illustrative of the processes through which new possibilities of recasting the legal categories of targets and non-targets can emerge out of the overlapping of law, violence and weapon technology. The view that welcomes this explicit coming together of civilian protection and military objectives overlooks the material reality of 'law as a bomb' and instead prefers to debate what constitutes the right interpretation of particular imperatives of LOAC.[76] In the age of lawfare, 'the question is never which interpretation is "right", but who has the political influence, the cultural authority or the military power to force their interpretation to become authoritative'.[77]

What comes in the following section is an exploration of the practical knowledge of enmity for targeting practices in COIN that shares the scepticism expressed in the term 'state lawfare'. In particular, I will show how the civilian-protectionist strategy of US COIN – with its 'hearts and minds operations' and so-called 'social

work' approach to armed conflict – is, in fact, linked to US combat operations, insofar as it provides a practical knowledge of target identification.

Knowledge in counterinsurgency

Earlier, I explained that law's visuality produces lawful human targets in a particular configuration of knowledge and vision to which I referred as order of visibility. In the absence of the military uniform, as laws visual technology, during insurgencies, counterinsurgent forces mobilise their own technological tools for operationalising an order of visibility that would legitimise the use of lethal violence. Here, I will discuss the knowledge by means of which US COIN doctrine produces the condition of targetability during an insurgency.

At a certain level of abstraction, the requisite knowledge of targetability is the same regardless of whether the armed conflict is of a conventional or unconventional type. In essence, the enemy target is an embodiment of a militarised political antagonism between groups whose primary objective is denying the realisation of each other's desired ends.

Knowledge of targetability is knowledge of an individual's hostility or propensity to be hostile. But when it comes to insurgencies, it is not always possible to ascertain whether an individual is hostile or not. In LOAC, hostility is an assumed quality of the uniformed soldier regardless of whether or not that soldier ever engages in a hostile act. In conventional war, in other words, hostility is an extension of the visibility that the military uniform creates. It is because of this assumption of hostility upon sight that a party to a conflict can resort to violence against its enemy. So, to say the military uniform automates the process of visuality in LOAC.

The absence of the military uniform is also the absence of the assumption of hostility and targetability. In an insurgency, an individual's hostility is recognisable during or after the hostile act, but not before such acts have taken place. Were the counterinsurgents to rely merely on knowledge of hostility as the criterion of targetability, then they could only use lethal force in a defensive mode and in reaction to an attack. Any offensive and pre-planned targeting – what the US military refers to as 'deliberate targeting'[78] – requires a knowledge of enmity that is visually recognisable before it is materialised in a hostile attack. 'What is the operational knowledge used in targeting in US COIN?' Given what has just been said, we can anticipate that the answer to this question will be more complicated than 'hostility or propensity to be hostile'. It will ultimately be found within the US COIN doctrine's conceptualisation of its overall political goals.

The strategic objective of US COIN

'Victory is achieved when the populace consents to the government's legitimacy and stops actively and passively supporting the insurgency', says FM 3-24 (2006).[79] In an even clearer formulation, both the 2006 and the 2014 manuals pronounce that the ultimate objective of US COIN is 'legitimacy'.[80] The achievement of this objective is, in turn, tied to 'acquiring the acceptance and support of the population'.[81]

Legitimacy and popular support are not doctrinal objectives operating at an abstract or rhetorical level. These goals are translated into concrete strategic and operational imperatives. One instance in which the goals of COIN inform the actual practices of the armed forces is the above-mentioned reduction in the reliance on the use of firepower and the increasing emphasis on the use of measured force and protection of the civilian population.[82]

More importantly, if legitimacy is the goal of COIN and is achieved when the population lends its support to the counterinsurgents, and if targetability of an individual depends on his adversarial relation with the realisation of the enemy's goals, then one can claim that targets of US COIN are those who refuse to support, and do not accept the legitimacy of, the host nation and the counterinsurgent forces. FM 3-24 (2014) validates this logic by stating: 'if legitimacy is the primary principle of counterinsurgency operations, then identifying what is preventing legitimacy is as important, if not more so, than intelligence pertaining to enemy actions'.[83] As far as recognition of the enemy is concerned, COIN manuals refer to their human targets not as enemy insurgents but almost exclusively as the 'uncommitted',[84] the 'un-co-opt-able',[85] those who are 'supportive of insurgency'[86] or the 'irreconcilable population'.[87] In fact, the draft version of the FM 3-24 (2006) explicitly refers to enemy targets not exclusively as insurgents – a term that connotes individual hostility – but as 'irreconcilable' individuals.[88]

Further proof of the reformulation of the knowledge of targetability from hostile act to irreconcilability is found in the Wikileaks 'Iraq War logs', specifically in the leaked Coalition Forces (CF) after-action reports from 2004 to 2009. One such report, titled 'a cache found and cleared', associates some seized weapons with 'irreconcilable Sunni groups'.[89] A similar report distinguishes between 'Sunni irreconcilable groups' and the 'willing and cooperative population', stating: 'this cache most likely belonged to Sunni irreconcilable groups … Turn in of this cache by a local sheik indicates the willingness of the population to cooperate with *CF* in the *OE* (Operation Environment)'.[90] Similarly, CF use the term 'irreconcilable extremists' when referring to individuals who, for instance, produce, deploy and explode IEDs,[91] or when referring to the leadership of insurgent armies like Jaish al-Mahdi (Al-Mahdi Army).[92] To put this in the words of FM 3-24 (2006) and Gen. Petraeus, the true extremists and enemy insurgents – those we have 'no alternative but to kill, capture or run … off' – are known by their 'irreconcilability'.[93]

In what follows I will explain the operational aspects of winning support and legitimacy and so ground the concept of irreconcilability in the practice of US COIN in order to show how this new 'knowledge' of targetability moves from an abstraction to a measurable and operable criterion that can be made into visual materials for the purposes of lethal targeting.

COIN as armed social work

The aim of reconciling the population with the host nation and counterinsurgent forces has such a prominent place in COIN doctrine because the insurgency is, after all, a crisis of legitimacy and popular support. Economic and political grievances such as widespread poverty, unemployment, inequality, lack of essential services,

etc. create a gap between the population on the one hand and the state's ability to control the territory and deliver for the population on the other hand.[94] Insurgency emerges when this gap is linked to an armed agenda for change.[95] Overcoming the gap or reconciling the population and the state is, in effect, what COIN is all about.

Notwithstanding the clarity of the ultimate objective of COIN, the conceptualisation of legitimacy and support in the 2006 and the 2014 COIN manuals is complex. At times the manuals understand the gap between the population and the state to be the result of real and concrete grievances having to do with the maintenance of livelihood as such,[96] whilst at other times legitimacy is said to be compromised by 'imagined and perceived' conditions without any concrete basis.[97] The US COIN manuals aim to bridge the gap of legitimacy through normative projects like establishing the rule of law and good governance,[98] whilst at the same time acknowledging that 'legitimacy can be established effectively by coercion'.[99]

This self-understanding of COIN as a mixture of social, economic, and policy-oriented operations with combat missions is theorised by the COIN manuals and their proponents as 'armed social work'.[100] As David Kilcullen describes it, 'armed social work' or COIN is 'community organizing, welfare, mediation, domestic assistance, and economic support under conditions of extreme threat requiring armed support'.[101] Accordingly, 'armed social work' pursues popular support primarily through political and civilian operations, while armed activities are used in support of these civilian operations.[102] In fact, neither of the two manuals is explicit about military operations or the way in which lethal engagement relates to the achievement of the overall objectives of a COIN campaign. Instead, the manuals largely consist of sociological reflections regarding the formative elements of a society, speculations about the utility of cultural sensitivity as a force multiplier, and discussions about the most optimal operations for addressing civilian grievances and achieving overall popular satisfaction.[103]

Two successful operations, prior to the publication of FM 3-24 (2006), shaped the empirical basis of what later came to be known as 'armed social work'. First, the defence of Baghdad during the 2004 Shi'ite insurgency and, second, the stabilisation of Tal Afar by Col. H. R. McMaster, Commander of the 3rd Armored Cavalry Regiment, in 2005.[104]

In the summer of 2004, during the Shi'ite insurgency led by the al-Sadr Mahdi Army, Maj. Gen. Peter Chiarelli, Commanding General of the 1st Cavalry Division and Task Force Baghdad, had the responsibility for all operations in Baghdad. Taking the view that in an insurgency security does not simply 'grow out of the barrel of a gun', he decided to co-opt the Iraqi population by giving them 'a sense of a peaceful future'.[105] Chiarelli first deployed the Iraqi forces on the frontline, implying that the Iraqi people themselves handled Iraq's security.[106] Second, Chiarelli dedicated major parts of his efforts to 'infrastructure improvement, establishing governance and increasing employment', which in practice included 'garbage collection, distribution of water and repairing the sewage system of Baghdad, and employing people in the security forces'.[107]

Col. McMaster also conducted his missions in Tal Afar city in 2005 by co-opting the Iraqi population.[108] A focal point of insurgency in Iraq, Tal Afar kept falling

back into the hands of insurgent groups after the US forces cleared the area.[109] But McMaster went into Tal Afar with a different plan. He decided it was not enough merely to 'clear' the city of insurgents; rather, 'holding' the city was intimately connected to 'building' it. His strategy was based on persuading the local leaders and population to share information on the whereabouts of the insurgents, in return for which he promised a lasting security and rebuilding of the city.[110]

The COIN manuals of 2006 and 2014 later drew on these experiences as the core empirical evidence for the efficacy of 'armed social work', under the rubric of 'hearts and minds operations'. Coined by British Field Marshal Sir Gerald Templer during the Malayan colonial COIN,[111] hearts and minds operations refer to exclusively civilian and non-lethal operations that target the emotive and rational registers of individuals in order to help or hinder a party to the conflict. Hearts and minds operations are about – to quote FM 3-24 (2006) – 'convincing and persuading' the civilian population that the counterinsurgents are the force protecting them and that resistance is pointless.[112]

In actual operational planning, COIN doctrine aims to achieve its goals through five logical lines of operation (see Figure 4.1),[113] four of which are exclusively civilian: (a) developing, restoring and refurbishing essential services e.g. sewage
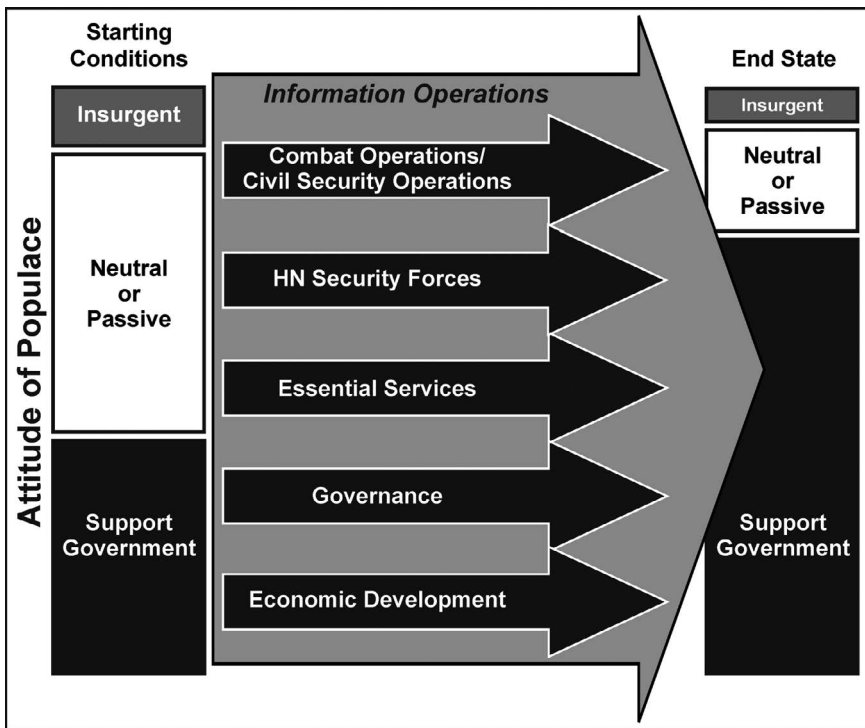
Figure 4.1 Logical lines of operation for a counterinsurgency.

Source: Image from the US Army/Marine Corps Counterinsurgency Field Manual, FM 3–24 (2006).

and trash treatment, restoration of water, electrical power and transportation systems, opening schools, hospitals, etc., (b) restoring and establishing effective governance e.g. developing the initial concept for governance, establishing institutions, identifying and recruiting local leaders, supporting and securing elections, etc., (c) economic development e.g. supporting freedom of commerce and free market economy, rebuilding commercial infrastructure, developing local economy, etc., and (d) civil security operations e.g. establishing law and order, securing borders and controlling mobility, training the host nation security forces, etc.[114]

This complex of civil, political, and economic (hearts and minds) operations together with a single line of combat operations constitutes the concrete content of armed social work.

Ungovernable irreconcilables as the human target of US COIN

Armed social work – COIN – constitutes a radical move by the US military to distance itself from combat operations whilst engaging more and more in practices that are traditionally associated with a state. To be precise, armed social work appears to enact a form of state-organised social welfarism that relies in part on the use of lethal force to achieve its objectives.[115]

This confluence of armed conflict and social work did not escape the attention of commentators. Patricia Owens, for instance, reminds us that the welfare state project was never an unarmed project to begin with. From Bismarck to Petraeus, she argues, the welfare state reinforces the despotic rules and techniques of governance that are historically associated with the household (*oikonomia*),[116] and as such it 'always rests on the highly gendered fusion of penal and social policies'.[117] The turn to social work is advantageous for COIN because welfarist approaches – as a force of social organisation – function most effectively during times of political and economic unrest in order to integrate the dangerous population through a limited redistribution of wealth that does not address the root causes of the unrest.[118] The aim of COIN's welfarist approach is in the first instance not to alleviate suffering, but to neutralise political antagonism, domesticate the population, and as such create a governable population for the host nation.[119] War through social work, then, is no longer simply the continuation of politics by other means; it is rather an 'artful governance amidst violence and instability'.[120]

A decisively important matter here is the relationship between the social and armed aspects of armed social work. How does the production of a 'governable' population relate to the ensuing armed activities of COIN? From a critical perspective, the relationship between armed and social work, centred on hearts and minds operations, is characterised by the application of overwhelming violence.[121] For instance, Paul Dixon points out that the relative success of the British Army in Malaya, rather than being the result of Templer's deployment of hearts and minds operations, was, in fact, associated with the forced removal and encampment of half a million ethnic Chinese Malayans, indiscriminate killings, food control programmes, movement restrictions, etc.[122] Similarly, US COIN practices in Vietnam, such as carpet-bombing, the poisoning of rice fields and the forced resettlement

of civilians,[123] do not seem to reflect a strategy of 'governing through hearts and minds'. More recently, the official introduction of armed social work in Iraq after the publication of FM 3-24 in 2006 was followed by a nearly fourfold increase in civilian deaths, during the US airstrikes in 2007.[124] These examples clearly reveal a discrepancy between the protection-centric ambitions of COIN and the practice of armed social work.[125] From another perspective, these examples lend support to the more radical claim that hearts and minds operations are merely a facade for the recurrent and unrestrained brutality of colonialism: that these operations merely represent business as usual, with a more palatable framing provided by the concept of 'armed social work'.[126] My claim about armed social work is different, however. I argue that the results of armed social work provide a concrete content for the concept of 'irreconcilability' and as such contribute to the knowledge of targetability in COIN – as one leg of the knowledge – vision composite that is lost after the removal the military uniform by the insurgents.

Understanding social work either as a mere facade, or as a mere means – effective or not – of mitigating the effects of armed work, implies that the armed and the social work aspects of COIN operate separately from one another – a view that is belied both by the history of the development of the doctrine of COIN and by the actual texts of the manuals. Both US COIN manuals explicitly insist on the intertwined relation of armed *and* social work under the auspices of the 'unity of effort'.

Unity of effort is an organisational imperative that aims to 'synchronize, coordinate and integrate the military and non-military operations'.[127] The US COIN manuals of 2006 and 2014 both insist that COIN's military operations can only be effective if they are 'integrated into a comprehensive strategy employing all instruments of national power'.[128] Integration begins at the intelligence level, where intelligence outcomes from non-military operations facilitate the subsequent military or other non-military operations.[129] In FM 3-24 (2006 and 2014), social work, far from being detached from armed practices, mediates them. This means that, in practice, social work helps to prepare the conditions necessary for the ensuing armed work to take place. More specifically, hearts and minds operations contribute to the fundamental task of distinguishing between the reconcilable and the (targetable) irreconcilable population.[130]

Hearts and minds operations can never achieve complete success: no operation can reach everyone, and there will always be some individuals who do not come to accept the host government and the counterinsurgents as legitimate authorities. Both US COIN manuals therefore provide criteria by means of which the counterinsurgents can measure and evaluate the level of population satisfaction, support and reconcilability, and on that basis divide the population into five different categories: active supporters of the counterinsurgents and the host government, passive supporters of the counterinsurgents and the host government, the neutral population, active supporters of the insurgency and passive supporters of the insurgency.[131]

The relation between hearts and minds operations and this system of classification of the population, on the one hand, and gradations of support and reconcilability, on the other, is evident from the indicators that FM 3-24 (2006 and 2014)

uses for making such classifications. These indicators – referred to as indicators of progress – are simply a reflection of the major components of the hearts and minds operations described earlier (see Figure 4.1). For instance, both manuals state that the degree to which hospitals, clinics, schools, and universities are functional or well attended by the population is an indication of the success or failure of COIN operations and as such an indication of the level of popular support or reconcilability of the population in that area.[132] This indicator corresponds directly to the provision of 'essential services' that is a major part of hearts and minds operations. In the same way, other indicators of support, such as 'level of turn out in elections, presence and activity of small- and medium-sized business' and 'number of acts of violence in an area',[133] correspond, respectively, to 'restoring and establishing effective governance', 'economic development' and 'civil and security operations' – the other three major aspects of hearts and minds operations.

