

# Drone-Cinema, Data Practices, and the Narrative of IHL

Shiri Krebs\*

Deakin Law School, Melbourne, Australia

*s.krebs@deakin.edu.au*

Abstract	309
Keywords	310
I. Introduction	310
II. ‘Just War Cinema’, Visual Technologies, and the Narrative of IHL	314
III. Who Has the Power to Speak IHL?	317
1. Actors and Subjects of IHL: North, South, and Tech	319
a) North and South	319
b) Tech	322
2. Militarism and Masculinity	323
IV. To Whom Is IHL Speaking?	324
V. How Do IHL Data Practices Reshape IHL’s Jurisdiction?	327
VI. Conclusion	331

## Abstract

This article explores how advanced military technologies and data practices reshape and reassert a particular, Western-centric, narrative of International Humanitarian Law (IHL). Analysing the dissemination of this narrative through popular culture, with a focus on the 2015 British thriller *Eye in the Sky*, I explore how the representation of IHL data practices reaffirms a humanitarian narrative of IHL. As a popular culture product – and one that is embraced by senior IHL experts and professionals – *Eye in the Sky* reflects and participates in the ethical, legal, and political debates about advanced military technologies, and presents mundane data practices as a system of knowledge production through which IHL exercises its jurisdiction over facts, people, time, and space. In particular, the article analyses how *Eye in the Sky*’s representations of IHL’s data practices strengthen and reinforce a

---

\* Associate Professor of Law, Deakin Law School; Co-Lead, Law and Policy Theme, Cyber Security Cooperative Research Centre (CSCRC); Affiliate Scholar, Stanford Center on International Security and Cooperation (CISAC). I wish to thank participants of the 16th Annual Minerva Conference on International Humanitarian Law (IHL), 9 November 2021, participants of the Ethics and Political Violence Seminar Series, CISAC, Stanford University, 19 October 2021, and participants of the International Conference on Jurisdiction: Who Speaks International Law, Bonn University, Germany, 3 September 2021, for helpful comments and reflections. I am particularly grateful for the anonymous reviewers for their thoughtful engagement with my article.

particular IHL narrative, which is consistent with Western countries' narrative about their existing bureaucracies of killing. Based on interdisciplinary analysis of socio-legal studies (SLS), Science and Technology Studies (STS), and culture and media literature, this article answers the following three questions: (i) who is given the power to speak IHL (and who is not)? (ii) to whom is IHL speaking? and (iii) how do data practices shape IHL's jurisdiction? The article concludes that *Eye in the Sky* speaks international law through the voices of drone-owning nations, and is directed to their mass publics, legitimising data-centred violence. At the same time, it disguises normative choices as inevitable, and erases African decision-makers, communities, and perspectives.

## Keywords

Drone – targeting – international humanitarian law – cinema – jurisdiction

## I. Introduction

‘Colonel Powell:

*“If my targeteer can calculate us coming in under fifty percent for the collateral damage on the girl then do you think we will get approval at your end?”*

Lieutenant-General Benson:

*“Yes. I do. Thank you.”*<sup>1</sup>

Colonel Powell is a British Army Colonel, leading a sophisticated, multi-country, targeted killing operation against Al-Shabaab terrorists in Nairobi, Kenya. Lieutenant-General Benson is Deputy Chief of Defence Staff at the British Ministry of Defence. The legal and ethical dilemma they are facing is the presence of a nine-year-old girl in the vicinity of the terrorists' compound, who is likely to be killed during the operation. The presence of the girl – Alia – is established through the predator drone's sensors. The likelihood of her death – or survival – is calculated by advanced algorithms programmed to estimate collateral damage.

Colonel Powell, Lieutenant-General Benson, and Alia are not real people. They are fictional characters created by screenwriter Guy Hibbert in his screenplay for the British action-thriller, *Eye in the Sky*. However, their dialogues, actions, and expressions – similarly to other characters in the movie – reflect a significant shift in the social and professional narrative of

<sup>1</sup> Guy Hibbert, *Eye in the Sky* (screenplay, 2014), 115, available at <<https://www.scriptslug.com/assets/uploads/scripts/eye-in-the-sky-2016.pdf>>.

International Humanitarian Law; a shift that solidifies IHL's Western-centred humanitarian narrative through its data practices and knowledge production technologies. These seemingly mundane data practices are presented as a superior system of knowledge production, through which IHL actors exercise jurisdiction over people and processes, time and spaces.

Viewed through this lens, IHL is not only a set of legal norms, rules, and principles designed to guide behaviour during armed conflicts. It is also a set of data practices that establish facts and construct physical conditions. Providing an external 'perfect vision' through which the world and its inhabitants are seen and evaluated, IHL's data practices determine individuals' gender, actions, and status (male/female, peaceful/fighter, civilian/combatant) and predict risk (how many bystanders will be killed as a result of an attack, how dangerous is the target).<sup>2</sup> These data practices are therefore both constitutive and explanatory: they create a virtual legal reality that – for the purposes of legal analysis – replaces the actual conditions on the ground; and at the same time, they justify and explain any gaps between this legal reality and the physical reality. Ultimately, the IHL narrative advanced in *Eye in the Sky* upholds IHL's data practices as a natural and necessary element of IHL's protective aim because of these assumed qualities (providing an external and infinite vision).

*Eye in the Sky* is a particularly interesting example in this context. Following its release on the big screen, IHL scholars and practitioners have praised this movie as an accurate and authentic representation of IHL principles and decision-making processes.<sup>3</sup> Its popularity among IHL experts and professionals, as well as critics and the general public, reflects the appeal of its main themes to various audiences. The broader social and professional discussions triggered by *Eye in the Sky* shed light on the main assumptions in the field about IHL data practices, as are the issues that are missing from these discussions. The following critical reading of *Eye in the Sky*'s script, therefore, is not an attempt to criticise the artistic choices of the movie's creators; nor does this article claim that the movie itself has intrinsic importance or significance as a popular culture product. Rather, in this article I argue that the warm embrace the movie received from IHL experts and practitioners – and the types of debates it triggered – shed light on the 'non-issues' and invisible assumptions about IHL data practices. It thus serves as a tool to illustrate the existing social and professional debates in this field, as well as the jurisdictional assumptions which serve as the foundations of these debates.

---

<sup>2</sup> Haraway describes this illusion of perfect, infinite, vision, a 'god trick'. Donna Haraway, 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective', *Feminist Studies* 14 (1988), 575-599 (582).

<sup>3</sup> See section II. below.

As a part of this special issue on jurisdiction in international law, this article contributes to the scholarly debates about jurisdiction through a focus on the way in which military technologies reshape IHL's competence. Generally, the doctrine of jurisdiction is perceived and treated as neutral and apolitical, expressing legal competence over people, territory, and events. In the field of IHL, jurisdiction is most often discussed in legal literature in the context of its enforcement mechanisms (mainly international criminal tribunals),<sup>4</sup> or when discussing its *lex specialis* nature and its relations with other branches of international law.<sup>5</sup> IHL's jurisdiction is also explored in the context of the legal classification of armed conflicts, and the legal categories to which people taking part in the hostilities belong.<sup>6</sup> However, Third World Approaches to International Law (TWAIL) scholarship has begun to explore the social and political dimensions of jurisdiction, pointing to the role of jurisdiction in 'shaping our social and political world'.<sup>7</sup> Chimni, for example, demonstrates how states use the legal doctrine of jurisdiction to naturalise legal categories such as 'nationals' and 'aliens', and to legitimise social injustice and economic inequality.<sup>8</sup> Literature in the intersection of law and technology has further explored the role of technologies and data analytics in importing inequalities to the domain of international law. Analysing smart borders technologies, Van Den Meerssche demonstrates how 'social hierarchies' are 'reproduced by practices of algorithmic association'.<sup>9</sup>

In this article I continue the critical inquiry of the doctrine of jurisdiction, focusing on the way in which data practices expand and reshape the competence of legal rules and legal institutions. The site of inquiry is the particular case of military technologies and data practices. Following Fleur Johns' conceptualisation of 'proto-jurisdiction',<sup>10</sup> I explore how mundane data prac-

<sup>4</sup> Dapo Akande, 'Selection of the International Court of Justice as a Forum for Contentious and Advisory Proceedings (Including Jurisdiction)', *Journal of International Dispute Settlement* 7 (2016), 320-344; Dapo Akande and Antonios Tzanakopoulos, 'The Crime of Aggression in the ICC and State Responsibility', *Harv. Int'l L. J.* 58 (2017), 33-36; Jelena Aparac, 'Which International Jurisdiction for Corporate Crimes in Armed Conflicts?', *Harv. Int'l L. J.* 57 (2016), 40-43.

