

# Chapter 2

## Targeting in Context

Christopher Coker

**Abstract** This essay discusses three aspects of the targeting challenge from the time of the ancient Greeks: the ‘who’, ‘what’, and ‘how’. With respect to the first, we would appear to have broken with past convention and adopted a policy of targeted killings of enemy commanders or political leaders. We have done so in response to a demand of the hour made possible by technology—the need to manage risks. Targeting has become a risk management exercise in all but name. With regard to the second, we are trying to be more precise when aiming at the centre of gravity and to reduce collateral damage to a minimum. We are trying, in a word, to be more ‘humane’. And with respect to the last, technology now allows us to target from a distance without endangering military personnel, at the risk, however, of producing a problem never before encountered in war: dissociation.

**Keywords** Drone · Risk · Targeted killing · Surveillance · Centre of gravity · Humane · Dissociation

### Contents

2.1 Introduction.....	10
2.2 Who.....	11
2.3 What.....	15
2.4 How.....	20
References.....	24

---

C. Coker (✉)

International Relations at the London School of Economics, London, UK  
e-mail: c.coker@lse.ac.uk

## 2.1 Introduction

In a passage from Thucydides' *History of the Peloponnesian War*, we find a brief exchange between a Spartan prisoner of war and an Athenian soldier who asks his captive whether his fellow Spartans, who have chosen so bravely to die rather than surrender the day before, had been men of honour. The Spartan replies that a weapon would be worth a great deal if it could distinguish a gallant man from a coward.<sup>1</sup> Of course, no weapon can.

It was Thucydides who called war 'the human thing', the only definition he was prepared to provide. It is human because it derives its impetus from the social context of the time. It is the context that is all-important for the 'who', the 'what', and the 'how' one targets. In the fifth century BC, men targeted other men; armies targeted each other. Even today, however, where people are usually targeted from the third dimension of war—the air—a drone pilot operating an Unmanned Aerial Vehicle (UAV) over the skies of Afghanistan does not know whether he is killing men who are brave or cowards. The drone pilot, it is true, may share an intimacy with his targets that is unique in history; he can follow his targets to weddings and funerals, and if he is curious watch them having sex thanks to infrared cameras.<sup>2</sup> Pilots can profile behaviour, and take out people they consider to be terrorists. But while a drone pilot may be able to see more than any pilot has seen before, his breadth of vision does not allow him to see the man within. He might have greater oversight of the battlefield than ever, but this affords him no greater *insight* into the moral status of the man he has in his sights.

The 'who' is only part of another context—the 'what'. We have been targeting for centuries what Clausewitz called 'the centre of gravity'. It is a concept derived from Newtonian mechanics, and one that has perhaps decreasing purchase in a digital age. But every century has a recognised centre of gravity and every army has tried to target it, though not always with success. Instead of engaging the Persians in close combat, the Scythians retreated into the vastness of the Steppes. As nomads they had no capital city to capture and no trade routes to cut off. Instead, they vanished over the horizon, harrying the invaders in skirmishes and ambushes by mounted archers. In exasperation, the Persian King Darius issued a challenge to 'stand and fight like men'. The reply from one of the Scythian kings was made famous by Herodotus: 'Know this of me, Persians. I have never fled for fear of any man.'<sup>3</sup> But because they had no cultivated land to waste and no towns to capture, they also had no reason to engage the Persians in battle. They had nothing to defend but the graves of their fathers. Find them and the Persians would get their battle. In the end, they never did, and so were forced to retreat'.

---

<sup>1</sup>Lendon 2005, pp. 2, 47.

<sup>2</sup>Catherina 2011.

<sup>3</sup>Asprey 1994, p. 3.

In the course of history, war changed. It began to involve the will of a society and its people to fight on. Europe, claimed the philosopher Hegel in the early nineteenth century, had reached the stage when its citizens no longer fought for the security of life or the property of the individual, but were willing to hazard both for a greater end. In the modern age, societies were ready to fight wars for freedom or for a cause. It was the readiness of the citizen to sacrifice his life in the service of the State that, for Hegel, constituted the last phase of history. Inevitably, the centre of gravity was located in the sprawling urban cities of the industrial world, and in the workers and citizens who were conscripted to fight either at the front or in the factories. Today we target terrorist networks, non-State actors, and jihad tourists, the ‘linchpin’ of collective violence.

As for the ‘how’ of targeting, this has been almost entirely the outcome of technology in the modern era. In the late nineteenth century weapons became area-killing devices; individual soldiers were encouraged to fire not at a specific enemy but at the area in which several enemies might be found. It just so happens that in recent years we have been offered targeting choices we have never had before, and some of these I will discuss. None of this, however, takes away from what Thucydides told us long ago, that without strategic wisdom, targeting is useless.

## 2.2 Who

Targeted killings have never been popular. The Duke of Wellington was aghast when one of his artillery officers wanted to fire on Napoleon during the battle of Waterloo. Aristocrats did not target each other except in duels. This was an era of so-called ‘cabinet wars’, when armies preferred to out-manoeuvre, rather than out-fight each other. Today, argued an essayist of the period, ‘war is waged so humanely, so deftly and with so little profit, that it could be compared without paradox to civil trials’.<sup>4</sup> Of course, fashions change in war as in every other aspect of life. It is impossible to extrapolate from any period of history into the future and assume that things will be the same. As the most unpredictable of all activities, war is particularly unsuitable for the sort of trend analysis in which so many experts put their faith. A graph of eighteenth century combat deaths would have given no hint of the slaughter that was to come in the French Revolutionary and later Napoleonic wars. Nevertheless, the targeting of commanders who are also political leaders (Napoleon being one) has been generally avoided throughout history for a very obvious reason. Political decapitation may help you win a battle, but not necessarily a war. Someone has to surrender.

