

DRONE WARFARE UNDER INTERNATIONAL HUMANITARIAN LAW

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ABSTRACT

Today, the character of war has evolved significantly. The regulations governing wartime conduct have struggled to keep pace with the technological and strategic shifts of contemporary warfare. Within this changing landscape, drones have increasingly been employed by states across blurred battlefields. Traditionally, International Humanitarian Law (IHL) has regulated the conduct of armed conflict on conventional battlefields. This paper investigates the legal loopholes and ambiguities within the IHL framework that have been strategically exploited by states in modern times to justify drone strikes. The paper evaluates three aspects. Firstly, vague definitions have allowed states to interpret conflicts differently. This creates confusion over the legal framework that applies. Similarly, states employ proxies and transnational non-state actors (NSAs) that are not fully covered by current IHL provisions. Secondly, the paper assesses the technological advancements in drones. Lastly, it examines non-kinetic operations of drones that don't cause any physical harm. Such drones operate in the grey zone between peace and war. Consequently, all these factors have risked normalising the controversial use of force under the guise of legality. The study adopts a qualitative methodology, drawing on case studies and expert interviews. In light of this, the study ultimately recommends strengthening legal governance and ethical frameworks to ensure greater accountability in the conduct of drone warfare.

Key Words: *Drone Warfare, Humanitarian Law, Legal Grey Zones, autonomous weapons, non-state actor*

1. INTRODUCTION

The Prussian General Carl von Clausewitz long ago stated that the character of war changes over time.¹ This principle is evident in contemporary conflicts, where new and evolving hostilities have fundamentally reshaped how wars are fought.

Today, war is no longer confined to traditional state-to-state combat between uniformed armies. Outdated frameworks once designed for conventional wars continue to govern conflicts. Wars now involve NSAs, proxy forces, asymmetrical strategies and advanced technologies. Similarly, within these evolving dynamics, drones have redefined the landscape of modern conflict, giving rise to “drone warfare.” This era is marked by remote precision, agility and decentralised command.² These fundamentally alter how states project force and maintain superiority. Likewise, they are leading to a growing disconnect between the realities of modern battlefields and the legal and ethical norms in place. Principally, International Humanitarian Law (IHL) and International Human Rights Law (IHRL) form the two primary legal regimes governing the protection of individuals in times of war and peace. IHL is *lex specialis derogat legi generali* (a more specific law prevails over a more general law) in cases of armed conflicts. In contrast, IHRL applies both in peace and war. The two bodies of law are distinct in scope and application. Hence, within these changing and blurred dynamics, it is difficult to determine whether IHL is

¹ Carl von Clausewitz, *On War* (London: Longmans, Green, and Co.), 14, accessed September 22, 2025, <https://icct.nl/sites/default/files/import/publication/On-War.pdf>

² Mateusz Piatkowski and Wiesław Goździewicz, “Precautions and Aerial Superiority or Supremacy,” Lieber Institute at West Point, June 5, 2024, accessed July 23, 2025, <https://lieber.westpoint.edu/precautions-aerial-superiority-supremacy/>.

triggered or IHL. They often operate concurrently, creating areas of overlap and at times, legal tension.

With respect to drones as well, despite growing international use, currently there is not a single international treaty, law or framework which can regulate UAV centric warfare. The UN resolutions offer only non-binding guidance. The 2014 United Nations Human Rights Council (UNHRC) Panel Discussion on Remotely Piloted Aircraft or Armed Drones stresses that counterterrorism measures involving drones must comply with international law (IL), annexed with human rights, humanitarian law and refugee law.³

The scope of this paper is focused on IHL. The intended purpose of establishing IHL was to mitigate human suffering and limit the collateral damage.⁴ The modern warfare dynamics have exposed critical tensions between contemporary state practices and the existing legal frameworks.

The research is guided by three questions encompassing the legal ambiguities of IHL frameworks with the interplay of drones. Firstly, this paper examines how states increasingly exploit the interpretive flexibility embedded in the strategic lexicon of international law. States also deliberately craft legal grey areas within IHL to justify strikes, especially in counterterrorism operations and undeclared war zones. They strategically invoke *Jus ad bellum* (the right to resort to war) and *Jus in bello* (the lawful conduct of war under IHL) to justify and legitimise drone strikes in parallel. However, both function as distinct legal regimes with contrasting principles and thresholds. Such practices persist

³ UNHRC, *Summary of the Interactive Panel Discussion on the Use of Remotely Piloted Aircraft or Armed Drones in Compliance with International Law*, A/HRC/28/38 (Geneva: Office of the High Commissioner for Human Rights, December 15, 2014), accessed June 14, 2025, <https://documents.un.org/doc/undoc/gen/g14/243/58/pdf/g1424358.pdf>.