<sup>5</sup> Oona Hathaway et al., 'Which Law Governs During Armed Conflict? The Relationship Between International Humanitarian Law and Human Rights Law', *Minn. L. Rev.* 96 (2011), 1883-1943.

<sup>6</sup> Noam Lubell and Nathan Derejko, 'A Global Battlefield? Drones and the Geographical Scope of Armed Conflict', *JICJ* 11 (2013), 65-88.

<sup>7</sup> Bhupinder S. Chimni, 'The International Law of Jurisdiction: A TWAIL Perspective', *LJIL* 35 (2022), 29-54. (33).

<sup>8</sup> Chimni (n. 7), 33.

<sup>9</sup> Dimitri Van Den Meerssche, 'Virtual Borders – International Law and the Elusive Inequalities of Algorithmic Association', *EJIL* 33 (2022), 4 <<https://doi.org/10.1093/ejil/chac007>>.

<sup>10</sup> Fleur Johns, 'Data, Detection, and the Redistribution of the Sensible in International Law', *AJIL* 111 (2017), 57-103 (60).

tices reshape IHL's jurisdiction, expanding its competence over the construction of facts during armed conflicts. In the context of IHL generally, and military decision-making in particular, 'proto-jurisdiction' relates to the exercise of jurisdiction through data collection and construction by legally authorised agents, such as drone operators, targeteers, military lawyers, and other military decision-makers. Adopting a relational ontology, Sullivan refers to these 'mundane socio-technical practices in global security governance' as 'infra-legalities', positioning these data practices 'below the law'.<sup>11</sup> These 'infra-legalities', including data collection, classification, and analysis, produce regulatory effects and should be understood through these effects.<sup>12</sup> Merging these conceptualisations of data practices and examining their effects on the operation of the law, I argue that in the context of targeting decisions they have dual effects: first, they reshape decision-makers and decision-making processes, restructuring what is 'human'.<sup>13</sup> Second, they extend and expand the (proto) jurisdiction of IHL, allowing it to constitute the very reality it seeks to govern.

By zooming in on these mundane data practices, *Eye in the Sky* provides an opportunity to discuss these effects. For example, Second Lieutenant Steve Watts – *Eye in the Sky*'s drone pilot – observed a young girl through the drone sensors. He then interpreted the drone visuals to determine her legal status (protected) and concluded that her fate must therefore be determined by the Collateral Damage Estimation (CDE) algorithm. From this moment on, the movie's plot progresses through its characters' adherence to, application and manipulation of the various technologies in play; technologies which are presented as the pinnacle of modern IHL. The professional discussions about the movie, which focused on the ethical dilemma (of whether it is ethical to approve the operation despite the presence of the young girl), accepted the invisible role of these data practices in the legal evaluation of military decision-making, and did not question its portrayal as an objective, neutral and natural representation of the physical world. The jurisdictional expansion of IHL – constituting the world through data practices – was similarly ignored. Drawing on the works of TWAIL scholars I further demonstrate how *Eye in the Sky*'s representations of IHL's proto-jurisdiction strengthen and reinforce a particular IHL narrative, which is consistent

<sup>11</sup> Gavin Sullivan, 'Law, Technology, and Data-Driven Security: Infra-Legalities as Method Assemblage', *J. L. & Soc.* (2022), 1-20 (3).

<sup>12</sup> Sullivan (n. 11), 6.

<sup>13</sup> Developing a posthumanist, feminist critique of existing IHL's data practices, Arvidsson argues that these data practices reshape the idea of what is 'human' and cannot be separated from the humans they are purported to assist. Matilda Arvidsson, 'Targeting, Gender, and International Posthumanitarian Law and Practice: Framing the Question of the Human in International Humanitarian Law', *Australian Feminist Law Journal* 44 (2018), 9-28 (12).

with a Western narrative about IHL and a technology-centred bureaucracy of killing.

Based on interdisciplinary analysis of socio-legal studies, Science and Technology Studies, and culture and media literature, this article answers the following three questions: (i) who is given the power to speak IHL (and who is not)? (ii) to whom is IHL speaking? and (iii) how do data practices shape IHL's jurisdiction? To answer these questions, section II. explores recent developments in Just War Cinema research, with a particular focus on cinematic representations of lawfare and military technologies. Section III. uses examples from *Eye in the Sky* to answer the question 'who can speak IHL?', shedding light on IHL's actors and subjects, and the invisible politics of legal interpretation. Section IV. answers the question 'to whom is IHL speaking?', examining how *Eye in the Sky* participates in reshaping the social perception of IHL jurisdiction and solidifies a particular IHL narrative. Section V. scrutinises the role of IHL's data practices, including visual and predictive military technologies, in expanding IHL's jurisdiction. Section VI. concludes, discussing the broader meaning of *Eye in the Sky*'s representations of lawfare for the future of IHL.

## II. 'Just War Cinema', Visual Technologies, and the Narrative of IHL

War movies have been a part of popular culture, and a distinct cinematic genre, for decades.<sup>14</sup> A vast literature explores the representation of war in films,<sup>15</sup> as well as the role of cinema in framing moral, political, and cultural debates about war and peace, militarism, and heroism.<sup>16</sup> Focusing on storytelling of significant historical events or subjective experiences of war and armed conflict, war films contributed to the development of ideological narratives about conflicts, as well as to social processes of militarisation, identity construction, and idealisation of heroism.<sup>17</sup> As Lacy notes, the cinema is a space where stories about 'what is acceptable behaviour from states and individuals are naturalised and legitimised'.<sup>18</sup>

<sup>14</sup> Guy Westwell, *War Cinema: Hollywood on the Front Line* (London: Wallflower Press 2006).

<sup>15</sup> E.g. James Chapman, *War and Film* (Trowbridge: Reaktion Books 2008).

<sup>16</sup> Paul Virilio, *War and Cinema: The Logistics of Perception* (London: Verso 1989); Dina Jordanova, *Cinema of Flames: Balkan Film, Culture and the Media* (London: Bloomsbury Publishing 2019).

<sup>17</sup> Mark J. Lacy, 'War, Cinema, and Moral Anxiety', *Alternatives* 28 (2003), 611-636; Patrick M. Regan, 'War Toys, War Movies, and the Militarization of the United States, 1900-85', *JPR* 31 (1994), 45-58.

<sup>18</sup> Lacy (n. 17), 614.

A segment of war movies focuses not on representation of historical events or individual stories and perspectives, but rather on the sets of laws, rules, and processes that represent the normative limits on war actions, as well as the bureaucracy of organised violence itself. Focusing on what he terms ‘Just War Cinema’, Finlay argues that popular cinema since the 1950s has shaped social attitudes about just war norms through centring on the moral arguments at the heart of Just War theory.<sup>19</sup> However, he warns that since the late 1990s, Just War Cinema has taken a ‘worrying turn’, unapologetically vitiating the aims of contemporary just war theory.<sup>20</sup> Similarly, Gates criticises the popular view praising Hollywood war films from 1998 to the present for their realism and authenticity. Instead, she argues, the new cinematic trend in war movies merely masks conservative themes, such as glorifying war and masculinity.<sup>21</sup> Focusing specifically on the so-called ‘war on terror’, Dodds criticises this class of movies – and the entertainment industry more broadly – for their ‘cultural appropriation of the war on terror’.<sup>22</sup>

With the expanding role of military lawyers in real-time military decision-making processes, a sub-genre of Just War Cinema has emerged, focusing on concrete IHL principles, rules of engagement, and the bureaucracy of military decision-making.<sup>23</sup> Describing this cinematic trend, Joyce and Simm observe that ‘International lawyers both want and shun the spotlight; desire recognition and power, yet fear misrepresentation and spectacle’.<sup>24</sup> *Eye in the Sky*, which was released in cinemas in September 2015, belongs to this cinematic genre. It focuses on the chain of command involved in targeted killing operations, spotlighting the various levels of military and civilian decision-makers involved in the application of IHL in an evolving military operation. It tells the story of humans, machines, laws, and processes involved in targeted killing decision-making, against the backdrop of an imminent terror attack endangering the people of Nairobi.