---

<sup>4</sup>Bell 2007, p. 49.

Even in World War II (as close to total war as any conflict has come), the Allies preferred not to target German commanders and the Americans targeted only one Japanese commander, Admiral Yamamoto, in 1943. On the eve of D-Day, the MI6 chief, Sir Stewart Menzies, wrote to the Foreign Office to explain why he was calling off a campaign of assassinations:

We prepared a list of names which represent the most important German personalities and paramilitary formations believed to be in France. We do not believe, however, their removal will have much, or indeed any, effect on the efficient functioning of so widespread and highly organised a machine.

The Chairman of the Joint Intelligence Committee concurred:

I agree with C in disliking the scheme, not out of squeamishness, as there are several people in this world whom I could kill with my own hands with a feeling of pleasure, and without that action in any way spoiling my appetite, but I think that it is the type of bright idea that in the end produces a good deal of trouble and does little good ... Also, the Germans may take reprisals on our prisoners, and at that game they always win.<sup>5</sup>

As noted by Shashank Joshi, in his review of two recent books, Jeremy Scahill's *Dirty Wars* and Mark Mazzetti's *The Way of the Knife*, these arguments have been progressively abandoned. Both books document the rapid emergence of a new and probably enduring epoch in American security policy. Drone strikes in particular (so-called 'signature strikes') have now become almost the norm.

There are a number of explanations for this. The first is that information is becoming an increasingly important military instrument, as well as a major determinant of tactical and operational effectiveness. It is considered to be a force multiplier; it is also part of winning the 'narrative' by minimising collateral damage. While in the past information was seen mostly as an enabler of more efficient and accurate targeting, information these days is seen as an end in itself.

Second, drone strikes are really a form of policing rather than pacifying—not producing security, but reducing insecurity to manageable levels, as we do crime at home. This is why it makes sense for the CIA, as well as the regular military, to carry out many of these strikes. George Tenet, the Director of the Central Intelligence Agency at the time of 9/11, was originally appalled that he should be asked to go into the assassination business. By 2013, Scahill tells us, President Obama's appointee to the same post—John Brennan—was known as the 'Assassination Tsar'.

Targeted assassinations are not new; they were pioneered by the Israelis back in the 1990s. It was in this period that the Israeli Defence Force (IDF) seems to have adopted the maxim that successful armies need to instil 'terror in the hearts of their enemies'. This maxim can be seen in a number of policies that became fundamental during the second intifada. The most well known of these is what have been called 'targeted killings', or 'extra-judicial executions'. These practices have taken many forms, ranging from the detonation of terrorist leaders' mobile phones

---

<sup>5</sup>Joshi 2013, p. 44.

to helicopter strikes in densely populated areas. Crucially, the IDF opted not only to strike at purely military ringleaders, but also to take out a number of individuals whose function was partly or wholly political. The assassinations in 2004 of Sheikh Ahmed Yassim, the spiritual leader of Hamas, and his successor, Abdel-Aziz al-Rantisse, are cases in point. While these operations drew widespread criticism in the outside world, Israel maintained that its actions had significantly weakened the infrastructure of the movement.

None of this should be surprising, however, because it is reflective of the way we have been policing our societies at home. War, Clausewitz reminds us, is part of the pattern of social life. It is a microcosm of society and its norms. Signature strikes are based on behavioural profiling that is as old as the way we have been policing our societies since the 1980s. In terms of surveillance, successful policing has depended increasingly on the information that provides the algorithmic methods of modern risk assessment. Crime control and policy are particularly connected with a ‘culture of control’, a term which was coined to describe a society in which the perennial desire for security, risk management and the taming of chance have been so magnified and reinforced with regulations that surveillance has become a norm in practically every area of life. In the UK, the Home Office spends a significant portion of its crime prevention budget on CCTV cameras and face-recognition ‘smart’ technology. Corporations actively monitor consumer choice every time a credit card is swiped or an internet site visited. We have NETFLIX suggestions for what we should watch next based on what we have viewed before. On Amazon and Google we are profiled by what we read as well as watch. The global positioning system can track mobile phone users, and the same, of course, goes for GPS systems in cars.

In Britain, the Ministry of Defence is investing in neural network technology for pattern-matching to enable the security services to scan faces in a crowd and cross-reference them to known troublemakers.<sup>6</sup> Very soon we will be able to programme computers to recognise patterns and relationships that we cannot recognise in each other—body language if you will—that betray anxiety, even perhaps an intention to plant a bomb.<sup>7</sup> The Department of Homeland Security has Future Attribute Screening Technology (FAST) to identify potential terrorists using ‘virtual’ signs such as body language with a 70 % success rate (however this is measured). The point is that law enforcement agencies take pre-emption seriously in stopping crime before it is committed.

Data processing systems are also improving all the time. CCTV cameras can now be patched into information retrieval systems to facilitate a ‘knowledge brokering’ function which goes far beyond pinpointing people as they move about.

