4 Human security in future military operations

Mary Kaldor and Iavor Rangelov

Abstract

Within the framework of International Humanitarian Law, the killing of civilians is permitted in war if it is necessary to achieve the military objective. From a human security perspective, the rules of engagement are just the opposite; the killing of combatants is permitted provided it is necessary to protect civilians. This chapter explores what this means for future military operations. It starts by tracing the growing interest in human security within NATO and some national militaries, notably the UK. It then considers what human security in future military operations might mean in practice – the core human security roles, principles, and legal regime for the military – and outlines the implications of adopting human security for military budgets and new technologies. The chapter argues that human security is an alternative to war and its universal adoption would mean the end of organised collective violence between two groups. Were human security to be adopted by some states and not others, it could mean dampening down of conflicts and a defensive non-escalatory response to acts of aggression, genocide, or massive violations of human rights.

Introduction

'Human security' is in the air. The concept has established itself within the development community for some time. But in recent years, there has been a growing interest in the topic within the defence community. The new Strategic Concept of the North Atlantic Treaty Organization (NATO), the outcome of the June 2022 Summit in Madrid, 'emphasises' the need to 'integrate' human security, along with climate change and the Women, Peace and

Security agenda, ‘across all our core tasks’ (NATO 2022, p. 1). And several NATO members – notably the UK, which in 2021 adopted a Joined Service Publication (JSP) on incorporating human security in Defence – are ‘mainstreaming’ human security throughout the armed forces (UK Ministry of Defence 2021).

Human security is usually defined as the security of *individuals* and the communities in which they live, in the context of multiple economic, environmental, health, and physical threats. It is generally contrasted with national security, which is about the defence of borders from the threat of foreign attack. In other words, human security is an alternative to war. Were it to be adopted universally, it would mean the end of organised collective violence between two groups. Were it to be adopted by some states and not others, it could mean a dampening down of conflicts and a defensive non-escalatory response to acts of aggression, genocide, or massive violations of human rights.

The first use of the term was in the 1994 Human Development Report of the United Nations Development Programme (UNDP), where the emphasis was on economic and social development as a way of preventing war; this understanding remains the main approach to human security in United Nations (UN) circles. Indeed, for most proponents of the concept, the implementation of human security involves a much greater emphasis on addressing a range of non-military insecurities – development, health, or the environment. Nevertheless, there is a role for the military, among other instruments, in minimising the harm to individual human beings from different forms of political and criminal violence, what is called within NATO Allied Command Transformation ‘MC2HS’, or the Military Contribution to Human Security.

This chapter is an attempt to elucidate what human security currently means in military operations and what it could mean in the future. It starts by tracing the trajectory of the growing interest in human security within NATO and in the specific case of the UK, drawing

on recent developments and insights from a series of exchanges we had with people in the defence community.[i] It then considers what human security in future military operations might mean in practice – the core human security roles of the military, the principles of human security in military operations, and the relevant legal regime. Finally, it briefly outlines the implications of the adoption of human security for military budgets and new technologies.

The turn to human security among the military

For both NATO and the UK, human security is understood as an umbrella concept that encompasses Building Integrity (anti-corruption), Protection of Civilians, Cultural Property Protection, Children and Armed Conflict, Conflict-related Sexual and Gender-based Violence, Human Trafficking, and Women, Peace and Security. A human security unit was established inside NATO by the Secretary General in 2019. A similar initiative was taken by the then Minister of Defence, Gavin Williamson, in the UK Ministry of Defence. Subsequently, these plans have speeded up with a new directive being developed in NATO's Supreme Headquarters Allied Powers Europe (SHAPE) and a new Joint Service Publication in the UK. There is an emphasis on integrating human security in training and in technological development, and, in the UK case, the introduction of human security advisors in all operational units.

