

2023

The Ambiguity in International Law and Its Effect on Drone Warfare and Cyber Security

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The Ambiguity in International Law and Its Effect on Drone Warfare and Cyber Security

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July 25th, 2023

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Introduction

Drone warfare and artificial intelligence have considerably shaped cybersecurity and international law over the years. The rapid growth of technology has slowly forced entry into the international and domestic affairs of states. How countries conduct surveillance and practice defence does not look the way it did many years ago. One must observe how the rule of law is affected by technological advancement at the international level where many complexities are seen to rise to the surface. Balancing domestic and international law comes into question when drones and artificial intelligence become key components in state affairs that transcend geographical borders.

This literature review will be concerned with, and will conduct an analysis of the effect international law has on drone warfare and the use of artificial intelligence in the international arena. More precisely, the idea of boundaries will be explored in full detail as the concept of sovereignty gets questioned in light of drone use in international affairs. The core of the research will revolve around the question of, how does international law affect drone warfare and use of artificial intelligence? The strength of international law is put to the test as technological developments have made way in international circumstances.

A comparative investigation will drive this literature review as the case study of key states will be examined to full capacity surrounding the involvement of drone use and the role of international law. The case study component will highlight the manifestation of boundaries being crossed and state sovereignty being questioned. How a bigger state compares to smaller states is observed when the idea of resources, money, manpower, and technology comes into play. The

key actor that is most notably involved in the discussion of drone use and pushing the narrative of cybersecurity is the United States. Their involvement has been seen in states such as Yemen, Iran, Afghanistan, Pakistan, and Iraq. Ranging from drone strikes to subdued surveillance, the United States has complicated the situation for many and has violated a significant number of laws that are otherwise there to protect states and their sovereignty. The root cause of this may be due to the imbalance of power between the states, perhaps in association with the weakness of international law.

Many scholars have found issues within international law and the discourse surrounding it, finding it fairly weak to provide protection for borders and states. The lack of enforcement and universal applicability has made it challenging for states to implement international law earnestly. As Brooks mentions, international law is dependent on the shared acceptance by all states for the enforceability of legal mechanisms. States find themselves having to hold their own interpretation of the concepts and meaning for the rule of law.¹ This can make room for an error in judgment.

The literature review will begin by looking into the central research question. The context behind the research question will be established in order to make sense of the direction and contents of this paper. Chapter two will discuss international law such as defining it, how it functions, and the dimensions of international law related to drones and artificial intelligence. Chapter three will look into information on drones and their role for recreational and non-

¹ Rosa Brooks. "Drones and the International Rule of Law." *Ethics & International Affairs* 28 (1): 2014. 83–103. <https://doi.org/10.1017/S0892679414000070>.

recreational use. Furthermore, this chapter will discuss the role of technology and artificial intelligence at the international level. Chapter four will revolve around the discussion of the ambiguity presented in international law, with specific attention to technological issues. It will be understood how states are able to manipulate international law for their benefit. Chapter five is where the heart of the comparative case study will take place as we look towards the United States conducting drone attacks on Pakistan and Yemen. We will look at how this case exemplifies the ambiguity and manipulation of international law on drone warfare and attacks. Chapter six will examine the role of civilians when it comes to international law on drone use and artificial intelligence. The remaining chapter will conclusively answer the question of whether international law is clear and effective based on the literature present and the discussion.

Chapter 1: The Heart of the Question and Argument

In short, we are concerned with the research question of how international law affects drone warfare and use of artificial intelligence? More precisely, how does international law affect the way drones are used and what boundaries have to be put in place between states? Where has international law failed people and leaders when it comes to protection against drones and the role of cybersecurity? These questions lead to the potential hypothetical answer to be the ambiguity within international law being the culprit for the failures we see in terms of regulation on drone warfare and surveillance. There is not enough clarity within international rules and regulations which can leaves states with the opportunity for conducting atrocities and escaping accountability. This is primarily what this thesis sets to argue. It points to the weakness of international law being the reason why powerful states have been able to bend the rules and blur the lines to fit their own agenda. International law has been incapable of accommodating and setting strict guidelines due to its vague nature which has resulted in many states continuing an abuse of power. This thesis will point out that while yes, states seem to take advantage and the blame should be put there, however, the blame should be distributed towards the system that was already faulty to begin with.

Liberal Internationalism Approach and Theory

It is critical to clarify what ambiguity in international law means here. We can turn to International Relations (IR) theory to aid us in this assertion. Much of international law is built on liberalism rather than other forms of theory such as realism which focuses on inter-state competition, or constructivism which is concerned with culture and identity. Liberalism looks to

multilateral cooperation and democracy; it finds that the world operates on the agenda of collective norms and rules that all states follow.²

The liberal international order had become influential following the Cold War with contributions made from Woodrow Wilson, Franklin Roosevelt, and Harry Truman. What we know now of IR liberalism is practices associated with cooperative security, international institutions such as the UN, shared rule of law, and collective problem solving.³ International law is based on liberal ideas because the international legal framework we know today functions on it being a collective rule-based framework where states have to cooperate and acknowledge the existence of the laws in order for them to get applied. Liberal international order is built on the assumption that states will cooperate in order to obtain mutual gains, however, that is not always the case. This is precisely where international law falls short in being coherent and direct.