---

<sup>6</sup>Norris 1999, p. 217.

<sup>7</sup>This is explained in a presentation by Moglen (2012) at Re:Publica (Berlin), around 16 min, he recalls a statement from a Senior White House Official: ‘The Governments wants a social graph of the US.’

Police forces go in for concentrated surveillance at high-risk locations and times;<sup>8</sup> hence, for example, the rise of drink-drive blitzes and random alcohol checks on weekends and public holidays. Both constitute a new *risk-focused* pattern of policing, which is intended through reconnaissance to establish the extent of the risk that either criminals or people involved in criminally negligent activity (drink driving) pose to the rest of us. Law enforcement agencies have begun replacing human police officers with efficient, all-seeing algorithms and the intelligence of the algorithms is continually growing. Speed cameras can now pick out newcomers to an area. Increasingly, these cameras are capable of making sense of human behaviour on CCTV. Algorithms are being tested that can identify—in real time—faces in a crowd or people with a particular gait. ‘Predictive policing’ systems built by IBM sift through vast records of past offences, weather patterns, social media use, and other contributing factors to display maps showing where offences are likely to occur, prompting police to boost patrols at specific times. Surveillance identifies a risk before it goes critical. To prevent it from going critical, we are encouraged to go for target devaluation.

In other words, our societies seek total knowledge of people. Surveillance enables the State to make biographical profiles of the population in order to determine their probable behaviour at some undetermined date. Thus, not only is it possible to follow an individual as he moves through space, but it is also possible to assess his moral worth at the same time, using information contained on a database.<sup>9</sup> This is called ‘social sorting’, an inclusive and exclusive process that is central to what the management of risk is fast becoming.

The same is increasingly true of targeting in war. It remains to be seen how successful drone strikes have been. The ‘who’ involves the ‘what’—the enemy’s centre of gravity. In Pakistan, the Americans have taken out training camps, and targeted the leadership of Al-Qaeda. The US campaign, however, seems to be less aimed at high value targets (only about 2 % of all drone deaths are aimed at targets such as Al-Qaeda Central members or militant leaders in Afghanistan or Pakistan); the main targets are usually low-level insurgents.<sup>10</sup>

Even now, it is impossible to estimate the real effects of drone strikes—whether tactical brilliance yields any real strategic reward. ‘Is it creating a new generation of terrorists’ is a question often asked. In the tribal areas of Pakistan, parents report taking their children out of school out of fears for their safety, and students speak of their diminished ability to concentrate.<sup>11</sup> Accounts such as these serve as

---

<sup>8</sup>Bauman and Lyon 2012, p. 47.

<sup>9</sup>Lyon 2007, p. 107.

<sup>10</sup>International Human Rights and Conflict Resolution Clinic at Stanford Law School and the Global Justice Clinic of New York University School of Law (2012) Living under drones: death, injury and the trauma to civilians from US drone practices in Pakistan. [www.livingunderdrones.org/wp-content/uploads/2013/10/Stanford-NYU-Living-Under-Drones.pdf](http://www.livingunderdrones.org/wp-content/uploads/2013/10/Stanford-NYU-Living-Under-Drones.pdf). Accessed 19 December 2013.

<sup>11</sup>See Amnesty International (2013) and Human Rights Watch (2013).

a reminder that the harm of the US drone campaign goes beyond the significant toll of civilian lives lost (a matter also much disputed).

## 2.3 What

The ‘what’ of targeting is part of the social discourse of war, and discourses are always changing. For good or ill, the Western discourse is a liberal one. And technology is the single most important factor in delivering the means by which liberal societies can fight in a liberal manner. Technology makes it possible, as we shall see, to keep faith with traditional ethical practices much more than in the past. It also poses new ethical problems, for all technologies have side effects. Liberal societies still find the world stubbornly resistant to their ideas of how war should be waged.

Consider the reaction in 1911 to the first aerial bombing. An Italian airman threw grenades out of his monoplane onto Turkish troops in Libya. The world’s press was outraged at the ‘unsporting’ nature of the venture on a very specific ground. The soldiers below were unable to retaliate. In fact, Turkish troops shot down an Italian airplane with rifle fire the following week. Less than 40 years later, Allied bombers were pummelling German cities (in retaliation, of course, for German raids).

It is striking that the Great Powers largely abided by the Geneva Protocol banning Chemical Weapons,<sup>12</sup> even though a few years earlier they had employed such weapons in the field. A strong military case was made for the use of gas before the American attack on Iwo Jima, but Roosevelt rejected the idea. More surprisingly, Hitler too prohibited their use even though they were central to the Final Solution (‘Endlösung’). In part, this may have been out of fear of reprisals, or in part, quite possibly, because he had been gassed himself. In their book *A Higher Form of Killing*, the authors note that Raubkammer, where the Germans tested chemical weapons, was the only major military proving ground that Hitler never visited, perhaps with devastating consequences.<sup>13</sup> At least one American commander, Omar Bradley, later claimed that a sustained chemical counter-attack would have made all the difference between success and failure on the Normandy beaches.<sup>14</sup>

Now, in an attempt to be even more ‘humane’, we not only have banned certain technologies, but also have invented non-kinetic means of dealing with the enemy. We have non-lethal weapons in their third generation that, though still not widely used in combat zones, allow us to neutralise our enemies without taking

---

<sup>12</sup>Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or other Gases, and of Bacteriological Methods of Warfare, 17 June 1925, 94 LNTS No 2138 (1929).