⁴ International Committee of the Red Cross, *What is IHL?*, (Geneva: ICRC, July 2004), https://www.icrc.org/sites/default/files/document/file_list/what_is_ihl.pdf.

in the absence of clear, universally applied parameters in the context of today's hybrid and asymmetrical warfare.

Second, the research explores whether existing IHL frameworks can effectively regulate drone operations, especially considering rapidly advancing technologies such as autonomous drone systems and swarms. Lastly, the paper investigates how the rise of non-kinetic drone operations such as surveillance, electronic interference and psychological pressure fall into the "*sub-threshold*" activities. These activities remain below the threshold of armed conflict, yet are not merely peaceful. This ambiguous status complicates whether they trigger the application of IHL, self-defence, or instead fall under IHRL. Broadly, this paper assesses how these overlapping dynamics are eroding the protective function of IHL.

Ultimately, the paper calls for a strengthened legal framework. This requires expanding and clarifying existing legal instruments. It also calls for enhancing international oversight mechanisms. These measures would ensure that drone warfare and related technologies remain subject to a robust legal code.

For this investigation, the methodology relies on both primary and secondary data collection within a qualitative research framework. It draws on international legal instruments and norms, including UN resolutions and institutional documents and reports. to maintain the reliability and validity of the findings.

2. LITERATURE REVIEW

Drone warfare has attracted scholarly attention from political scientists, security experts and legal scholars across the world. This interest has grown alongside

the proliferation of unmanned aerial systems in counterterrorism and contemporary military strategy. Much of the foundational literature on drones predominantly originates from the US drone operations in Pakistan and Afghanistan. The studies centred on the operational effectiveness and impacts of drones as a whole.

Political scientists such as P.W. Singer describes drones as revolutionary tools.⁵ He traces the evolution of military robotics from early prototypes to modern systems like the Predator and Reaper. He asserts that drones are optimal platforms for reducing troop casualties and enhancing tactical effectiveness. Similarly, James Igoe Welsh highlights their increasing operationalisation in counterterrorism, particularly in intelligence gathering, precision targeting and the transformation of battlefield tactics.⁶

In contrast, legal scholars have turned their focus toward the normative and jurisprudential challenges posed by drone warfare. A significant body of work has interrogated the legal justification for drone strikes, especially those carried out by the US following September 11, 2001. Scholars such as Laurie R. Blank examine the tensions between *Jus ad bellum* and *Jus in bello*, underscoring inconsistencies between state practice and international legal doctrine.⁷ Ashley Deeks introduces the notion that host-

⁵ P. W. Singer, *Wired for War: The Robotics Revolution and Conflict in the 21st Century* (New York: Penguin Press, 2009), 34–35.

⁶ James Igoe Walsh, *The Effectiveness of Drone Strikes in Counterinsurgency and Counterterrorism Campaigns* (Carlisle, PA: U.S. Army War College Press, 2013), 15.

⁷ Laurie R. Blank, “After ‘Top Gun’: How Drone Strikes Impact the Law of War,” *University of Pennsylvania Journal of International Law* 33, no. 3 (2012): 675–718.

state consent or state failure may permit drone strikes under certain interpretations of self-defence, though such reasoning remains contested.⁸

Other scholars explore the intersection of emerging technologies in drones, particularly AI and autonomous systems and legal or ethical frameworks. Paul Scharre, for example, proposes that constrained autonomy and “*centaur systems*” (human-AI hybrids) could improve compliance with IHL by reducing human error and increasing reaction speed.⁹ This, however, depends on maintaining integral human oversight throughout the process. Despite this, the existing literature broadly approaches the legality of drones as a binary issue. The studies have largely focused on whether drone strikes are lawful, without deeply interrogating the structural ambiguities within IHL that give rise to this debate.

This gap becomes evident in today’s geographically dispersed and asymmetrical conflicts, for which IHL is ill-equipped. Likewise, today’s advanced technologies like AI-driven targeting or drone swarms challenge the human-centric assumptions (human judgments) embedded in IHL. Moreover, in these hybrid conflicts and shadow wars, states employ drones for non-kinetic tactics such as sabotage and systematic degradation that often fall below the threshold of armed conflict. This study addresses this gap by examining how the evolving dynamics and legal justifications have contributed

⁸ Ashley S. Deeks, “‘Unwilling or Unable’: Toward a Normative Framework for Extraterritorial Self-Defence,” *Virginia Journal of International Law* 52, no. 3 (2012): 483–550.