The US military has already developed computer software with the specific purpose of measuring public opinion and the success of the hearts and minds operations in a given area.[134] One such piece of software is SCIPR, an agent-based computer simulation and training programme developed for the Pentagon by private engineering company Aptima. Aptima describes SCIPR as social-analytical software that can, among other things, predict 'how … a multi-ethnic population [will] react to counterinsurgency, or a school reconstruction project'. It also 'tracks the flow of ideas and sentiment through the electronic landscape, and how influence moves through contagiously, to coalesce support or incite unrest'.[135] In other words, by measuring the success of hearts and minds operations, SCIPR can predict the potential growth of irreconcilability in a given area.

In a manner that bears some similarities to the Israeli Army's practice of 'knocking on the roof', although perhaps different in its level of intentionality, the hearts and minds operations can thus operate as the counterinsurgents' command to the civilian population to self-identify as supporters of one or the other side of the conflict. The response of the civilian population to this command organises them – in terms of their reconcilability and irreconcilability – into different levels of support, which may eventually be used by armed forces in the targeting process. The link between measuring the popular support in an area and subsequent targeting practices will become clearer in the next section as I move from a discussion of COIN's visualisation of knowledge of targetability to a particular practice of producing population support overlays (see Figure 4.2) and this practice's relation to a targeting method called kill boxing.

There is no way for us to know what level of support for insurgency is taken to warrant lethal targeting or what level of support for the host nation is taken to indicate a successful reconciliation; such information is not publicly disclosed. The COIN manuals of 2006 and 2014 are not helpful here either. For instance, FM 3-24 (2014) defines passive supporters – the lowest level of support for insurgents – as those who 'provide the insurgents with freedom of movement, safe haven to reside, train and plan and withhold information from the counterinsurgents'; for that reason, the manual considers them 'critical for successful insurgency'.[136] Yet active supporters are not necessarily fighters. They are those
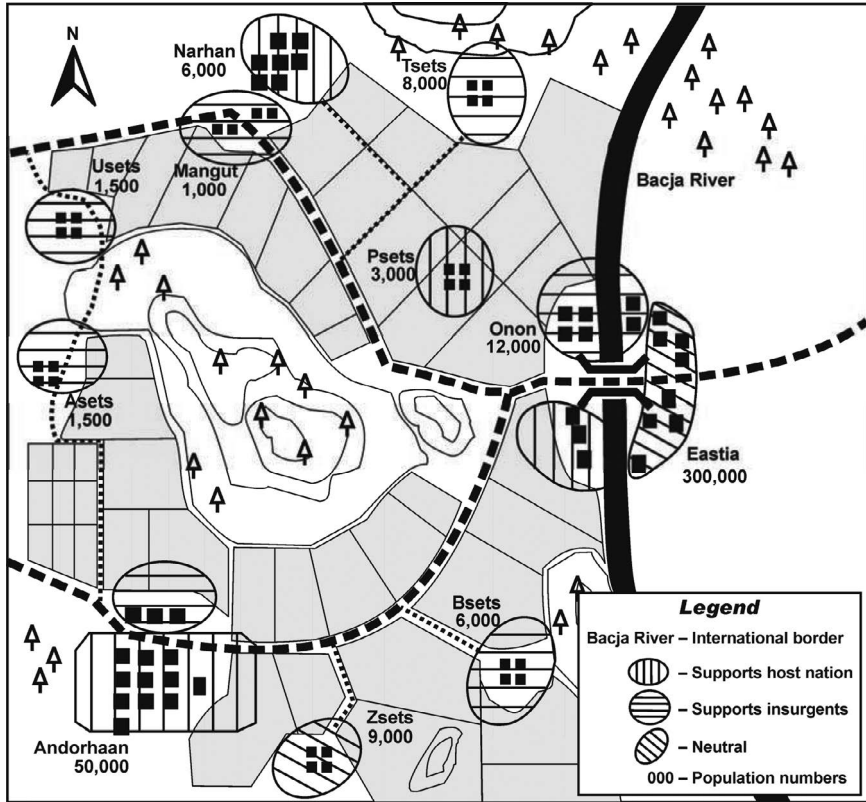
Figure 4.2 Population support overlay.

Source: Image from the US Army/Marine Corps Counterinsurgency Field Manual, FM 3–24 (2006).

who 'openly sympathise with the insurgents, participate in their operations' – not necessarily military operations – 'find new recruits for insurgents and may provide the insurgents with material, intelligence or assistance', and because of that the 2014 manual considers active supporters 'central to the insurgency's propaganda'.[137] Behind the riddling language of 'critical and central for insurgency' the manual conceals its ultimate metric for targeting. What is clear, however, is that the outputs of social work provide practical knowledge that allows counterinsurgents to divide and categorise the enemy population, and as such give a concrete content to the terminology of reconcilability.[138] In this context, 'reconcilability' – tantamount to the status of being a civilian – can be read as the condition of those who are convinced and persuaded of the merits of being governed by the host government and consequently lend their active or passive support to the counterinsurgents. By contrast, 'irreconcilables' – apparently the human targets of COIN – are those who, unaffected by hearts and minds operations, remain unsupportive of the host government, uncommitted to its cause and

as such actively or passively support the insurgents. What falls in between the two poles of reconcilability and irreconcilability is a grey area of support ripe for the production of contentious interpretations – the essence of lawfare – in which civilian deaths can be deemed acceptable as long as these civilians are perceived to be less than actively supportive of COIN.

Vision in counterinsurgency

So far, I have explained that the counterinsurgent strategists of the US military have used the dismantling of LOAC's visuality, caused by the loss of the military uniform, as an opportunity to expansively redefine knowledge of targetability from hostile intention to political irreconcilability. What remains is *vision* as the other constitutive element of the knowledge–vision composite. How do counterinsurgent forces create modes of visibility – linked to the produced knowledge of target-ability – in order to both make possible use of lethal force as well as laying claim upon the discriminate nature of such a use? The short answer is through expansive apparatuses of digital visual technologies, at the centre of which stands the military drone. Here, I wish to open for a more complex answer – one that considers the role that these technologies paly as constitutive elements of the modality of visuality that the principle of distinction is.

Mindful of their growing vulnerability to increasingly sophisticated technolo-gies of surveillance, insurgents are coming to find that the traditional methods of clandestine operation, such as hiding in mountainous and inaccessible terrains, are unsustainable, and they are instead resorting to urban warfare.[139] Insurgents are notorious for their preparedness to fight from within the civilian population, donning civilian clothing and revealing themselves only in the fleeting moments prior to an explosion. But insurgents are not wholly to blame for the fact that they adopt these practices. Manipulating the visual order of the principle of distinction by avoiding the military uniform is the only reasonable tactic the insurgents can adopt against the advanced visual technologies of state armies. For example, the latest drone camera developed by the US Department of Defense Advanced Research Project Agency (DARPA) – named ARGUS, after the hundred-eyed giant of Greek myth – is, with 1.8 gigapixel resolution, the highest resolution camera ever made, and is capable of simultaneously providing 130 independ-ent, steerable video streams whilst covering an area half the size of Manhattan.[140] Another ambitious DARPA project, the transparent earth project, aims even to bring the underground – to a depth of 5 kilometres – within the sights of the US military. Such forms of visualisation leave no place to hide, and if they are not exactly a justification for the insurgents' practice of donning civilian attire, they at least provide an explanation for it.

This play of visibility and invisibility between the insurgents and the counterin-surgents, enacted in the space created by the absence of the military uniform, makes finding and identifying insurgents one of the most important challenges for the coun-terinsurgents. In COIN, vision, as one of the constitutive elements of law's visuality, itself needs to be produced before there can be any production of targets.

Biometrics and population management techniques

The US COIN manuals of 2006 and 2014 mention demographics and population management techniques such as profiling, census taking, biometric data collection and the issuing of ID cards as effective methods of creating the required visual distinction between targets and civilians.[141] Commanders are advised to compile a census and collect biometric data from the population as soon as it becomes logistically possible,[142] because doing so helps the forces to 'map [the] human environment, identify patterns of life'[143] and establish intelligence databases for future security operations.[144]

In fact, population management techniques like census taking and ID issuance are common means of control and of securing a socio-political hierarchy and power asymmetry, and they proved effective during colonial COIN operations.[145] According to David Galula, compiling a thorough census and issuing ID cards is the best way of beginning any successful control operation during a COIN campaign.[146] The control of civilian movements through the requirement to carry ID cards during the British colonial COIN in Malaya (1948–1960) serves as an example of 'best practice' of COIN.[147]

What is new in US COIN, apart from advances in biometric technologies, is the extent to which COIN operations are reliant on biometric operations and census taking.[148] Tactically speaking, these techniques fall within the category of 'shaping operations'. Shaping operations are operations that involve 'identifying which areas in an operational environment exhibit conditions that counterinsurgents can impact'.[149] In other words, census and biometrics, as technologies of visualisation, feed into the COIN commander's decision about where and when to execute an operation.

Census taking and biometric operations involve routinely scanning the collected biometric information about the civilian population and comparing it to existing biometric databases that include different watch lists of 'people of interest', information about known networks and collected biometric forensics from past incidents.[150] US COIN biometric task forces in Iraq and Afghanistan collect individual biological data such as 'iris images, fingerprints, and facial images, and combine them with contextual and biographic data to produce an electronic dossier on an individual'.[151] The biographical data includes information on 'who lives in an area and what they do', including details about 'family, clan, tribe, religious, interpersonal or professional relations' as well as economic hierarchies and dependencies amongst people.[152] Combining biology with the social and political ecology of the environment of operation, Biometric-Enhanced Intelligence (BEI) is said to 're-veal' the insurgent's concealed identity by sorting the population into distinguishable categories based on various kinds of traits, such as bodily features, biological specifications, and behavioural patterns.

Biometric data collection programmes

The usefulness of BEI depends wholly on the existence of comprehensive databases against which the collected information can be examined. The scale of the reliance of US COIN targeting on biometric visualisations is evident from the sheer

amount of resources that the US military has put into creating biometric databases for Iraq and Afghanistan.

In Iraq, coalition forces began digitalising biometric databases from Saddam's era as early as 2003,[153] and by 2004, they were able to set up iris and fingerprint scanners and begin their own biometric collection operations.[154] As of 2012, US forces had collected biometric data from more than a quarter of the male Iraqi population, storing it at the US Central Command intelligence depository in Florida.[155]

In contrast to Iraq, there was no pre-existing biometric infrastructure in Afghanistan. The last nationwide census in Afghanistan took place in 1979.[156] Starting from scratch, the US allocated 3.5 billion dollars to a five-year biometric project in Afghanistan.[157] In 2011, the US Army published a handbook titled 'Commander's Guide to Biometrics in Afghanistan', in which it stressed the tactical importance of biometrics as a 'non-lethal weapon' of COIN that separates targets from non-targets.[158] It also provided instructions to commanders and troops on how to use various instruments and online databases in order to collect, register, and store biometrics correctly.

In Afghanistan, personnel from each brigade and combat team were ordered to collect biometric information from every Afghan civilian that they come across during each operation, raid or any other chance encounter.[159] The ambition of the programme, the above-mentioned handbook says, was to collect data on 'every person who lives within an operational area', or, if that is not possible, at least to 'fully biometrically enrol all military-age males'.[160] By 2010, three different biometric data collection systems were active in Afghanistan. Besides the US/NATO Biometric Automated Toolset (BAT) and Handheld Interagency Identity Detection Equipment (HIIDE), the Afghan Ministry of Interior, in collaboration with the National Security Intelligence agency, officially began the Afghan government's own biometric system – the Afghan Automated Biometric Information System (AABIS).[161] By the end of 2011, these programmes had biometric information on one out of twenty Afghan civilians and, for military-age male Afghans, between the ages of fifteen and seventy, they had information on one out of six.[162]

Even though AABIS was framed as a national census programme that aimed to issue national biometric ID cards, it was built upon US databases and was intentionally designed to complement the US Department of Defense's Automated Biometric Information System and the FBI's Integrated Automated Fingerprint Identification System.[163] The Afghan system was also linked to a larger database at the US Department of Homeland Security, which contains all the fingerprint data gathered at border entry points.[164] The Biometric Fusion Centre in West Virginia puts all this data together to create a detailed mosaic picture of the global COIN environment. If data is stored and updated properly, then regular scans will ideally link 'unknowns' to 'knowns'. A single enrolment of an otherwise unknown individual in Helmand may yield a match with a fingerprint retrieved from an IED event in another area; it may also reveal that the individual routinely travels to so-called 'hot spots' and as such provide evidence of a link to local or international insurgent networks.[165]

Biometric-enabled watch lists

In the context of COIN, there are multiple ways in which the collected biometric data is used by the army to visualise otherwise invisible targets. To begin with, BEI 'sees' and subsequently traces the forensic footprints left by insurgents in the environment of operation. After the explosion of an IED, the capture of an enemy vehicle or the discovery of a safe house or cache site, biometric teams collect evidence – much in the way that crime scene investigators do – and run the collected biometric evidence against existing databases of civilian biometrics. On the basis of these investigations, commanders are able to 'separate the insurgents from the populace, reduce their mobility and eventually kill or capture them'.[166]

In other instances, biometric data is incorporated into a Biometric-Enhanced Watch List (BEWL), a list of individuals who through intelligence analysis are deemed a threat or potential threat, or are simply determined to be worth tracking.[167] BEI and BEWL have reportedly led to the arrests as well as the successful targeting of many insurgents who would otherwise have been invisible.[168] It is reported that since 2010, 20 to 25 arrests per week in Afghanistan were made possible by these biometric operations.[169] Another source reports that routine biometric checks in Afghanistan resulted in the apprehension of 35 prisoners out of the 475 escapees of the Sarposa prison in Kandahar in 2011.[170] More authoritatively, the Commander's Guide to Biometrics in Afghanistan says that the successful targeting of four to five watch list suspects every day in Afghanistan can be attributed to BEI.[171]

Biometrics and mobility

BEI also allows for counterinsurgents to hinder the free movement of insurgents by making the possibility of movement dependent upon the possession of biometric ID cards or by instituting full biometric examinations at random checkpoints. Besides identifying insurgents, biometric checkpoints allow counterinsurgents to identify individuals belonging to different BEWL 'risk groups', like the active 'be on the lookout' category – people who appear in or visit 'hot spots' – and 'out of towners' – people who are flagged because of their frequent movement or because they are enrolled in locations other than their original enrolment location.[172]

The prime example of the systematic use of biometrics to control mobility and to filter the population into different categories is the second battle of Fallujah in 2004–2005, during which the entire city was walled off and every route in and out of it was biometrically monitored. During the conflict, around 200,000 people were evicted from Fallujah,[173] and they were only permitted to return if they submitted to a full biometric examination, including fingerprinting, an iris scan, a digital photo, and the recording of their name, parents' name, height, weight, hair colour, tribe, religion, address, and occupation.[174] Only people who participated in these examinations and acquired a biometric ID card were granted access to the city. The same programme was later imposed in Kandahar in the summer of 2010.[175] It should also be noted that in such conditions, where the validation of

one's identity is equated with security and trust and leads to the granting of safe passage, being 'sans identity card' is not only to be denied access but by definition 'to be in trouble'.[176]

Positive identification and the validation of individual identity thus filter and condition physical mobility. But they are also used to hinder social mobility. Running biometric check-ups prior to recruiting individuals in public institutions, especially in national security and the armed forces, allows the host nation and counterinsurgents 'to thoroughly screen applicants and recruits for any potential negative past history or criminal linkages' and so prevent enemy infiltration and access.[177]

Producing vision of targetability by geographically limiting 'knowledge' of targetability

Most importantly, BEI shapes the environment in favour of the counterinsurgents and reduces the ability of insurgents to mount surprise attacks. During the US COIN in Afghanistan, a cross-agency collaboration involving Taskforce Biometrics and the National Ground Intelligence Center fused biometric data with terrain analysis to produce 'human terrain maps'.[178] These maps, the Commander's Guide to Biometrics in Afghanistan says, were an 'invaluable intelligence resource for planning operations', 'enhancing targeting', naming 'areas of interest', and finding 'matches against BEWL or against unknown latent files'. These maps produced geospatial density analysis of various different factors in a particular area, for instance the level of violence, the density of hits or the rate of matches with a BEWL.[179] By depicting geography, biology, identity, economy, as well as social, political or military activities as different layers on top of one another, the US produced comprehensive grids of intelligibility for different areas of engagement. Compensating for the loss of visibility that follows from the absence of military uniform, this complicated process transforms the abstract mass of biometric data into concrete overlays and maps to be used by forces on the ground.

The COIN field manual of 2006 gives an extraordinary example of one such overlay. A 'population support overlay' (see Figure 4.2) is a geographical depiction of 'sectors of the populace that are pro-government, anti-government, pro-insurgent, uncommitted and neutral'. The manual says that the importance of these overlays is that they help 'the analysts determine whether the local populace is likely to support the host nation government or to support the insurgents'.[180]

These types of overlays were important instruments since in COIN the enemy territory is conceived as 'a dynamic mosaic where insurgent objectives and tactics may vary by neighborhood'.[181] This means that in COIN, as far as rules of engagement for targeting and combat operations are concerned, a terrain is not treated as a unity but rather as a combination of fragmented areas, each possessing a different military and legal status. As shown in Figure 4.2, a territory is divided into different boxed areas of support for insurgents (horizontal lines), support for the host nation (vertical lines), and neutrals (diagonal lines). The implications of these overlays for targeting purposes can best be illustrated with reference to the US Air Force's use of the notion of the 'kill box'.