It is naïve to assume that liberal internationalism can be applied to all areas of the international system. Just as it works for trade or diplomacy, does not mean it can work for the rule of law. In order for liberal internationalism to be applied in international law, one would assume that states will act in each other's benefits because of the mutual gains received. That the reason why they comply is so that the application is universal to all states. However, what is the mutual gain in one state having drones and being able to use them and the other state cannot? States will continue to take advantage of the ambiguity presented in international law to pursue their own ends.

² Amitav Acharya. "Global International Relations (IR) and Regional Worlds: A New Agenda for International Studies1. 2014. Pg. 650. doi:10.1111/isqu.12171.

³John G. Ikenberry. "Liberal Internationalism 3.0: America and the Dilemmas of Liberal World Order." *Perspectives on Politics* 7, no. 1. 2009. Pg. 72-73. <http://www.jstor.org/stable/40407217>.

Guzman argues exactly this point. He drives the theory that compliance in international law is built on a model of rational self-interest states. The argument is that compliance in international law occurs due to a state's fears about their own reputation if they are found to not comply. This theory points to not only why nations comply but when and why they violate international law. International law is built on the compliance theory, that if a state does not comply, they are hit with aggression from the international world such as economic sanctions. In addition to this, another reason for compliance comes from the norms that generate compliance. The cycle being that a norm exists because of compliance which then translates to that norm improving compliance.⁴ A state will look to its own interest which gives them the window of opportunity to bend the rules if that means protecting their state. Self-interest is above all based on Guzman's theory, so if it comes a time that a state will have to violate international law to meet a certain objective, they will do just that. This will be demonstrated later on.

The Debate

The questions laid out for this thesis come from the debate that has been seen in the literature amongst international law and political scholars. The formal argument that lies in the discipline of war and technology, as in Walzer, holds that very little changes when drones enter the picture. For example, if taking targeted killings into consideration whether by assassination or through other means, they hold the same moral bases or justification as drones. It does not matter that the targeted killing is done through a gun operated by an individual or a computer-

⁴ Andrew T. Guzman, "A Compliance-Based Theory of International Law." *California Law Review* 90, no. 6. 2002. Pg. 1832. <https://doi.org/10.2307/3481436>.

generated drone.⁵ This begs the question of whether international law would even need to adjust to account for technological innovation in warfare?

Legally, in peaceful zones, targeted killings are ruled out as they are not seen as legitimate. The standard rule holds, “collateral damage – that is, the death or injury of non-combatants must not be disproportionate to the value of the military target”.⁶ Walzer as well as other scholars find that the same moral and legal criteria hold against drones. However, the difficulty comes when it is learned that the person operating the drone is not subject to threat as someone on the battleground behind a gun would be. Drones allow for the operator to sit behind a safe environment while making calculated decisions of when a strike is appropriate. Knoops also seems to explore this difficulty by asking how drone warfare changes the battlefield and who takes accountability. The author claims that the political threshold for using drones is lowered since no human lives are harmed for the state doing the attacking.⁷ Politically, drone warfare sounds much easier to states as it presents no casualties to their own men.⁸

The debate when it comes to drones and warfare in the legal sense involves, who is actually being killed. Whether it is the combatants or civilians and how many, regardless of whether it is done through drones or ammunition. Coyne and Hall list seven main issues when it comes to drone warfare as discussed and agreed upon by many scholars which are: (a) violation

⁵ Michael Walzer. “Just & Unjust Targeted Killing & Drone Warfare.” *Daedalus* 145, no. 4 (2016): Pg. 12–24. <http://www.jstor.org/stable/24916780>.

⁶ *Ibid*, Pg. 14.

⁷, Alexander Geert-Jan Knoops. “Legal, Political and Ethical Dimensions of Drone Warfare under International Law: A Preliminary Survey.” *International Criminal Law Review* 12, no. 4 2012. Pg. 717. doi:10.1163/15718123-01204004.

⁸ Michael Walzer. 2016. “Just & Unjust Targeted Killing & Drone Warfare.” *Daedalus* 145, no. 4 Pg. 15. <http://www.jstor.org/stable/24916780>.

of international law and a nation's sovereignty, (b) the ethical framework, (c) collateral damage through civilian casualties, (d) lack of transparency from governments, (e) lack of checks on government programs on drones, (f) the psychological stress on drone pilots, and (g) the precedence by U.S. government for other international governments to engage in drones.⁹ These fundamental issues have demonstrated violations from all angles when it comes to drone warfare and surveillance. Issues that range from human life loss all the way to technicality issues pertaining to law and rules. The question and argument driving this thesis will now be explored as we look to how international law's effect on drone warfare looks like.