⁹ Paul Scharre, “Centaur Warfighting: The False Choice of Humans vs. Automation,” *Temple International & Comparative Law Journal* 30, no. 1 (Spring 2016): 151–66.

to the instrumentalisation of legal grey zones. The purpose is to clearly categorise conflict classification and ensure accountability.

3. CONCEPTUALISING IHL

IHL regulates the conduct of warfare. It is broadly categorised into International Armed Conflicts (IACs) and Non-International Armed Conflicts (NIACs).¹⁰ An IAC involves the use of “*armed force*” between two or more states. It is defined in Common Article 2 of the 1949 Geneva Conventions. A NIAC, by contrast, refers to armed conflict between a state and one or more non-state armed groups within its defined territory, or between NSAs among themselves. NIACs are governed by Common Article 3. The *Tadić* case further elaborated that a NIAC requires two key elements: protracted armed violence and a sufficient level of organisation among the parties.¹¹ Unlike IACs, NIACs do not grant combatants prisoner of war (POW) status, meaning captured fighters are not entitled to the full range of rights and protections. This distinction aims to avoid conferring implicit legitimacy on NSAs. Nevertheless, all persons captured in NIACs must still be treated humanely in accordance with applicable humanitarian law.

As a whole, the Geneva Conventions, its Additional Protocol, the Hague Conventions and its annexed regulations and customary international form the legal basis of IHL. IHL, further protects *hose de combatants* (people who are not participating in hostilities, e.g., civilians, medical workers, wounded soldiers). In essence, it regulates the

¹⁰ "International Humanitarian Law Databases," ICRC, accessed June 2, 2025, <https://tinyurl.com/4z5ayeyh>

¹¹ "ICTY, *The Prosecutor V. Tadić* | *How Does Law Protect in War?*," Online Casebook, accessed June 13, 2025, <https://tinyurl.com/u68fdafh>.

means and methods (weapons) of warfare (*jus in bello*). IHL is governed by four core principles: necessity, distinction, proportionality and precaution.

With respect to these principles, the Article 48 of Additional Protocol I (AP) obligates distinguishing between legitimate military targets and civilian persons or property, with the aim of minimising unintended harm.¹² The principle of proportionality requires that the use of military force be commensurate with the anticipated military advantage. In other words, the strategic benefit must not outweigh the harm caused. Whereas, Article 57 underlines *jus ad bellum*, that is, taking necessary precautions by obliging parties to verify that targets are lawful.¹³

IHL is further enforced and monitored by the International Criminal Court (ICC) and Ad hoc tribunals such as the International Criminal Tribunal for the former Yugoslavia (ICTY), the International Criminal Tribunal for Rwanda (ICTR) and the International Committee of the Red Cross (ICRC), as guardians of IHL.

3.1 Contemporary Conflicts: Fitting Drones into IHL

Drone warfare has emerged as a distinct and transformative mode of conflict. They are characterised by remote operations, technological asymmetry and aerial dominance. In principle, drones are not beyond the scope of IHL. In light of drones, the ICRC underscores that the central question is not *if* IHL applies, but *how* it applies to this form of warfare.¹⁴

¹² "International Humanitarian Law Databases."

¹³ "International Humanitarian Law Databases."

¹⁴ ICRC, *Ensuring the Use of Drones in Accordance with IHL*, statement at the UNHRC, Geneva, September 22, 2014, <https://www.icrc.org/en/document/ensuring-use-drones-accordance-international-humanitarian-law>.

Over the years, states have claimed the adherence of drones to the Article 36, which states that weapons must not inflict “*unnecessary suffering or superfluous injury.*” This legal framing supports the assumption of a “*clean war.*” This also allows states to avoid the “body bag syndrome that is described as a casualty aversion that decreases public support of participation in military missions.”¹⁵ States assert that technological precision minimises collateral damage and ensures compliance with IHL principles. However, it is not without serious controversy. Numerous reports by UN Special Rapporteurs and human rights organisations have challenged the reliability of US claims about precision and minimal civilian harm.¹⁶

Today, this legal framework is increasingly strained by evolving conflict dynamics. Drones are increasingly deployed beyond traditional battlefields into protracted and fragmented conflicts characterised by hybrid warfare. The interplay of drones with emerging technology, proxies and sub-further threshold operations complicates the legal landscape. These developments challenge the traditional parameters of IHL and the foundational norms governing it.

4. FRAMING OF THE CONFLICTS

The 21st century has seen drones become central tools in military operations. In this evolving landscape, IHL is no longer just a protective framework. Instead, states

¹⁵ Blum and Wittes, *The Future of Violence*, 11–14.

¹⁶ Larry L. Lewis and Diane M. Vavrich, *Rethinking the Drone War: National Security, Legitimacy and Civilian Casualties in U.S. Counterterrorism Operations* (Quantico, VA: Marine Corps University Press, 2016), 16.

strategically use and reshape it to assert military power, suppress political dissent and justify controversial drone strikes under the cover of legality.