'The kill box', says a US military manual, 'is a three-dimensional area used to facilitate the integration of joint fires … the primary purpose of a kill box is to allow lethal attack against surface targets without further coordination with the establishing commander'.[182] In an operational setting, 'a kill box is graphically portrayed by a solid black line defining the area borders'.[183] Simply put, a kill box is a fire-at-will zone; in a kill box, targeting takes place independently of the command structure, because it has already been decided that no friendly forces or civilians dwell in that area. In a kill box, there are only targets. As Grégoire Chamayou puts it, a 'kill box is an autonomous zone of slaughter', well suited to the decentralised form of targeting that characterises contemporary targeting procedures of drones.[184]

To make even more clear the relation between the division of the population according to support in overlays like Figure 4.2 and targeting in COIN, I wish to quote at length some correspondence between Michael N. Schmitt and a key (anonymous) figure at US Central Command, on the function of what Schmitt calls 'zoning' in the armed conflict in Afghanistan. The participant at the US Central Command writes to Schmitt:

> I knew there would be people (ally and enemy alike) all over the country that looked exactly the same (white robes/turbans, on horses/pickup trucks, etc.). Identification of the enemy was everything during this conflict. There wasn't even a FLOT (forward line of own troops). Eventually, the best we could do was create small zones/boxes where we could say none of our people were located. You simply couldn't tell who the enemy was from the lawn darts [slang for an F-16] and this was a way of empowering the guys in contact to shoot or call air strikes based upon 'Positive Identification' (the totality of the circumstances). And, even with these tight rules the conflict didn't go without incident.[185]

One straightforward function of biometric operations is to link verified identities to a delimited geographical area. In other words, biometric intelligence allows forces 'to know who lives where, who does what, who belongs, and who does not'.[186] This type of intelligence, the Commander's Guide to Biometrics in Afghanistan says, entails the counterinsurgents 'owning the ground',[187] such that soldiers will always be able to enter an area with a secure knowledge of who in that area belongs to what category.

Biometrics and wartime racial ordering of the enemy

Biometrics procedures are popular with the US Army because they are perceived as non-invasive visualising practices with a high degree of accuracy, objectivity, and re-liability.[188] Indeed, this might be true when comparing biometric strategies to routine night raids as ways of uncovering invisible insurgents. Yet the supposed accuracy and non-invasive character of biometric visualisation are both questionable.

From ethical and legal perspectives, scholars have questioned the justifiabil-ity of replacing traditional ways of seeing the enemy with solely technological

visualisations. They argue that replacing the human elements of sight, perception, and emotion with technological surveillance is unjustifiable and unethical.[189]

The core claim of the reliability of biometrics can also be criticised. For one thing, neither the biological nor the social identity of individuals is invariable enough to be used as a point of reference for defining groups as opposed to one another. Furthermore, the technology that records such identities is not objective or, for that matter, fully independent of the very identities it aspires to record. Both the science of biology and biometric technologies are regular objects of critique as practices that perpetuate the distinctions that they claim simply to measure and study. To begin with, the defining boundaries of the different categories of race or gender are determined by the practice of biology itself.[190] In the context of this study, this means that the US Army's 'shaping operations' truly are practices of shaping the social fabric of the invaded country and forming it into measurable categories by reinvigorating social, ethnic, and religious divides or by creating a sense of identity and belonging amongst different groups.[191] The division and walling off of Baghdad into exclusively Shi'ite and Sunni neighbourhoods is an oft-cited example of the social ordering and shaping that biometric categorisation entails. This is all the more true of Afghanistan, where the census and biometric ID card programmes served effectively to produce (racially differentiated) citizens for a state that has experienced war for almost four decades. This reveals that the practice of biometrically measuring the people is, in fact, a process of producing 'a' people, or sometimes multiple, opposing peoples. All of which is done with the purpose of visually distinguishing sites and bodies relevant for lethal targeting.

The social, religious, and tribal identities that were forced upon Afghans and Iraqis during censuses were at times resisted by the general population. For instance, during the COIN in Iraq, the *New York Times* reported that many Iraqis carried false ID cards, each indicating a different sectarian affiliation, as a means of self-protection. The report noted that sometimes one set of biometric data matched three different individual names, tribes, and religious affiliations.[192] In a country with many religious and ethnic divides, having proof of only one identity is potentially to put oneself at a disadvantage.

Similarly, in Afghanistan there was a backlash against the national census programme when a majority of the population was not confident about how to answer the question about their 'ethnicity', with many refusing to identify their nationality as 'Afghan', which literally refers to the majority Pashtun ethnicity.[193] The examples of both Iraq and Afghanistan thus show these purportedly fixed and measurable social or religious identities to be, in fact, manipulable and contestable.

Moreover, the way the biometric technologies are constructed entails that certain groups will be marked as deviant. For instance, early biometric technologies repeatedly failed to read Asian women's fingerprints, and so categorised them as unrecognisable.[194] In addition, these technologies fail properly to read and distinguish between the pupil and iris of darker-coloured eyes, those of people with dark skin or those with eyes affected by cataracts.[195] The problem here is that the norm and the standard subject around whose biometric measurements this recognition

technology is developed is White, male, and able-bodied, with light-coloured eyes and with a binary and fixed gender identity. In contrast to this 'standard', then, there is a 'terrorist assemblage'[196] – a racialised, (trans)-gendered and dis-abled body – that repeatedly produces alarms and glitches in a system in which to be marked as deviant is to be marked as a threat.[197]

Biometrics is at the same time too generalised and too individualised a method to serve as a means of distinguishing between targets and non-targets. On the one hand, biometrics casts a general suspicion over an entire population. 'Everyone's biometrics must be collected because everyone can potentially be or become an insurgent'. This, in turn, increases the sense of insecurity, which enhances the insurgency's cause and in the end provides a justification for more COIN operations.[198]

Moreover, by linking racial and gendered assumptions to scientific 'truth' claims, militarised biometrics perpetuates existing hegemonic and racialised stereotypes with respect to security, threat, and fear.[199] Biometrics thus appears to lend scientific credence to inherently uncertain target-visualisation practices. This collectivising of targetability on the basis of racially produced and bio-metrically solidified visibilities operated also at the mundane non-technological levels. Colby Buzzell, a former US Army soldier, captures the racialised con-struction of the enemy target rather bluntly in his war diaries. Describing his first ride on the back of an armoured vehicle in the densely populated streets of Baghdad, Buzzell wrote:

'I hate to say this, because it's extremely racist, but every single fucking person there looked like a goddamn terrorist to me. Every single one of them. And dude, they were all over the place. I saw a couple people with AK-47s on a bridge hanging out. They had no uniforms on, and they kinda freaked me out when I saw them, but they were probably Iraqi police, because nobody in my platoon shot them when we drove past, and they didn't seem too scared when they saw us.'[200]

The collective differentiation as a means of subjugation, mobilisation of fear, and legitimation of use of lethal violence sits at the heart of the contemporary defi-nition of race and racism. Ian Lopez, in White by Law, has defined race as 'histori-cally contingent social systems of meaning that attach to elements of morphology and ancestry.'[201] The violent function of this regime of meaning production based on manufactured differentiation – i.e. racism – in turn is defined by Ruth Wilson-Gilmore as the 'state-sanctioned or extralegal production and exploitation of group-differentiated vulnerability to premature death.'[202] In the introduction, I have defined wartime visuality, as a regime of setting differentiated value upon what that is seen or captured within the technologically enhanced domain of sight, for the purpose of deployment of discriminate lethal violence. This definition resembles the operation of race and racism as explained here. This resemblance however is not coincidental as we must note that 'the deployment of visuality and visual technologies, as a Western social technique of ordering', according to Nicholas

Mirzoeff was shaped fundamentally through developments of practice of seeing, overseeing, sense making and subjugation in the context of the plantation slavery in the Americas.'[203]

On the other hand, and beside collectivisation of enmity through logic of difference, the highly individualised distinctions based on unique biological features such as fingerprints or retinal blood vessel patterns, rather than meaningfully dividing the population into groups and categories, entail the 'securitisation of every individual identity'.[204] All this should make such technological means of creating wartime visibility undesirable, yet the US Army's push for the expansive role of technologies of visualisation in contemporary armed conflicts goes beyond integrating biometrics in shaping operations. The final – and most revealing – paragraph in the Commander's Guide to Biometrics in Afghanistan discusses the fusion of biometrics with other digitalised modes of surveillance in order to create an overarching instrument of target recognition – what has come to be known as the 'disposition matrix':

> BEI continues to evolve through the process of understanding biometrics, the conditions, and operations of the ever-changing battlefield. A profile and pattern of life can be created through linking data exploited from an individual's documents, phone, electronic media, and other biometric collections. The profile can then be used for lethal and nonlethal targeting purposes and allows intelligence channels further understanding of networks and insurgent operations.[205]

Notes

1 For a straightforward history of COIN and its many operational uses, see Gregory Fremont-Barnes, *A History of Counterinsurgency. Vol. 1, From South Africa to Algeria, 1900 to 1954* (2015); Gregory Fremont-Barnes, *A History of Counterinsurgency. Vol. 2, From Cyprus to Afghanistan, 1955 to the 21st Century* (2015); Anthony James Joes, *Resisting Rebellion: The History and Politics of Counterinsurgency* (Kentucky: The University Press of Kentucky, 2004); Andrew J. Birtle, *US Army Counterinsurgency and Contingency Operations Doctrine, 1942–1976* (Washington, DC: Center of Military History United States Army, 2006); David Kilcullen, *Counterinsurgency* (Oxford: Oxford University Press, 2010).

2 Andrew J. Birtle mentions Germany after the Second World War and the Korean War (1945–1950) as examples of the use of 'small war' or COIN strategy as part of the occupation and control technique. See Birtle, *US Army Counterinsurgency and Contingency Operations Doctrine, 1942–1976*. A more recent example is the Israeli Army's use of COIN strategy in the occupied Palestinian territories as a means of controlling and administering violence; on this see Sergio Catignani, *Israeli Counter-Insurgency and the Intifadas: Dilemmas of a Conventional Army* (London: Routledge, 2008); Laleh Khalili, *Time in the Shadows: Confinement in Counterinsurgencies* (Stanford, CA: Stanford University Press, 2013).

3 French counterinsurgency operations in Algeria (1954–1962) and the US government's military, economic and advisory interventions in Latin America during the Cold War – especially in the 1960s and 1970s – in countries such as Nicaragua, Cuba, Ecuador, Bolivia, Chile, etc., are examples of counter-revolutionary or counter-insurrectionary uses of COIN.

4 Bashar al-Assad's regime's response during the Syrian civil war, which began in 2011, is taken to be of a COIN character. For more on the Syrian civil war and COIN, see Brian Michael Jenkins, "The Dynamics of Syria's Civil War", *Perspectives* (2014). http://www.rand.org/pubs/perspectives/PE115.html.

5 An example of COIN as a general strategy for an armed conflict is Operation Iraqi Freedom, which began in 2003.

6 See Birtle, US Army Counterinsurgency and Contingency Operations Doctrine, 1942–1976.

7 Joseph MacKay, *The Counterinsurgent Imagination: A New Intellectual History* (Cambridge: Cambridge University Press, 2023), p. 25.

8 Birtle, US Army Counterinsurgency and Contingency Operations Doctrine, 1942–1976.

9 Ibid.; Austin Long, Doctrine of Eternal Recurrence: The US Military and Counterinsurgency Doctrine, 1960–1970 and 2003–2006, Rand Counterinsurgency Study. Paper 6 (Santa Monica, CA: Rand National Defense Research Institute, 2008). http://www.rand.org/pubs/occasional_papers/2008/RAND_OP200.pdf.

10 US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, p. vii. At this time, the most recent US Army manual on counterinsurgency was from 1986: US Department of the Army, *Field Circular Low Intensity Conflicts, FC 100-20* (1986). For the Marine Corps, the most recent was published in 1980: US Marine Corps, *Counterinsurgency Operations, FM 8-2* (1980). Cf. Julian Lindley-French and Yves Boyer, *The Oxford Handbook of War* (Oxford: Oxford University Press, 2012), p. 360.

11 See US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, pp. 1-4 to 1-22 and US Department of the Army/US Marine Corps, *The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24*, ed. US Department of Defense (Chicago: University of Chicago Press, 15 December 2006), p. 77 and pp. 44–51. See also Eliot Cohen et al., "Principles, Imperatives, and Paradoxes of Counterinsurgency", *Military Review* 86, no. 2 (2006), pp. 49–53; Stephen T. Hosmer and S. O. Crane, *Counterinsurgency: A Symposium, April 16–20, 1962* (Santa Monica: RAND Corporation, 2006), pp. 13, 21–2, 26 and 77.

12 See Birtle, US Army Counterinsurgency and Contingency Operations Doctrine, 1942–1976.

13 See US War Department, Field Service Regulations: Operations FM 100-5.

14 Ibid., p. 284. This manual remained largely the same from 1939 until 1949; Birtle, *US Army Counterinsurgency and Contingency Operations Doctrine, 1942–1976*, p. 10.

15 Birtle, US Army Counterinsurgency and Contingency Operations Doctrine, 1942–1976, p. 10.

16 Ibid., p. 17. Beyond the US context, decolonial and self-determination movements constitute a major part of the insurgency movements of this period. See John A. Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam* (Chicago: University of Chicago Press, 2005). Anthony James Joes points out that the view that associates COIN operations exclusively with anti-communism is typical of many who were writing during the Cold War era. Beyond the Cold War, he says, royalists, conservatives and religious movements have all resorted to insurgency as a method of making war. Moreover, many of the Cold War COIN operations that are commonly categorised as anti-communist operations, such as Malaya, Vietnam and Afghanistan, also included a strong ethno-religious element. See Joes, *Resisting Rebellion: The History and Politics of Counterinsurgency*.

17 Birtle, US Army Counterinsurgency and Contingency Operations Doctrine, 1942–1976, pp. 5–6.

18 Nagl, Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam, p. 26.

19 See Birtle, *US Army Counterinsurgency and Contingency Operations Doctrine, 1942–1976*, pp. 6–7 for an infographic map of US COIN activities 1942–1976, in which each approach to COIN is indicated.

20 US Department of the Army/US Marine Corps, The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24, p. xx.
21 FM 3-24 (2006) refers to the simultaneous use of civil-political missions and combat missions as 'unity of effort'. See US Department of the Army/US Marine Corps, *The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24*, pp. 53–77.
22 Long, Doctrine of Eternal Recurrence: The US Military and Counterinsurgency Doctrine, 1960–1970 and 2003–2006, p. 4.
23 Birtle, US Army Counterinsurgency and Contingency Operations Doctrine, 1942–1976, p. 138.
24 Hosmer and Crane, Counterinsurgency: A Symposium, April 16–20, 1962, p iii.
25 Ibid.
26 David Galula, *Counterinsurgency Warfare: Theory and Practice* (Westport, CT: Praeger Security International, 2006). It is worth noting that John A. Nagl wrote the preface to this edition.
27 Hosmer and Crane, Counterinsurgency: A Symposium, April 16–20, 1962, p. 2.
28 Ibid., pp. 56 and 58–9.
29 Ibid., pp. 12–3.
30 John F. Kennedy, "Remarks at West Point to the Graduating Class of the US Military Academy", *The American Presidency Project* (6 June 1962). http://www.presidency.ucsb.edu/ws/?pid=8695, quoted in Fred M. Kaplan, *The Insurgents: David Petraeus and the Plot to Change the American Way of War* (New York: Simon & Schuster, 2013), p. 27.
31 Long, Doctrine of Eternal Recurrence: The US Military and Counterinsurgency Doctrine, 1960–1970 and 2003–2006, p. 5.
32 US Department of the Army, *Counter-guerrilla Operation, FM 31-16* (1963), p. 3. US Department of the Army, *Field Service Regulation: Operations FM 100-5* (February 1962), p. 137; The White House, "National Security Action Memorandum No. 182, Counterinsurgency Doctrine", (24 August 1962). http://www.jfklibrary.org/Asset-Viewer/ZwPjq2qEu02NamlIyfitoA.aspx quoted in Long, *Doctrine of Eternal Recurrence: The US Military and Counterinsurgency Doctrine, 1960–1970 and 2003–2006*, p. 5.
33 US Department of the Army, Counter-guerrilla Operation, FM 31-16, p. 3.
34 Ibid., pp. 20–1.
35 Ibid., p. 38.
36 Hosmer and Crane, Counterinsurgency: A Symposium, April 16–20, 1962, p. 77.
37 US Department of the Army/US Marine Corps, *The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24*, pp. 73–5. The problem of the pacification programme – FM 3-24 (2006) suggests – was the separate chains of command for military and civilian efforts, which meant that the 'unity of effort' did not actually involve much unity at the command level. See also US Department of the Army, *Counter-guerrilla Operation, FM 31-16*, p. 99.
38 Kilcullen, *Counterinsurgency*, p. 1. US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, pp. 1-2. As well as Joint Chiefs of Staff US Department of Defense, *Counterinsurgency Operations, JP 3-24* (5 October 2009), p. I-2.
39 See David Petraeus, "Unclassified Excerpts from Tactical Directive", *International Security Assistance Force – Afghanistan Headquarters* (1 August 2010). http://www.rs.nato.int/article/isaf-releases/general-petraeus-issues-updated-tactical-directive-emphasizes-disciplined-use-of-force.html.
40 US Department of the Army/US Marine Corps, The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24, p. 167.
41 US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, pp. 1–2, 1–5, 1–7 and 1–8. See US Department of the Army/US Marine Corps, *The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24*, pp. xxv and 101. The same can be found in Kilcullen, *Counterinsurgency*, p. 7. Further, FM 3-24 (2014)

describes this shift more comprehensively by stating that the insurgency's centre of gravity is not merely or necessarily civilian support but can also include 'external support from other countries, a group of core leadership or believers, or it could be host of other factors or vital functions'; see US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, p. 7-6.

42 US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, p. 7-2; US Department of the Army/US Marine Corps, The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24, p. 49.

43 See Petraeus, "Unclassified Excerpts from Tactical Directive". In this tactical directive, Gen. Petraeus writes: 'We must continue – indeed, redouble – our efforts to reduce the loss of innocent civilian life to an absolute minimum. Every Afghan civilian death diminishes our cause. If we use excessive force or operate contrary to our counterinsurgency principles, tactical victories may prove to be strategic setbacks. We must never forget that the center of gravity in this struggle is the Afghan people; it is they who will ultimately determine the future of Afghanistan'.