⁹ Christopher J. Coyne and Abigail R. Hall. "The Drone Paradox: Fighting Terrorism with Mechanized Terror. 2018 Pg. 51-52. <http://www.jstor.org/stable/26591799>.

Chapter 2: Diving into Drones and the World of Artificial Intelligence and Cybersecurity

The Federal Aviation Administration (FAA) has defined drones to be a vehicle that is piloted by the human from the outside. It is essentially a vehicle that is automated without the person having to be inside it to operate. It is in most cases remotely controlled either by the pilot or by a software program through code. Drones are most commonly known under the names of Unmanned Aerial Systems (UAS), Unmanned Aerial Vehicles (UAV), Remotely Piloted Aircraft (RPA), and Quadcopters.¹⁰ The most common forms of drones are either found to be in the water, on land, or in the air. A popular sea drone on the market is known as the QYSEA FIFSH V6 Underwater ROV which is able to dive 160 feet underwater with a camera depth of 4K. In addition, Terra-firma drones are known as RC cars and are the first of drone's humankind has seen. Terra-firma drones are land drones and resemble miniature cars.¹¹

History and Evolution on the Use of Drones

DeFrancesco takes us through the historical account of how drones came to be and their uses throughout history. The first historical vehicle that was considered to be a drone was a balloon or, more specifically, a hot air balloon. Although scholars do not recognize this as the first drone since hot air balloons do not fit the strict definition of a drone, history still deems it as the very first form based on a looser definition. Within Ancient times, drones can be traced back to Greece, specifically to an inventor who built a mechanical bird that was steam-powered. Yet the Chinese were the first to develop hot air balloons for military objectives where they utilized

¹⁰ DeFrancesco, R., & DeFrancesco, S. (2022). *The Big Book of Drones* (1st ed.). Chapter 1: Introduction. Pg. 2.

¹¹ Ibid.

them for military signalling and for throwing bombs from the air.¹² In 181-280ad is where these unmanned balloons were being put to use for military signalling for the Chinese¹³. Commercial balloons and attempts at flying technology came to be seen in the 1700s with inventors such as Carl Fredrich Meerwein and Jean-Pierre Blanchard. Meerwein was seen to have developed an ornithopter, which was a mechanical bird that was powered by a human.¹⁴

Remote-controlled technology came to be in the 1800s with Nikola Tesla in 1898 forming a boat that was controlled by a remote and run by electricity. This invention had a significant impact as it was found to be used in different militaries and in wars. It led states and civilians to realize that harm could be extracted from miles away. For example, the Austrian military had used these unmanned balloons in Venice, Italy, with bombs held inside it in 1849.¹⁵

The world wars were big on using drones during the time of high tension and conflict between states. The United States and the United Kingdom took the lead in developing drones to use, specifically, radio-controlled aircraft in World War I.¹⁶ At the time of World War II, the US started using a lot of radio-controlled weapons, such as the B-17 bomber that was packed with explosives and was controlled by radio to lean in on the target for execution. Another form of drone used by the US was the F6K-5K Hellcat drone where a radio repeater was able to guide the bomb to its target.¹⁷

¹² DeFrancesco, R., & DeFrancesco, S. (2022). *The Big Book of Drones* (1st ed.). Chapter 2: The History of Drones Pg. 15

¹³ History of Ballooning." Kubicek Balloons UK.

¹⁴ DeFrancesco, R., & DeFrancesco, S. (2022). *The Big Book of Drones* (1st ed.). Chapter 2: The History of Drones Pg. 15

¹⁵ Ibid. Pg. 17.

¹⁶ Ibid. Pg. 18.

¹⁷ Ibid. Pg. 19-20.

For the purpose of drone history, Afxentis states the gravity of looking at armed violence and not just the technological aspect of drones. The author claims, “I argue that the formative years of air forces during the early twentieth century are crucial when thinking critically about drone warfare”.¹⁸ Afxentiou describes how World War I set forth the idea that in order to succeed militarily and gain power, aircraft technology must be used instead of the resources on land. Air power theorists found that air forces must act independently instead of being used purely for war purposes. All air theorists at the time found administrative autonomy to be a significant requirement for air force in order to become fully efficient. For air power to be proven of full potential, it needed to showcase its ability to win independently and not be embedded within the functionality of the Army alone.¹⁹

Drones Today

The drones we see today mimic what drones were set out to achieve historically. Yet, of course, with time, the technology and capacity of them has greatly exceeded earlier versions. They are faster, stronger, can carry more, and possess better navigation and battery life, in addition to being less susceptible to failure due to technological advancement in the globalized world.²⁰ Drones do much more than just achieve a strategic military objective; they can be used for surveillance and cybersecurity reasons.

¹⁸Afxentis Afxentiou. “A History of Drones: Moral(e) Bombing and State Terrorism.” *Critical Studies on Terrorism* 11, no. 2 (May 4, 2018): Pg. 307. doi:10.1080/17539153.2018.1456719.