This new emphasis on human security is the consequence of several overlapping factors. The first factor has been the actual experience of out of area operations, particularly but not only Afghanistan. According to one British officer we spoke with, it can be traced back to the Responsibility Protect/Libya and the experience in Basra in 2008–2009 where the commanding officer, General Andy Salmon, adopted an explicitly human security agenda, and it arrived in the UK via the Women, Peace and Security agenda. Another reference point

for British officers is Helmand, which is seen as an innovation in adopting a human security approach that was ultimately undermined by the ways in which British forces were attacked; it was a 'tripartite approach' involving the Ministry of Defence (MoD), the Foreign and Commonwealth Office (FCO) and the Department for International Development (DFID) but the sustained attacks meant that the MoD became preeminent. Other examples are Mali, the Royal Navy operations in the Caribbean for humanitarian relief and in the Mediterranean for migrants, as well as the British-led European anti-piracy mission in the Gulf. In addition, the experiences of Kosovo and Iraq were important in drawing attention to the issue of cultural heritage.

The NATO role in Afghanistan has been particularly salient. As one British officer put it:

> There is real appetite for understanding the human environment better – a different way of analysing the human environment that is conflict sensitive. It took a long time to understand the local dynamics in Afghanistan, the multiple reasons for fighting … the human environment. We tend to think about the adversary as a group. But sometimes it is about the structural factors that produce conflict . . . Framing through the adversary is not always the most useful analytical lens. There needs to be a Human Security approach in understanding and engaging.[ii]

Particularly important was the growing emphasis on protection of civilians – something that gained traction because air strikes and night raids were undermining the legitimacy of the international presence in Afghanistan. A comprehensive Protection of Civilians policy was adopted in July 2016. As one study points out, "Not only was NATO receiving significant international backlash over highly publicised incidents of civilian harm but commanders began to identify civilian harm as fuelling the growing insurgency" (Holt 2021, p. 5).

A second factor was the evolution of the European Security and Defence Policy. In the early 2000s, a series of reports on European security capabilities were presented to Javier Solana,

then High Representative for Common Foreign and Security Policy, by the Study Group on European Security Capabilities, later renamed the Human Security Study Group.[iii] The Study Group proposed a human security doctrine for the European Union (EU) as a distinctive way of doing security. According to this version, human security is what individuals enjoy in rights-based, law-governed societies. It is assumed that the state will protect individuals from existential threats and that emergency services – including ambulances, firefighters, and police – are part of state provision. In a global context, human security is about extending individual rights beyond domestic borders and about developing a capacity at a regional or global level to provide emergency services that can be deployed in situations where states either lack capacity or are themselves the source of existential threats. The Study Group proposed a human security force composed of both civilians and military and based on a set of principles, which are very different from the principles that apply to the military in a classic war-fighting role. These proposals were echoed in the State of the Union address by Ursula von der Leyen in 2021:

> The European Union is a unique security provider. There will be missions where NATO or the UN will not be present, but where the EU should be. On the ground, our soldiers work side-by-side with police officers, lawyers and doctors, with humanitarian workers and human rights defenders, with teachers and engineers. We can combine military and civilian, along with diplomacy and development – and we have a long history in building and protecting peace.
>
> (Leyen 2021)

It can be argued that the European pillar of NATO has been enhanced partly as a consequence of the Trump years, when the US was less present, but more importantly under the impetus of the war in Ukraine and the impending membership of Sweden and Finland.

The New Force Model proposed in the 2022 Strategic Concept will increase the number of ready forces available to NATO and these are likely to be European (Biscop 2022).

A third factor is the growing influence of NGOs, and a much greater readiness for working together with civilians, including other government agencies, international organisations as well as industry and academia. We were told that NATO cooperates with the International Red Cross on cyber security issues and does a two-week human security course with the UN. At SHAPE, we were recommended to talk with a range of NGOs including the Stimson Centre, which has played a pioneering role in protection of civilians; Civilians in Conflict, the NGO that collects data on civilian casualties; PAX for Peace in the Netherlands, which has long spearheaded demands for human security; and the Center for Cultural Heritage and Armed Conflict.