<sup>19</sup> Christopher J. Finlay, ‘Bastards, Brothers, and Unjust Warriors: Enmity and Ethics in Just War Cinema’, *Rev. Int’l Stud.* 43 (2017), 73–94.

<sup>20</sup> Finlay (n. 19), 93.

<sup>21</sup> Philippa Gates, ‘“Fighting the Good Fight”: The Real and the Moral in the Contemporary Hollywood Combat Film’, *Quarterly Review of Film and Video* 22 (2005), 297–310 (299).

<sup>22</sup> Klaus Dodds, ‘Hollywood and the Popular Geopolitics of the War on Terror’, *Third World Quarterly* 29 (2008), 1621–1637 (1634).

<sup>23</sup> See, for example, Martyna Fałkowska-Clarys and Vaios Koutroulis, ‘The Fog of Law in the Fog of War: International Humanitarian Law in War Movies’ in: Oliver Corten, François Dubuisson and Martyna Fałkowska-Clarys (eds), *Cinematic Perspectives on International Law* (Manchester: Manchester University Press 2021), 128–152.

<sup>24</sup> Daniel Joyce and Gabrielle Simm, ‘Zero Dark Thirty: International Law, Film and Representation’, *London Review of International Law* 3 (2015), 295–318 (297).

*Eye in the Sky* received wide acclaim from viewers and critics and gained success at the box office.<sup>25</sup> Importantly, it was positively received by IHL scholars and professionals, who praised the movie for its accurate, nuanced, and realistic depiction of sensitive legal rules and processes. Perhaps it was the movie's accurate use of legal terminology, its focus on the mundane work of legal advisors and legal decision-makers, or its seemingly neutral description of the bureaucracy and decision-making processes, which engendered such wide support within the profession. A few notable examples include David Cole, the Legal Advisor of the American Civil Liberties Union (ACLU) and a Professor of Law at Georgetown University, who praised *Eye in the Sky* for providing an illuminating and sophisticated exploration of the legal and moral challenges created by drone warfare.<sup>26</sup> Paul Rosenzweig, formerly Deputy Assistant Secretary for Policy in the Department of Homeland Security, applauded the way *Eye in the Sky* unpacks the political complexities surrounding targeted killing decision-making.<sup>27</sup> Other academics commended *Eye in the Sky* for its objectivity and its realistic depiction of modern technological warfare;<sup>28</sup> and admired the movie for the convincing manner in which it raises a range of topical issues in military ethics.<sup>29</sup> It was even included in the International Committee of the Red Cross (ICRC) recommended list of ten 'must watch' films and television series about IHL.<sup>30</sup>

This warm embrace from senior legal experts and professionals is understandable, considering the movie's objective tone and bureaucratic nuance. In

<sup>25</sup> *Eye in the Sky* grossed \$6.6 million in the UK, \$18.7 million in the US and Canada, and \$32.8 million worldwide, <<https://www.boxofficemojo.com/>>. The movie received positive reviews both from critics (95 % on Rotten Tomatoes, based on 219 reviews) and from viewers (82 % on Rotten Tomatoes, based on more than 25,000 reviews), <[https://www.rottentomatoes.com/m/eye\\_in\\_the\\_sky](https://www.rottentomatoes.com/m/eye_in_the_sky)>.

<sup>26</sup> David Cole, 'Killing from the Conference Room', *The New York Review of Books*, 10 March 2016, available at <<https://www.nybooks.com/daily/2016/03/10/killing-from-conference-room-eye-in-the-sky-drones/>>; Marko Milanovic, 'Eye in the Sky', *EJIL Talk!*, 9 May 2016, available at <<https://www.ejiltalk.org/eye-in-the-sky/>>.

<sup>27</sup> Paul Rosenzweig, 'Eye in the Sky – A Movie Review', *Lawfare*, 28 March 2016, available at <<https://www.lawfareblog.com/eye-sky-movie-review>>.

<sup>28</sup> Toby Walsh, 'Eye in the Sky Movie Gives a Real Insight into the Future of Warfare', *The Conversation*, 25 March 2016, available at <<http://theconversation.com/eye-in-the-sky-movie-gives-a-real-insight-into-the-future-of-warfare-56684>>; Kevin McFarland, 'Eye in the Sky Is the Quintessential Modern War Film', *Wired*, 4 January 2016, available at <<https://www.wired.com/2016/04/eye-in-the-sky-modern-war-film/>>.

<sup>29</sup> Deane-Peter Baker, 'Eye in the Sky and the Moral Dilemmas of Modern Warfare', *The Conversation*, 1 April 2016, available at <<https://theconversation.com/eye-in-the-sky-and-the-moral-dilemmas-of-modern-warfare-56989>>.

<sup>30</sup> 'Ten Must-See Films and Series for IHL Buffs', International Committee of the Red Cross, 2 November 2017, available at <<https://www.icrc.org/en/document/colombia-ten-must-see-films-and-series-ihl-buffs>>.



this article, however, I argue that the representation of IHL in *Eye in the Sky* is far from being ‘accurate’ or ‘authentic’. Instead, it adopts and advances an ideological narrative, presenting existing IHL’s data practices as value-neutral, and solidifying IHL’s narrative as a protective legal regime that limits (rather than legitimates) violence. The movie presents military technologies as just, accurate, and protective; and constructs compliance with – and submission to – these data practices as the highest form of modern military heroism. By doing so, it contributes to and participates in the growing conservative cinematic trend in war movies,<sup>31</sup> while masking this ideological stance as neutral and natural. Though not glorifying war per se, *Eye in the Sky* participates in the legitimation of Western countries’ counterterrorism practices, including its technology-based knowledge production system. The following three sections unpack and demonstrate this argument.

### III. Who Has the Power to Speak IHL?

*Eye in the Sky* moves quickly between various locations and technologies: It begins in the streets and poor neighbourhoods of Nairobi, Kenya, where a group of Al-Shabaab terrorists gets ready to launch a terror attack destined to kill dozens in a crowded Nairobi shopping mall. Nearby, a child is playing outside her home; and a Kenyan undercover field agent provides ground intelligence using short-range cameras. From there, the camera moves abruptly to British Army Headquarters at Northwood, where Colonel Katherine Powell leads the operation to capture (and later kill) the terrorists. Using various telecommunication devices, the camera then spotlights Creech Air Force Base in Nevada, United States (US), where Second Lieutenant Steve Watts operates a predator drone (USAF MQ-9 Reaper). Back in London, the camera moves to the Cabinet Office, where British Lieutenant-General Frank Benson, two full government ministers, and a ministerial under-secretary supervise the mission. Additional locations are Singapore, where the United Kingdom (UK) Foreign Secretary is currently on a trade mission; and China, where the US Secretary of State, is playing a friendly tennis match with a Chinese Junior Olympian player.<sup>32</sup>

The technologies connecting all of these locations and decision-makers are the force that progresses the movie’s plot: the viewers – both on-screen decision-makers and off-screen audiences – see the Al Shabaab terrorists through the drone’s eye in the sky. The terrorists’ weaponry and actions are also visible through short-range ornithopter cameras. Facial recognition tech-

---

<sup>31</sup> Gates (n. 21).