<sup>13</sup>Harris and Paxman 2002.

<sup>14</sup>The Economist (2013) The history of chemical weapons: the shadow of Ypres.

them out: sonic bullets that give you the mother of all headaches; super-glue guns that glue you to your weapon; and corrosive chemicals that dissolve the wings on a plane before it has had a chance to take off. All of these weapons, according to the commander of the US Marine Corps unit in Somalia in February 1995, showed “a reverence for human life and ... commitment to the use of minimum force.”<sup>15</sup> This is what humane warfare promises, the chance for the first time to eliminate the incivility of modern warfare. As Alvin and Heidi Toffler wrote some years ago:

Non-lethality emerges not as a simple replacement for war, or an extension of peace, but as something different. It is something radically different in global affairs, an intermediate phenomenon, a pausing place, an arena for contests where more outcomes are decided bloodlessly.<sup>16</sup>

What we are targeting, however, is a centre of gravity which increasingly is public opinion. Winning the narrative is the name of the game and to win it we have to be humane. This derives from three imperatives, all of which require us to *humanise* war. The first is old-fashioned Western humanism. Governments used to measure the cost of war in terms of money, lost production, or the number of soldiers killed or wounded. Rarely did they attempt to measure its cost in terms of individual human suffering. Enemies were stripped of their humanity. Little thought was given to individuated death. Democracies had no more compunction than their enemies in raining down death and destruction on the heads of citizens, even children. ‘Two years ago, we would all have been aghast at the idea of killing civilians’, complained George Orwell in 1942.<sup>17</sup> ‘I remember saying to someone during the Blitz... “in a year’s time you will see headlines in the *Daily Express*: *Successful raid on Berlin orphanage. Babies set on fire*”’.<sup>18</sup>

Today, by contrast, we are inclined to individualise both death and human suffering more than ever before, especially when targeting. The US, claimed Madeline Albright at the time of the Kosovo War, spent as much time trying to limit deaths on the other side as it did its own. Even the ethics of war is no longer determined by abstract concepts as in the past. Ethics is a human endeavour and present-day humanism is reflected in the wish of civil society to reduce the incivility of warfare, both for the soldiers who serve in society’s name and the enemies with which our societies find themselves at war.

We are doing so because we can technologically. We tried to accomplish this, of course, much earlier, back in the 1890s, but advances in modern weaponry, such as automatic weapon fire, massed artillery bombardment, and aerial bombing, resulted in greater inhumanity still—wars of bloody attrition. Today, we see little value in ‘area killing’ or the targeting of civilians. In the future, we will continue

---

<sup>15</sup>Cited in Freedman 1998, p. 16.

<sup>16</sup>Toffler and Toffler 1994.

<sup>17</sup>Orwell 1968, p. 496.

<sup>18</sup>Ibid.

to become more discriminating. In the first Gulf War (1991) precision-guided weapons accounted for only 8 % of ordinance drops. During the second Gulf War, the invasion of Iraq twelve years later, they counted for nearly 100 %. ‘The calibration of destruction’ was the title of an article which appeared in *The Economist* in January 2010. ‘Smaller, cleverer and more accurate munitions are changing warfare’.<sup>19</sup> The article was about *Perseus*, a 2000 lb bomb that incinerates almost everything in an area the size of two dozen football fields. Just outside that area, it sucks oxygen from the air, crushing anyone to be found there by a pressure wave. The weapon is not that different from napalm. What is surprising is that it is endorsed by the Human Rights Watch,<sup>20</sup> a humanitarian non-governmental organisation based in New York, largely because the weapon can be employed selectively and humanely; it spares the lives of people while destroying a bunker housing biological or chemical weapons. It can sterilise germ warfare laboratories. It can be put to use humanely.

The corollary of this is that we are also increasingly interested in reducing the material and human destructiveness of the battlefield, in limiting damage to the environment and human habitat. A 1954 Convention on Cultural Property permits countries to nominate 100 buildings that cannot be targeted by an enemy (in Britain, St Paul’s Cathedral, but interestingly not Westminster Abbey, is on the list).<sup>21</sup>

We also fight humanitarian wars—Kosovo was supposed to be the first, though it may well have been the last. There was little humanity in the twentieth century. Marxists and non-Marxists alike were usually dismissive of the claims of small people to nationhood, not to mention ‘unhistorical peoples’ who got in the way of progress. In mediating humanity through the nation in arms or the revolutionary State, locked in a historic struggle against ancient adversaries, even democracies put principles first and individual human suffering second. In making the world ‘safe for democracy’, few Americans asked themselves whether democracy could be made safe for the world. Today, we fight for others as well as ourselves. We have extended our concept of humanity from the local community to the imagined community of the nation-State, and further afield still to the global village. “We are all internationalists now”, claimed Britain’s Prime Minister 22 days into the Kosovo War.<sup>22</sup> And you cannot fight humanitarian wars inhumanely. Even if we accept that selective targeting cannot work—that air power and cruise missiles do not always allow ethical choices and that we cannot target the evils of the world with the blunt instruments in our possession—we will insist on being more humane in targeting than we have in the past.

---

<sup>19</sup>The Economist (2010) The calibration of destruction.

<sup>20</sup>Ibid.