And the final, and perhaps counterintuitive, factor is the war in Ukraine. One might have expected that the war in Ukraine would encourage a return to a more traditional emphasis on war-fighting. A senior NATO official told us that Ukraine has been 'a wake-up call' – while traditional NATO planning was based on the assumption of a World-War-II-type conflict with millions of civilian casualties, nowadays that is seen as completely unacceptable. This may explain both the emphasis on conventional and defensive forms of deterrence in the new Strategic Concept as well as human security. It is not just concern about minimising loss of life and preventing escalation; a very important issue is legitimacy. As one of our UK interviewees put it, Russia is focused on delivering human insecurity – brutality towards civilians, destruction of cultural heritage, sexual violence, looting. Conforming with International Humanitarian Law (IHL) is hugely important for legitimacy, something they stress in contingency training for Ukrainian soldiers.

What is not clear as yet is whether the umbrella approach to human security actually involves a paradigm shift in how military operations are conducted. There are tensions between the

various topics included under the heading of human security. Some fear that the emphasis on gender and climate change waters down the significance of human security, while some of those who focus on the Women, Peace, and Security agenda do not talk about human security because of concerns that this new concept detracts from a focus on gender issues. More importantly perhaps, it is not clear whether the new emphasis on human security merely means taking IHL and the various components of the umbrella terms very seriously when conducting military operations – something that is, of course, a positive development – or whether it portends more far-reaching change in how the military operate.

Almost everyone interviewed for this chapter were enthusiastic proponents of human security. Indeed, an interviewee who was chosen because she was not part of the human security institutional framework, responded to our questions about whether ordinary soldiers were affected by these efforts, by saying that it is absolutely the case and it is in fact 'all over everything'. Yet several of our interlocutors expressed frustration about the difficulty of changing mindsets. They felt that the shift to human security has not yet materialised in a heartfelt manner; it has not yet reached a 'tipping point'.

So what might human security in future military operations mean?

Future military contributions to human security: roles, principles, legality

Evidently, implementing human security requires a range of non-military capabilities – humanitarian responders, health workers, engineers, firefighters, police, and so on and the mix depends on the type of contingency – natural disasters, famines, or war, for example. The military contribution to human security is focused on meeting large-scale physical threats to individuals and their communities; these might include military invasions, genocide, or massive violations of human rights. The aim of any military operation has to be defensive and

non-escalatory. In other words, it is about defending people from organised violence without at the same time provoking further violence; something which is very difficult for soldiers to undertake. It is about the legal use of force, but this is not the same as war-fighting. In this section, we discuss the specific roles in which the military might be used for human security in the future, the principles that should guide such operations, and the relevant legal framework.

Roles

There are two main roles in which the military may be required in order to implement human security. One is defence of people against the crime of aggression, as in Ukraine, and the other is the contribution to international peace-keeping and crisis management.

Defence against aggression is different from engaging in military competition along geo-political lines. Rather than matching capabilities of potential aggressors, the idea is to be able to demonstrate effective defence, to show that aggression cannot succeed, without at the same time being perceived as a potential threat to other states.

During the 1980s, there was much concern about the offensive posture of NATO and the dangers of weapons of mass destruction. At that time, proposals were put forward for what was known as defensive deterrence (Boserup & Neild 1990), i.e., deterring foreign attacks through a credible conventional defensive posture rather than through the threat of nuclear or conventional retaliation. It was the idea behind Gorbachev's notion of 'reasonable sufficiency'. Proposals for area defence or in-depth defence were put forward that would have meant drawing down nuclear weapons as well as conventional offensive capabilities, such as bombers or massed tanks (though evidently some are needed for defensive purposes). It is worth asking whether Putin would have invaded Ukraine had he realised that Ukraine would put up such an effective conventional defence.