Traditionally, the moral and philosophical framework for war, although not legally binding, has been the much-debated Just War Theory.¹⁷ Under it, the legal justification for the use of force is governed by two core principles: *jus ad bellum* and *jus in bello*. Importantly, these two legal regimes operate independently. Yet, unlawful resort to force does not permit violations of *Jus in bello*. However, in practice, states increasingly interpret and apply these principles flexibly to accommodate operational and strategic exigencies. This challenges the coherence and enforcement of international law.

4.1. Actual or Imminent Threat

Historically, under Article 51 of the UN Charter, the invocation of self-defence within the framework of *jus ad bellum* was limited to state-to-state conflicts. It required an “actual” or “imminent” armed attack within clearly defined territorial boundaries. In the 19th century, the *Caroline* standard refined this further, holding that anticipatory self-defence is lawful only when the necessity is “*instant, overwhelming, leaving no choice of means, and no moment for deliberation.*”¹⁸ Originally, this standard applied strictly to imminent attacks; immediate, unavoidable and about to occur. Over time, however, some states have broadened the concept to justify action in anticipation of a merely expected

¹⁷ Carsten Stahn, “‘Jus ad bellum,’ ‘Jus in bello’ . . . ‘Jus post bellum’? – Rethinking the Conception of the Law of Armed Force,” *European Journal of International Law* 17, no. 5 (2006): 921–943, <https://doi.org/10.1093/ejil/chl037>.

¹⁸ Daniel Webster, *Letter to Lord Ashburton*, August 6, 1842, in *British and Foreign State Papers*, vol. 30 (London: Her Majesty’s Stationery Office, 1843), 195–196.

attack, or even to preempt a potential future threat. Such interpretations are a result of unsettled or lack of clear thresholds and definitions.

4.2. Unable and Unwilling Doctrine

Following 9/11, states such as the US and UK expanded self-defence to cover counterterrorism operations against NSAs that conducts attack from another state's territory. In addition to invoking imminent threat, they developed the "unwilling or unable" doctrine, allowing force when the host state fails to address the threat.¹⁹ However, it also does not have a clear and universally accepted legal basis. On the flip side, it self-authorises states to conduct drone strikes without UNSC or the state's approval, on the grounds that the host state is harbouring NSAs or withholding consent.

The expansion of self-defence by states to justify attacks rests on unsettled and contested concepts such as imminence, necessity and proportionality, all of which remain legally ambiguous. There is also no clear standard for determining when a host state under this yardstick fails to address threats as strikes are typically classified with minimal public disclosure and limited opportunities for independent investigation. In such high-stakes, politically charged context, assessing whether the use of force is genuinely proportionate becomes highly problematic.

This legal uncertainty perpetuates more serious consequences, producing conflicting interpretations-akin to the rabbit-duck illusion, a classic psychological image that can be perceived either as a rabbit or as a duck depending on the viewer's

¹⁹ Deeks, "Unwilling or Unable," 483.

perspective. Hence, the state conducting drone strikes may characterise the situation as a NIAC, while the host state views it as an IAC due to the violation of its sovereignty.

4.3. Prolonged and less imminent threats: IHL Invoked

Expanding the justification of the use of force solely under self-defence becomes increasingly difficult when military operations become prolonged and threats less immediate. Consequently, drone-conducting states invoke IHL to classify such operations as NIACs, enabling them to deny POW status to non-state actors and prosecute them under domestic law. This approach, driven by practical and political considerations, preserves greater discretion in detention and prosecution. Meanwhile, the host state's claim that an armed conflict has been triggered is often suppressed.

As noted, states invoking the pretext of an imminent threat, often without transparency, remain bound by the UN Charter and IHL, yet the lack of universally accepted standards for concepts such as imminence, necessity, and proportionality affords them wide operational latitude. This strategic legal shift enables drone-conducting states to frame illegal counterterrorism and drone operations in humanitarian terms while pursuing broader military objectives and portraying the host state in a negative light. The last example to this is India's strike, allegedly targeting the JeM Subhanallah Complex in Bahawalpur, Pakistan, though in this context it was carried out with missiles rather than drones.

Hence, in practice, states invoke *jus ad bellum* to justify the initial use of force and *jus in bello* to legitimise their conduct during hostilities, tailoring legal obligations to

strategic interests. This dual approach enables them to project compliance with IHL while sidestepping key protections designed to limit harm in armed conflicts.