44 Stanley McChrystal, "Tactical Directive", *International Security Assistance Force, Headquarters, Kabul, Afghanistan* (6 July 2009). http://www.nato.int/isaf/docu/official_texts/Tactical_Directive_090706.pdf.

45 The framing of US COIN strategy as a protection-centric doctrine of war is most apparent in the introductory chapters of the FM 3-24 (2006). See US Department of the Army/US Marine Corps, *The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24*, pp. xiii–1.

46 US Department of the Army/US Marine Corps, The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24, pp. xxi–xxliii.

47 See Kaplan, The Insurgents: David Petraeus and the Plot to Change the American Way of War.

48 Sitaraman, "Counterinsurgency, the War on Terror, and the Laws of War", pp. 1745–839.

49 Ganesh Sitaraman, "Remarks by Ganesh Sitaraman", *Proceedings of the Annual Meeting* (American Society of International Law) 104 (2010), p. 173.

50 Schmitt, "Targeting and International Humanitarian Law in Afghanistan", p. 328.

51 Robin Geiß and Michael Siegrist, "Has the Armed Conflict in Afghanistan Affected the Rules on the Conduct of Hostilities?", *International Review of the Red Cross* 93, no. 881 (2011), p. 21.

52 Ganesh Sitaraman suggests that since the strategic necessities of COIN impose a more stringent obligation of the discriminate use of force on counterinsurgents, even a broad understanding of the lawful target would still offer considerable protection through a robust principle of proportionality; see Sitaraman, "Counterinsurgency, the War on Terror, and the Laws of War", p. 1781.

53 For a discussion and critique of the function and growing influence of legal advisors in the targeting process, see Craig A. Jones, "Frames of Law: Targeting Advice and Operational Law in the Israeli Military", *Environment & Planning D: Society & Space* 33, no. 4 (2015).

54 Colin H. Kahl, "In the Crossfire or the Crosshairs? Norms, Civilian Casualties, and US Conduct in Iraq", *International Security*, no. 1 (2007), p. 16.

55 Craig Jones discusses how lawyers sometimes end up assuming the role of the commander by effectively determining the possibility of carrying out a lethal attack. See Jones, "Frames of Law: Targeting Advice and Operational Law in the Israeli Military".

56 Janina Dill, *Legitimate Targets? Social Construction, International Law and US Bombing* (Cambridge: Cambridge University Press, November 2014), pp. 148–52.

57 Ibid. Craig Jones describes a similar procedure for the participation of Israeli military legal advisors. See Jones, "Frames of Law: Targeting Advice and Operational Law in the Israeli Military".

58 Ganesh Sitaraman, *The Counterinsurgent's Constitution: Law in the Age of Small Wars* (New York: Oxford University Press, 2013), p. 242.

59 Dill, Legitimate Targets? Social Construction, International Law and US Bombing, p. 152.
60 Ibid., p. 149.
61 Ibid., p. 152.
62 Michael N. Schmitt, "Asymmetrical Warfare and International Humanitarian Law", *Air Force Law Review* 62, no. 1 (2008), p. 36.
63 See Derek Gregory, "The Everywhere War", *Geographical Journal* 177, no. 3 (2011); Kennedy, *Of War and Law*. On the development of targeted killing and compulsion to legality, see Gunneflo, *Targeted Killing: A Legal and Political History*.
64 Eyal Weizman, The Least of All Possible Evils: Humanitarian Violence from Arendt to Gaza (London: Verso, 2011), pp. 121–2.
65 Yotam Feldman and Uri Blau, "Consent and Advise", no. 23 December 2015 (5 February 2009). http://www.ifamericansknew.org/cur_sit/consent.html, quoted in: Eyal Weizman, "The Book of Destruction", *London Review of Books* 34, no. 23 (6 December 2012).
66 Eyal Weizman, "Legislative Attack", *Theory, Culture & Society* 27, no. 6 (2010), p. 22.
67 Charles J. Dunlap, "Law and Military Interventions: Preserving Humanitarian Values in 21st Conflicts" (Humanitarian Challenges in Military Intervention Conference, Washington, DC: Carr Center for Human Rights Policy Kennedy School of Government, Harvard University, 29 November 2001).
68 Lisa Hajjar, "Lawfare and Armed Conflict: Comparing Israeli and US Targeted Killing Policies and Challenges against Them", *International Affairs* (January 2012).
69 Eyal Weizamn cites the Israeli military lawyer Daniel Reisner, who describes his task as 'finding untapped potential in the interpretation of international law' in order to allow for military action. See Weizman, "Legislative Attack", p. 25.
70 Cf. Hajjar, "Lawfare and Armed Conflict: Comparing Israeli and US Targeted Killing Policies and Challenges against Them"; Jones, "Frames of Law: Targeting Advice and Operational Law in the Israeli Military". In addition to the Israeli military's redefinition of 'direct participation in hostilities' or 'human shields', the invention of the category of 'unlawful combatants' can also be seen as a type of 'contentious legal scholarship' that aims to redefine the boundaries of international law. On so-called 'unlawful combatants', see Parks, "Combatants".
71 Feldman and Blau, "Consent and Advise" Another example of the development of international law through contentious state practices, if not outright violation of existing international rules, is the post-9/11 invasion of Afghanistan. In an unprecedented interpretation of international law, the US decided to invoke its right to self-defence according to Article 51 of the UN Charter against the sovereign state of Afghanistan on the basis of the actions of a non-state actor, i.e. al-Qaeda, whilst prior to the US invasion of Afghanistan, Article 51 of the UN Charter appeared only to govern relations between states. For debates on the US's invocation of self-defence against Afghanistan for the actions of al-Qaeda, see Christian J. Tams, "The Use of Force against Terrorists", *European Journal of International Law* 20, no. 2 (2009); Kimberley N. Trapp, "The Use of Force against Terrorists: A Reply to Christian J. Tams (1)", *European Journal of International Law* 20, no. 4 (2009); Federico Sperotto, "The Use of Force Against Terrorists: A Reply to Christian J. Tams (2)", *European Journal of International Law* 20, no. 4 (2009); Lindsay Moir, *Reappraising the Resort to Force: International Law, Jus Ad Bellum and the War on Terror* (Oxford: Hart, 2010).
72 US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, pp. 13-13 and 13-14.
73 For instance, see Sitaraman, *The Counterinsurgent's Constitution: Law in the Age of Small Wars*, p. 13: 'Counterinsurgency is attuned to legitimacy and legality, and population perceptions because it is a political warfare … in political conflicts, law is inevitably an instrument of war', or p. 18: 'Strategic self interest provides the foundation for compliance with law in the age of small wars'.

74 Hosmer and Crane, Counterinsurgency: A Symposium, April 16–20, 1962, p. 21.

75 US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, p. 1-US Department of the Army/US Marine Corps, The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24, p. 39.

76 For a defence of the Israeli Army's 'knock-on-the-roof' strategy, see Michael N. Schmitt and John J. Merriam, "The Tyranny of Context: Israeli Targeting Practices in Legal Perspective", *University of Pennsylvania Journal of International Law* 37 (12 April 2015).

77 Weizman, "Legislative Attack", p. 14.

78 US Department of Defense, *Joint Targeting Manual, JP 3-60*, p. I-6.

79 US Department of the Army/US Marine Corps, The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24, p. 6.

80 US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, pp. 1–19. US Department of the Army/US Marine Corps, The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24, pp. 3 and 37.

81 US Department of the Army/US Marine Corps, The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24, p. 37.

82 See Petraeus, "Unclassified Excerpts from Tactical Directive"; Stanley McChrystal, "ISAF Commander's Counterinsurgency Guidance", (16 August 2009). http://www.nato.int/isaf/docu/pressreleases/2009/08/pr090827-643.html.

83 US Department of Defense, Insurgencies and Countering Insurgencies, FM 3-24, pp. 1–20.

84 US Department of the Army/US Marine Corps, *The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24*, pp. 35, 163 and 312.

85 Ibid., pp. 18 and 167.

86 Ibid., p. 104.

87 FM 3-24 2006, page 17; US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, pp. 4-10–4-13.

88 Kaplan, The Insurgents: David Petraeus and the Plot to Change the American Way of War, p. 162.

89 "Cache Found/Cleared (Friendly Action) IRQ20080802n11367", Iraq War Logs, WikiLeaks, 8 August 2008, accessed 23 December 2015. https://wikileaks.org/irq/report/2008/08/IRQ20080802n11367.html.

90 "Cache Found/Cleared (Friendly Action) IRQ20081213n11910", Iraq War Logs, WikiLeaks, 13 December 2008, accessed 23 December 2015. https://wikileaks.org/irq/report/2008/12/IRQ20081213n11910.html.

91 See "Attack RTP (Enemy Action) IRQ20090701n12129", Iraq War Logs, WikiLeaks, 1 July 2009, accessed 23 December 2015. https://wikileaks.org/irq/report/2009/07/IRQ20090701n12129.html; "IED Explosion RPT (Explosive Hazard) IRQ20080607n11704", Iraq War Logs, WikiLeaks, 7 June 2008, accessed 23 December 2015. https://wikileaks.org/irq/report/2008/06/IRQ20080607n11704.html.

92 "Detain by D 1/8 Cav IVO Baghdad, IRQ20070830n8522", Iraq War Logs, WikiLeaks, 30 August 2007, accessed 23 December 2015. https://wikileaks.org/irq/report/2007/08/IRQ20070830n8522.html.

93 See US Department of the Army/US Marine Corps, *The US Army/Marine Corps Counterinsurgency Field Manual, FM 3–24*, p. 17; David Petraeus, "Roundtable Disscussion: Media Roundtable with Gen. Daavid H. Petraeus", news release (4 September 2008). http://www.globalsecurity.org/military/library/news/2008/09/mil-080904-mnfi-b01.htm.

94 US Department of Defense, Insurgencies and Countering Insurgencies, FM 3-24, p. 4-3.

95 Ibid.

96 US Department of the Army/US Marine Corps, *The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24*, pp. 53–57; Thomas B. Nachbar, "Counterinsurgency, Legitimacy, and the Rule of Law", *Parameters, The US Army War College Quarterly* 42 (Spring 2012), p. 29.

 97 US Department of Defense, Insurgencies and Countering Insurgencies, FM 3-24, pp. 1-19 and 4-3.
 98 US Department of the Army/US Marine Corps, The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24, pp. xviii, 159 and 170. US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, pp. 1–9.
 99 US Department of Defense, Insurgencies and Countering Insurgencies, FM 3-24, pp. 1–10.
100 US Department of the Army/US Marine Corps, The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24, p. 299.
101 Kilcullen, *Counterinsurgency*, p. 43.
102 US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, pp. 1–12; US Department of the Army/US Marine Corps, The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24, p. 299. See also Galula, Counterinsurgency Warfare: Theory and Practice, p. 65.
103 For example, see US Department of the Army/US Marine Corps, *The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24*, Chapter 3, 'Intelligence in Counterinsurgency', pp. 79–138, in which the manual extensively defines and discusses concepts such as: society, culture, race, belief, identity, network, language, power and authority, etc. US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, which in Chapters 2 and 3 – titled 'Understanding an operational environment' and 'Culture', pp. 2-1–3-4, respectively – similarly engages with sociological questions raised by the fighting of a COIN whilst taking cultural and social considerations into account.
104 Fred Kaplan reports that these two events were decisive in helping Petraeus and Nagl to convince the conservative commanders of the US Army of the benefits of the new COIN manual. See Kaplan, *The Insurgents: David Petraeus and the Plot to Change the American Way of War*, pp. 166–90.
105 Bruce Pirnie and Edward O'Connell, *Counterinsurgency in Iraq (2003–2006)* (Santa Monica, CA: RAND Corporation, 2008), p. 42. Peter W. Chiarelli, "The 1st Cav in Baghdad – Counterinsurgency EBO in Defense Urban Terrain" interview by Patrecia Slayden Hollins, September-October, 2005. https://sill-www.army.mil/firesbulletin/archives/2005/SEP_OCT_2005/SEP_OCT_2005_FULL_EDITION.pdf, p. 6.
106 Pirnie and O'Connell, Counterinsurgency in Iraq (2003–2006), p. 42.
107 Chiarelli, interview pp. 4–5.
108 See Kaplan, *The Insurgents: David Petraeus and the Plot to Change the American Way of War*, pp. 170–3. COIN Manual FM 3-24 (2006) refers to the Tal Afar operation as an example of a successful COIN operation; see US Department of the Army/US Marine Corps, *The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24* pp. 182–4.
109 Pirnie and O'Connell, Counterinsurgency in Iraq (2003–2006), p. 39.
110 See Army Col. H. R. McMaster US Department of Defense, Commander of the 3rd Armored Cavalry Regiment, "Press Briefing on Overview of Operation Restoring Rights in Tall Afar, Iraq", news release (13 September 2005). http://archive.defense.gov/Transcripts/Transcript.aspx?TranscriptID=2106.
111 The term 'hearts and minds' is associated with British Field Marshal Sir Gerald Templer, who in the colonial context of the Malayan COIN famously said: 'the answer lies not in pouring more troops into the jungle, but in the hearts and minds of the people'. See Richard Stubbs, *Hearts and Minds in Guerrilla Warfare: The Malayan Emergency 1948–1960* (Oxford: Oxford University Press, 1989), pp. 1–2; Michael A. Cohen, "The Myth of a Kinder, Gentler War", *World Policy Journal*, no. 1 (2010), p. 78; Robert Egnell, "Winning 'Hearts and Minds'? A Critical Analysis of Counter-Insurgency Operations in Afghanistan", *Civil Wars* 12, no. 3 (2010), p. 283.
112 US Department of the Army/US Marine Corps, *The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24*, p. 294. FM 3-24 (2014) insists and stresses the

centrality of social and civilian operations during a COIN operation; however, it has dropped the term 'hearts and minds'.

113 This figure appeared first in Peter W. Chiarelli and Patrick R. Michaelis, "The Requirement for Full-Spectrum Operations", *Military Review* 85, no. 4 (2005), p. 7, and later in US Department of the Army/US Marine Corps, *The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24*, p. 155.

114 US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, pp. 7–9. US Department of the Army/US Marine Corps, The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24, p. 156.

115 Armed social work, Kalyvas says, is a 'state-building competition' between groups hoping to govern the unsatisfied population. In this competition the insurgents operate to undermine the government and the counterinsurgents try to act like a government. See Jeffrey C. Isaac et al., "Review Symposium: The New US Army/Marine Corps Counterinsurgency Field Manual as Political Science and Political Praxis", *Perspectives on Politics* 6, no. 2 (2008), p. 351.

116 See Patricia Owens, "From Bismarck to Petraeus: The Question of the Social and the Social Question in Counterinsurgency", *European Journal of International Relations* 19, no. 1 (2013). Moreover, *oikonomia* can be defined as the 'domestic' governance of social units through the management of human activities, basic human life needs and the submission of individuals – through violence or otherwise – to the authority of the household ruler. See Patricia Owens, *Economy of Force: Counterinsurgency and the Historical Rise of the Social* (Cambridge: Cambridge University Press, 2015), pp. 2–3.

117 Owens, Economy of Force: Counterinsurgency and the Historical Rise of the Social, p. 32.

118 Owens, "From Bismarck to Petraeus: The Question of the Social and the Social Question in Counterinsurgency", p. 3. Owens, *Economy of Force: Counterinsurgency and the Historical Rise of the Social*, pp. 72–4. On a similar note, see also Patricia Owens, "Human Security and the Rise of the Social", *Review of International Studies* 38, no. 3 (2012), p. 565.

119 Owens, *Economy of Force: Counterinsurgency and the Historical Rise of the Social*, p. 27; Owens, "From Bismarck to Petraeus: The Question of the Social and the Social Question in Counterinsurgency", p. 10. Drawing heavily on Arendt, Owens says that the emergence of the social realm as the space of governance resulted from the merger of the rules (*nomoi*) of the household (*oikos*) with the public sphere (*polis*) as the space of public deliberation and politics. Society as the unit of governance then emerges as a sphere that is neither political nor private. In this reading, then, armed social work is the re-emergence of such a form of social organisation on a globalised scale.

120 Isaac et al., "Review Symposium: The New US Army/Marine Corps Counterinsurgency Field Manual as Political Science and Political Praxis", p. 354.

121 See Cohen, "The Myth of a Kinder, Gentler War", p. 79. Egnell, "Winning 'Hearts and Minds'? A Critical Analysis of Counter-Insurgency Operations in Afghanistan", p. 284. See also Karl Hack "The Malayan Emergency as Counter-Insurgency Paradigm", *Journal of Strategic Studies* 39, no. 3 (2009); Huw Bennett, "'A Very Salutary Effect': The Counter-Terror Strategy in the Early Malayan Emergency, June 1948 to December 1949", *Journal of Strategic Studies* 32, no. 3 (2009).

122 Paul Dixon, "'Hearts and Minds'? British Counter-Insurgency from Malaya to Iraq", *Journal of Strategic Studies* 32, no. 3 (2009), pp. 367–8.

123 Ibid., p. 362.

124 Cohen, "The Myth of a Kinder, Gentler War", p. 83.

125 See for instance Amitai Etzioni, "COIN: A Study of Strategic Illusion", *Small Wars & Insurgencies* 26, no. 3 (5 March 2015).

126 For such reading of armed social work, see Douglas Porch, *Counterinsurgency: Exposing the Myths of the New Way of War* (Cambridge: Cambridge University Press, 2013); Douglas Porch, "The Dangerous Myths and Dubious Promise of COIN", *Small Wars &*

Insurgencies 22, no. 2 (2011). Porch takes COIN to be merely a rebranding of the old colonial brutality. For a similar take, see Andrew Bacevich, "Social Work with Guns", *London Review of Books* 31, no. 24 (17 December 2009); Gian P. Gentile "A Strategy of Tactics: Population-centric COIN and the Army", *Parameters, The US Army War College Quarterly* 39 (Autumn 2009).