In terms of crisis management and peace-keeping, that is to say intervention in intractable conflicts, the aim is to end such wars by dampening down conflict and reducing the incentives for violence rather than through victory or a single top-down peace agreement. Central to this goal is the establishment of legitimate and inclusive political authority and a rule of law (SGESC 2004; HSSG 2007; HSSG 2016). Human security interventions are always civilian led and involve a combination of civilian and military actors. The tasks of the (external) military in these circumstances could include: protecting civilians from attack and creating a safe environment in which a legitimate political authority can be established; monitoring and upholding local peace agreements and ceasefires as part of multi-level peace building involving civil society, especially women; establishing humanitarian space through corridors and safe havens that allow for the delivery of humanitarian assistance; and arresting war criminals. A similar approach was adopted by the British in Northern Ireland or the EU-led anti-piracy mission in the Gulf of Aden, which combined the arrest of pirates with non-military measures such as the introduction of fishing licenses on the coast of Somalia.
This is very different from counter-insurgency and counter-terror where the goal is victory over an enemy. In Afghanistan, for example, the goal was the destruction of the Taliban, al Qaeda and later ISIS Khorasan, rather than the security of Afghans. This meant continuing attacks (air strikes and night raids) that provoked and strengthened the insurgency as well as allying with corrupt commanders who undermined the legitimacy of the Afghan government. It also marginalised the civilian leadership of the international intervention, notably the UN Special Representative (Rangelov & Theros 2019; Kaldor 2021).

Principles

How such operations are conducted is as important as why. The practice of the military in protecting civilians must conform to human security principles. Human security is about

human rights rather than war. It is about saving all lives including the lives of enemies. It is about law-based security rather than war-based security; in other words, it is more like policing than war-fighting. One way to think about it is as an inversion of the law of armed conflict. Under IHL, the killing of civilians is sometimes permitted if it is necessary to achieve a military objective and the harm is proportionate to what would be achieved by victory. For human security, it is the other way round. The killing of enemies is permitted if it is necessary to protect civilians or save lives.

The principles for conducting military operations within a human security framework include:

-*Minimising all loss of life*. Military operations are carried out in ways that seek to minimise all casualties, civilians as well as combatants – including enemy combatants.

-*Stability rather than victory*. The aim of the military contribution to human security is to help stabilise crises by reducing the incentives for violence and protecting civilians rather than pursuing military victory.

-*Defensive rather than offensive.* Military operations have a defensive focus and employ defensive rather than offensive capabilities across the spectrum of conventional and cyber systems and weapons, including Artificial Intelligence (AI)-enabled capabilities.

-*Civilian control.* Military operations are civilian led and aligned with civilian priorities.

Legality

If human security entails a law-based rather than a war-based approach to security, the question is what law? The answer depends on the concept of human security that is adopted. Different understandings of human security unfold across the spectrum of international law relating to a diverse set of issues, shaping how international law constructs its subjects,

identifies its sources, and creates obligations for states and non-state actors, as well as informing forward-looking proposals how it may do so in the future (Oberleitner 2022). Thus the 'broad' UNDP version of human security invites consideration of the frameworks for promoting social, economic, and cultural rights and countering structural inequality under international law (Estrada-Tanck 2022) or specific bodies of law such as international food law (Steier, Kang & Ramdas 2022) or global health law (Forman 2022).

The 'narrow' Canadian version of human security informs the Responsibility to Protect (R2P) concept developed by the International Commission on Intervention and State Sovereignty (ICISS 2001) and formally adopted by the UN General Assembly in 2005. R2P seeks to address the perceived need for a 'humanitarian exception' to the prohibition on the use of force under the UN Charter, which provides only for a 'self-defence' exception. It spells out the responsibility of the international community to intervene, including by using military force as a last resort, in cases of mass human rights violations such as ethnic cleansing and genocide. The UN Security Council authorised the NATO intervention in Libya in 2011 with an R2P mandate with Security Council Resolution 1973 adopted on 17 March 2011.