<sup>21</sup>Convention for the Protection of Cultural Property in the Event of Armed Conflict. The Hague. 14 May 1954. 249 UNTS 240.

<sup>22</sup>Blair 1999.

Something more profound, however, is behind this new attitude towards targeting—risk management. Humanity, in fact, is not something that has only recently been ‘discovered’. Up until now it has been difficult to conduct war humanely. Back in 1916 when the German military was arguing for an unrestricted submarine campaign against Britain, it tended to dismiss civilian objections as *Humanitätsdusehei*, or mere ‘humanitarian babbling’.<sup>23</sup> In fact, the debate over whether or not to press ahead with unrestricted submarine attacks on allied shipping went far beyond humanitarianism; it involved a discussion about the political consequences of being *seen* to be more inhumane than the enemy when fighting. To invoke today’s fashionable phrase, it was all about who owned the narrative.

The German Chancellor initially resisted the generals’ demands for unrestricted submarine warfare for fear it would bring the US into the war. Clausewitz would have cautioned restraint. The principal object of the military art, he tells us, ‘is to prevent the trembling balance from suddenly turning to our disadvantage and the half-war from changing into a complete one’.<sup>24</sup> Ultimately, both the decision to go to war and the decision to adopt submarine warfare three years later represented a failure of political leadership for which the Chancellor himself must be held partly responsible. He simply did not fight his corner hard enough. The consequences of the campaign were indeed devastating. Apart from the humanitarian concerns about drowning innocent passengers on ships like the *Lusitania*, which had been torpedoed two years earlier, it also meant breaking international law (no small matter when the President of the US was a moralist like Woodrow Wilson).

Today, we are always enjoined to anticipate the negative effects of our decisions; we are urged continually to bring the future into a calculative relation to the present. And this was also the dynamic of the U-Boat debate in 1916–1917, with a critical difference. The Germans externalised the risks, such as the response of neutral countries to putting their own shipping in danger by continuing to trade with the UK and the risk that the US would be bounced into war by public opinion. We now tend to *internalise* risks in the form of consequence management. The distinction does not lie in the fact that the risks the German High Command chose to incur were measurable in a way that many risks we run today are not. The real difference is that the costs of incurring them have become unacceptably high. We have become consumers, not producers, of risk, and have greater difficulty than ever in legitimising the risks we ask others to take (including our own citizens, or members of coalitions to which we belong, by virtue of the fact that they are implicated in every decision we take).

Consequence management (as the internalisation of risk) was clearly in evidence in Kosovo in 1999. Precision air strikes enabled NATO to coerce the Serbian government without inflicting much direct damage on the population,

---

<sup>23</sup>Stone 2007, p. 99.

<sup>24</sup>von Clausewitz 1982, p. 401.

although collateral damage could not be eliminated altogether. When it failed to make progress, the Alliance was forced to bomb a large number of industrial plants. The most important target of all was the Serbian power grid. Some of the bombs contained carbon fibre spools, which instead of destroying the generators, merely short-circuited the transformer yards, putting out the lights in the major cities for anywhere between 8 and 24 hours. As soon as the Serbs managed to get the power working again, more air strikes could be carried out using non-lethal carbon fibre bombs.<sup>25</sup> As a medium-sized economy, Serbia was also small enough to allow precision targeting to achieve its objectives without major damage, although the long-term consequences of the bombing campaign were greater than NATO was willing to acknowledge at the time. In Pančevo and Novi Sad, two towns that vied for the title of ‘the most bombed town in Serbia’, the once thriving car factories that provided jobs were devastated.

Kosovo was the first example of consequence management evolving into a doctrine—an effects-based approach to war. An effects-based operation is a methodology in which the desired effect of an action, regardless of its scope, has to be identified first. In the air attack with which the invasion of Iraq (2003) began, the first concern of the Americans was to negate the effectiveness of the enemy’s air defences without necessarily destroying Iraqi aircraft on the ground. The country’s air defence system was rendered useless by a series of tailored actions that included selective hard strikes against key command and control nodes (if pilots have no instructions, no radar to guide them, and no communications, they are unlikely to be effective), as well as a series of ‘soft strikes’ (feeding false data into Iraqi information systems and infecting them with computer viruses).<sup>26</sup>

In this regard, writes Alan Stephens, the term ‘effects based operation’ has come to define a *philosophy* of war more than a doctrine. The object is to achieve a specific effect and to avoid both predicted and unpredicted consequences at the lowest affordable cost. But as a philosophy of risk management it also has drawbacks, for the impact of an air strike, as an example, is not always obvious at the time.<sup>27</sup> Even more significantly, it is not necessarily apparent even at the point of impact. The political fallout is often latent, or in other words invisible to everyday perception. Hazards may externalise symptoms only later in the day and they often reach a critical mass before they are appreciated. It is the interval between action and impact (as a *latent* symbol) that is frequently critically important in determining whether public support for war can be retained.

The modern battle-space, in other words, is a fiendishly complex environment. At staff colleges these days, students are taught that the more risks go unacknowledged at the time, the more likely they are to multiply later. And when the risks are latent, the cost is liable to be all the greater when the time bomb finally explodes. This is especially problematic given the speed of modern war. Targeting decisions

---

<sup>25</sup>Ignatieff 2001, p. 107.

<sup>26</sup>Stephens 2007, p. 134.