¹⁹ Ibid. Pg. 307-308.

²⁰ DeFrancesco, R., & DeFrancesco, S. (2022). *The Big Book of Drones* (1st ed.). Chapter 2: The History of Drones Pg. 22.

The many different industries that drones are used in today include agriculture, energy, utilities, security, media, infrastructure, entertainment, transport, logistics, insurance, and telecom. The number of drones being made, bought, traded, and sold has grown exponentially, with the Federal Aviation Administration reporting a growth of 300% of registered Unmanned Aircraft Systems (UAS). UAS is one of the most popular forms of drone used today and is defined as an unmanned aircraft where the pilot must be capable to operate it within the national airspace system safely and that the pilot is not operating while on board the aircraft vehicle.²¹ It must be fully autonomous and would be considered a type of aircraft. UAS bring a form of danger to them by being susceptible to cyberattacks, which raises concerns over cybersecurity. The drones are found to be run through a software which can be accessed by any smartphone or laptop.²² This is of course a faulty system for the running of a UAS as there is a greater probability for hacking which would involve taking over its systems and data. Despite the protections that would be in place at the state and international level, there are still existing risks.

The biggest threats seen to drones, more specifically to UAS, are cyberattacks within the sphere of cyberspace and telecommunication infrastructures. The term cyberspace was coined by William Gibson in 1984 and his definition looks more into how cyberspace is a hallucination observed by authorized users around the world using mathematical concepts and graphical representation of data to achieve a universal complexity.²³ A universal definition of cyberspace that Pyzynski et al. provide us with is “the entirety of connections of human activity with the

²¹Mariusz Pyzynski and Tomasz Balcerzak. “Cybersecurity of the Unmanned Aircraft System (UAS).” *Journal of Intelligent & Robotic Systems* 102 (2). 2021. Pg. 34-35. <https://doi.org/10.1007/s10846-021-01399-x>.

²² Ibid. Pg. 34.

²³ Mariusz Pyzynski and Tomasz Balcerzak. “Cybersecurity of the Unmanned Aircraft System (UAS).” *Journal of Intelligent & Robotic Systems* 102 (2). 2021. Pg.35. <https://doi.org/10.1007/s10846-021-01399-x>.

participation of ICT (Information and Communication Technology)”.²⁴ It is essentially computer systems that is able to construct a network where central units and softwares are connected to produce data, methods, and transmission. Cyberspace helps run the different sectors of society and the state such as communication, economy, transport, energy, gas infrastructure, and healthcare. The state has become highly dependent on the use of cyberspace and IT not only to facilitate the functioning of the country but to defend itself against internal and external threats.²⁵

Cybersecurity exists as a mechanism to protect stored network information systems and user assets from anti-virus’s and threats. It holds a combination of governance protection and IT technical protection such as policies and encryption.²⁶ The biggest threat to the state would be either to the state’s economy or to the democratic system as those two maintain the functioning of the state. Many notable worldwide examples of concerns include the hacking of elections in democratic states such as the infamous 2016 U.S. election tampering which many Russian nationals were accused of.²⁷ Putin was also accused with exerting influence during the elections.²⁸ The CIA triad are the attacks on the security of information that would be of concern which is confidentiality, integrity, and availability. Confidentiality is concerned with the breaching of systems where integral intel and data gets exposed to unauthorized users. Integrity looks to the undermining of the systems where inconsistencies start to arise on the information

²⁴ Mariusz Pyzynski and Tomasz Balcerzak. “Cybersecurity of the Unmanned Aircraft System (UAS).” *Journal of Intelligent & Robotic Systems* 102 (2). 2021. Pg.35. <https://doi.org/10.1007/s10846-021-01399-x>.

²⁵ Ibid.

²⁶Michael Veale and Ian Brown. “Cybersecurity.” *Internet Policy Review* 9 (4). 2020. Pg. 2. <https://doi.org/10.14763/2020.4.1533>.

²⁷ “Russian Interference in 2016 U.S. Elections.” FBI, September 30, 2018.

²⁸ Cécile Fabre. “The Case for Foreign Electoral Subversion.” *Ethics & International Affairs* 32 (3): 2018. 283–92. <https://doi.org/10.1017/S0892679418000424>.

being processed. Availability is affected if the system becomes non-functional from the threat or virus.²⁹ At the heart of drone usage is the threat and fear of cyberattacks.

A technological trend seen in cybersecurity as noted by Best et al is the public use and advancement of UAS. There are two main ways UAS is advancing the world of cybersecurity, the first is that UAS have become a fundamental cybersecurity target due to the high level of information and data collection that UAS undertakes and holds. The second way UAS is advancing the world of cybersecurity is as a result of UAS having the potential to be in the possession of the wrong hands, and thus having possession of secure and critical data and information that is otherwise sacred.³⁰ It is leading to more institutions and governments being forced to put in stricter regulations in place to deal with the potential risk of information being passed. Many different departments within a state's security institution make use of technological IT infrastructures such a UAS.