From a human security perspective, R2P is too state-centric and top-down. It enhances the power of the permanent members of the Security Council, which means that in cases like Syria, it becomes irrelevant. Moreover, as its implementation in Libya demonstrates, it relies on war-fighting methods (air strikes) that contradict its humanitarian objectives, prioritise force protection over civilian protection, and blur the boundaries between humanitarian intervention and regime change. Human security requires a shift in focus from the responsibility of states to intervene with military means to the rights of human beings to be protected. A shift from the Responsibility to Protect to a Right to be Protected under international law means that

> Human security might necessitate the use of force in situations of humanitarian emergency, but under much tighter rules of engagement, which are aimed at minimizing all loss of life, with a defensive focus on individuals on the ground and involving, where possible, the arrest rather than killing of those responsible for human rights violations as well as enhanced accountability.
>
> (Chinkin & Kaldor 2017, p. 539)

Human security requires a similar shift in military operations carried out in self-defence. Human security is the inverse of IHL, which permits the killing of civilians when militarily necessary, subject to the principles of distinction and proportionality. The principle of military necessity permits combatants to carry out necessary attacks to achieve a legitimate military objective, even if these attacks will result in foreseen civilian casualties. Its application is based on the rules of distinction (requiring combatants to distinguish between civilians and civilian objects, on the one hand, and combatants and military objectives, on the other) and proportionality (demanding that when estimating the civilian deaths or injuries caused by an attack on a legitimate military target, the harm caused cannot be excessive (disproportionate) to the anticipated military advantage to be obtained by the attack).

For IHL, the objective of military operations is to defeat the enemy and that determines when the killing of civilians is permissible in pursuit of that objective (the military necessity, distinction and proportionality principles). For human security, the objective of military operations is to protect individuals and communities and that determines when the killing of combatants is permissible in pursuit of that objective (when it is necessary to protect civilians or save lives). The rules of engagement from a human security perspective are the inverse of IHL because of this shift in the means and ends of military operations. Or to put it another way, the rules of engagement are much tighter than for IHL and are complemented by

International Human Rights Law, International Criminal Law, and the so-called 'human security treaties'.[iv]

Human security implications for military spending and new/emerging technologies

Most of the human security literature starts from the presumption that military spending should be reduced and the funding released should be used to address a range of non-military existential threats such as extreme poverty, pandemics, or climate change. Indeed, this was the thrust of the original UNDP concept of human security. The idea that reducing expenditure on the arms race and increasing expenditure on development would increase overall security had already been expressed in a series of expert reports and commissions such as the Brandt Commission.

Evidently, human security does require increased expenditure on such issues as health, the environment, education, or livelihoods. But, as we make clear in this chapter, there is a role for military forces in protecting people from foreign attack, as well as from other forms of political violence. It is not immediately evident that this would mean a reduction in military spending.

The two main functions of military forces are defence against external attack and a contribution to peace-keeping, or more particularly, protection of civilians in crisis situations. In the case of defence against external attack, we have argued that deterrence consists of effective defence rather than retaliation. This would require increased expenditure on personnel and precision systems including cyber security rather than nuclear weapons and complex offensive systems. A human security approach to crisis management prioritises the civilian elements – development and legitimate governance. Nevertheless, it may also require

an increased peace-keeping and crisis-management role, involving the protection of civilians, the protection of humanitarian space, mediation and monitoring of ceasefires. Expenditure on UN peace-keeping in 2021 was $6.8 billion, a tiny proportion of the total $3 trillion global expenditures, though this does not include peace-keeping expenditures by other international organisations, such as the EU or the AU (Brzoska, Omitoogun & Sköns 2022).

A shift from national to human security among the big military spenders, the US, Russia and China, would involve big reductions in military spending, though additional costs would be required for destruction and recycling of military equipment, for reintegration of military personnel and for the conversion of defence industries. The big falls in military spending after the end of the Cold War did lead to a big rise in mercenaries and private security companies as well as an increase in the private sales of surplus weapons. There was also persistent pressure from industry to restart military production. Likewise, there is also a human security case for reductions among big military spenders in the so-called Global South, where military spending is artificially high as a consequence of purchases of expensive systems often linked to corruption (indeed, human security might be a useful way to reframe Security Sector Reform programmes). For those countries where military spending is around the global average of 2% of GDP, there is a need for more detailed analysis of what a shift to human security might mean in financial terms.