<sup>32</sup> Hibbert (n. 1).

nology is further used to provide a 100 % match with the list of wanted terrorists. Through screens within screens, decision-makers and audience alike are convincingly exposed to the terrorists' plot. The sophisticated surveillance cameras quickly and easily zoom in and out, producing powerful real time images. When the short-range cameras depict a terrorist wearing his suicide vest and getting ready to leave the compound, plans are put in motion and the CDE algorithm is applied to estimate the collateral damage anticipated from an immediate attack on the terrorists' compound. Other algorithms are used to estimate the number of casualties in the mall if the terror attack materialises, based on the weapons the terrorists possess and the suspected location they choose to detonate them. The answers are quick and clear: the terror attack will result in the death of eighty civilians; the drone attack on the terrorists' compound may result – with a 45-65 percent chance – in the death of a single child (Alia, the girl depicted at the beginning of the movie). What is the legal and ethical course of action under these circumstances? Should Western decision-makers sacrifice one Kenyan girl to save dozens of Kenyan citizens? This is the dilemma that *Eye in the Sky* focuses on, and constructs as the main challenge decision-makers applying IHL face.

This question, though, is just as fake as *Eye in the Sky*'s characters are. It is based on several convenient assumptions reflecting ideological preferences, as well as knowledge gaps reflecting the questions not asked: that the people visible through the drone's sensors are indeed terrorists planning a multi-casualty attack; that the weapons depicted are indeed weapons; that – if a terror attack is indeed underway – there is no other course of action to frustrate the attack or protect potential victims; that the sensors through which the world is seen generate a perfect vision of reality; and that invisible algorithms predict the future with acute certainty and authority. The certainty with which these assumptions are presented are particularly striking, as in several real operations, drone operators have mistaken wood fire for RPG rockets (Rocket Propelled Grenades), and identified women and children as Taliban fighters, resulting in numerous (unanticipated) civilian casualties.<sup>33</sup> The only fact the movie presents as uncertain, at least to some extent, is the anticipated death of Alia, which is predicted at a 45-65 percent chance (though this probability is, in itself, presented as certain). These invisible assumptions shed light on the making of IHL, and on IHL's making of the world. Through the drone looking glass we perceive IHL's main actors and

---

<sup>33</sup> Shiri Krebs, 'Predictive Technologies and Opaque Epistemology in Counterterrorism Decision-Making' in: Arianna Vidaschi and Kim Lane Scheppele (eds), *9/11 and the Rise of Global Anti-Terrorism Law: How the Security Council Rules the World* (Cambridge: Cambridge University Press, 2021), 199-221.

roles: we see who is given the power to speak IHL, who can shape IHL's scope and meaning, and who (or what) asserts IHL's jurisdiction.

## 1. Actors and Subjects of IHL: North, South, and Tech

### a) North and South

Analysing the origins and development of IHL, Mégret traces an exclusionary approach towards the 'other' adopted by IHL institutions, arguing that the laws of war have always stood for a particular Western vision of legitimate warfare.<sup>34</sup> In particular, he argues that 'to uphold "civilization" and "civilized nations" as the benchmark, in turn, one necessarily had to point to the "non-civilized", presumably to be found in the darker recesses of Asia and Africa'.<sup>35</sup> The exclusion of non-Western voices (redefined as 'outlaw', 'rogue', or 'failed' states) from the construction of modern international law was further problematised by Baxi, demonstrating how these states have been disciplined and punished by 'well-ordered' societies.<sup>36</sup> In the context of human rights, Mutua similarly demonstrates the clear lines international law and institutions draw between Western 'saviours' and non-Western 'victims' and 'savages'.<sup>37</sup>

*Eye in the Sky* reinforces this exclusion of Third World voices, classifying participants into actors and subjects of international law: those who create, shape, and represent IHL, and those whom IHL regulates and to whom it applies.<sup>38</sup> On the one hand, Western decision-makers, both civil servants and military commanders, apply the law, interpret its meaning, and determine its scope. For example, the white military lawyer – Major Harold Webb – embodies the law: asserting its neutrality, interpreting its rules, applying its principles, and passionately defending its processes and practices as just and objective. Steve

<sup>34</sup> Frédéric Mégret, 'From "Savages" to "Unlawful Combatants": A Postcolonial Look at International Humanitarian Laws' in: Anne Orford (ed.), *International Law and Its Others* (Cambridge: Cambridge University Press 2006), 265-317.

<sup>35</sup> Mégret (n. 34).

<sup>36</sup> Upendra Baxi, 'The War on Terror and the War of Terror: Nomadic Multitudes, Aggressive Incumbents, and the New International Law-Prefactory Remarks on Two Wars', *Osgoode Hall L.J.* 43 (2005), 7-43 (36-37). Anghie traced this distinction between 'law-abiding' states and 'rogue' states in Western thought back to the work of Kant, 'whose idea of world peace is based on a distinction between liberal and non-liberal states': Antony Anghie, 'The War on Terror and Iraq in Historical Perspective', *Osgoode Hall L.J.* 43 (2005), 45-66 (51).

<sup>37</sup> Makau Mutua, 'Savages, Victims, and Saviors: The Metaphor of Human Rights', *Harv. Int'l L.J.* 42 (2001), 201-246.

<sup>38</sup> Charles-Emmanuel Côté, 'Non-State Actors, Changing Actors and Subjects of International Law' in: Karen N. Scott et al., *Changing Actors in International Law* (Leiden: Brill Nijhoff 2020), 1-24.

Watts, the drone pilot, applies the law, treating the CDE algorithm as a higher authority, beyond challenge. The movie's protagonist, Colonel Powell (played by British actor Helen Mirren), manipulates IHL's data practices – the CDE algorithm – to be consistent with her own judgement.

On the other hand, African people are categorised into potential victims, dangerous terrorists, or operative pawns, sent on life-threatening missions to tilt the algorithmic calculation to the desirable balance.<sup>39</sup> Major Moses Owiti of Kenya's National Intelligence service (NIS), for example, receives his orders from Colonel Powell and is eager to please her. While he has a team ready to go into the terrorists' compound and arrest them, he accepts Powell's preference to change the plan from a capture to a kill operation. He also agrees without hesitation to send an undercover Kenyan field agent, Jama Farah, on a near-suicide mission into the militia-controlled area, to provide ground intelligence. Farah accepts his mission and obeys Powell's wishes, putting his own life in grave danger. Throughout the movie, the growing risk to Farah's life constantly remained outside of any risk analysis. *Eye in the Sky's* depiction of IHL actors does not leave any room for the active participation of African decision-makers, and instead, extends Western decision-makers' powers and responsibilities extraterritorially. UK and US decision-makers are therefore the only decision-makers debating whether to sacrifice one Kenyan child in order to save the lives of many Kenyan people.

This Western-centred portrayal of IHL actors is consistent with other popular culture products,<sup>40</sup> presenting locations in the global south as structureless and chaotic, requiring Western powers to intervene to produce 'order' through their superior technological capabilities.<sup>41</sup> Similarly, TWAIL scholars, including Anghie and Chimni, have demonstrated how Western justifications of colonialism, including through a 'civilizing mission', have served to justify continuous Western intervention in the affairs of Third World societies.<sup>42</sup> *Eye in the Sky* participates in disseminating these colonialist ideas.

---

<sup>39</sup> Existing literature has similarly explored the connections between Critical Race Theory (CRT) and Third World Approaches to International Law (TWAIL). See: James Thuo Gathii, 'Writing Race and Identity in a Global Context: What CRT and TWAIL Can Learn from Each Other', *UCLA L. Rev.* 67 (2020), 1610-1651.

<sup>40</sup> Dodds concludes that Hollywood action thrillers depict the inhabitants of Middle Eastern and North African cities as untrustworthy, dangerous, and prone to extreme violence. Dodds (n. 22), 1633.