<sup>27</sup>Adam 2003, p. 219.

have to be taken quickly. Whatever is effective in the medium term is usually preferred, irrespective of the attendant consequences. Immediate successes tend to result in complacency. Success, however temporary, is often taken to be its own reward.

## 2.4 How

Until the twentieth century targeting was the responsibility of the army and navy. Once war took to the third dimension it became not only a major concern, but also the chief function of the air force. Only six years after the *Wright Flyer* had taken to the air, Parliamentarians in Britain expressed apprehension about the *immoral* bombing, thus identifying—years before major aerial bombardment became a possibility—the real strategic centre of gravity: morale. The MPs recognised that the application of air power in this way could have consequences beyond potential physical damage to infrastructure and buildings. ‘We do not know’, contended one, ‘[w]hat destructiveness [aircraft] will cause in our laws, customs and convenience, but these matters will no doubt be adjusted’.<sup>28</sup> These matters, adds Peter Lee, would be adjusted far more quickly than MPs could have imagined at the time.<sup>29</sup>

In war, changes have always been made to customs and laws (it is part of war’s Darwinian ability to adapt to every environment). But the *internal* adjustments to the psyche and our emotional register are perhaps the most important of all. Throughout history it has not been morality that has been especially effective. Technology has made the critical difference in warfare—take the sword and shield, the arquebus, rapid fire small arms, aircraft, and missiles. Technology offers choices. It opens doors and closes others. It happens that today technology offers a more diverse set of targeting options than ever before. Once targeting is combined with changing moral codes and ethical precepts, as well as new technologies, the ‘who’ of targeting transforms very quickly.

The real game changer, however, is the elimination of risk—a first in warfare. This may have resulted in the unforeseen progressive dissociation of pilots from the activity in which they are engaged. To be dissociated from one’s actions is not the same as to be distanced or divorced; it is to be disembodied (it is to lack feeling, sensitivity). We learn only by seeing and we see ‘feelingly’. To see feelingly is to allow reason to move us within the constraints of the suffering body, which is why Wittgenstein concluded that the body in pain is the most graphic reflection of the human soul. The challenge of all military technology in the past hundred years is that it creates death while destroying the experience of it. It is much easier to

---

<sup>28</sup>House of Commons Debate, Naval and Military Aeronautics, 2 August 1909, vol 8, cc1564–617. <http://hansard.millbanksystems.com/commons/1909/aug/02/naval-and-military-aeronautics>. Accessed 19 December 2013. Idem: Lee 2013, p. 73.

<sup>29</sup>Lee 2013, p. 134.

become desensitised, distanced from the consequences of our actions. It is quite another thing to become altogether disconnected from what our actions mean for others. By acting without meaning we are in danger of being stripped of our moral core.

For the Allied bombers of World War II the issue was distance and the fear that war was becoming a mere routine. Some crew members called themselves ‘freight-engineers’, others ‘aerial taxi drivers’. They returned from their missions, wrote one, ‘bored in a way no-one had ever been bored before’.<sup>30</sup> But the point is that however distanced they were from their targets, they remained at risk all the time. By August 1943, the Germans were shooting down as many American B-24 and B-17s as replacement crews and planes arrived in England. A plane could be shot down by anti-aircraft fire or intercepted in the air by fighters. The crews were exposed to other hazards as well, including respiratory infections from which they continued to suffer well into the peace. A man’s courage is his capital, wrote Lord Moran—the call on the bank may be the daily drain of the front line, or it may be a sudden draft which threatens to close the account. And he found this to be as true for the pilots of Bomber Command as it was for the infantrymen or tank crews on the ground. ‘The pilot enters upon the summer of his career, a period of confidence, success and achievement... But the summer months must pass, and when autumn comes the picture of the pilot’s distress is not so different from that of a soldier or sailor, only the colouring varies’.<sup>31</sup> The extent of that ‘colouring’ was caught vividly many years later in one of the most powerful war novels to emerge from the experience of World War II, Joseph Heller’s *Catch-22*.

All this is history. ‘Our major role is to sanitise the battlefield’, a service airman is quoted as saying in Peter Singer’s book, *Wired for War*.<sup>32</sup> Today, even bomber pilots no longer face the risks they did. Unlike B-52 pilots in Vietnam, pilots in the present day are rarely in danger of being shot down. Embedded with the B-1 Bomber Squadron in the early days of Operation Enduring Freedom, the journalist Mark Bowden concluded that for the pilots war had become almost entirely cerebral, not visceral; it required them to invest little emotional energy into the task at hand.<sup>33</sup> Almost immune from danger, they clocked up the hours in the sky like business executives, and, like the latter, could go home to their families in 48 hours from a mission over Afghanistan, in time to see the latest episode of *Friends*.

And one of the most important questions is what the experience of selective targeting, or targeted killing, is doing to the pilots concerned. For if distance was a twentieth century problem, dissociation or disconnection is a twenty-first one. Paul Kahn, Professor at Yale Law School, claims that both distance and disconnection ‘propel us beyond the ethics of warfare’, but the two are actually quite different.<sup>34</sup>

---

<sup>30</sup>Piette 1995, pp. 76–77.

<sup>31</sup>Holmes 2004, p. 214.

<sup>32</sup>Singer 2009, p. 34.

<sup>33</sup>Bowden 2002.

<sup>34</sup>Singer 2009, p. 432.