The key point is that the shift from national to human security is not just about a shift from military spending to other types of social spending. There needs to be a change in the content of military spending and without further research, it is not clear whether this would be cheaper or more expensive.

The military applications of new and emerging technologies have potentially far-reaching consequences for human security in future military operations, which also require further investigation. Several clusters of emerging technologies are expected to mature and become

deployable in the battlefield in the next two to three decades. They include the uses of AI in information warfare, cyber operations, weapons systems, and Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR); advanced robotics and autonomous systems including unmanned vehicles operating without human supervision or control; quantum technology applications for C4ISR and both offensive and defensive cyber capabilities/operations; technologies that deliver novel kinetic and non-kinetic effects including hypersonic weapons systems and Directed Energy Weapons (DEW) (e.g., high-energy lasers); satellites and space-based technologies including anti-satellite (ASAT) capabilities; and biotechnologies such as physical or cognitive Human Enhancement Technology (HET) and synthetic biology (e.g., weaponisation of biological pathogens and advanced delivery systems) (EPRS 2021; Favaro, Renic & Kühn 2022).

Although a nascent arms race involving major powers – the Unites States, Russia, and China – may already be underway in areas such as AI and hypersonic weapons, there is much debate and uncertainty about the future adoption and impact of emerging technologies in military operations. It is possible to anticipate some of the human security implications of specific technologies based on their technical characteristics and possible uses. However, much more significant but difficult to forecast is their cumulative impact. How new technologies interact with each other, with legacy systems (conventional and nuclear) and with changes in the broader environment in which military operations are justified, planned, and carried out, will determine their overall impact on human security.

A recent study forecasting the future impact of 12 emerging technologies on international stability and human security concludes that taken together, the net impact of all 12 technologies is negative. With respect to human security, the authors find that only one of the technologies they study – quantum technology for C4IRS – is likely to strengthen humanitarian principles. They describe the combined effect of emerging technologies as

‘negative multiplicity’, highlighting ‘the predominantly negative, concurrent, and in some cases similar, first- and second-order effects that emerging technologies are expected to have on international stability and human security’ (Favaro, Renic & Kühn 2022, p. 49).

The implications of specific technologies for human security will depend on how they are used in practice. For example, DEWs can be used in offensive operations against human and material targets, but they also have significant defensive potential for countering rockets, artillery, mortars, hypersonic weapons or drones. Similarly, quantum technology can be used offensively (e.g., for decrypting data secured by public key encryption) but also defensively (e.g., using quantum-resilient algorithms to develop encryption that can withstand even quantum computers).

The use of AI for information warfare is expected to blur the distinction between combatants and civilians and to exploit exiting social biases and stereotypes, thereby increasing the vulnerability of protected persons, whereas the use of AI for cyber operations raises concerns about distinguishing between military and non-military objects and about accountability and attribution (Favaro, Renic & Kühn 2022, pp. 40–1). For the International Committee of the Red Cross (ICRC), there are two other areas where the use of AI and machine learning by conflict parties raises particularly serious concerns. One is the increasing autonomy in physical robotic systems, including weapons, and the other is the impact of ‘decision support’ or ‘automated decision-making’ systems on the nature of decision-making in armed conflict – especially decisions for selecting and attacking targets (ICRC 2020).

The impact of AI-enabled systems and weapons on human security in future military operations will depend on how these capabilities are developed and deployed in practice. There is broad consensus about the need to regulate the military applications of AI and machine learning with a view to ensuring ‘human-centricity’, however what that means in

practice can be interpreted differently and may result in the emergence of different kinds of AI principles and rules.

The UK Ministry of Defence, for example, takes a human impact-based approach, which stresses the need to assess and consider the full range of effects of AI-enabled systems on humans, both positive and negative, across the entire system lifecycle: 'The choice to develop and deploy AI systems is an ethical one, which must be taken with human implications in mind' (UK Ministry of Defence 2022, p. 9). The ICRC advocates a human control-based approach that emphasises preserving human control over tasks and human judgment in decisions, especially decisions that pose risks to human life: "This starts with consideration of the obligations and responsibilities of humans and what is required to ensure that the use of these technologies is compatible with international law, as well as societal and ethical values" (ICRC 2020, p. 471).