<sup>41</sup> Stephen Graham, 'Cities and the "War on Terror"', *International Journal of Urban and Regional Research* 30 (2006), 255-275 (256).

<sup>42</sup> Antony Anghie, and Bhupinder S. Chimni, 'Third World Approaches to International Law and Individual Responsibility in Internal Conflicts', *Chinese Journal of International Law* 2 (2003), 77-104 (85).

First, *Eye in the Sky* adopts a colonialist narrative by describing Nairobi in unflattering and ‘uncivilised’ terms: poor, crowded, dangerous. Information about Nairobi and its inhabitants is provided only as necessary for the Western interests in the place. All we know about Alia is that the drone sensor and operators categorised her as a female child, and that she is about to become ‘collateral damage’; all we know about the neighbourhood she lives in is that technology-generated intelligence, combined with facial recognition and predictive algorithms, determined that a group of dangerous Somali terrorists are using it as a hiding place. While the drone sensors continuously zoom in and out, hovering over time and space, there is no history, culture, or depth to their portrayal of Nairobi and its inhabitants.

Second, *Eye in the Sky* participates in disseminating colonialist ideas by evaluating Nairobi and its inhabitants based on their relations with and attitudes toward the West, including their ‘friendliness’. Portraying Nairobi as a ‘friendly’ city references an orientalist discourse,<sup>43</sup> in which nations and peoples in the global south are measured through their ties to ‘civilized nations’.<sup>44</sup> In return, ‘friendly’ nations or cities like Nairobi gain protection from their benevolent benefactors or ‘saviours’.

Third, *Eye in the Sky* invokes the West’s ‘civilising mission’, including through references to Kipling’s ‘White Man’s Burden’. For example, by asserting, through Lieutenant-General Benson, that inaction will result in having to ‘announce to the people of Nairobi that we knew everything but did nothing’.<sup>45</sup> This sentiment reflects a Western narrative justifying violent actions in Third World countries based on humanitarian values.<sup>46</sup> At the same time, it turns the concept of accountability for war actions on its head: by launching the attack on the compound Western forces will be directly responsible for Alia’s death; however, postponing or cancelling the attack on the compound will not make UK or US decision-makers accountable for a terror attack conducted by a Somali terror group in Kenya. Furthermore, the crafting of available options (immediate Western attack on the compound or no action) constructs an imaginary, Western-focused, ethical dilemma. Other

---

<sup>43</sup> Hibbert (n. 1), 70.

<sup>44</sup> See, for example, Matthew H. Bernstein and Gaylyn Studlar (eds), *Visions of the East: Orientalism in Film* (New Brunswick: Rutgers University Press 1997); Lina Khatib, *Filming the Modern Middle East: Politics in the Cinemas of Hollywood and the Arab World* (London: Bloomsbury Publishing 2006); and the foundational work of Edward Said: Edward W. Said, *Culture and Imperialism* (London: Vintage 2012).

<sup>45</sup> Hibbert (n. 1), 113.

<sup>46</sup> Baxi attributes this justification for violence to Rawlsian ideas requiring well-ordered societies to stand together and use force, when persuasion fails, against ‘outlaw’ societies. Uprendra Baxi, ‘Operation Enduring Freedom: Towards a New International Law and Order?’, *Law, Social Justice & Global Development Journal* 2 (2001), 31-46.

possibilities, existing beyond the moral imagination of the movie, included informing and consulting with Kenyan civilian decision-makers, as equals and partners whose voices matter. But *Eye in the Sky* reserves active participation and implementation of IHL to Western decision-makers, while African decision-makers are to remain passively in the shadows.

The possible solutions of this Western-centred moral dilemma are similarly grounded in Western thought. Lieutenant-General Benson's position reflects utilitarian ethics grounded in Western philosophy ('it is generally understood that it is sometimes necessary to sacrifice the one in order to save the many').<sup>47</sup> Similarly, Angela Northman MP, the Parliamentary Under-Secretary of State for Africa, who rejects Benson's view, relies on deontological ethics, grounded in Kantian philosophy (by focusing on humanistic reasoning and refusing to sacrifice Alia for an external goal).<sup>48</sup> The UK Attorney-General, George Matherson, joins her view, but for a different reason, grounded in a realist outlook on Western political interests: 'If Al-Shabaab kill eighty people, we win the propaganda war. If we kill one girl, they do.'<sup>49</sup> Between a utilitarian analysis, Kantian ethics, and a Realpolitik approach, the voices and preferences of the people and leaders of Kenya were silenced.

## b) Tech

In between, the technology itself is presented as a developing new actor – and perhaps a higher authority – in IHL: determining when a planned operation is consistent with the rules of engagement, identifying a target as a necessary military target, alerting when the anticipated collateral damage is concerning. This elevation of IHL's data practices is expressed by Steve Watts, the drone pilot, who treats the CDE algorithm as the embodiment of legal authority and justice:

'STEVE: (*firm but nervous*) Ma'am, I need you to run the Collateral Damage Estimate again, with the girl out front [...] Colonel Powell, Ma'am, I am the pilot in command responsible for releasing the weapon. I have the right to ask for the CDE to be run again. I will not release my weapon until that happens.'<sup>50</sup>

Steve sees the girl on his screen. He understands what her fate will be once he releases his weapons on that compound. Yet his own judgement is insignificant,

<sup>47</sup> Hibbert (n. 1), 101. For a defence of utilitarian ethics in Western thought see: Robert E. Goodin, *Utilitarianism as a Public Philosophy* (Cambridge: Cambridge University Press 1995).

<sup>48</sup> Christopher Kutz, 'Torture, Necessity and Existential Politics', *Cal. L. Rev.* 95 (2007), 235-276.

<sup>49</sup> Hibbert (n. 1), 107.

<sup>50</sup> Hibbert (n. 1), 89.

and he is ready to follow the higher – external, objective, complete – ruling of the algorithm. *Eye in the Sky* constructs the new military heroism as a complete submission to the rule of IHL's data practices; Steve's heroism is expressed through obeying the CDE algorithm, killing 9-year-old Alia, against his own moral and legal judgement. Colonel Powell, too, accepts the authority of the technology and orders her targeteer to re-run the CDE (while attempting to manipulate its outcomes). While doing so, the screenplay describes Powell as 'seething' – clearly frustrated with the rise of this new algorithmic actor that overrides her own legal authority. Importantly, by treating mundane data practices as IHL's highset authority, *Eye in the Sky* portrays these military technologies as external to the humans they guide, as a complete and objective vision of both reality and normativity. As Arvidsson observes, however, these data practices are not 'separate' from the humans they 'inform',<sup>51</sup> and as Sullivan demonstrates, are affecting decision-makers in various ways.<sup>52</sup>

## 2. Militarism and Masculinity

'How have men from different cultures had their notions of manhood – and womanhood – shaped and reshaped by officials so as to permit governments to wage the sorts of wars they have imagined to be necessary?'<sup>53</sup> *Eye in the Sky* answers Enloe's question, providing an example of how officials reshape notions of manhood and masculinity to permit Western governments to wage their war on terrorism, imagined as necessary and just. By asserting the authority of the technology and defending IHL's data practices, male characters such as Steve Watts and Harold Webb reflect a new masculinity, empowered by technology. Watts' bravery is established through demanding that the CDE algorithm will be run again; Webb's heroism is expressed through his demand that Colonel Powell complies with the law and its data practices.

In a significant ending scene, after the attack took place and Alia was killed, Lieutenant-General Benson berates MP Northman for lacking the necessary experience to understand the situation:

'LIEUTENANT-GENERAL BENSON: I have attended the immediate aftermath of five suicide bombings. On the ground. With the bodies. What you witnessed today, with your coffee and biscuits, is terrible. What these men would have done would have been even more terrible. That is how it is. [*Almost killing*

<sup>51</sup> Arvidsson (n. 13).

<sup>52</sup> Sullivan (n. 11).

<sup>53</sup> Cynthia Enloe, *The Morning After: Sexual Politics at the End of the Cold War* (Berkeley: University of California Press 1993), 71.