127 US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, pp. 1–10. For a detailed account of the military and civilian agencies involved in US COIN, see US Department of the Army/US Marine Corps, *The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24*, pp. 60–4.

128 US Department of the Army/US Marine Corps, *The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24*, p. 53; also see p. 40: 'The political and military aspects of insurgencies are so bound together as to be inseparable'.

129 US Department of Defense, Insurgencies and Countering Insurgencies, FM 3-24, pp. 1–20.

130 This argument is also to be found, albeit implicitly, in Sitaraman, "Counterinsurgency, the War on Terror, and the Laws of War", p. 1776.

131 US Department of the Army/US Marine Corps, *The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24*, p. 104; US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, pp. 4–13. This categorisation is traceable to David Galula; David Galula, *Pacification in Algeria, 1956–1958* (Santa Monica, CA: RAND Corporation, 2006).

132 US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, p. 12-7. US Department of the Army/US Marine Corps, The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24, p. 192.

133 Ibid.

134 There is also scholarship on the mathematical aspects of hearts and minds that develops algorithms for calculating popular support. See Jonathan David Farley, "Evolutionary Dynamics of the Insurgency in Iraq: A Mathematical Model of the Battle for Hearts and Minds", *Studies in Conflict & Terrorism* 30, no. 11 (2007).

135 "Intelligent Visualization, Pattern Recognition, and Social Analytics at Aptima booth #1738", 2012, accessed 23 December 2015. http://www.aptima.com/news/2012/aptima-demo-tools-geoint-2012-analysts-zoom-find-meaning.

136 US Department of Defense, Insurgencies and Countering Insurgencies, FM 3-24, pp. 4–13.

137 Ibid.

138 Fred Kaplan reports a heated discussion between Lt. Col. John Nagl, the co-author of FM 3-24 (2006), and retired Gen. Peters, during which Nagl describes the 'finding of the invisible enemy' as the ultimate function of winning over the population. In Kaplan, *The Insurgents: David Petraeus and the Plot to Change the American Way of War*, p. 220.

139 Robin Geiß, "Asymmetric Conflict Structures", *International Review of the Red Cross* 88, no. 864 (2006), p. 764.

140 Joshua Kopstein, "DARPA's 1.8 Gigapixel Drone Camera Is a High-Res Fourth Amendment Lawsuit Waiting to Happen", (1 February 2013). http://www.theverge.com/2013/2/1/3940898/darpa-gigapixel-drone-surveillance-camera-revealed; Brian M. Pierce, "Autonomous Real-time Ground Ubiquitous Surveillance – Infrared (ARGUS-IR)". http://www.darpa.mil/program/autonomous-real-time-ground-ubiquitous-surveillance-infrared.

141 Other population control measures that are not discussed in this section include curfew, movement restrictions and travel permits. See US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24* pp. 1-20, as well as 8-6. See also US Department of the Army/US Marine Corps, *The US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24*, p. 166.

142 US Department of the Army/US Marine Corps, The US Army/Marine Corps Counter-insurgency Field Manual, FM 3-24, p. 166.

143 US Department of Defense, Insurgencies and Countering Insurgencies, FM 3-24, p. 10-6.

144 US Department of the Army/US Marine Corps, The US Army/Marine Corps Counter-insurgency Field Manual, FM 3-24, p. 166.

145 Khalili, Time in the Shadows: Confinement in Counterinsurgencies, p. 197.

146 Galula, Counterinsurgency Warfare: Theory and Practice, p. 85; see also Hosmer and Crane, *Counterinsurgency: A Symposium, April 16–20, 1962*, p. 17; Galula, Pacification in Algeria, 1956–1958, p. 99.

147 Kalev I. Sepp, "Best Practices in Counterinsurgency", *Military Review* (2006), p. 10.

148 In addition to the tactical value of demographics for US and colonial COIN, Laleh Khalili points out the justificatory and discursive functions of population control techniques. See Khalili, *Time in the Shadows: Confinement in Counterinsurgencies*, p. 197.

149 US Department of Defense, Insurgencies and Countering Insurgencies, FM 3-24, p. 9-5.

150 Forensics here can include any evidence that can be used to reveal an identity, e.g. fingerprints or digital footprints.

151 US Department of Defense, Insurgencies and Countering Insurgencies, FM 3-24, p. 8-6; see also Center for Army Lessons Learned, US Army Handbook-Commander's Guide to Biometrics in Afghanistan: Observations, Insights and Lessons, ed. US Department of the Army (April 2011), p. 31.

152 US Department of the Army/US Marine Corps, The US Army/Marine Corps Counter-insurgency Field Manual, FM 3-24, p. 180. See also Center for Army Lessons Learned, *US Army Handbook-Commander's Guide to Biometrics in Afghanistan: Observations, Insights and Lessons*, p. 4.

153 Farah Stockman, "Worries about US Data on Iraqis: Privacy Advocates, Those Scanned Fear Misuse If Files Shared", *The Boston Globe* (31 August 2010). http://www.boston.com/news/nation/washington/articles/2010/08/31/questions_arise_about_use_of_data_gathered_in_iraq_war/?page=2.

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5 From the military uniform to the disposition matrix

'If we decide [someone] is a bad person, the people with him are also bad'

So far and in the previous chapters, I have established that the legitimate human target of LAOC is best understood as an outcome of a modality of visuality, which I described as the coming together of a particular knowledge of enmity with discernible material modes of (in)visibilities. Subsequently, the military uniform was redescribed as law's analogue visual technology, automating the knowledge–vision composite. In insurgencies, where the insurgent forces abandon wearing of the military uniform, the counterinsurgent targeting is primarily focused on reconstructing its own mode of wartime visuality. This has, on the one hand, amounted to an expansion of knowledge of targetability from hostility to political irreconcilability and, on the other hand, to visual identification of enemy both at individual level – through biometric tracing of the population – as well as collectivising irreconcilability – through population support overlays. But neither the biometric visualisations nor the population support overlays replace the confidence and automated speed by which the military uniform makes the link between knowledge and vision of the legitimate target. If the counterinsurgent soldiers are to be able to make on-the-spot decisions about who to target in the context of an actual battle, knowledge and vision need to be brought together in such a way that the targetability of an individual is self-evident upon sight.

This operational and legal gap created as the result of the loss of law's original visual technology is filled in by data-driven visual technologies that put drones into motion. This chapter discusses the origin, operation, and implications of targeting by means of the 'disposition matrix'. Even though information regarding disposition matrix is not a matter of public record, this chapter puts together different pieces of evidence in order to create a picture of how the disposition matrix combines COIN's knowledge of targetability with modes of visualisation in order to make targeting during a counterinsurgency possible. By the end of this chapter, the disposition matrix and its associated weapon systems – i.e. the military drones – will emerge as technological interventions that, much like the military uniform, bring the separate elements of targetability into a seemingly legitimate configuration of knowledge–vision that identifies, locates and visualises targets on the basis of their social pattern of life.

The disposition matrix

The first time the term disposition matrix was publicly disclosed as part of the US military's technologies of targeting was in 2012, in a series of three reports published by the *Washington Post*.[1] The US military never confirmed the assertions or the conclusions of these reports; however, according to the editor the findings of the reports were 'based on interviews with dozens of current and former national security officials and intelligence analysts'.[2] The first report, written by Greg Miller, introduced the disposition matrix as the 'next generation of targeting list'.[3] Miller credited Michael Leiter, former director of the United States National Counterterrorism Centre (NCTC), with the development of the disposition matrix. The aim in developing this technology, the report notes, was to create an instrument to 'augment CIA and Joint Special Operations Commands' (JSOC) separate but overlapping kill lists'.[4] This interagency venture eventually resulted in the production of 'a single, continually evolving database' that went beyond a simple list of names in that it not only catalogued 'biographies, locations, known associates and affiliated organisations' but also included suggested strategies of engagement such as 'extradition requests, capture operations, and drone patrols'.[5]

The disposition matrix is an updated version of an earlier US military targeting practice known as 'signature strikes'.[6] Signature strikes are lethal attacks that target 'groups of men who bear certain signatures, or defining characteristics associated with terrorist activity, but whose identities aren't known'.[7] The 'signature' in signature strikes refers to traceable signs that individual behaviours and patterns of life leave behind. In other words, 'signature' here is a sign that grows out of everyday life activities and that can replace self-identification as a way of determining whether an individual belongs to this or that group.

The story of signature strikes begins back in February 2002, when CIA drone operators came across three men who displayed signs and manifested behaviours that eventually convinced the drone operators to target them. What they observed was a 'tall man in robes' and two other men acting reverently towards him in a former Mujahedeen base in Afghanistan, in a location called Zhawar Kili. Assuming that the 'tall man' was none other than Osama bin Laden, the three men were targeted.[8] Later, Pentagon Spokeswoman Victoria Clarke conceded that the 'tall man' was not bin Laden, but added: 'we are convinced that it was an appropriate target', although 'we do not know yet exactly who it was'.[9]

Before discussing the disposition matrix in detail, one point of clarification is in order. Signature strikes and the disposition matrix might appear to be similar to so-called 'personality strikes' or targeted assassinations (killings). But, there is one significant difference between the two modes of targeting. Whereas in cases of targeted assassination, there is a high degree of confidence regarding the actual identity of the target[10] – usually a known and high-value leader of an armed group – in signature strikes the actual identity of the targeted individual, as in the above example, is not known. Instead, targets are selected by comparing and matching individual behaviours and patterns of life with a 'pre-identified

signature of behaviour that the US links to militant activity' or membership of a terrorist organisation.[11] This distinction between targeted assassination and signature attacks together with the confidence displayed by above-motioned Pentagon Spokeswoman in the eye of a clearly erroneous lethal killing, captures the fundamental ways in which the placement of current digital technologies of targeting as a substitute of the military uniform lends itself to production of the visuality once captured in the principle of distinction.

As the *Washington Post* articles describe it, the disposition matrix is like a funnel that gathers a vast quantity of data from half a dozen agencies and then mines through this colossal collection of data, pairing individual signatures with signatures that are seen as threatening. Only after this process does it create a list of potential targets to be vetted by decision-makers.[12] The thinking behind the system is that in a war in which individual statuses are deliberately hidden, 'activity becomes an alternative to identity'.[13] Instead of seeking to ascertain individual identity, the disposition matrix looks to patterns of life, digital footprints, and signatures that can signify a desired target. Underlying the method is the fact that the everyday life of all of us contains traces of certain patterns that form the routine of our individual lives. For instance, we may repeatedly visit certain locations at roughly the same time and stay for roughly the same duration. We meet and interact, on a more or less regular basis, with a certain and limited group of people. Our online footprint can also reveal a repeated pattern of visits to certain websites and online social networks. If the everyday life of a person is put under surveillance, 'it is possible to establish a spatiotemporal map of [that person's] usual doings'.[14] By connecting behavioural maps to other forms of intelligence, then, it is possible to examine the quality of an individual's interaction networks. Furthermore, subjecting this data to algorithmic calculation allows for the identification of similar regularities in different people's lives, which in turn may result in establishing associations between suspicious people, places, financial transactions, etc.[15] Patterns of behaviour replace material visibility as a means of identification. As a US counterterrorism official, quoted by Chamayou, says: 'those who end up being killed' as the result of this method of targeting 'are people whose actions over time have made it obvious that they are a threat'.[16]

How does the disposition matrix work?

Besides being a cross-agency, integrated kill list, the disposition matrix differs from its predecessor, the signature strike, in that it developed out of an ambition to create an automated, self-perpetuating intelligence system capable of transforming a large amount of raw data into 'actionable intelligence'. An early expression of this ambition can be found in a 2003 article by Keith Alexander et al., published in the *Defense Intelligence Journal*, titled: 'Automating Markup of Intelligence Community Data: A Primer'.

In this article, Alexander et al., mindful of the difficulties inherent in contemporary targeting, call for a complete change in the culture and mindset of the US military intelligence community in order to do away with what they see as the coupling

of information age technological achievements with industrial age processes.[17] The authors' suggestion is to revolutionise the extraction, tagging, labelling, notifying patterns, analysis, storing, and sharing of intelligence in order to gain a greater understanding of enemy threats.[18]

The problem that such an automated system aims to resolve is the following. Traditional single-source intelligence analysts work their way in a linear fashion from data collection to a report. The analysts, who have access to a limited set of data, initially 'decide from their point of reference' what data is relevant and what is irrelevant and then 'create an analytic product to share with the rest of Intelligence Community'.[19] The data that is deemed irrelevant is discarded and thus not shared with the intelligence community at large. Alexander et al. argue that from the bulk of collected data – which is potentially useful for target identification – only a fraction is shared, and that other single-source analysts usually cannot access the discarded data, even if stored. Further, in such processes and procedures the analysts are unable to integrate all the potentially relevant collected information with the reported information or to integrate the collected data with broader historical information.[20] The authors' solution involves: (a) greater access to worldwide databases at all classification levels and languages, (b) the establishment of the required infrastructure at the lowest tactical level, and (c) the optimisation of data processing by integrating technologies of extracting data, entities, events, themes, and relationships.[21] The first two elements of this solution fall within the NSA mass data collection programmes, and the third solution is realised by the disposition matrix. The disposition matrix 'is a sophisticated grid', the mining instrument, 'mounted upon a database containing biographies of individuals believed to pose a threat to US interests and their known or suspected locations'.[22]

In the article, Keith Alexander – who two years later became director of the NSA – and his co-authors sketch a possible design for an automated data extraction, integration, and analysis technology. Their description of this technology provides a valuable insight into the way in which targeting by means of data analysis and pattern matching – key practices for the disposition matrix – might work.

In making their case for automating the target identification process, the authors imagine the reception of two different text messages by two different intelligence agencies. Message 1 reads: 'Mohamad Nasir ordered 300 pounds of ANFO (Ammonium Nitrate Fertilizer) on June 3, 2003 for delivery to Sabah, Malaysia', and message 2 reads: 'Two pounds of TNT were delivered to Taman Raja Laut on 20 October 2003. Delivery was accepted by Abas'.[23] If not analysed by an automated and integrated system, the two messages may appear unrelated and as such may never be paired. But an integrated, automated system will first break the two messages down into general categories such as <Person> Mohamd Nasir, Abas, <Location> Sabah, Taman Raja Laut, Malaysia, <Named Entities> ANFO, TNT, <Date> June, October, etc. Such a method of tagging isolates and unifies the core information of each message, which subsequently makes it possible for algorithms to juxtapose and compare the tagged data with other existing tagged data – other names, locations, dates, events, accidents, etc. At the end of this process, relations and patterns between different entities, locations, activities and dates can emerge.

In the above scenario, it turns out that Mohamad Nasir goes by different names, one of which is 'Abas'. By integrating the two messages, Mohamad Nasir pops up in the system as the recipient of both ammonium nitrate fertiliser and the two pounds of TNT.[24] Observing this pattern of behaviour, the logical conclusion, the authors suggest, is that 'components of a fertilizer-based bomb may be being assembled' by the monitored individual.[25] The case for automated target identification, then, is easily made: algorithms are much quicker than human analysts at recognising these patterns and pairing information in vast amounts of data, which means that targeting decisions can be taken that much more rapidly.

The operation of automated data analysis technology such as the disposition matrix critically depends on access to a comprehensive depository of raw data. To close the gap between 'what is known' and what 'could be known', all data is potentially useful. The identification of enemy insurgents through this mechanism depends on the constant extraction and storage of data from the general civilian population. Thus, under the directorship of Keith Alexander, the NSA operated according to one motto: 'Collect it all'.[26]

It is in this environment that so-called bulk data collection, or 'the authorized collection of large quantities of Signals Intelligence (SIGINT) data … without the use of discriminants',[27] for which the NSA became infamous, became an inescapable necessity for the operation of the COIN target identification machine.

Construction of an automated technological system for integrating knowledge and vision of targetability involves a host of technological mechanisms of collection and analysis data. In October 2015 *The Intercept* obtained a cache of secret documents which revealed that the NSA and JSOC use a target identification and locating system, code named GILGAMESH, in order to create a 'Geo-Location Watch List' (Figure 5.1).[28] GILGAMESH is a simulated cell tower mounted on a drone that forces cell phones to lock onto it as the drone flies over a particular area. Subsequently, after algorithms treat the collected data, 'the phone signals can triangulate a target's location'.[29] In a similar programme, the NSA and the CIA 'utilize a pod on aircraft [*sic*] that vacuums up massive amounts of data from any wireless routers, computers, smartphones or other electronic devices that are within range'.[30]

From Alexander et al.'s call for an automated data processing system to the bulk collection of metadata by the NSA, the question for us remains: how is the bulk collection of metadata used to identify enemy targets and threats and distinguish them from civilians? How does the algorithmic calculation of the disposition matrix spot potential targets in the mass of data?

In this regard, another official report, *Bulk Collection of Signals Intelligence: Technical Options*, is extremely illuminating. This report was published after the Snowden leaks in 2015 in order to provide a response to the US president's request to the US National Research Council to find 'software to provide alternatives to bulk signals intelligence collections' that could respect the privacy of US citizens whilst at the same time satisfying the needs of the security and intelligence services.[31] This report focuses in particular on the use of metadata and communication
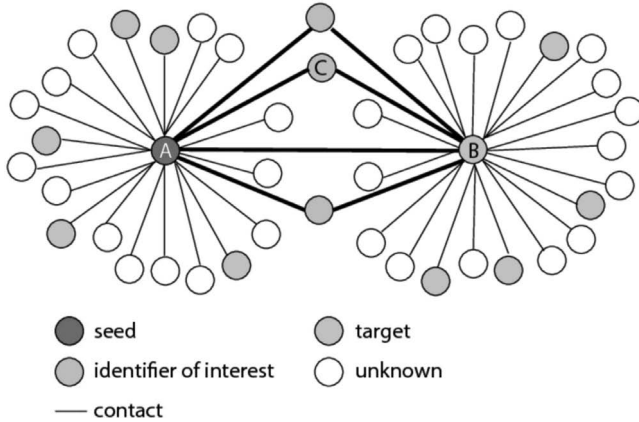
Figure 5.1 A leaked geo-location watch list.