As a law-based model of security, human security depends on the ability to enforce international law, investigate and document violations, and hold perpetrators to account including through criminal prosecution (Rangelov, Theros & Kandić 2018, pp. 144–6). The three guiding principles for the use of AI adopted by the French Ministry of Defence – compliance with international law, maintaining significant human control, and ensuring permanent command responsibility (ICRC 2020, p. 474) – are critical for human security in any military operation involving AI-enabled systems and weapons.

Conclusion

What we are learning from the current experience in Ukraine, and indeed from the interventions in Iraq and Afghanistan, is that wars are very difficult to win nowadays. They either risk escalation and the real possibility of human extinction, or they became intractable low-level conflicts, as in Syria or DRC – characterised by forced displacement, sexual

violence, the spread of transnational crime, or the destruction of cultural heritage and human capital – that reproduce themselves. The rise of AI, cyber and information warfare, may contribute both to escalation and to intractability.

In analysing future warfare, one possibility is extrapolation from the present – more intractable conflicts, as well as the reappearance of inter-state conflicts as in Ukraine or perhaps Taiwan. This is a bleak scenario that could even mean human extinction. But there are openings that could potentially redirect this trajectory and make war less likely. In this chapter, we have explored the practical potential of applying a human security approach to future military operations, and the steps that are already being taken within NATO and a number of individual national militaries.

The aim of such an approach would be to prevent future wars of aggression through effective non-threatening defensive deterrence, to protect people from political and criminal violence, and to contribute to the dampening down of intractable conflicts along with other, non-military instruments and actors. If this were to happen, we might be able to envisage the phasing out of warfare in the future.

References

Biscop, S 2022, 'The New Force Model: NATO's European Army?', *Trans European Policy Studies Association*, 9 September, <www.tepsa.eu/the-new-force-model-natos-european-army-sven-biscop-egmont-belgium> (accessed 18 October 2022).

Boserup, A & Neild, R 1990, *The Foundations of Defensive Defence*, Palgrave Macmillan, London.

Brzoska, M, Omitoogun, W & Sköns, E 2022, *The Human Security Case for Rebalancing Military Expenditure,* SIPRI, Stockholm.

Chinkin, C & Kaldor, M 2017, *International Law and New Wars*, Cambridge University Press, Cambridge.

Daft, S 2022, 'Human Security and International Law: Why? How?', in G Oberleitner (ed), *Research Handbook on International Law and Human Security*, Edward Elgar, Cheltenham, pp. 25–38.

EPRS 2021, 'Innovative Technologies Shaping the 2040 Battlefield', *European Parliamentary Research Service*, *European Parliament*, <https://www.europarl.europa.eu/thinktank/en/document/EPRS_STU(2021)690038> (accessed 15 October 2022)

Estrada-Tanck, D 2022, 'Human Security: Countering Structural Inequality and Fostering Resilience Under International Law', in G Oberleitner (ed), *Research Handbook on International Law and Human Security*, Edward Elgar, Cheltenham, pp. 305–19.

European Union 2016, *Shared Vision, Common Action: A Stronger Europe – A Global Strategy for the European Union's Foreign and Security Policy*, Brussels, June.

Favaro, M, Renic, N & Kühn, U 2022, *Negative Multiplicity: Forecasting the Future Impact of Emerging Technologies on International Stability and Human Security*, IFSH Report #010, Institute for Peace Research and Security Policy, University of Hamburg, <https://ifsh.de/file/publication/Research_Report/010/Research_Report_010.pdf> (accessed 25 October 2022).

Forman, L 2022, 'Global Health Law: WHO, COVID-19, and Human Security', in G Oberleitner (ed), *Research Handbook on International Law and Human Security*, Edward Elgar, Cheltenham, pp. 339–54.

Holt, V K 2021, 'Origins, Progress, and Unfinished Business: NATO's Protection of Civilians Policy', *Stimson Centre*, 18 March.