4.4. Case Studies

4.4.1. Historical Precedent as A Case Study: US during 9/11

Following the 9/11 attacks, the US on September 14, 2001, by passing the Authorisation for Use of Military Force invoked the right to self-defence to justify military operations against al-Qaeda. This indeed was setting the global precedent of ignoring territorial sovereignty and reshaping IHL to fit counterterrorism goals, thereby legitimising drone strikes.

Considering the sustained nature of threats emanating from geographically dispersed locations, these threats did not qualify as “*imminent*” under classical interpretations of self-defence. Consequently, the US gradually shifted the legal framing of its drone programme to one based on NIAC. This is illustrated by official statements, claiming that Washington was in “*an armed conflict with al-Qaeda, the Taliban and associated forces,*” rather than with any state.

Moreover, a NIAC, as defined by Common Article 3 is conflict within the territory of a *single state*. However, the rise of transnational groups like ISIS, al-Qaeda and the TTP challenged this territorial paradigm. In other words, IHL remains silent mainly on the classification of transnational NIACs.

In this context, the US engaged in a “*single, continuous NIAC against NSAs*” under counter-terrorism operations, regardless of the multiple state borders in which these actors operated. This approach also suffers from limited grounding in treaty law or clear

customary norms. It has been widely contested by scholars and institutions such as the ICRC, which favour *the “multiple NIACs”* framework treating each instance of hostilities within a particular state as a separate conflict.²⁰ This doctrinal fragmentation is further illustrated in the Syrian conflict, where overlapping classifications existed simultaneously: Syria vs. ISIS (internal NIAC), the US vs. ISIS (extraterritorial NIAC), the US vs. Syrian government forces (potential IAC), and Turkey vs. Kurdish groups (separate NIAC). Likewise, occasionally, the US also invoked the maritime doctrine of “hot pursuit” to justify strikes, despite it having no established legal basis in land-based armed conflicts.²¹

As a whole, this fragmentation of conflict classifications undermines the coherence and effectiveness of IHL. By allowing states to selectively apply different legal regimes within the same theatre of operations, accountability and protections for civilians become inconsistent and weakened.

Further shedding the case of Pakistan and US during 9/11, in principle, when a third-party state (US) attacks a non-state group on another state's territory (Pakistan) the host state's consent becomes critical. If consent exists, the conflict remains a NIAC. If not, the action may trigger an IAC between the intervening and territorial states due to breach of sovereignty. In this context, Dr. Waseem Ahmad Qureshi explains that for drone strikes to be lawful and not constitute an “act of war” against another state, they must be conducted with the host state's consent.²² He explains that they must adhere to strict constraints on the use of force. Specifically, drone strikes should be employed only as a

²⁰ ICRC, *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, (Geneva: ICRC, 1987), 24, <https://ihl-databases.icrc.org/ihl/full/470#com-95>.

²¹ Maham Naweed, *Hot Pursuit: Legal Validity of Cross Border Military Operations under International Law* (Islamabad: Islamabad Policy Research Institute, September 2023), <https://ipripak.org/wp-content/uploads/2023/09/Hot-Pursuit-Maham-Naweed.pdf>.

²² Dr. Waseem Ahmad Qureshi (Legal Expert on IHL), Interview by Author, June 15, 2025.

last resort. Targets must be legitimate combatants. He articulates that the principle of proportionality must be respected, meaning the anticipated military advantage must outweigh potential harm. Likewise, civilians must be afforded the highest degree of protection against collateral damage.

The US also launched the debated “*pre-emptive*” and “*surgical strikes*” on these non-state groups. Invoking NIAC but at the same time launching double-tap strikes or signature strikes, then makes the US accountable for violating the principle of distinction in IHL. Article 50(1) of AP I requires individuals to be presumed civilians in cases of doubt. In light of this, it could be posed that neither country is a party to it, so citing Article 50(1) AP I as legally binding for them is arguable. However, many legal scholars view key provisions of AP I as customary international law applicable to all.

Against Article 50, double tap strikes involve targeting individuals based on behavioural patterns and signal intelligence and imagery rather than human intelligence based on confirmed identity. This has often resulted in flawed intelligence. A 2011 US drone strike in North Waziristan, for example, killed over 40 individuals attending a tribal jirga based solely on a behavioural “signature” interpreted as a militant gathering.²³ The presence of a high-value terrorist is sometimes used to justify strikes that also kill their family members, such as in the operations against Osama Bin Laden or Baitullah Mehsud. This illustrates states practice of relying on patterns of association or behaviour as the basis for targeting, effectively reversing the legal principle from “*innocent until proven guilty*” to “*guilty until proven innocent*.”

²³ “US Drone Strike ‘Kills 40’ in Pakistani Tribal Region,” *BBC News*, March 17, 2011, <https://www.bbc.com/news/world-south-asia-12769209>.