Source: Image from Jeremy Scahill, The Assassination Complex, *The Intercept*, 15 October, 2015. https://theintercept.com/drone-papers/the-assassination-complex/

information collected from domestic and foreign telephone calls, emails, and other communications.[32]

In order to make the case in favour of the bulk collection of data, the reporting committee – which included Michael Leiter, the former director of NCTC and the person behind the disposition matrix, in his capacity as a representative of a private system integration and security corporation, Leidos – describes different ways in which the collected data is used in target identification and in the production of actionable intelligence. One method of using SIGINT to produce actionable intelligence is the mathematical mapping of a complex network of contacts between people and organisations: 'contact chaining' (Figure 5.2). The basic aim of contact chaining is to visualise clandestine networks by 'connecting the dots' between individuals who, together, are taken to form such networks.[33] A top-secret NSA document describes contact chaining as 'the process of building a network graph that models the communication (email, telephony, etc.) patterns of targeted entities (people, organisations, etc.) and their associates from the communications sent or received by the target'.[34]

The report also includes a description of a contact-chaining process. After the data collection phase, analysis begins with the identification of a 'subject

Figure 5.2 A network of contacts among identifiers.

of interest', which is referred to as a 'seed'.[35] The seed is 'an identifier of a communications endpoint' and is deemed a potential threat.[36] It is important to note that an identifier does not refer to a particular individual, but to a communication channel such as a phone number, an Internet Portal (IP) address or an email address that a target (or many others at many different times) may use. The 'geo-location watch list' (Figure 5.1), for instance, does not contain the names of targets but merely a set of phone numbers that are assumed to be connected to enemy terrorist activities.

Analysts use a particular seed identifier, e.g. a cellphone number, to dig into a vast database and gather information about other persons or networks that are in communication with that particular seed. Elaborating on the contact chaining graph shown in Figure 5.2, the report says that the contact-chaining process starts by filtering a database by means of commands like 'collect all communications to or from' known seeds – in this case 'A' and 'B'.[37] On the basis of these commands, new identifiers branch out of the initial seeds, which in turn can be subjected to further analysis. In this way, through rigorous data mining and contact chaining a whole system of communications can be illuminated on the basis of only two known seeds, 'A' and 'B'. Moreover, there is always a possibility that a peripheral seed, such as 'C', surfaces as a valuable link between two seemingly separate networks, indicating a new pattern of communication.

The automated data analysis does not stop here. The visualised identifiers in Figure 5.2 can also manifest the strength of a particular link or communication, regardless of its content. The density, length or frequency of linkages between identifiers is subjected to a triaging process, which categorises 'identifiers according to the danger that their owners might pose'.[38] Thus, the same automated data analysis system that identifies and visualises chain(s) of relations also ranks the severity

of the threat posed by each node. The case of targeting of Bilal Berjawi and the subsequent wave of arrests and targetings in Somalia, Manhattan, and Djibouti are examples of the way in which the automated system described above can continuously identifies new targets based on a single targeted seed.

We can say that this is the basics of the process of producing visualisable knowledge of enmity through digital data collection and processing mechanisms. What is important to bear in mind is that this mode of target identification is exclusively based on metadata analysis and not on the content of a particular communication. Perhaps there is a farmer in need of a steady supply of fertiliser who just happens – quite innocently – to be in constant contact with a potential insurgent. This farmer would probably end up on a watch list, or even targeted. According to a former JSOC drone operator, target identification is often based on cellphone tracking and not on a confirmation of a target's identity.[39] Similarly, one of the Afghan war logs documents leaked by Wikileaks shows that of 2,058 subjects included on a particular kill list – the Joint Prioritized Effects List (JPEL) – a large portion are not names but phone numbers.[40] What inevitably results from this form of targeting is the killing of individuals about whom there is no knowledge of identity or affiliation – about whom the most available knowledge is that they shared certain communication channels with a particular known threat.

Given that the US Army does not mind targeting without fully identifying its targets, it should not come as too much of a shock that it also counts as a legitimate target (and so not a civilian casualty) anyone who is unintentionally killed as the result of such lethal attacks. The leaked drone files published by *The Intercept* reveal that the US military labels any individual who is killed unintentionally as a result of a strike on a particular target an Enemy Killed in Action (EKIA).[41] EKIA, *The Intercept* reveals, is the designation code for those killed in a strike who are not the intended target but who have not been 'proven' to be a civilian nor been proven not to be an 'unlawful enemy combatant'.[42] The only qualification for being an EKIA is being a military-aged male who happens to be within the kill radius of a US drone missile that was aiming at another target (where this latter target itself is identified not by name or affiliation but on the basis of a certain pattern of life).[43]

The overwhelming confidence of the US security apparatus in pattern of life as a method of target recognition is further evident in the *Report of the US Joint Inquiry into the Terrorist Attacks of September 11, 2001*, which claims that 'on September 11, enough relevant data was resident in existing databases' that 'had the dots [been] connected' the attacks could have been 'exposed and stopped'.[44] This is exactly the same line of reasoning by which the report on *Bulk Collection of Signals Intelligence: Technical Options* justified the NSA's data collecting programmes.[45] Similarly, Keith Alexander sought to defend the NSA's surveillance programmes during a House Select Intelligence Committee Hearing in June 2013 by arguing that 'the events of September 11, 2001 occurred, in part, because of a failure on part of [the US] government to connect those dots', whereas, according to Alexander, the NSA and its partners had 'been able to connect the dots and prevent more terrorist attacks'.[46]
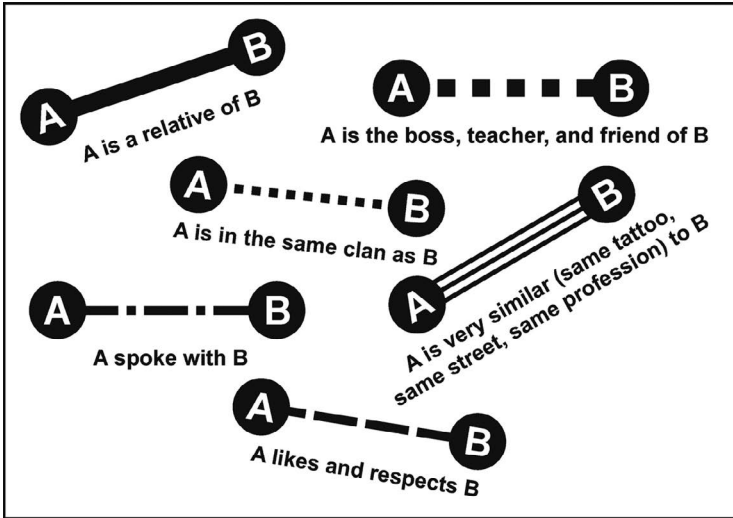
Figure 5.3 Example of dyads. Example of dyads.

Source: Image from the US Army/Marine Corps Counterinsurgency Field Manual, FM 3-24 (2006).

Let us now turn to the COIN manuals in order to show how these technological developments relate to the targeting process of contemporary armed conflict. The above-mentioned process of identifying and visualising members of clandestine insurgent networks is referred to explicitly in FM 3-24 (2014).[47] The updated US COIN manual reasons that since 'a networked insurgency consists of individuals and connections between them', 'commanders and staff can think of the individuals in an insurgency as actors or nodes'.[48] A link connects two individuals. The different ways of portraying connecting links – a straight line, a dotted line, a hyphenated line, etc. – indicate different types and severities of connection between the two individuals.[49] Two individuals and the link between them form a dyad, and multiple dyads indicate a network.[50]

The connection between the production of such network visualisations are illustrated in Figure 5.3 and the actual targeting process is to be found elsewhere in a US Army field manual. Concerning the production of individual patterns of life as means of target identification, the Targeting Process Field Manual (FM 3-60) writes:

Life pattern analysis is connecting the relationships between places and people by tracking their patterns of life. While the enemy moves from point to point, reconnaissance or surveillance tracks and notes every location and person visited. Connections between those sites and persons to the target are built, and nodes in the enemy's network emerge. Link analysis and life pattern analysis identify these relationships in order to flesh out the target information folder.[51]

As the Targeting Process Field Manual and FM 3-24 (2014) both explain, the importance of such visualisations for staff, besides identifying targets of interest, is to illustrate which nodes are central for the life of a network and so which nodes' 'removal' could fragment a network.[52] This thus makes taking decisions regarding targets a relatively straightforward process. As FM 3-24 (2014) explains, by simply looking at a network commanders and staff can ascertain 'how an individual fits to a network', assess 'the degree of centrality' of an individual for a network, and determine which nodes have high degrees of centrality or, in other words, which nodes constitute hubs.[53]

One problem with this method of target recognition emerges when FM 3-24 (2014) describes the other nodes whose 'removal' is also important for defeating a networked insurgency. The manual says that it is not just the central nodes but also nodes with a 'high degree of betweenness centrality', which indicates 'the extent to which an individual lies between other individuals in the network, serving as intermediary, liaison, or bridge' that have a lot of influence on the life and flow of a network.[54] Moreover, even though peripheral nodes score lower in FM 3-24 (2014) target assessment, they are still important because they are 'often connected to networks that are not currently mapped'.[55] The problem with all this is clear. In this logic of target recognition there is no space, no position, for nodes to be considered simply as non-targets. Whereas target recognition based on the analogue visual technology of the military uniform operated in a binary manner – at least discursively[56] – in the operation of advanced digital technologies of targeting, there can be degrees of targetability, but there cannot be a sharp distinction between targets and non-targets, civilians and combatants. The technology designed to identify the invisible enemy targets does so simply by creating a spectrum of possibilities in which everyone is painted with a different shade of targetability based on their degrees of separation. The closer an individual is to a hub in a suspicious network, the higher is the probability that he or she will be targeted.

I postpone my overarching critique of this mode of targeting to a later discussion. What is already clear is that in COIN the disposition matrix serves at once to identify, locate, and visualise targets. The disposition matrix identifies targets by automatically mining through a mass of data in order to recognise patterns of life, which it then pairs with those of known insurgents, or with whichever other patterns of behaviour that its algorithms deem threatening. At the same time, the disposition matrix geographically locates the identified targets by tracking, tracing and keeping tabs on individual movements. Finally, it visualises targets by superimposing different forms of intelligence upon materially legible and comprehensible formats, such as maps, contact-chaining graphs, and geo-location watch lists. In doing all this, the disposition matrix shows itself to be, in effect, an attempt to replace the operational – and in practice the legal – functions of the military uniform.

That said, in order critically to engage with the practice of targeting on the basis of the disposition matrix, we need further to discuss the legal and political processes through which targeting on the basis of network and pattern analysis becomes the preferred substitute for targeting on the basis of the military uniform. For COIN manuals and the scholarship behind them, the knowledge underlying the

targeting process is knowledge of ungovernability or of the lack of support among the population; the algorithmic logic of pattern-making extends the condition of targetability thus created from one individual to the members of his or her network of interaction. Targetability thus potentially becomes less a matter of activity or identity and more a condition based on association, proximity and frequency of contact. In other words, the disposition matrix works on the basis of 'guilt by association'.[57] This fact about contemporary COIN targeting is explicitly expressed in a US military handbook on the prevention of civilian casualties in Afghanistan, which says: 'individuals are declared hostile based on their affiliation with known enemy groups'.[58] A COIN officer puts it even more clearly: 'if we decide [someone] is a bad person, the people with him are also bad'.[59] What will be discussed below is how such a rationality of extending targetability from one individual to others gathered momentum in COIN.

Radicalisation studies and the sociable enemy

Setting aside the disposition matrix – the most prominent technology of target identification used by the US – there are a host of other computer programmes at work in contemporary warfare. I have already mentioned the use of biometrics in the production of visibility through making BEWLs and Aptima's sociocultural modelling software, SCIPR. In addition to these programmes, in the counterterrorism operations of the US Department of Justice and federal intelligence agencies, Louise Amoore reports, another algorithmic security system, called NORA (Non-Obvious Relationship Awareness), is used.[60] Originally developed by Oracle Corporation for use by Las Vegas casinos, NORA is identification software that can spot 'obscure relationships' between individuals.[61] In the field of security, NORA applies its algorithm in order to find 'behavior patterns or personal associations that hint at terrorist activity, turning data into actionable intelligence'.[62]

The anthropologist Roberto J. Gonzalez notes that computerised data analysis and sociocultural modelling is a multibillion-dollar industry in which virtually all branches of the US armed forces, except the Coast Guard, are involved.[63] Gonzalez provides a partial list of more than twenty-five different sociocultural modelling, simulation, and forecasting programmes used by the US Department of Defense to perform a variety of tasks, from virtual combat training, cultural sensitivity training, visualisation and assistance programmes for operational planning, to tracking, forecasting and analysing human behaviours, support analysis systems, etc.[64] For instance, one such piece of software, FACETS, 'forecasts likely opinion changes of individuals and groups to certain events'.[65] Another system, used in Iraq and Afghanistan in 2007 and 2010, respectively, is a data-processing and data-mining system called Real Time Regional Gateway (RTRG), which reportedly has the ability to predict insurgent attacks with an astonishing accuracy of between sixty and seventy per cent.[66] RTRG is a regionally focused system that predicts enemy attacks by analysing all manner of gathered data, including phone conversations, text messages, road traffic patterns, public opinion, and even the price of potatoes.[67]

Data-driven predictive technology owes its exponential growth to the post-9/11 climate of anxiety and fear in which the prediction and prevention of future attacks became the paramount imperative of the security apparatus as a whole.[68] The groundwork for the rationalisation and legitimisation of target identification on the basis of the logic of association and proximity deployed by these technologies was laid, on the one hand, by certain developments in the field of terrorism studies and, on the other hand, in the contested development of the notion of 'direct participation in hostility' in the legal scholarship of armed conflict.

One key factor that tied the 'guilt by association' logic to the development of data-driven predictive technologies and, by extension, to the targeting rationality of contemporary COIN is what Arun Kundnani describes as the state-sponsored study of the so-called 'radicalisation' process, which became a topic in the post-9/11 discipline of 'terrorism studies'.[69] Seeking to predict and prevent acts of terrorism, radicalisation theories ask: 'what goes on before the bomb goes off?' and 'why do some individual Muslims support an extremist interpretation of Islam that encourages violence?'[70] In answering these questions, Kundnani writes radicalisation studies build their intellectual foundations on 'the assumption that the knowledge of indicators of individual or group radicalisation would allow for the construction of an early warning system to detect theological violence'.[71] Through surveillance and analysing the everyday habits of citizens, governments would be able to detect changes in behaviour that indicate the potential for extremism. The foundational assumptions of this particular academic field about modelling terrorist behaviours and the processes by which an individual becomes inclined towards extremism became part of the state security apparatus in the War on Terror.[72]

One significant figure in this field is Marc Sageman. As a psychiatrist, a former CIA operator in Afghanistan and an advisor to the New York Police Department, Sageman's writings have the authority that comes from him being both a former field operator and an academic. His books *Understanding Terror Networks* – acknowledged as a source for FM 3-24 (2006) – and *Leaderless Jihad: Terror Networks in the Twenty-First Century* offer a method of tracing and identifying potential future threats that later came to be known as the 'bunch of guys' theory.[73] The essence of Sageman's influential theory is that the growth of Islamic extremism and individual radicalisation depends to a great degree not on individual or collective political and economic grievances but 'on kinship, friendship and social interaction'.[74] Sageman claims that of the five hundred individuals whom he found to be linked to the 9/11 attacks, 'about two-thirds … were friends with other people who joined together or already had some connection to terrorism'.[75] On this reading of enmity, then, 'social bond comes before ideological commitment'.[76] Translated into the language of FM 3-24 (2014), the battlefield is no longer to be considered as an 'Area of Operation' but as a dynamic 'Environment of Operation'.[77] The 2014 COIN manual opens its discussion of the networked understanding of radicalisation by insisting that 'it is uniquely important in counterinsurgency operations that commanders and staff do not view [friendly, neutral and hostile] actors as static and unchanging'. An environmental understanding of the battlefield views targets as parts of a dynamic and interrelated network in which targeting is

no longer conceived in terms of the relatively static categories of combatant and civilian. Clearly evincing the influence of Sageman's theory of enmity as an extension of social interaction, the manual says that actors 'can become more hostile or less hostile'[78] depending on how and where in a particular system of relations they are placed. In an environment of operations, it is thus not the current state of an actor but 'the interaction between the actors and the changes between their interactions that is important'.[79]

Direct participation in hostilities

The new knowledge and vision of targeting, facilitated through technological affordances of surveillance and data analysis technologies, ultimately promote and lift a particular legal discourse to locate its operational expansion of the category of target within the existing legal discourses. In this regard, debates in the legal scholarship concerning the notion of 'direct participation in hostilities' (DPH) have fed into the way in which the US has sought legitimacy for this new radicalisation-theory-influenced targeting.

Targeting civilians, according to LOAC, is permitted only if, and only for such time as, they are directly taking part in hostilities.[80] Therefore, in order to justify the targeting of members of a social network or the labelling of a group as legitimate targets (as in the category of EKIA), it must be established that those individuals were directly participating in hostilities. Since in insurgencies individuals participate in hostilities without clearly and unambiguously indicating their affiliation to a party to the conflict (they do not, for instance, wear uniform, insignia, or bear arms openly), it is clear that the notion of DPH will be instrumental for regulating targeting in such conflicts.