*her with the line:] Never tell a soldier that he does not know the cost of war. [He takes his briefcase and walks out].<sup>54</sup>*

Consistent with feminist critiques of military masculinity, which are associated with practices of strength, toughness, and aggressive heterosexuality,<sup>55</sup> Benson's speech links a particular field experience (which is erroneously equated with male/masculinity) with a superior ability to generate and apply knowledge, and at the same time to present this knowledge as objective and beyond questioning. His conclusion, based on the drone visuals, that the alleged terrorists would have caused greater suffering, is also left unchallenged. MP Northman does not question the predictive epistemology on which he bases this analysis and, instead, cries silently, letting her emotions symbolise the opposite of the objective, technology-based epistemology.

Posthumanist feminist scholars have critiqued this illusion of perfect, objective knowledge, generated by military technologies.<sup>56</sup> The Western militarism myth of 'perfect vision' is described by Haraway as a 'god trick'; an illusion through which 'the powers of modern sciences and technologies [...] have transformed the objectivity debates'.<sup>57</sup> Haraway's proposed solution, therefore, focusing on the politics of Western epistemologies, calls for a different view – a 'view from a body, always a complex, contradictory, structuring, and structured body, versus the view from above, from nowhere, from simplicity'.<sup>58</sup>

#### IV. To Whom Is IHL Speaking?

As becomes clear from the warm reception of *Eye in the Sky* by the scholarly and professional IHL community, one segment of its audience includes its main characters: legal advisors, decision-makers, and IHL experts. For that particular audience, *Eye in the Sky* speaks the correct legal language, giving voice to actors that usually remain behind the scenes. The movie places military and civilian decision-makers under the spotlight, depicting their everyday dilemmas and effectively conveying them to the public. Another segment of *Eye in the Sky*'s audience is the general public, which is at the same time the audience of the actual theatre of war, through various news and social media reports on war actions in Afghanistan, Iraq, Syria, and

<sup>54</sup> Hibbert (n. 1), 134.

<sup>55</sup> Claire Duncanson, 'Forces for Good? Narratives of Military Masculinity in Peacekeeping Operations', *International Feminist Journal of Politics* 11 (2009), 63-80.

<sup>56</sup> Arvidsson (n. 13).

<sup>57</sup> Haraway (n. 2), 582.

<sup>58</sup> Haraway (n. 2), 589.



elsewhere around the globe. Disguised as a progressive, reflective, and authentic description of existing IHL practices, *Eye in the Sky* sophisticatedly addresses both these groups, reflecting and solidifying a conservative and uncritical narrative of IHL and Western bureaucracy of killing.

For decades, IHL's dominant narrative has been a humanitarian one, portraying the development of IHL as a 'history of compassion and civilization'.<sup>59</sup> According to this orthodox narrative, IHL was developed to limit the destruction of war and to humanise practices of armed conflicts.<sup>60</sup> The canonisation of this narrative went as far as describing IHL rules as an 'intuitive force' and a 'requirement of the human condition', symbolising common human – and humane – values.<sup>61</sup> However, since the 1990s, this humanitarian-protective narrative has been under attack, and a competing narrative – portraying IHL as a force of Western oppression and imperialism, has emerged. According to this critical narrative, 'military or Western needs have consistently trumped humane values, exposing civilians to the violence of war and legitimizing their suffering'.<sup>62</sup> This narrative criticised the orthodox humanitarian narrative of IHL and illustrated how powerful nations and institutions 'deliberately formulated the laws of war to advance the primacy of military violence over humanitarian concerns, despite noble rhetoric to the contrary'.<sup>63</sup> Recent works by Moyn and Jones further attack IHL's humanitarian-protective narrative, arguing that it, instead, legitimises and extends violence,<sup>64</sup> sanitising war so that it can continue forever.<sup>65</sup> Similarly, others demonstrated how core IHL principles, such as the principle of proportionality, which have been widely treated as humanistic developments in the law of war, were in fact designed to permit civilian harm. For example, tracing the debates over the formulation of the principle of proportionality, Alexander finds that many delegations, especially those from

<sup>59</sup> Amanda Alexander, 'A Short History of International Humanitarian Law', EJIL 26 (2015), 109-138 (113).

<sup>60</sup> Benvenisti and Lustig refer to this narrative as 'canonical'. Eyal Benvenisti and Doreen Lustig, 'Monopolizing War: Codifying the Laws of War to Reassert Governmental Authority, 1856-1874', EJIL 31 (2020), 127-170.

<sup>61</sup> Marco Sassòli, Antoine A. Bouvier and Anne Quintin, *How Does Law Protect in War?* (Geneva: ICRC, 3rd edn, Vol. 1, 2011) (Chapter 1, 7), available at <<https://www.icrc.org/en/doc/assets/files/publications/icrc-0739-part-i.pdf>>.

<sup>62</sup> Alexander (n. 59), 113. On the relationship between colonialism and international law more broadly, see Antony Anghie, 'Finding the Peripheries: Sovereignty and Colonialism in Nineteenth-Century International Law', *Harv. Int'l L.J.* 40 (1999), 1-80.

<sup>63</sup> Chris Jochnick and Roger Normand, 'The Legitimation of Violence: A Critical History of the Laws of War' *Harv. Int'l L.J.* 35 (1994), 49-96.

<sup>64</sup> Craig Jones, *The War Lawyers: The United States, Israel, and Juridical Warfare* (Oxford: Oxford University Press 2022).

<sup>65</sup> Samuel Moyn, *Humane: How the United States Abandoned Peace and Reinvented War* (London: Verso Books 2022).

the Eastern Bloc and the Third World, were critical of this provision and emphasised its legitimisation of attacks that result in civilian casualties.<sup>66</sup> Contemporary critiques of international law further argue that international law – IHL included – is tainted by a degree of legal cynicism,<sup>67</sup> and is characterised by either (or both) apologetic or utopian politicisation of the content and application of its rules.<sup>68</sup>

At a time when IHL is criticised as cynical and even as a ‘sham’,<sup>69</sup> and the idea of military humanism is disparaged as a rhetorical strategy,<sup>70</sup> *Eye in the Sky* participates in defending and restoring IHL’s humanitarian narrative, through highlighting its objective, technology-based data practices that liberate it from flawed and limited human cognition. To achieve this goal, the movie constructs humans (such as Colonel Powell) as flawed and biased and positions the outputs of military technologies as superior and flawless, carefully separating between humans and machines.

Moreover, *Eye in the Sky* uses IHL’s data practices to reshape – or reflect the evolving nature of – the concept of protection itself: when Colonel Powell orders her targeteer, Sergeant Mushtaq Saddiq, to ‘Do whatever you can to save this girl’s life’, she means that he should find a way to amend the algorithmic calculation so that in the parallel realm generated by (human-controlled) IHL data practices, Alia’s chances of survival will increase to a certain pre-determined threshold. After the CDE algorithm elevates Alia’s chances of survival to 65 percent, Colonel Powell declares that ‘We have now done everything in our power to give this girl a chance to survive’.<sup>71</sup> This modification of chances and prediction through data practices functions as a constitutive exercise: whatever fate befalls Alia – the technology has given her a ‘chance’ to survive. ‘Everything in our power’ is thus reduced to fine-tuning of the algorithmic prediction. Other – non-technology-based – courses of action, such as cancelling the operation, using ground forces (which in this case were ready and willing), attacking the target on its way to location, or consulting with local authorities,

<sup>66</sup> Amanda Alexander, ‘International Humanitarian Law, Postcolonialism and the 1977 Geneva Protocol I’, *Melbourne Journal of International Law* 17 (2016), 15-50 (32-33).

<sup>67</sup> John Hagan and Sanja Kutnjak Ivković, ‘War Crimes, Democracy, and the Rule of Law in Belgrade, the Former Yugoslavia, and Beyond’, *The Annals of the American Academy of Political and Social Science* 605 (2006), 130-151 (134-135); Shiri Krebs, ‘All Is Fair in Law and War? Legal Cynicism in the Israeli-Palestinian Conflict’ in: Björnstjern Baade et al. (eds), *Cynical International Law? Abuse and Circumvention in Public International and European Law* (Heidelberg: Springer Press 2020), 235-259.