HSSG 2007, *A European Way of Security*, The Madrid Report of the Human Security Study Group presented to EU High Representative for Common Foreign and Security Policy Javier Solana, Madrid, 8 November.

HSSG 2016, *From Hybrid Peace to Human Security: Rethinking EU Approaches to Conflict*, The Berlin Report of the Human Security Study Group presented to the High Representative of the Union for Foreign Affairs and Security Policy Federica Mogherini, Brussels, 24 February.

ICISS 2001, *The Responsibility to Protect: Report of the International Commission on Intervention and State Sovereignty*, International Development Research Centre, Ottawa.

ICRC 2020, 'Artificial Intelligence and Machine Learning in Armed Conflict: A Human-Centred Approach', *International Review of the Red Cross*, vol. 102, no. 913, pp. 463–79, https://doi.org/10.1017/S1816383120000454.

Kaldor, M 2021, 'The Main Lesson from Afghanistan is that the War on Terror Does Not Work', *Guardian*, 24 August.

Leyen, U von der 2021, *State of the Union 2021*, Speech by the President of the European Commission, <https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_21_4701> (accessed 14 August 2022).

NATO 2022, *NATO Strategic Concept 2022*, adopted by Heads of State and Government at the Summit in Madrid, 29 June.

Oberleitner, G 2022, 'Introduction', in G Oberleitner (ed), *Research Handbook on International Law and Human Security*, Edward Elgar, Cheltenham, pp. 1–23.

Rangelov, I 2022, 'Human Security in Europe: The European Union and Beyond', in G Oberleitner (ed.), *Research Handbook on International Law and Human Security*, Edward Elgar, Cheltenham, pp. 356–71.

Rangelov, I, Theros, M & Kandić, N 2018, 'EU Approaches to Justice in Conflict and Transition', in M Kaldor, I Rangelov & S Selchow (eds), *EU Global Strategy and Human Security: Rethinking Approaches to Conflict*, Routledge, London, pp. 142–57.

Rangelov, I & Theros, M 2019, 'Political Functions of Impunity in the War on Terror: Evidence from Afghanistan', *Journal of Human Rights*, vol. 18, no. 4, pp. 403–18, https://doi.org/10.1080/14754835.2019.1629889.

SGESC 2004, *A Human Security Doctrine for Europe*, The Barcelona Report of the Study Group on Europe's Security Capabilities presented to EU High Representative for Common Foreign and Security Policy Javier Solana, Barcelona, 15 September.

Steier, G, Kang, M & Ramdas, S 2022, 'Food Security and the Right to Food: Pillars of Humanity Arising from Food and Agriculture Law', in G Oberleitner (ed), *Research Handbook on International Law and Human Security*, Edward Elgar, Cheltenham, pp. 320–38.

UK Ministry of Defence 2021, 'JSP 985: Human Security in Defence', *MoD Joint Service Publication*, 1 December.

UK Ministry of Defence 2022, 'Ambitious, Safe, Responsible: Our Approach to the Delivery of AI-enabled Capability in Defence', *MOD Policy Paper*, 15 June.

Notes

[i] This includes 12 interviews and exploratory conversations with officials from NATO and the UK Ministry of Defence and British Army officers. The data gathered in these exchanges has been anonymised upon request of our interlocutors.

[ii] See *supra* note 1.

[iii] The Human Security Study Group was reconvened in 2015–2016 to feed into the consultation for the EU Global Strategy 2016 (European Union 2016). See the Barcelona, Madrid, and Berlin Reports of the Study Group (SGESC 2004; HSSG 2007; HSSG 2016). On the evolution and impact of human security thinking in Europe, see Rangelov 2022.

[iv] They are labelled 'human security treaties' because their development was driven by advocates of human security among states, international institutions, and most importantly NGOs. They include the Ottawa Convention, the Convention on Cluster Munitions, the Rome Statute establishing the International Criminal Court, the Optional Protocol to the Convention on the Rights of the Child on involvement of children in armed conflict, and the Arms Trade Treaty. See Daft 2022.