One US Air Force Colonel in command of a Predator Squadron told Singer that the young pilots under his command did not know what was really going on; they were semi-detached from the action.<sup>35</sup> We talk of pilots being distanced when they cannot see the effects of their bombing; we talk of drone pilots being disconnected or dissociated when they have an impaired understanding of war itself. And dissociation is becoming a theme of many Hollywood films, including Ridley Scott's *Body of Lies*, in which the CIA boss, played by Russell Crowe, orders a drone strike against terrorists from the comfort of his own office, while the agent in the field, played by Leonardo Di Caprio, living an offline life, gets tortured, blown up, and at one point beaten to a pulp. Dissociation is likely to arise when we live a largely online life.

One interesting question—a first in targeting—is what the technologies used by the pilots and gunners are doing to their brains. It is not so much a failure to understand the experience or decode the meaning of an activity. Something much more may be involved. Our brains are engaged less directly and more shallowly in information processing. We may become more efficient in our undertakings but less aware of what it is that we are doing. One of the problems is that we process information out of context and therefore find it difficult to be reflective about what we process. After all, what we are doing in multi-tasking is shifting our attention from one job to the next, learning to be more skilful at a superficial level. The area in which we are becoming more skilled is that of visual attentional processing—the speed at which we can shift our visual attention without at the same time gaining an insight into what lies behind the picture. Nicholas Carr quotes Patricia Greenfield, a developmental psychologist at UCLA, whose research found that new strengths in visual-spatial intelligence tend to go hand in hand with the weakening of ‘de-processing’ that underpins inductive analysis, critical thinking and the full use of our imagination. And this can actually be measured in changes of neural circuitry. Our brains, in fact, are becoming more computational; they are beginning to function like computers. We can increase ‘the pace of the stream’. We can process the flow of information even faster than before, but we may be doing so at the risk of becoming emotionally shallow.<sup>36</sup>

Or is this the proper way of looking at the question? Quite another method is involved if we invoke Actor Network Theory (ANT), an approach to social theory and research originating in the field of science studies and developed by scholars such as Bruno Latour and John Law.<sup>37</sup> Broadly speaking, ANT is a constructivist approach that avoids essentialist accounts of events or innovations (explaining a successful theory by saying it is true and others are false). It is different from other sociological network theories for its distinct material DOS semiotic approach.

The point is that non-animate machines, like drones, do not lie outside social relationships. There is no difference in the ability of technology and humans to act.

---

<sup>35</sup>Singer 2009, p. 367.

<sup>36</sup>Carr 2011, p. 133.

<sup>37</sup>Law 1992.

Take a car. It is a system with many electronic and mechanical components hidden from the view of the driver, which is why the latter tend to see a car as a single object, not a system of which he or she is a part. And it is generated by the principle of generalised symmetry (i.e., differences between humans and machines are created in the network of relations). John Law offers another example. When he writes a text he is communicating with a reader, though the two will probably never meet in person. The communication is made possible by the computer on which he has typed the article, the paper on which it is written, and the printing press that is used to publish it. The argument is that these ‘technologies’ participate in the social world. They help shape it and are necessary to the social relationship between author and reader. In some measure, it might even be said that they overcome the reader’s reluctance to read the text.<sup>38</sup> If machines are part of the social world we take for granted, they are likely to play an even larger role in the future. The theory rejects the claim that either the machine or human being is determinate in the final instance (that one drives the other). Both are inextricably interlinked. It is a radical theory, of course, because it also rejects the idea that we are necessarily special.

This raises an even more radical question: what do we mean by ‘people’. What counts as a person is generated by a network of relationships with other people and other things. And a machine, too, is not an inanimate object after all; it relies on human designers and users. It is contended that the process, as it deepens, will give rise to a new category of people–machine, or the ‘inhuman’.<sup>39</sup> The term is unfortunate, but it is one that is intended to blur the distinction between the two and, in the case of machine ethics, suggests that one day, perhaps quite soon, we will not know whether the ethical arises from man or machine. It would also be fair to say that whenever we have wanted to be ethical in the modern era, we have been entirely reliant on technology anyway, from precision guided munitions to non-lethal weapons.

All this is vitally important in respect to drones, as the technology will continue to become more autonomous. The US Air Force Research Laboratory at Wright-Patterson Air Force Base (Dayton, Ohio) is expecting to have operational by 2015 a suite of on-board sensors that will allow drones to independently detect another aircraft and manoeuvre to avoid it. Quite soon, drones will be able to start processing information that they are looking for, rather than sending back an endless video stream that requires hours of intense analytic analysis and interpretation, and is heavily human-intensive. And one day in the not too distant future, drones will be able to independently dock with Air Force tankers in mid-air.<sup>40</sup>

At some point in the future they may even be able to take ethical decisions on our behalf. When drones can be programmed with moral algorithms equivalent to

---

<sup>38</sup>Law 1992 pp. 381–382.

<sup>39</sup>Thrift 1994, p. 197.

<sup>40</sup>Coker 2013.

the moral heuristics programmed into us by natural selection, there will be little need of pilots. At best they will be on the loop, not in the loop, acting as managers, not operators, checking to see that the programmes work and the heuristics are being adhered to. This will represent a major threshold in the future of war; man and machine will be taking targeting decisions together, in a partnership that blurs the ultimate distinction between the two.