<sup>68</sup> Martti Koskeniemi, ‘The Politics of International Law’, *EJIL* 1 (1990), 4-32.

<sup>69</sup> Jochen von Bernstorff, ‘Is IHL a Sham? A Reply to Eyal Benvenisti and Doreen Lustig’, *EJIL* 31 (2020), 709-720.

<sup>70</sup> Hugh Gusterson, ‘Drone Warfare in Waziristan and the New Military Humanism’, *Current Anthropology* 60 (2019), 77-86 (85).

<sup>71</sup> Hibbert (n. 1), 97-98.

remained invisible, non-existent. By reasserting IHL's humanitarian narrative through reshaping the very meaning of protection, *Eye in the Sky* participates in and affirms Gates' observation that the new cinematic trend in war movies merely masks conservative themes.<sup>72</sup>

## V. How Do IHL Data Practices Reshape IHL's Jurisdiction?

On 29 August 2021, US forces attacked a white Toyota Corolla near Kabul airport, killing ten people. The attack was approved based on information that included drone visuals. The drone team, which followed the vehicle for eight hours up until the attack, determined that the vehicle was carrying an ISIS (Islamic State of Iraq and Syria) bomb, designed to attack US forces as they were withdrawing from the country. However, following a New York Times investigation, a US Air Force investigation found that the targeted vehicle did not pose any danger and that all ten casualties were civilians, seven of them children. The investigation concluded that the 'tragic mistake' resulted from inaccurate interpretation of the available intelligence, including the drone visuals.

This example joins other incidents, such as the US attack on a Doctors Without Borders' hospital in Kunduz, Afghanistan, in 2015, or the attack on civilian vehicles in Uruzgan in 2010,<sup>73</sup> to demonstrate the tragic outcomes of the illusion that IHL data practices are complete, universal, and objective; external to and separate from the humans who comprehend, interpret, and apply them.<sup>74</sup> It illustrates the human factors and subjective elements ingrained in IHL's data meaning-making practices; elements that are missing in *Eye in the Sky*'s objective portrayal of IHL's data practices. *Eye in the Sky* features many advanced technological capabilities, including drone imaging, facial recognition technologies, short-range surveillance cameras, and collateral damage algorithms, and showcases their centrality in the application of IHL. While these data practices are the main force progressing the movie's plot, the knowledge production methodologies they rely on remain invisible, unquestioned, and are not critically explored. Instead, the technology is used as an Archimedean Point from which the just and true nature of IHL practices can be observed, and from which IHL's (proto) jurisdiction can

<sup>72</sup> Gates (n. 21).

<sup>73</sup> U.S. Forces Headquarters in Afghanistan, *AR 15-6 Investigation, 21 February 2010. Air-to-Ground Engagement in the Vicinity of Shahidi Hassas, Uruzgan District, Afghanistan* (21 May 2010).

<sup>74</sup> For a deeper analysis of these military failures, see: Shiri Krebs, 'Just the Facts: Reimagining Wartime Investigations Concerning Attacks Against NGOs', *Berkeley J. Int'l L.* 37 (2019), 405-436.

govern the past, present, and future. The following paragraphs use *Eye in the Sky*'s (and the professional debates that ensued) central legal and ethical problem – Colonel Powell's modification of the collateral damage estimate from 45-65 percent chance (that Alia will be killed), to below 50 percent – to demonstrate how data practices and institutionalised prediction expand IHL's (proto) jurisdiction.

'MUSHTAQ Adjusting the target to here [...] there is a forty-five to sixty five percent possibility of fatality. COLONEL POWELL Sixty-five? MUSHTAQ Yes. COLONEL POWELL I need that calculation to be below fifty percent. [*A long pause*]. MUSHTAQ Well I [...] COLONEL POWELL Perhaps there is an adjustment in the assessment on the impact here? MUSHTAQ That calculation is already at the lowest limit of what I believe is possible. COLONEL POWELL Or if you target the missile here? MUSHTAQ I would still have to make that a sixty-five per cent possibility on the upper limit. COLONEL POWELL I need you to make this work, Sergeant. *A beat*. MUSHTAQ *looks cornered*. COLONEL POWELL (CONT'D) Do you understand? MUSHTAQ Yes Ma'am. MUSHTAQ [*is sweating at what he is being asked to do*]. COLONEL POWELL We are locked into this kill chain and a decision has to be made. There are many lives at stake. MUSHTAQ Ma'am [...] I think [...] I think that if the target is here then [...] then I could, I think, predict a forty five per cent possibility of fatality. That might be possible. COLONEL POWELL Forty-five per cent? MUSHTAQ Possibly. Yes. COLONEL POWELL I will put that to Cobra. MUSHTAQ Ma'am, it's [...] COLONEL POWELL It is my understanding that, in these circumstances, your calculation can only be speculation. That puts you beyond any culpability. MUSHTAQ Thank you, Ma'am. COLONEL POWELL Thank you, Sergeant.<sup>75</sup>

The probability that Alia will be killed was revised accordingly, determining that it is more likely than not that Alia shall survive. Despite this prediction, Alia is ultimately killed in the attack. This eventuality creates a gap between the prediction and the outcome of the operation. To justify this gap, Colonel Powell invoked the speculative – yet authoritative – nature of the technology:

'COLONEL POWELL I'm sorry, Sergeant, I couldn't see any other option. MUSHTAQ Yes, Ma'am. I understand that. [*But MUSHTAQ doesn't understand it. POWELL'S military intelligence career has been reduced to lying about percentages in order to complete her mission. MUSHTAQ stares at her, numb.*] COLONEL POWELL You will file your report as a 45 percent CDE. [*Silence from MUSHTAQ*]. COLONEL POWELL (CONT'D) Sergeant? [*A beat*]. MUSHTAQ 45 percent. Yes, Colonel.<sup>76</sup>

<sup>75</sup> Hibbert (n. 1), 114-116.

<sup>76</sup> Hibbert (n. 1), 132.

This portrayal of human-machine interaction presents a clear hierarchy between indifferent data practices, capable of seeing everything from everywhere and from nowhere, equally and fully, and biased, imperfect humans, whose knowledge is always situated and restricted.<sup>77</sup> It solidifies and puts into ordinary practice the myth of objectivity, placing technology as the master who produces, appropriates, and orders the world.<sup>78</sup> The subjective and hypothetical elements inherent to this virtual construal of reality – including the drone operators’ interpretation of the visuals, or the predictive methodology of the algorithms – remain invisible. Consequently, *Eye in the Sky* constructs the climax of military heroism as submission to IHL’s data practices: corrupt or biased individuals (Powell) reject or manipulate the technology. Others (Watts and Webb) demonstrate contemporary military bravery and heroism by obeying IHL’s technology-based knowledge production practices. *Eye in the Sky* presses this point stating that by modifying the CDE prediction, Powell’s ‘military intelligence career has been reduced to lying about percentages in order to complete her mission.’<sup>79</sup>

But was she lying? And was the algorithm correct?

*Eye in the Sky* clearly separates the technology from the ‘human’, who is imperfect and whose villainy is expressed through subverting the objective true judgements of the technology. The clear distinction between biased humans and unbiased technology is deceptive – even within the context and storyline of *Eye in the Sky*. When the CDE algorithm produced an estimate of 45-65 percent probability that Alia will be killed, that prediction was presented as an objective fact. Viewers were accordingly invited to condemn Colonel Powell for ordering the targeteer to generate a different prediction. By condemning this apparent manipulation of the algorithm, the movie celebrates the original estimate as a true and objective representation of reality, rather than a limited, and to some extent – arbitrary – choice, much like the modified calculation. Moreover, both predictions – the original and the modified one – are the outcome of human-machine interaction, in which the machine cannot be completely separated from the human. Both predictions reflect situated knowledge, embedded in particular contexts.