Therefore, the lack of transparency around these operations has contributed to “*hybrid legal framing*” approach. The lines between counterterrorism, armed conflict and self-defence are strategically blurred. Within this fragmented legal environment, IHL is stretched, selectively applied and at times undermined. This raises fundamental concerns about accountability, state responsibility, and the broader erosion of international legal standards in the age of drone warfare and decentralised conflict. Through selective legal framing, states navigate between *jus ad bellum* and *jus in bello* to create a semblance of legality, all while drones silently conduct operations in spaces where traditional warfare and legal accountability once held firm boundaries.

4.4.2. Modern Day Case Study: Israel

Today, emulating US practices, “drone power club” states such as Israel have also employed hybrid legal framing to justify its escalating operations on foreign soil. Israel has deployed advanced unmanned aerial systems such as the IAI Harop loitering munition, Hermes 900 and Heron TP drones in Syria and Lebanon. Drone operations are carried out against perceived threats posed by Iranian weapons convoys, Hezbollah infrastructure, Hamas and proxy militias.²⁴

For Israel, under selective operation, the Caroline standards “unable or unwilling” doctrine is used to justify strikes on Syrian and Lebanese territory. In contrast, Israel has further described its security environment as an “ongoing, borderless threat.”²⁵ This thereby nullifies the requirement that self-defence is only allowed in response to an actual

²⁴ Michael N. Schmitt and Orde F. Kittrie, “Striking Hezbollah-Bound Weapons in Syria: Israel’s Actions Under International Law,” *Harvard National Security Journal*, August 26, 2013.

²⁵ Institute for National Security Studies, *The State of Israel’s National Security Doctrine and Policy Guidelines for 2025–2026* (Tel Aviv: INSS, 2025), <https://www.inss.org.il/publication/policy-2025/>.

or imminent armed attack. This explains how “imminence” is often stretched by powerful states, applied not only to attacks that are about to happen, but also to long-term threats, weapons build-ups, or the activities of proxy groups.

Additionally, since no formal armed conflict (*de jure* war) exists between Israel and Syria, Israel avoids classifying its actions as an IAC. However, from Syria 's perspective, such strikes constitute violations of its sovereignty and may qualify as an IAC, underscoring the asymmetric and contested nature of legal characterisation in modern conflict settings. For instance, on January 16, 2025 Israel conducted a drone strike in Southern Syria against allegedly Iranian militias. Israel reportedly framed this as a pre-emptive self-defence measure against Iran's growing influence in Syria, while Syria condemned it as a violation of sovereignty.²⁶

Interestingly, the Israel-Palestine conflict presents several factors that complicate its legal categorisation. First, the contested status of Israel and Palestine as states themselves. Second, the status of Hamas as a *de facto* governing authority in Gaza with an organised armed wing. Third, the Palestine Liberation Organisation (PLO) acts as the representative of the State of Palestine but holds limited authority, largely restricted to parts of the West Bank. These overlapping and conflicting narratives highlight ongoing legal and political disputes over statehood, recognition, and the threshold for triggering IHL regimes, which remain unsettled. This illustrates the complexity of applying traditional legal categories to modern conflicts involving quasi-state actors, proxies and NSAs.

²⁶ Bassem Mroue, “Syria’s New Administration Condemns Israeli Incursions after Strike in Southern Syria Killed Three,” *AP News*, January 16, 2025, <https://apnews.com/article/99639d93ab1ca037d058f60023983d74>.

From a political-theoretical perspective, as William E. Connolly argues, contested sovereignty and identity reveal deeper struggles over who holds authority to define political communities and legitimacy.²⁷ This complicates the legal discourse by intertwining questions of political identity and power.

Therefore, in conflicts involving non-state actors and proxies, neither IHL nor domestic law applies consistently or is fully enforceable. This blurring of legal boundaries enables states to avoid accountability, sidestep international oversight, and operate in a murky space where rules are unclear, selectively interpreted, or simply unenforced. Ultimately, this undermines the normative frameworks of both IHL and the UN Charter.

5. TECHNOLOGY AT PLAY

Following the strategic reinterpretation of legal meanings and exploitation of loopholes in the IHL lexicon to justify drone operations, states have ventured into another sphere. They are now exploring emerging technologies in drone warfare to further deepen these legal grey zones. With platforms such as the US CINDER, Turkey's STM KARGU, Russia's Lancet-3, Israel's Harop and Harpy systems, and AI-enabled loitering munitions using open-source Auterion hardware, drones are increasingly capable of operating without continuous human oversight. This reduced human control blurs accountability and challenges IHL's core principles of distinction and proportionality. This is explained by “*PlayStation mentality*” associated with autonomous systems and AI-driven targeting,

²⁷ William E. Connolly, *Identity/Difference: Democratic Negotiations of Political Paradox* (Ithaca, NY: Cornell University Press, 1991), 42.

which has amplified the dehumanising effects of war.²⁸ It does so by distancing operators or, in some cases, removing them entirely from the consequences of lethal force.