Taking the Department of Homeland Security (DHS) in the US, for example, they have four departments that use UAS daily for their functional activities. These departments are the U.S. Coast Guard, Customs and Border Protection, the Federal Emergency Management, and Cybersecurity and Infrastructure Security Agency.³¹ An example of a cyberattack or threat within the DHS could be the department of Customs and Border Protection being at risk of losing intelligence, surveillance, and reconnaissance (ISR). The loss of the ISR can create blind

²⁹ Michael Veale and Ian Brown. "Cybersecurity." *Internet Policy Review* 9 (4). 2020. Pg.5.

³⁰ Katharina Ley Best, Jalal Awan, Nahom M. Beyene, Maynard A. Holliday, Raza Khan, Karen Lee, Jon Schmid, and Shane Tierney. *How to Analyze the Cyber Threat from Drones: Background, Analysis Frameworks, and Analysis Tools*. Santa Monica, Calif: RAND Corporation. 2020. Pg. ix.

³¹ *Ibid*. Pg. X.

spots leading to the inability to track smugglers or suspicious activities at the border and ports by the overtaking of scanning done at the borders.³²

There are of course certain mechanisms in place for creating an infrastructure to lead the protection and safety guards against cyberattacks on the IT infrastructure for state organizations. The STRIDE threat model taxonomy is one approach used by Best et al which allow for the organization and categorization of threats and later apply them to cyber targets. It helps avoid any future cyber threats so that there is a level of anticipation that enables the necessary mechanisms to manage the oncoming threats.³³

Artificial intelligence (AI) plays a significant role in the functionality of drones. Udith and Bhargava define artificial intelligence to be a “focus area of science and technology to make machine knowledgeable, which basically means generalized learning, reasoning, analyzing, and understanding of natural languages.”³⁴ Bots, automated machines, and robotic infrastructure are some examples of the output that AI produces, which further helps make certain products for daily use. A drone that is set out to fulfill a certain agenda would go through the technique of automation, which means that the task is completed without any human intervention through application bots.³⁵ For drones such as UAVs, intelligent bots get put to use, as they are capable of encoding messages within a limited time frame to detect threats and carry out an act. An

³² Katharina Ley Best, Jalal Awan, Nahom M. Beyene, Maynard A. Holliday, Raza Khan, Karen Lee, Jon Schmid, and Shane Tierney. *How to Analyze the Cyber Threat from Drones: Background, Analysis Frameworks, and Analysis Tools*. Santa Monica, Calif: RAND Corporation. 2020. Pg. Xi.

³³ Ibid. Pg. 5.

³⁴ Pratap Singh, Udit and Mishra, Astha Bhargava, Chapter 5: Artificial Intelligence in Robotics and Automation. *Artificial Intelligence: Fundamentals and Applications*. 2021. Pg. 56.

³⁵ Pratap Singh, Udit and Mishra, Astha Bhargava, Chapter 5: Artificial Intelligence in Robotics and Automation. *Artificial Intelligence: Fundamentals and Applications*. 2021. Pg. 57.

example of threats that drones are capable of recognizing are things such as vehicle borne improvised explosive devices (IEDs) or the more common one such as land mines.³⁶

Just as AI uses automated bots to provide the functioning of drones, these same bots can be used for companies and organizations as their intelligence security system to detect any form of security breach or threat. Cybersecurity becomes a critical issue as these bots can create a system to deter any attacks from occurring, yet also be the ones to do the attacking. Multiple bots can be launched to conduct a larger attack on a program through the exploitation of an unpatched system. This is also known as botnets.³⁷

Drones have had a ground-breaking historical impact on how the world views technology and its capabilities, by being used for commercial activities while also being a form of weapon used by many states. Drones are only getting smarter and faster as time goes on. AI functioned systems provide functionality and efficiency, yet the risks are nonetheless present. Laws and regulations are there to provide a form of limitation to the usage of drones and the ethics surrounding it, yet the question remains of whether laws accomplish exactly that.

³⁶ Pratap Singh, Udit and Mishra, Astha Bhargava, Chapter 5: Artificial Intelligence in Robotics and Automation. Artificial Intelligence: Fundamentals and Applications. 2021. Pg. 65.

³⁷ Ibid. Pg. 65.

Chapter 3: International Law and the Parameters Set for Drones and Cybersecurity

Within this chapter, the emphasis on international law will be confined to that associated with human rights, consent, self-defence, drones, and borders. There are certain areas of international law that address the issue of legality on the use of armed drones. International humanitarian law (IHL), international human rights law (IHRL), and jus ad bellum are of particular importance when looking into the issue of drone warfare. IHL and IHRL are directed towards the right to life for both the individual and the state whereas jus ad bellum sets the parameters and governs the use of force by one state on another state's territory.³⁸ Jus ad bellum is significant in that it governs how interstate armed drones shall be used and in what conditions, which shed light on the importance of sovereignty.