Furthermore, by comparing the ‘original’ and the ‘modified’ predictions, *Eye in the Sky* masks a more important comparison: between predictions and outcomes. Presenting IHL’s data practices as constitutive rather than predictive makes the eventual outcomes of the operations largely irrelevant. This choice is consistent with the movie’s general alignment with IHL’s humani-

---

<sup>77</sup> Haraway (n. 2), 582.

<sup>78</sup> Haraway (n. 2), 587.

<sup>79</sup> Hibbert (n. 1), 129.

tarian narrative, particularly with regard to the principle of proportionality which is focused on prediction.<sup>80</sup> *Eye in the Sky*'s move to present algorithmic prediction as an inherent part of the application of the proportionality principle institutionalises prediction even beyond the historical context in which this principle was crafted,<sup>81</sup> portraying the proportionality prediction as both external (to the humans in the loop) and constitutive.

The final scenes of the movie demonstrate the temporality and rigidity of this institutionalised prediction: once the first strike was launched – destroying the compound, killing all but one of the terrorists (the wanted British national, Susan Danford), and injuring Alia – the factual basis for the legal assessment changes. The terrorists' plans are frustrated, and the risk to Alia's life is increased (as it is now clear that she is in the range of fire, injured and unable to move). But the virtual legal reality remains static, unmoved, unquestioned, as Colonel Powell orders a second strike on the compound; a strike that kills both Danford and Alia. Through predictive data practices, IHL's actors thus exercise jurisdiction over space and time, freezing visions of the future and imagined avatars.

Similarly, *Eye in the Sky* distinguishes between two types of errors: an inevitable, innocent, one, which is an inherent element of the institutionalisation of prediction, and a malicious one, which is attributed to deliberate human manipulation of the technology. Compelling as may be, this distinction is nonetheless misleading, as both types of errors involve some degrees of subjectivity and manipulation. The trick of using intentional manipulation to present the technology itself as neutral and its errors as benign contributes to the invisibility of these data practices and their limitations. Because any prediction generated by a CDE algorithm is speculative, depicting Powell's attempts to modify the algorithmic prediction as the main mishap in this scenario is nothing more than a diversion, shifting attention from the real calamity, which is Alia's death. It also shifts attention from the possibility that Alia is not the only civilian casualty. After all, the prediction that only one civilian may be harmed is also just a speculation (and so is, at least to some extent, the identification of the individuals in the house as terrorists). Viewed from this lens, Colonel Powell's data manipulation should not be constructed as a 'lie' (or outlier), but rather as an inherent element of IHL's data practices and the institutionalisation of prediction.

---

<sup>80</sup> Shiri Krebs, 'The Invisible Frames Affecting Wartime Investigations: Legal Epistemology, Metaphors, and Cognitive Biases' in: Andrea Bianchi and Moshe Hirsch (eds), *International Law's Invisible Frames* (Oxford: Oxford University Press 2021), 124-140.

<sup>81</sup> Alexander (n. 66).

## VI. Conclusion

*Eye in the Sky* reflects and participates in the contemporary debates about IHL's narrative. By presenting IHL's data practices as natural and neutral, highlighting IHL's humanitarian function, it contributes to the growing conservative cinematic trend in war movies. This depiction of IHL's data practices fails to show how these data practices produce – not just describe – the legal reality. *Eye in the Sky* embraces these data practices without considering their effects on legal decision-makers, and without accounting for the cognitive biases they trigger, such as automation and confirmation biases.<sup>82</sup> By presenting these data practices as external, complete, and neutral, *Eye in the Sky* – and practitioners praising its robust accuracy and authenticity – present contingent, situated knowledge as universal and 'unlocatable'. In Haraway's words, '[t]here is no unmediated photograph or passive camera obscura in scientific accounts of bodies and machines; there are only highly specific visual possibilities'.<sup>83</sup>

The uncritical view of IHL's data practices flattens the debate about military technologies in a way similar to the effects of the 'ticking time bomb' scenario on the debate about torture.<sup>84</sup> Creating false dichotomies and presenting hypotheses as facts, the debates about torture demonstrate how the law – and in particular theoretical legal thinking – may facilitate, rather than prevent, abuses.<sup>85</sup> *Eye in the Sky* relies on the same false dichotomies and assumptions feeding the 'ticking time bomb' justification for torture: it describes a clear factual situation, where the accuracy of the target identification is indisputable (ignoring the guesswork involved in making such assessments). It portrays a single available course of action: a hellfire drone attack on a residential neighbourhood at a very narrow timeframe. The result of not following this course of action is described as disastrous and inevitable. The layers of assumptions ingrained in this description are then masked using so-called objective and sophisticated data practices. The outcome of this presentation of the legal and ethical dilemma ultimately justifies harming civilians to prevent a (predicted) greater evil.

*Eye in the Sky*'s choice to present the selected course of action as the only option, with no alternatives either in method or time, masks the real debate concerning bombing a house in a residential neighbourhood based on invis-

<sup>82</sup> See, for example, Ashley S. Deeks, 'Predicting Enemies', Va. L. Rev. 104 (2018), 1529-1592; Rebecca Crootof, Margot E. Kaminski and W. Nicholson Price II, 'Humans in the Loop', Vand. L. Rev., forthcoming 2023.

<sup>83</sup> Haraway (n. 2), 583.

<sup>84</sup> Karima Bennoune, 'Terror/Torture', Berkeley J. Int'l L. 26 (2008), 1-61.

<sup>85</sup> Susan Marks, 'Apologising for Torture', Nord. J. Int'l L. 73 (2004), 365-396 (385).

ble data practices. The movie was released a few months after British and US forces attempted to target and kill a British national in Northern Syria – Junaid Hussain – but killed, instead, three civilians and wounded five;<sup>86</sup> and shortly after a US aircraft bombed a Doctors Without Borders’ hospital in Kunduz, Afghanistan, killing forty-two people, mostly medical staff and patients.<sup>87</sup> Viewed within this context, the image of IHL’s data practices as a ‘conquering gaze from nowhere’<sup>88</sup> seems particularly problematic. The critical analysis of IHL’s data practices offered above reveals – and challenges – the imperfections and jurisdictional assumptions ingrained in IHL’s data practices, the political and cultural predispositions which shape their vision of the world, and the way in which these data practices are used to legitimise violence and domination.

Instead of providing a ‘nuanced’, ‘authentic’, and ‘robust’ representation of the contemporary bureaucracy of killing, as IHL experts opined, *Eye in the Sky* simplifies and dogmatizes a complex (legal) reality – presenting assumptions and hypotheticals as neutral and natural, and eliminating alternative viewpoints and interpretations. By using fake dichotomies between ‘lawful’ and ‘unlawful’; ‘us’ and ‘them’; ‘now’ or ‘never’ – *Eye in the Sky* speaks international law through the voices of drone-owning nations, and is directed to their mass publics, participating in the legitimation of the existing bureaucracy of killing and solidifying IHL’s humanitarian narrative. This narrative disguises normative choices as inevitable, erases African decision-makers, communities, and perspectives, and flattens some of the most important legal and moral dilemmas of our time.

---

<sup>86</sup> Hussain, a senior ISIS hacker and operative, was eventually killed in a subsequent attack. Kimiko de Freytas-Tamura, ‘Junaid Hussain, ISIS Recruiter, Reported Killed in Airstrike’, *The New York Times*, 27 August 2015 available at <<https://www.nytimes.com/2015/08/28/world/middleeast/junaid-hussain-islamic-state-recruiter-killed.html>>.

<sup>87</sup> Alissa J. Rubin, ‘Airstrike Hits Doctors Without Borders Hospital in Afghanistan’, *The New York Times*, 3 October 2015 available at <<https://www.nytimes.com/2015/10/04/world/asia/afghanistan-bombing-hospital-doctors-without-borders-kunduz.html>>.

<sup>88</sup> Haraway (n. 2), 581.