Rather typically, however, there is no treaty definition of the notion of DPH. In accordance with its international mandate as a neutral and independent organisation tasked with the promotion of greater understanding of IHL, the ICRC attempted to fill this gap by holding a series of conferences from 2003 to 2008 with the aim of providing interpretive guidelines for the notion of direct participation in hostilities.[81] The results of these conferences were published in 2009 as *Interpretive Guidance on the Notion of Direct Participation in Hostilities under International Humanitarian Law*. The debates and divisions surrounding this much-discussed publication, I will argue, can provide an insight into how the US military found a way of legitimising its logic of targeting by social proximity and association.[82]

According to the mainstream narratives of international law, there are two major interpretations of the notion of DPH, the narrow and the broad. The main areas of disagreement between the narrow interpretation of DPH (that of the ICRC) and the broad interpretation (that of the US) have to do with a) which acts constitute DPH and b) when DPH begins and when it ends.[83]

The ICRC study argues that for an act to constitute DPH it must pass three tests. First, there is a 'threshold of harm' that an act must reach in order to be

considered a participation in hostilities. The act, the ICRC holds, 'must be likely to adversely affect the military operations or military capacity of a party to an armed conflict or, alternatively, to inflict death, injury, or destruction of persons or objects protected against direct attack'.[84] For an act to reach the threshold of harm, it is not necessary that it entail death, injury, or destruction.[85] For instance, sabotaging or disturbing 'deployments, logistics and communication'[86] satisfies the requirement of harm.

Second, 'there must be a direct causal link between the act and the harm likely to result from the act, or from a coordinated military operation of which that act constitutes an integral part'.[87] Direct harm, the ICRC writes, is harm that is brought about in 'one causal step'.[88] For that reason, 'individual conduct that merely builds up or maintains the capacity of a party to harm its adversary', such as 'providing an adversary with supplies and services like electricity, fuel, construction material, finances or design, production, and transport of weapons are excluded from the concept of direct participation in hostility'.[89] In addition, the indispensability of an act for the conduct of hostilities or the existence of an uninterrupted causal link between an act and harm are neither sufficient nor necessary for the act to be considered direct participation. As such, neither providing food for the armed forces – an indispensable act for sustaining hostilities – nor the design, assembly, storage, purchase or transportation of an IED – an uninterrupted causal chain – pass the directness of harm test, according to the ICRC study.[90]

Third, there must be a 'belligerent nexus', meaning that 'the act must be specifically designed to directly cause the required threshold of harm in support of a party and to the detriment of the other'.[91] Furthermore, the narrow interpretation of the ICRC insists that civilians lose their protection and become lawful targets only if, and for such time as, they directly take part in hostilities. In this regard, the ICRC accepts that the time during which individuals are preparing for the execution of an act and deploying to and returning from the location of execution of an act are times during which individuals can lawfully be targeted as directly participating in hostilities.[92] But the ICRC also insists that for DPH to be a meaningful concept parties to a conflict must accept that a civilian recovers his or her protection once no longer participating in hostilities. This oscillation between being a lawful target and a protected civilian, commonly known as the revolving door effect, 'is not a malfunction of IHL' but 'an integral part' of it because 'it prevents attacks on civilians who do not, at the time, represent a military threat'.[93]

The US Department of Defense Law of War Manual, on the other hand, while admitting that the proposals and interpretations of the ICRC are often helpful, rejects the ICRC's proposal about the interpretation of DPH.[94] Apart from the general point of disagreement – that the ICRC's interpretation ends up, counter-intuitively, providing more protection for non-state actors, who do not enjoy combatant status, than for the combatant members of regular armed forces – it will be useful for the purposes of this book to set out some of the more specific disagreements.[95]

To begin with, the broader interpretation holds that war is ultimately a 'zero-sum game' in which acts that help one party to a conflict harm the adversary.[96] Thus, whereas the ICRC excludes acts that enhance a party's military capacity from the meaning of direct harm, the broader view holds that harm is not only a matter of damaging or weakening the enemy but also of enhancing a party's war-fighting and war-sustaining capacity.[97] This broad view stems directly from the US Commander's Handbook on the Law of Naval Operations, which controversially asserts that it is a legitimate military objective to target efforts that support the 'war sustaining' capacity of the enemy.[98] For this reason, the US's broad view sees the design, assembly, and production of an IED as acts meeting the criteria of DPH, whereas the ICRC's narrower view would only consider the planting and detonation of an IED to constitute 'direct harm'.[99]

The US's insistence that support activities amount to DPH, and its conclusion that those engaging in them may therefore lawfully be targeted, marks a line of continuity between the Bush administration's coinage of the term 'unlawful combatant', the Obama administration's understanding of the notion of DPH and US COIN manuals' conceptualisation of its human enemy targets.[100]

In the context of the so-called Global War on Terror, the Bush administration developed a category of targetable humans in order to facilitate the use of force in a geographically expansive armed conflict against an extremely broadly defined enemy. The US Military Commission Act of 2006 defined the term 'unlawful combatant' – a legitimate target in the eyes of the US military – as 'a person who has engaged in hostilities or who has *purposefully and materially supported hostilities* against the United States' [emphasis added].[101]

A similar expansion of the notion of DPH to include support activities is evident in a memorandum provided by the Obama administration that explained the president's authority to detain suspected terrorists at Guantanamo Bay. The memo considers it legitimate to detain, among others, persons:

> [W]ho were part of, or *substantially supported*, Taliban or al-Qaida forces or *associated forces* that are engaged in hostilities against the United States or its coalition partners, including any person who has committed a belligerent act, or has *directly supported hostilities*, in aid of such enemy armed forces [emphasis added].[102]

The memo not only refuses to identify what, precisely, 'substantial support' and 'associated forces' mean but also insists that there is no need to provide any such definition.[103] Even more significant is the memo's subsequent replacement of the term 'direct participation in hostilities' with 'direct support of hostilities'. This replacement of 'participation' with 'support' as the constitutive act by which civilians lose their protection and become targets provides the backdrop for US COIN doctrine's tendency to define its enemy targets no longer exclusively in terms of their hostile acts but rather in terms of their irreconcilability and unsupportiveness. The prominence of the concepts of

lack of commitment, irreconcilability, ungovernability and unsupportiveness in COIN has as much to do with the tendency of the US military to conceptualise targeting possibilities as broadly as possible as it does with the problem of the insurgents' lack of visibility.

That said, it is the ICRC's development of the notion of 'membership of a non-state armed forces' in the context of DPH that provides the impetus for the disposition matrix's targeting on the basis of proximity, social relation, and association. In developing its notion of DPH, the ICRC study makes a distinction between civilians participating in hostilities and the members of non-state armed groups. The distinction between these two groups is of fundamental importance. Civilians directly participating in hostilities, the ICRC argues, lose their protection and can be targeted only 'for such time' that they are directly taking part in hostilities.[104] But if membership of a non-state armed force can be established, then an individual can be targeted at any time, as long as he is performing a 'continuous combat function'.[105]

Continuous combat function, for the ICRC, is synonymous with continuous DPH.[106] What is important for us here is that 'continuous combat function', which signifies membership in a non-state armed group, 'may be openly expressed through the carrying of uniforms, distinctive signs or certain weapons';[107] but if these are not available, as is the case in an insurgency, then 'it may also be identified on the basis of conclusive behaviour'.[108] The keywords here are obviously 'conclusive behaviour'. In the ICRC's view, individual behaviours can replace the signification of the military uniform and therefore link an individual to a non-state enemy force as a member. The idea of replacing identity with activity, which, as I established above, is central to the logic of the disposition matrix, gains its rationale from this assertion of the ICRC. The ICRC study goes on to argue that by establishing that an individual's direct participation is not of a 'spontaneous, sporadic, or temporary' character, he can be turned from a civilian directly participating in hostilities into a member of a non-state armed group, and can then be targeted at any time, regardless of whether he is involved in a hostile act at the time of targeting.[109] By the same token, according to the ICRC, disengagement from an armed group is also expressed through 'conclusive behaviour', such as 'lasting physical distance from the group'.[110]

In order to establish a continuum of behaviour as a justification for targeting civilians outside the temporal limits of DPH – in order, that is, to transform civilians directly participating in hostilities into members of a non-state armed group targetable at any time – the disposition matrix and its related technologies present otherwise sporadic, fragmented and incidental interactions and contacts as interlinked, frequent and intentional relations. The emergence of guilt by association as the logic of targetability, the development of the category of EKIA, and the algorithmic software of the disposition matrix all get their rationale and claim to legitimacy, in part, from developments in data processing and computer science, security and terrorism studies as well as, of course, the legal scholarship of armed conflict.

'Killing at an industrial scale': Disposition matrix operationalising the new visuality

In an interview, Lt. Col John Nagl, co-author of the FM 3-24 (2006), boasted about the new technology of target identification:

> We're getting so good at various electronic means of identifying, tracking, locating members of the insurgency that we're able to employ this extraordinary machine, an almost industrial-scale counterterrorism killing machine that has been able to pick out and take off the battlefield not just the top level al Qaeda-level insurgents, but also increasingly is being used to target mid-level insurgents.[111]

An overarching critique of the use of the disposition matrix in targeting practices is suggested by this extraordinary presentation of COIN targeting as an 'industrial-scale' practice. What does this mean? To begin with, his new visuality of targeting operates as a self-perpetuating process that can produce its own operational conditions. At first, the disposition matrix registers the life of the population as it appears to its surveillance technologies. Then it calculates, categorises, identifies, and records patterns of life that it deems abnormal and threatening. Finally, it subjects these patterns of life to a relevant operational decision, one of which is the use of lethal targeting.

The disposition matrix does not, however, operate in a vacuum. Taking FM 3-24 (2014) at its word when it refers to the battlefield as an 'Environment of Operation', the lives that are constantly monitored, those that are taken by drones and those that survive drone attacks, share an ecosystem – a platform of affecting and being affected by – with the instruments and the visual technologies that operationalise the contemporary amalgamation of surveillance and targeting. As the disposition matrix targets individual patterns of life, the targeted population adapt their lives to patterns that, they come to understand, do not trigger the lethal algorithms of the disposition matrix. This is to say that as drones strike certain patterns of life, they eventually produce, favour or impose *other* patterns of life as normal and unthreatening ones. Deviations from these newly imposed patterns, in turn, signify new anomalies and, as such, create new possibilities and conditions of engagement. It is in this way that the disposition matrix becomes a self-perpetuating, automated, industrial killing machine that can produce new targets of engagement out of patterns of life that it initially did not consider targetable.

Outside of the context of Iraq and Afghanistan, the study *Living Under Drones* tells the story of how frequent drone strikes, beyond just taking lives, have extensively reconfigured the way of life in the FATA region (Federally Administered Tribal Areas in northern Pakistan) to such an extent that previously 'normal' patterns of life can now easily be considered as anomalies, and so suitable for targeting. For instance, the study mentions that as a result of a targeting practice called 'double tapping', people in this region are no longer willing to

try to rescue victims after a drone strike.[112] Double tapping means that in order to ensure the elimination of their targets, drones usually fire two consecutive missiles at the same target.[113] Double tapping is such a routine practice that a survivor of a drone strike, Faheem Qureshi, notes that 'when a drone strikes and people die, nobody comes near the bodies for half an hour because they fear another missile will strike'.[114] The Bureau of Investigative Journalism reported in February 2012 that of 18 attacks on first responders and rescuers, 12 resulted in further loss of life.[115]

As a routine targeting practice, double tapping effectively renders anyone who rushes to provide medical assistance to those wounded in an attack a de facto target. When everyone knows that drone attacks come in pairs, it becomes no longer acceptable or normal behaviour to seek to provide medical assistance after an attack.[116] Here is what happened to Hayatullah Ayoub Khan, as reported in *Living Under Drones*:

> He stated that a missile from a drone was fired at a car approximately three hundred meters in front of him, missing the car in front, but striking the road close enough to cause serious damage. Hayatullah stopped, got out of his own car, and slowly approached the wreckage … He stated that when he got close enough to see an arm moving inside the wrecked vehicle, someone inside yelled that he should leave immediately because another missile would likely strike. He started to return to his car and a second missile hit the damaged car and killed whomever was still left inside.[117]

The study also discusses individuals who avoid any form of congregation. Some lock themselves inside their homes and have minimal external interactions and refuse to receive guests or visitors.[118] In other cases, parents pull their children out of schools, fearing that, to the eyes of a drone, a classroom full of students may appear similar to a dangerous gathering.[119] One college student notes that in some cases even teachers and staff refuse to show up to class.[120] Because of repeated attacks on weddings, funerals, and mosques, others refuse to show up to such social events.[121]

> We do not come out of our villages because it's very dangerous to go out anywhere … In past we used to participate in activities like wedding gatherings [and] different kinds of *jirgas*, different kinds of funerals … We used to go to different houses for condolences, and there were all kinds of activities in the past and we used to participate. But now it's a risk to go to any place or participate in any activities.[122]

Another one says:

> If I am walking in the market, I have this fear that maybe the person walking next to me is going to be a target of the drone. If I'm shopping, I'm really careful and scared. If I'm standing on the road and there is

a car parked next to me, I never know if that is going to be the target. Maybe they will target the car in front of me or behind me. Even in mosques, if we're praying, we're worried that maybe one person who is standing with us praying is wanted. So, wherever we are, we have this fear of drones.[123]

In this new modality of wartime visuality where the normality of everyday activities has been redefined through successive drone attacks, a classroom full of students, a mosque, a crowded wedding or funeral, people hanging out in groups or rushing to help victims of an attack all subvert the patterns created by the disposition matrix, and thus become potential targets.

Others have criticised contemporary targeting practices by debunking the claims of precision and discriminate targeting made on behalf of the disposition matrix. As far as the claim of precision is concerned, the leaked 'drone papers' published by *The Intercept* show that in a period of five months, May–September 2012, of 155 individuals who were killed in 27 US drone operations in northern Afghanistan, only 19 of them were intended targets – the so-called 'jackpot' targets. The remaining 136 were simply categorised as EKIA.[124] This means that almost 9 out of every 10 victims of a drone attack in that period were not intended targets at the time of the attack, and neither were they posthumously categorised as so-called 'unlawful combatants'. To be sure, statistics from a five-month period may not necessarily be representative of the whole targeting campaign. But the mathematical twist that has been used subsequently to frame this period not only as a successful period of targeting but as an exceptionally successful one – with a 70 per cent precision rate – reveals something remarkably suspicious, if not flawed, about any claims of precision. In presenting the statistics of this period, the same documents show, the US military divides the 19 successful hits by 27 – the number of drone operations – and thus claims an astonishing 70 per cent precision rate for its drone operations.[125]

Chamayou reminds us that 'there is a crucial difference between hitting a target and hitting only the target'.[126] He goes on to note that there is nothing surgical or for that matter 'more precise' about using an air-to-surface anti-tank missile with the estimated kill radius of 15 metres and wound radius of 20 metres – a hellfire missile – for targeting a single human being.[127]

Because of the reliance of contemporary targeting practices on data mining and data science, and because of the extensive use of visual intelligence and the remarkable endurance of drones in tailing individuals,[128] there is a good deal of confidence amongst a certain group of legal scholars in the ability of contemporary targeting practices to apply lethal force discriminately.[129] To give one example, Michael N. Schmitt relies on the visual and technological qualities of drones to make this case for drones and pattern of life analysis in contemporary targeting practices: 'compared to attacks by manned aircraft or ground-based systems, the result is often a significantly reduced risk of misidentifying the target or causing collateral damage'.[130] John Brennan, in his

capacity as the US president's Advisor on Homeland Security and Counterterrorism, has a similar view:

> With the unprecedented ability of remotely piloted aircraft to precisely target a military objective while minimizing collateral damage, one could argue that never before has there been a weapon that allows us to distinguish more effectively between an al-Qaida terrorist and innocent civilians.[131]

Drones and the disposition matrix are framed as precision instruments capable of making distinctions. Yet, as one commentator notes, the technological complications of targeting – the algorithmic and probabilistic calculations – provide merely a veneer of scientific rationality for a practice that is neither precise nor discriminatory.[132] The logic of data science and, in particular, data mining, Claudia Aradau writes, is that of resemblance, correspondence, and similitude. When used as a yardstick for target identification and connected so intimately to the use of lethal violence, 'any action, any characteristic, can become the sign of terrorist activity – from buying a one-way plane ticket to reading online material'.[133]

This point can best be supported by reference to another report on drone targeting, titled *You Never Die Twice*.[134] This report, prepared by a US-based NGO, tracks forty-one names on the US kill list and follows their targeting processes and after-attack reports, only to find that many of these individuals have ended up 'dying' in more than one drone attack. For instance, in a drone attack in the Datta Khel area on 31 December 2009, Haji Omar, named on the US kill list, was reported dead. But Haji Omar had already been announced killed after another drone strike on 26 October 2008.[135] In these two attacks, 27 other people died.[136] Haji Omar's case is not even the most extreme example. According to US reports, Baitullah Mehsud, a Taliban leader, was 'killed' at least six times, until he eventually died in a drone strike on 5 August 2009.[137] In these seven different operations, 127 other people are reported to have died.[138] Abu Ubaidah al Masri 'died' three times in US drone strikes only to later die of natural causes.[139] In total, this report finds that as many as 1,147 people may have been killed during attempts to kill these 41 men.[140] What this report makes clear is that the logic of targeting based on the disposition matrix is effectively as indiscriminate as the following quote from a US counterterrorism official suggests it to be: 'al Qaeda is an insular, paranoid organization – innocent neighbors don't hitchhike rides in the back of trucks headed for the border with guns and bombs'.[141]

The above critiques serve at least to undermine contemporary COIN targeting's claims of precision and discriminate targeting. But, a larger problem with the disposition matrix emerges when we relate its functions to LOAC. The disposition matrix, or for that matter technologies of visualisation used in US COIN, acts, above all, as an interface between the lethal violence of the US counterinsurgents, the population who has fallen under the grip of the global COIN and the requirements of lawful targeting as set out in LOAC. The disposition matrix makes targeting possible where there are no reliable ways of distinguishing civilians from non-civilians. It also calculates and rationalises a self-made knowledge of enmity – that

of guilt by association – on the basis of which it goes on to identify, locate, and eventually materially visualise individuals for targeting purposes. Considering all these functions, the disposition matrix is the coming together various technologies of visualisation that effectively occupies the space that otherwise would have been filled by the military uniform. Therefore, in filling in for the military uniform, the disposition matrix inevitably also implies a claim to the legitimacy of its uses of violence, even though these exercises of violence have been facilitated in the first place by the disposition matrix itself. That is to say, in the disposition matrix the execution of violence and its legitimation are one and the same process: targets are what the disposition matrix attacks, and they are legitimate targets because the disposition matrix visualises them.