Heyns et al. note that a holistic approach to international law is needed when looking at drone strikes and their lawfulness. They state, "for a particular drone strike to be lawful under international law, it must satisfy the legal requirements under applicable international legal regimes."³⁹ There can be a situation where a drone strike meets the requirements and jurisdictions for all legal areas except for one which would thus make it unlawful. The reasoning behind applying a holistic approach according to scholars is based on Article 51 of the UN charter. Article 51 of the UN Charter permits a state to act in self-defence if responding to an armed attack on their territory, furthermore, this would make a state not responsible for complying with rules pertaining to IHL and IHRL which protect individual lives. The

³⁸ Christof Heyns, Dapo Akande, Lawrence Hill-Cawthorne, and Thompson Chengeta. "THE INTERNATIONAL LAW FRAMEWORK REGULATING THE USE OF ARMED DRONES." *The International and Comparative Law Quarterly* 65 (4). 2016. Pg. 794. <https://doi.org/10.1017/S0020589316000385>.

³⁹ *Ibid.* Pg. 795.

compliance under IHL and IHRL is conducted through the states that have signed the treaty not based on a reciprocal principle.⁴⁰

Drones in itself are not illegal. As Alberstadt states, there is no legal provision that prohibits them, even within Article 8 of the Rome Statute. This is due to the fact that drones are not found to cause harm or unnecessary suffering. Nonetheless, for drone usage to be considered lawful action, it must meet a certain military need or objective and proportionality.⁴¹ Drones are to fall under the conventional rule within international law that governs warfare and the use of force. There is no area of speciality that governs drones alone, it is rather an area of law that has established rules on warfare and the instruments that are allowed to be used. Within customary law for example, it is the implementation of drones instead of the actual drone themselves that is addressed in the law, due to indiscriminate weapons being banned, as Alberstadt describes. The three area of laws that govern conflict are international humanitarian law in 1946 Geneva Convention, the 1907 Hague Convention, and the 1977 Additional Protocols.⁴² In short, if the use of drones is in accordance with international law regulating use of force, it is allowed to be in use for the specific military objectives. Restrictions on the use of drones are done on a case-by-case basis. For example, if the use of drones is not being used for surveillance but rather targeted killings, the legality of it would become an issue. This is because of International Humanitarian Law which is concerned with the protection of human lives and collateral damage. A targeted

⁴⁰ Christof Heyns, Dapo Akande, Lawrence Hill-Cawthorne, and Thompson Chengeta. "THE INTERNATIONAL LAW FRAMEWORK REGULATING THE USE OF ARMED DRONES." *The International and Comparative Law Quarterly* 65 (4). 2016. Pg. 796. <https://doi.org/10.1017/S0020589316000385>.

⁴¹ Alberstadt, R. (2014) Drones under International Law. *Open Journal of Political Science*, 4, 221-232. doi: 10.4236/ojps.2014.44023.

⁴² *Ibid.*

killing might cause damage to civilians that are simply bystanders which would put IHL into effect to prohibit the use of drones.⁴³

UAS are considered as an aircraft under the international regime of air law, as they are fully autonomous. Any type of unmanned aircraft whether autonomous or not is under the provision of the Convention of International Civil Aviation (the Chicago Convention). Article 8 of the Chicago Convention explicitly states that no aircraft that does not need a pilot is allowed to fly without a pilot over a contacting state's territory without having been granted permission.⁴⁴

Self-defence is a crucial point pertaining to international law, as is the idea of consent.

Heyns et al state:

“Article 2(4) of the UN Charter and customary international law prohibit the threat or use of inter-State force. A state may, however, consent to the use of force on its territory by another State, with the result of Article 2(4) will not be engaged. Where no consent is given, the UN Charter gives two exceptions to the Article 2(4) prohibition: where action is taken lawfully in self-defence under Article 51 and where the Security Council authorize enforcement action under Chapter VII of the UN Charter.” (Heyns et 2016, 797).⁴⁵

⁴³ Alberstadt, R. (2014) Drones under International Law. *Open Journal of Political Science*, 4, 221-232. doi: 10.4236/ojps.2014.44023.

⁴⁴ Mariusz Pyzynski and Tomasz Balcerzak. “Cybersecurity of the Unmanned Aircraft System (UAS).” *Journal of Intelligent & Robotic Systems* 102 (2). 2021. Pg. 35. <https://doi.org/10.1007/s10846-021-01399-x>.

⁴⁵ Christof Heyns, Dapo Akande, Lawrence Hill-Cawthorne, and Thompson Chengeta. “THE INTERNATIONAL LAW FRAMEWORK REGULATING THE USE OF ARMED DRONES.” *The International and Comparative Law Quarterly* 65 (4). 2016. Pg. 797. <https://doi.org/10.1017/S0020589316000385>.