## References

- Adam B (2003) *The risk society and beyond: critical issues for social theory*. Sage, London
- Amnesty International (2013) Will I be next? US drone strikes in Pakistan. <http://www.amnestyusa.org/sites/default/files/asa330132013en.pdf>. Accessed 13 May 2014
- Asprey R (1994) *War in the shadows: the classic history of guerrilla warfare from ancient Persia to the present*. Little and Brown, New York
- Bauman Z, Lyon D (2012) *Liquid surveillance: a conversation*. Polity, Cambridge
- Bell D (2007) *The first total war: Napoleon's Europe and the birth of modern warfare*. Bloomsbury, London
- Blair T (1999) Doctrine of the international community (22 April 1999). PBS NewsHour . [www.pbs.org/newshour/bb/international/jan-june99/blair\\_doctrine4-23.html](http://www.pbs.org/newshour/bb/international/jan-june99/blair_doctrine4-23.html). Accessed 19 Dec 2013
- Bowden M (2002) The Kabul dance (1 November 2002). *The Atlantic*. [www.theatlantic.com/magazine/archive/2002/11/the-kabul-ki-dance/302610/](http://www.theatlantic.com/magazine/archive/2002/11/the-kabul-ki-dance/302610/). Accessed 19 Dec 2013
- Carr N (2011) *The shallows; how the internet is changing the way we think, read and remember*. Atlantic, London
- Catherina F (2011) Ethical conflicts of killing without risk (19 November 2011). *The Times*. <http://www.thetimes.co.uk/tto/news/world/article3231479.ece>. Accessed 9 May 2014
- von Clausewitz C (1982) *On war*. Penguin, London
- Coker C (2013) *Warrior geeks: how 21st century technology is changing the way we fight and think about war*. Oxford University Press, New York
- The Economist (2010) The calibration of destruction (28 January 2010). <http://www.economist.com/node/15391218>. Accessed 9 May 2014
- The Economist (2013) The history of chemical weapons: the shadow of Ypres (31 August 2013). *The Economist*. <http://www.economist.com/news/briefing/21584397-how-whole-class-weaponry-came-be-seen-indecent-shadow-ypres>. Accessed 9 May 2014
- Freedman L (1998) *The revolution in strategic affairs*, Adelphi Paper, No 318. International Institute for Strategic Studies, London
- Harris R, Paxman J (2002) *A higher form of killing: the secret history of chemical and biological warfare*. Random House, New York
- Holmes R (2004) *Acts of war: the behaviour of men in battle*. Cassell, London
- Human Rights Watch (2013) Between a drone and Al-Qaeda: the civilian cost of US targeted killings in Yemen. [http://www.hrw.org/sites/default/files/reports/yemen1013\\_ForUpload\\_1.pdf](http://www.hrw.org/sites/default/files/reports/yemen1013_ForUpload_1.pdf). Accessed 13 May 2014
- Ignatieff M (2001) *Virtual war: Kosovo and beyond*. Chatto and Windus, London
- Joshi S (2013) America's killing spree. *The World Today* 69:7. <http://www.chathamhouse.org/sites/default/files/public/The%20World%20Today/2013/AugSep/WT0413Joshi.pdf>. Accessed 12 May 2014
- Law J (1992) Notes on the theory of the Actor Network; ordering, strategy and heterogeneity. *Systems Practice* 5:4
- Lee P (2013) Return from the wilderness; an assessment of Arthur Harris' moral responsibility for the German city bombings. *Air Power Rev* 16:1 (Spring)

- Lendon JE (2005) *Soldiers and ghosts: a history of battle in classical antiquity*. Yale University Press, New Haven
- Lyon D (2007) *Surveillance studies: an overview*. Polity, Cambridge
- Moglen E (2012) *Why freedom of thought requires free media and why free media require free technology*, Re:Publica 2012 (Berlin) [http://www.youtube.com/watch?feature=player\\_embedded&v=sKOk4Y4inVY](http://www.youtube.com/watch?feature=player_embedded&v=sKOk4Y4inVY). Accessed 12 May 2014
- Norris C (1999) *The maximum surveillance society: the rise of CCTV*. Berg, London
- Orwell G (1968) *Penguin essays of George Orwell*. Penguin, London
- Piette A (1995) *Imagination at war: British fiction 1939–1945*. Papermac, London
- Scahill J (2013) *Dirty wars: the world is a battlefield*. Serpent's Tail, London
- Singer P (2009) *Wired for war: the robotics revolution and conflict in the 21st century*. Penguin, London
- Stephens A (2007) Effects-based operations and the fighting power of a defence force. In: Olson J (ed) *New wars. Files on defence and security 4/2007*, Oslo, pp 131–149
- Stone N (2007) *World War 1: a short history*. Allen Lane, London
- Thrift N (1994) *Inhuman geographies: landscapes of speed, light and power*. In: Cloke P, Doel M, Matless D, Phillips M, Thrift N (eds) *Writing the rural: five cultural geographies*. Paul Chapman, London
- Toffler A, Toffler H (1994) *War and anti-war: survival at the dawn of the 21st century*. Warner Books, London



<http://www.springer.com/978-94-6265-071-8>

Targeting: The Challenges of Modern Warfare

Ducheine, P.A.L.; Schmitt, M.N.; Osinga, F.P.B. (Eds.)

2016, XVI, 299 p. 6 illus., 1 illus. in color., Hardcover

ISBN: 978-94-6265-071-8

A product of T.M.C. Asser Press