A further complexity arises from “Kill Clouds” systems within drones. They are integrated networks of sensors, AI modules, image-recognition algorithms and data fusion systems that are supplied by multiple states and private contractors.²⁹ While marketed as tools for precision targeting, these systems are vulnerable to algorithmic bias, black box unpredictability, misidentifications and unintended escalations. Their distributed design and fragmented chains of command make responsibility diffuse and legally ambiguous. These challenges are magnified in conflicts where classification as an IAC or NIAC is unclear, such as civil wars involving multiple NSAs and external state involvement. Without a clear legal designation, determining applicable IHL rules and assigning responsibility becomes nearly impossible.

Furthermore, IHL provides protection to *hors de combat* (wounded, captured, or surrendering). Yet swarm drones operate in microsecond engagement cycles that make real-time human oversight unfeasible. Without human consciousness, these systems cannot interpret nuanced behaviour, such as a fighter dropping a weapon or signalling surrender. Thus, when targeting decisions are delegated to algorithms rather than to sentient actors, the legal and ethical foundation of IHL is fundamentally destabilised. In such cases, compliance becomes a matter of technical plausibility rather than humanitarian obligations.

²⁸ Grégoire Chamayou, *A Theory of the Drone*, trans. Janet Lloyd (New York: The New Press, 2015), 113–115.

²⁹ Disruption Network Lab (Disruption Network Institute), *Investigating the Kill Cloud: Information Warfare, Autonomous Weapons & AI* (conference and research initiative, Berlin, 2023–2024), <https://disruptionlab.org/investigating-the-kill-cloud>.

Hence, the claim of “*reduced collateral damage*” often hides a strategic advantage for states. They use drone swarms and AI-driven “kill chains” in unclear legal settings with little accountability. In effect, it is eroding the presumption of a human decision-maker behind every attack. This shift makes it harder to follow key rules of war such as distinction and proportionality.

6. NON-KINETIC DRONE OPERATIONS

With the evolving environment of hybrid and shadow wars, the role of drones has expanded beyond their traditional use of precision strikes and lethal targeting. These kinetic attacks have evolved to be deployed for a spectrum of non-kinetic operations. These include reconnaissance, deploying drones to map air defence radars of an adversary state, psychological signalling, and demonstrating political resolve, often without causing physical destruction.

Under Article 49(1) of AP I of the Geneva Conventions, an “*attack*” is defined as “*acts of violence against the adversary, whether in offence or in defence.*” However, the term “violence” lacks a clear elaboration in IHL. Similarly, IACs require “armed force” between states. Specifically, as per norms and customary law, tangible, physical acts, those involving lethal force or destruction, are generally classified as “attacks” or “acts of war” to trigger IHL obligations. In this context, non-kinetic operations that operate below the threshold of armed conflict, though they breach a state's territorial integrity, reveal another regulatory gap within IHL.

Modern drones are increasingly equipped with advanced electronic warfare tools. These include GPS spoofing modules, radar jamming pods, and communication

disruption payloads. In effect, without the “use of armed force,” drones mislead navigation systems, interfere with air defences and disrupt enemy communications. The question arises, does it trigger an IAC, after all, no lethal force was used, but it violated state sovereignty.

Moreover, certain drones, such as the MQ-9 Reaper or Russia's Orion, have been adapted for non-kinetic operations. Their dual-use capability can affect both military and civilian infrastructure, especially systems like air traffic control or emergency communications. Such interference blurs the line between civilian and military targets (challenging distinction) and risks civilian harm that may outweigh any military gain (challenging proportionality), raising serious humanitarian concerns under IHL.

In addition to that, non-lethal disruptions further complicate matters by contributing to escalation pathways. If the drone is armed or identified as a loitering munition or kamikaze drone even without firing, the host state may perceive its presence as a precursor to attack. This perception can trigger claims of anticipatory self-defence, despite the difficulty of proving intent, especially when drones are used for political signalling or strategic messaging. Such perceptions alone may provoke countermeasures or actual force. If that occurs, and if attribution and hostile intent are established, the incident could form the basis for an IAC under IHL. Until kinetic force is used, however, these actions remain in a legal grey zone, not clearly an “armed attack” but still violating sovereignty and escalating tensions in ways that challenge both legal thresholds and strategic stability. To put it simply, IHL currently lacks a clear threshold to resolve this intent-versus-impact dilemma, creating persistent grey zones.