Consent

The idea of consent highlights one of the ways international law brings forth questionable dilemmas and ambiguity. The question becomes, who can give consent and what constitutes consent? In international law, it is typically assumed that those with the highest authority within the governing body of that state is capable of giving consent in legitimate fashion. This reasoning is because of the assumption that those holding the highest authority usually represent the state in international affairs. The Head of State, Head of Government and the Foreign Minister are examples of those who hold power to act on the behalf of the state in international matters.⁴⁶ Consent is seen legitimate in international law for long as it is given ahead of time and there is mutual proof of that consent being given by the two parties.⁴⁷

In the case where consent is not granted, one of the two exceptions is granted within Article 2(4). The one that is most used by states is the exception of self-defence. It is Article 51 that sets the parameters and strict guidelines as to when a state can conduct self-defence to justify the force they are to employ on the other state. There is certain criteria to be met as to what is seen as an armed attack according to the International Court of Justice (ICJ). The institution states that for an armed act to lead a state to act in self-defence and it being justified, the attack must have reached a certain threshold of gravity. Furthermore, it must meet necessity and proportionality within international law, which would mean that the state must protect against the

⁴⁶ Christof Heyns, Dapo Akande, Lawrence Hill-Cawthorne, and Thompson Chengeta. "THE INTERNATIONAL LAW FRAMEWORK REGULATING THE USE OF ARMED DRONES." *The International and Comparative Law Quarterly* 65 (4). 2016. Pg. 799. <https://doi.org/10.1017/S0020589316000385>.

⁴⁷ *Ibid.*

attack.⁴⁸ If a threshold of an armed conflict has been crossed, *jus in bello* is put into effect. *Jus in bello* is primarily concerned with the legal regulations of what actors are permitted to do during an armed attack and the regulations that must be followed by states. If one is to enter an armed attack or wishes to do so, that is where *jus ad bellum* gets put into use. *Jus ad bellum* establishes who can enter and under what conditions.⁴⁹ The principle embedded within international law follows the idea that there are specific laws that override general law. For example, Common Article 2 of the 1949 Geneva Convention permits states to utilize any measures needed to meet the aim of a military objective, however, this is within limitations, as it cannot cross the prohibitions that are clearly stated.⁵⁰

From what can be seen, international law does not specifically prohibit drones but rather sets the parameter of when they are lawful. This leaves obvious room for discrepancies and perplexity when looking at the use of drones. The next chapter will explore this dilemma in greater detail with the ambiguity of it all.

⁴⁸ Christof Heyns, Dapo Akande, Lawrence Hill-Cawthorne, and Thompson Chengeta. "THE INTERNATIONAL LAW FRAMEWORK REGULATING THE USE OF ARMED DRONES." *The International and Comparative Law Quarterly* 65 (4). 2016. Pg.800. <https://doi.org/10.1017/S0020589316000385>.

⁴⁹ Elodie O. Currier. "After Action: The U.S. Drone Program's Expansion of International Law Justification for Use of Force Against Imminent Threats." *Vanderbilt Law Review* 76 (1): 2023. 259–321.

⁵⁰ *Ibid.*

Chapter 4: The Ambiguity Surrounding International Law and Regulations on Drones

After examining the trajectory of drones within the market for commercial use and for domestic and international use, law has made progress in adapting to the technological advancements society has seen. Yet when looking at drone warfare and the role they play in the international arena, the lines get significantly blurred as there exist advantages for powerful states. As Afxentious describes, within the literature of drones, the focus has been on the linkage of drone warfare with that of imperial forms of domination. Many authors have taken note of the drone operations that occur against the background of the legal, political, and cultural legacy of imperial rule within certain geographical regions.⁵¹ This is where regions that have limited sets of protections in place are able to be manipulated from the powerful states that were found to have also partaken in imperialism. Even as regulations exist both domestically and internationally on the use of drones and AI, there still exists the lack of clarity within the regulations.

The Debate on Drone Use and Regulations

Within the literature, there has been a developing consensus amongst authors and scholars that there still needs to be significant work done towards addressing the limited scope of the laws and regulations on drones. Cortright and Fairhurst look at the latest debate and policy development on drone warfare use amongst authors in the field by providing a holistic analysis on the link between the themes that are discussed by the scholars. Much of the conversation

⁵¹ Afxentis Afxentiou. "A History of Drones: Moral(e) Bombing and State Terrorism." *Critical Studies on Terrorism* 11, no. 2 (May 4, 2018): Pg. 307. doi:10.1080/17539153.2018.1456719.

surrounding drone use and its capabilities have been on the legality and ethical concerns following it.