Notes

1 In order of their appearance, these reports are Greg Miller, "Plan for Hunting Terrorists signals U.S. Intends to Keep Adding Names to Kill Lists", (23 October 2012); Karen DeYoung, "CIA Veteran John Brennan Has Transformed U.S. Counterterrorism Policy", (24 October 2012). https://www.washingtonpost.com/world/national-security/cia-veteran-john-brennan-has-transformed-us-counterterrorism-policy/2012/10/24/318b8eec-1c7c-11e2-ad90-ba5920e56eb3_story.html; Craig Whitlock, "Remote U.S. Base at Core of Secret Operations", (25 October 2012). https://www.washingtonpost.com/world/national-security/remote-us-base-at-core-of-secret-operations/2012/10/25/a26a9392-197a-11e2-bd10-5ff056538b7c_story.html.
2 All three *Washington Post* reports begin with this editorial statement.
3 Miller, "Plan for Hunting Terrorists signals U.S. Intends to Keep Adding Names to Kill Lists".
4 Ibid.
5 Ibid.
6 See Ian G. R. Shaw, "Predator Empire: The Geopolitics of US Drone Warfare", *Geopolitics* 18, no. 3 (2013).
7 Daniel Klaidman, *Kill or Capture: The War on Terror and the Soul of the Obama Presidency* (Boston: Houghton Mifflin Harcourt, 2012), p. 41.
8 On the origins of signature strikes and the case of the targeting in Zhawar Kili, see John Sifton, "A Brief History of Drones", (7 February, 2012). http://www.thenation.com/article/brief-history-drones/.
9 For the transcript of Victoria Clarke's Pentagon press briefing of 11 February 2001 after this drone targeting, see Victoria Clarke, "Clarke, Stufflebeem Hold Pentagon Briefing", (11 February 2002). http://edition.cnn.com/TRANSCRIPTS/0202/11/se.02.html.
10 Center for Civilians in Conflict (formerly CIVIC) and Human Rights Clinic at Columbia Law School, *The Civilian Impact of Drones: Unexamined Costs, Unanswered Questions* (2012). http://civiliansinconflict.org/uploads/files/publications/The_Civilian_Impact_of_Drones_w_cover.pdf, p. 8.
11 Center for Civilians in Conflict (formerly CIVIC) and School, *The Civilian Impact of Drones: Unexamined Costs, Unanswered Questions*, p. 8.
12 Miller, "Plan for Hunting Terrorists signals U.S. Intends to Keep Adding Names to Kill Lists".
13 Chamayou, *A Theory of the Drone*, p. 48.
14 Ibid., p. 47.
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70 Peter Neumann, "Perspectives on Radicalisation and Political Violence: Papers from the First International Conference on Radicalisation and Political Violence", (June 2008). http://icsr.info/wp-content/uploads/2012/10/1234516938ICSRPerspectivesonRadicalisation.pdf, p. 4, quoted in: Kundnani, *The Muslims Are Coming!: Islamophobia, Extremism, and the Domestic War on Terror*, pp. 116–7. In discussing the racial undercurrent of terrorism studies, Kundnani writes that Salafi Muslim men are taken to be always already predisposed towards violence.

71 Kundnani, *The Muslims Are Coming!: Islamophobia, Extremism, and the Domestic War on Terror*, p. 118.

72 Ibid., p. 122.

73 Marc Sageman, *Leaderless Jihad: Terror Networks in the Twenty-First Century* (Philadelphia: University of Pennsylvania Press, 2008); Marc Sageman, *Understanding Terror Networks* (Philadelphia: University of Pennsylvania Press, 2004).

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77 US Department of Defense, *Insurgencies and Countering Insurgencies, FM 3-24*, p. 2-2.

78 Ibid.

79 Ibid.

80 Common Article 3 to the four Geneva Conventions, as well as Article 51 of the API.

81 Melzer, *Interpretive Guidance on the Notion of Direct Participation in Hostilities under International Humanitarian Law*.

82 Michael N. Schmitt reports that the divisions around the conclusions of the ICRC conferences and the draft version of the DPH study were so stark 'that a significant number of experts [who participated in the conferences] asked that their names be deleted as participants'. He writes that he was one of those who asked for his name to be removed. See Michael N. Schmitt, "The Interpretive Guidance on the Notion of Direct Participation in Hostilities: A Critical Analysis", *Harvard National Security Journal* 1 (5 May 2010), p. 6.

83 There are other areas of disagreement between the US view and the view of the ICRC which fall outside the ambit of this research. For instance, see W. Hays Parks, "Part IX of the ICRC "Direct Participation in Hostilities" Study: No Mandate, No Expertise, and Legally Incorrect", *International Law and Politics* 42 (2010), in which Parks criticises Part IX of the ICRC study. Moreover, the broader US view expressed in Parks' article rejects the interpretation of the ICRC that military necessity allows use of force only based on a case-by-case assessment. That is to say, if capture and injury is a viable possibility, commanders must refrain from killing and destroying.

84 Melzer, *Interpretive Guidance on the Notion of Direct Participation in Hostilities under International Humanitarian Law*, p. 46.

85 Ibid., pp. 47–8.
86 Ibid., p. 48.
87 Ibid., p. 46.
88 Ibid.
89 Ibid., p. 53.
90 Ibid., p. 54.
91 Ibid., p. 46.
92 Ibid., p. 65.
93 Ibid., p. 71.
94 US Department of Defense, *Department of Defense Law of War Manual*, p. 179.
95 See Parks, "Part IX of the ICRC "Direct Participation in Hostilities" Study: No Man-date, No Expertise, and Legally Incorrect"; Michael N. Schmitt, "Deconstructing Direct Participation in Hostilities: The Constitutive Elements", *International Law and Politics* 42 (2010); Schmitt, "The Interpretive Guidance on the Notion of Direct Participation in Hostilities: A Critical Analysis". For a broader understanding of the US's rejection of the ICRC's study of the notion of DPH, one must see it alongside the general view of the US on the Additional Protocol I of the Geneva Conventions. For this, see Sofaer, "The US Decision Not to Ratify Protocol I to the Geneva Conventions on the Protection of War Victims".
96 Schmitt, "Deconstructing Direct Participation in Hostilities: The Constitutive Elements", p. 719.
97 Schmitt, "The Interpretive Guidance on the Notion of Direct Participation in Hostili-ties: A Critical Analysis", p. 28.
98 US Department of the Navy et al., *The Commander's Handbook on the Law of Naval Operations*, ch. 8.2.
99 Schmitt, "The Interpretive Guidance on the Notion of Direct Participation in Hos-tilities: A Critical Analysis", p. 28; Schmitt, "Deconstructing Direct Participation in Hostilities: The Constitutive Elements", p. 719.
100 As to the history of this trend in the treatment of civilians participating in hostilities, the official US response to the API is a significant starting point, as already mentioned. See Sofaer, "The US Decision Not to Ratify Protocol I to the Geneva Conventions on the Protection of War Victims".
101 The US Congress, "Military Commissions Act of 2006", *Public Law (109-366), 120STAT.2600* (17 October 2006). https://www.loc.gov/rr/frd/Military_Law/pdf/PL-109-366.pdf.
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103 United States Department of Justice, "Respondents' Memorandum Regarding the Government's Detention Authority Relative to Detainees Held at Guantanamo Bay at 8, In re Guantanamo Bay Detainee Litigation, No. 08-442 (TFH) (D.D.C.2009)".
104 Melzer, *Interpretive Guidance on the Notion of Direct Participation in Hostilities under International Humanitarian Law*, p. 65.
105 Ibid., p. 70.
106 Ibid., p. 27.
107 Ibid., p. 35.
108 Ibid.
109 Ibid.
110 Ibid.
111 Originally appeared on PBS's *Frontline*, a transcript of which is available from PBS Frontline, "Kill/Capture Transcript", *PBS* (2011). http://www.pbs.org/wgbh/frontline/

film/kill-capture/transcript/. The quote also appears in Hannah Gurman, ed., *Hearts and minds: A People's History of Counterinsurgency* (New York: The New Press, 2013), p. 220.

112 James Cavallaro, Stephan Sonnenberg and Sarah Knuckey, *Living Under Drones: Death, Injury and Trauma to Civilians from US Drone Practices in Pakistan* (Stanford: International Human Rights and Conflict Resolution Clinic, Stanford Law School and NYU School of Law, Global Justice Clinic, 25 September 2012), pp. 74–6.

113 Some have speculated that double tapping has been adopted as a way of masking the imprecision of so-called surgical warfare. See Matthew J. Nasuti, "Hellfire Missile Accuracy Problems Uncovered in Pentagon Data", (27 November 2011). http://kabul-press.org/my/spip.php?article89242.

114 Cavallaro, *Living Under Drones: Death, Injury and Trauma to Civilians from US Drone Practices in Pakistan*, p. 75.

115 See Chris Woods, "Get the Data: Obama's Terror Drones", (4 February 2012). https://www.thebureauinvestigates.com/2012/02/04/get-the-data-obamas-terror-drones/, quoted in Cavallaro, *Living Under Drones: Death, Injury and Trauma to Civilians from US Drone Practices in Pakistan*, p. 74.

116 There is a striking resemblance between the US 'double tapping' practice and the Israeli practice of 'knocking on the roof' in terms of how they recast civilians as targets.

117 Cavallaro, *Living Under Drones: Death, Injury and Trauma to Civilians from US Drone Practices in Pakistan*, pp. 75–6.

118 Ibid., pp. 86–7, and 95–7.

119 Ibid., p. 89.

120 Ibid.

121 Ibid., pp. 92–4.

122 Ibid., p. 96.

123 Ibid., p. 98.

124 Begley, "A Visual Glossary: Decoding the Language of Covert Warfare".

125 Devereaux, "Manhunting in the Hindu Kush: Civilian Casualties and Strategic Failures in America's Longest War".

126 Chamayou, *A Theory of the Drone*, p. 141.

127 Ibid., pp. 141–2.

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131 John O. Brennan, "Transcript of Remarks by John O. Brennan Assistant to the President for Homeland Security and Counterterrorism: "The Ethics and Efficacy of the President's Counterterrorism Strategy"", (30 April 2012). https://www.wilsoncenter.org/event/the-efficacy-and-ethics-us-counterterrorism-strategy.

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133 Aradau, "The Signature of Security: Big Data, Anticipation, Surveillance", p. 26.
134 REPRIVE: Delivering Justice Saving Lives, "You Never Die Twice: Multiple Kills in the US Drone Program".
135 Ibid., p. 15.
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141 Jo Becker and Scott Shane, "Secret 'Kill List' Proves a Test of Obama's Principles and Will", (29 May 2012).

6 Conclusion

International lawyers often take advanced digital technologies of targeting such as drones to be external forces that are redefining every facet of the law and practice of war. Mainstream approaches are preoccupied with the normative evaluation of the new weapon systems, while more critically inclined scholars see these advanced digital technologies through a lens of novelty and epochal change. For instance, Frédéric Mégret argues that the introduction of expansive visual capacities into weapon systems marks a moment of deterritorialisation in which the *battlefield*, as a practical, geographical, and legal boundary of wartime violence, vanishes.[1] This in turn inaugurates the age of 'everywhere war',[2] where instead of fighting on a battlefield, the adversarial forces fight their way to victory through 'zones of surveillance'.[3] Christiane Wilke confronts similar questions and calls instead for a focus on the 'visual crisis' of international law[4] that follows from 'the shift of the vantage point from the ground to the sky' and from background assumptions that interpret targetability at the intersection of racial discourses of risk[5] – a crisis that eventually blurs the distinction between civilian and combatants/militants.[6] More recently, Rebecca Mignot-Mahdavi has pointed to the entanglement of technologies of targeting within the legal landscape, revealing an interactive and co-productive relation between the law and new technologies of targeting.[7] These perspectives all focus in one way or another on the novel, epoch-making changes wrought by these new technologies, and, insightful as they are, they ultimately rest on an assumed distinction between law's area of operation and the technology's area of operation.

The German filmmaker Harun Farocki writes that the visual technologies of war make images that are 'neither to entertain nor to inform'. Instead, what they produce are 'operative images'. Operative images are 'images that do not represent an object, but rather are part of an operation'.[8] This book has taken Farocki's definition as its inspiration and, by bringing to bear theories of legal materiality, attempted to trace the ways in which technologies that produce forms of visibility, whether analogue or digital, participate in the operations of war, both in the practical context of armed conflict, such as COIN, and in the operationalisation of the laws that facilitate lethal violence.

The book therefore followed a different trajectory from that of conventional international legal scholarship. It approached the emergence of drone targeting

from a socio-legally inspired problematisation of the contemporary confluence of weapon systems and technologies of digital visualisation. That is, it asked: why have such technologies and modes of targeting become so ubiquitous, and what basic function do technologies of visualisation play in the LOAC?

Taking these questions as its starting point, the book investigated drone targeting by placing it in the empirical context of US COIN and the interpretive context of the laws that pertain to lethal targeting. In so doing, the book was able to centre visibility and its technologies as the units of analysis integral to the process of targeting and its legitimation in law – not least because insurgents' refusal to visually self-identify means that the insurgency context is characterised by the intentional eschewal of the required legal and military regimes of visibility.

It is at this point in the argument that the theory of legal materiality enters. The theory allows us to frame this 'visual crisis', as Wilke puts it, as a material and technological crisis that is characterised by the loss of law's original visual technology, namely the military uniform. From this standpoint, the principle of distinction appears to legitimise lethal violence through a particular configuration of technologically produced forms of visibility and adversarial political intentionality, which I called the knowledge–vision composite. In this configuration, *knowing* the enemy relates to the political objectives of targeting, while *visual* distinguishability secures the conditions of the possibility of distinction during targeting. In other words, visual distinguishability is what allows the target selection process to operate discriminately and therefore lawfully. The categories of the principle of distinction are inseparable from the political rationalities and objectives sought in an armed conflict, but the lawfulness of targeting any of those categories is also inseparable from the conditions and technologies that frame those political objectives in a visually discernible manner.

Understanding the knowledge–vision composite as the underlying process by which violence is legitimised allows us also to highlight the importance of the logistics of perception for the operationalisation and legitimation of lethal violence. This importance is evident in the great significance that the principle of distinction attaches to various materially produced forms of visibility. Before it constrains the use of violence, the principle of distinction imposes a modality of visuality – a coming together of images, discourses, practices, and technologies that produce (in)visibilities. By allocating different values to the ways in which objects and entities are visually configured in relation to adversarial political objectives, this modality of visuality authorises the use of violence. The upshot is that extending the scope of permissible violence – recasting civilians as targets – is simply a matter of reconfiguring the relationship between adversarial *knowledge* and the ways of producing distinctive *visibility*.

This conception of the legitimate target makes possible a novel critique of drone targeting, one that takes the deployment of advanced visual technologies to be part and parcel of the process by which wartime violence is legitimised. The problem with drone targeting is not simply that it expands the battlefield or facilitates a more comprehensive view from above. It is that it also actively reconfigures the constitutive elements of the knowledge–vision composite. That is, it

amounts to a conceptual expansion of legitimate lethal violence. The fact that, in eschewing military uniform, insurgents have *dematerialised* the legal production of targets, or the fact that they fight in non-linear and networked ways, is only an additional justification for the expansion of legitimised violence already provided by the drone itself.

Developments in US COIN attempt to visualise a battlefield darkened by the disruptive practices of the insurgents, but in this attempt, there is a simultaneous transformation of the *knowledge* of targetability – from 'hostility' to an expansive notion that comprises irreconcilability, unsupportiveness, and ungovernability. All aspects of COIN, including so-called 'social work' and 'hearts and minds' operations, participate in this reconfiguration of targetability's knowledge–vision composite. As I have shown, this reconfiguration ultimately manifests itself in targeting decisions taken on the basis of visual practices such as pattern-of-life analysis, population support overlay, and contact chaining. In COIN, being a target is a matter of being visualised as close to the centre of a network of 'irreconcilable' individuals – a network that is itself produced by different technologies of visualisation. Put simply, the knowledge required for targeting becomes incidental to the visualisation of the targeting technologies.

International law scholars have long since shown that the legal ambiguities, histories, and empirical realities of war allow for civilians to be recast as targets in various ways. A legal materiality perspective shows how this recasting unfolds practically. Technology and other material interventions configure matters of interest for law.[9] In conventional war, the military uniform configures the principle of distinction's primary matter of concern, namely the human target, and new technologies of visualisation are attempts to reconfigure the content of that matter of concern. By interpreting and framing active civilian life in certain ways, these technologies further blur the line between civilians and targets. The co-productive normativity between law and technologies of visualisation does not mean that surveillance technologies automatically legitimise the targeting of whatever they capture. It means that new technologies of targeting continuously reconfigure and restructure the element of targetability such that individuals who would otherwise be considered civilians are seen as targets, or else as borderline cases who may nonetheless be attacked. Decomposing the legitimation of targeting decisions into its constitutive elements, knowledge and vision, reveals that the production of law's target is always already a technological practice. To introduce new technologies of target visualisation is, then, necessarily to introduce a new legal claim of targetability. Put simply, 'change the instruments, and you will change the entire social theory that goes with them'.[10]

Notes

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7 Mignot-Mahdavi, *Drones and International Law: A Techno-Legal Machinery.*
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