Sub-lethal Act	IHL Grey Zone
Loitering drones hovering over air defences without striking	Is this an “attack” triggering full IHL compliance?
Drone swarms jamming or blinding radars	Functional attack vs non-violent disruption?
Political deniability of "non-lethal" operations	Weak enforcement and blurred legal thresholds
Communication disruption targeting Military + civilian infrastructure	Breach of distinction principle — is dual-use interference an “attack”? Proportionality concerns: civilian harm may outweigh military advantage
Hovering armed drones without firing	Perceived precursor to attack → risk of anticipatory self-defence?
Political signalling with high-visibility drone flights	Legal intent vs. impact dilemma; no clear IHL threshold

Table 1: Operational and Legal Uncertainty in Sub-Lethal Drone Use

Indeed, states have exploited such legal ambiguities through strategic restraint, conducting operations that are militarily significant yet legally indeterminate. This reflects a growing pattern of sub-threshold escalation, where force is applied without crossing the legal markers that would trigger the full application of IHL. While avoiding open warfare,

the normalisation of grey-zone conflict risks eroding established legal norms and weakening civilian protections in future battlefields.

7. RECOMMENDATIONS

Considering the increasing reliance on drones by states and the expanding grey zones within IHL, it is imperative to establish clearer legal frameworks and address existing loopholes.

Following are some recommendations to fill in the gaps of IHL and drone warfare:

7.1. Codify Customary Norms on Drone Warfare into Binding International Treaty

Taking into account the general principles and insufficiently tailored frameworks offered by IHL to address the increasingly complex realities of drone warfare along with evolving dynamics, the UNGA or the International Law Commission must take steps to enshrine customary international norms into a specific treaty or protocol. This may be informed by continuous state efforts and a realisation of legal obligation (*opinio juris*). A specified UN Special Rapporteur or judicial body must be set up.

7.2. Mandating Exporter and Importer Obligations

Exporting states should mandate strict end-use verification and post-delivery monitoring of drone technology, including software, maintenance, and remote-operation services, to prevent diversion or misuse. Under Article 7 of the Arms Trade Treaty, they must assess whether a transfer could facilitate serious violations of IHL, IHRL, terrorism,

or transnational organised crime and deny exports where the risk is overriding. Correspondingly, importing states should provide binding end-use assurances, permit post-delivery inspections, and ensure drones are not transferred to proxies or NSAs in breach of IHL or IHRL. By committing to transparent reporting and cooperation, both exporters and importers can close legal and accountability gaps, strengthen oversight, and align drone governance with established international arms control standards.

7.3. A New Legal Protocol for Autonomous and Remote Warfare

As drone and AI-driven weapons proliferate, one forward-looking measure could be the creation of a Protocol V to the Geneva Conventions, specifically addressing Autonomous and Remote Warfare, in line with recommendations from the United Nations Institute for Disarmament Research.

In hybrid warfare, where drones can carry out both kinetic strikes and non-kinetic actions, the *Tallinn Manual on the International Law Applicable to Cyber Warfare* provides persuasive, though non-binding, guidance. It interprets how existing IHL and other international rules apply to cyber operations. Drawing on its reasoning, states could argue that certain sub-lethal drone activities qualify as an “attack” under IHL, thereby triggering legal obligations and helping close current accountability gaps by recognising harm that extends beyond physical destruction.

In refining “Kill Chains,” insights from scholars like Ronald Arkin, who propose “artificial conscience” systems for armed drones, should be considered. Embedding such systems with the Martens Clause, formulated in the Hague Conventions and reaffirmed in AP I, would safeguard humanity and the dictates of public conscience. This safeguard

would apply even in the absence of explicit treaty law. It would also serve as a legal and moral barrier against misuse in the grey zones of modern conflict.

Such seminal feats would uphold IHL and minimise unlawful targeting by enabling autonomous systems to apply legal constraints, discriminate between combatants and civilians and refuse unlawful orders, thereby aligning technology with legal and ethical frameworks.

8. CONCLUSION

The accelerating pace of drone warfare has outstripped the capacity of existing IHL to provide clear rules, leaving dangerous legal and accountability gaps. A *lex ferenda* approach that is anchored in future-oriented, internationally agreed norms offers the best path to address emerging challenges such as autonomous targeting, AI-driven swarms, dual-use infrastructure, and remote-state responsibility. The choice now facing the international community is stark: adapt the law to meet the realities of the battlefield, or risk allowing technological advantage to erode the IHL principles that underpin humanitarian protection. Closing these gaps is not only a legal necessity but a moral obligation ensuring that the evolution of warfare does not outpace the values it must serve.

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