The continuous growth of drone warfare had made ethicists, international lawyers, and human rights analysts take a look into the repercussions and effect of drone use. Cortright and Fairhurst claim that “court challenges, journalistic accounts, and criticisms from domestic and international policy reports have elevated public concerns and generated pressure on the Obama administration to reduce unintended civilian casualties and pay greater attention to ethical and legal principles.”⁵² Due to the gap in regulations, there was an attempt made by the Obama administration in 2012 to conduct an analysis on the U.S. drone policy guidelines. This led to the realization of an ad hoc system with no specification on when killing is permitted and who can be killed. Many authors agree that the practices and regulations on drone warfare are for the betterment of the world and the international political arena.⁵³

It is critical to understand that the ethical argument for drones is dependent on its ability to eschew civilian harm and collateral casualties. Avery Plaw has shown that drone strikes do a finer job of being able to differentiate between combatants and civilians, than military personnel on the field, which leaves a better mark on ethical military practices. The operators are better informed on the targets, due to accumulation of high-quality data based on the technological capabilities of the drones. By comparing historical armed conflicts and the drone strikes conducted in Pakistan, it was found that the civilian casualty rates were far less with the drone

⁵² David Cortright, Rachel Fairhurst, and Kristen Wall. Chapter one: Assessing the Debate on Drone Warfare. *Drones and the Future of Armed Conflict: Ethical, Legal, and Strategic Implications*. 2015. Pg. 3. <https://doi.org/10.7208/9780226258195>.

⁵³ Ibid. Pg. 5-6.

strikes than traditional armed conflicts. Yet this does not mean that there is a total avoidance of civilian harm, as the drones are not capable of making the ethical decision of whether attacking the target is morally legitimate, which is primarily why there is still hesitation from scholars.⁵⁴ Drones should be looked at more as providing a technical function rather than a moral one. Kreps and Kaag hold hesitation like many other authors on a drone's ability to merge the concepts of distinction and proportionality when the focus should be on keeping them separate. Essentially, if the distinction between combatants and civilians is accurate then governments are able to spare those civilians from not being a target. They find that technology is not capable of creating the will for states and actors to abide to IHL and be committed enough to differentiate civilians from combatants.⁵⁵

The Weakness in Regulations and Laws

When it comes to international humanitarian law, Sonnenberg describes it as being referred to as the “law of armed conflict” which manifests IHL to be an observant and a regulatory mechanism for interstate conflicts. It explicitly limits the amount of violence being used in warfare. There are found to be limitations however, in terms of what IHL regulates. Sonnenberg mentions how IHL for example, does not prohibit the use of violence or protect those that would be affected by an armed conflict based on the purpose of the conflict.⁵⁶ A report co-authored by Sonnenberg on the impact of the U.S. UAVs program in North Waziristan of

⁵⁴ David Cortright, Rachel Fairhurst, and Kristen Wall. Chapter one: Assessing the Debate on Drone Warfare. *Drones and the Future of Armed Conflict: Ethical, Legal, and Strategic Implications*. 2015. Pg. 8. <https://doi.org/10.7208/9780226258195>.

⁵⁵ Ibid.

⁵⁶Stephan Sonnenberg. Chapter 5. Why Drones Are Different. Kerstin and Ramos, Jennifer M. *Preventive Force: Drones, Targeted Killing, and the Transformation of Contemporary Warfare*. 2016. Pg. 116. <https://doi-org.proxy1.lib.uwo.ca/10.18574/nyu/9781479857531.001.0001>

Pakistan had revealed the effects of targeted killings and practice with the IHL. The findings had showcased the violation of the principle of proportionality with the strikes hitting many mosques, schools, and public domains within the remote village. The military strike should not have caused civilian damage disproportionate to the strategic target that was intended, but yet it did, thus leading to violation of the principle embedded in IHL.⁵⁷ Sonnenberg writes, “the report observed that the U.S. “signature strike” policy, whereby an individual would be targeted based on his or her pattern of behaviour, was a serious threat to the principle of distinction, or the idea that militaries must make efforts to distinguish between lawful targets and civilians”.⁵⁸ Many U.S. policymakers had found themselves broadening the list of targets for extrajudicial killing by the drone program that the U.S. had introduced. North Waziristan has seen countless drone strikes and unethical military operations from the U.S, which has significantly destabilized the region and the rest of Pakistan. The region remains inaccessible, leaving the innocent civilian injured or family members of those that were killed with a high amount of psychological, physiologic, and socioeconomic harm.

Yet IHL actors such as scholars and human rights activists have looked to the benefits of drones and their ability to advance the purpose of IHL. It seems to be that drones hold a higher capability of avoiding civilian harm due to their capacity to distinguish combatants from non-combatants in the case of performing a strike. This is similar to what Avery Plaw has described on the benefits of utilizing drones. Yet Sonnenberg disagrees with this notion and claims that human rights scholars and IHL advocates should be wary of holding such a position. She uses

⁵⁷ Sonnenberg, Stephan. Chapter 5. Why Drones Are Different. Fisk, Kerstin and Ramos, Jennifer M. Preventive Force: Drones, Targeted Killing, and the Transformation of Contemporary Warfare. 2016. Pg. 121. <https://doi-org.proxy1.lib.uwo.ca/10.18574/nyu/9781479857531.001.0001>

⁵⁸ Ibid.

the U.S. drone program to point out the flaws of even the most technologically advanced drones to shed light on the weakness in using them despite the international regulatory institutions' appraisal of them. Within the drone operation conducted in Pakistan by the U.S., the intelligence that was gathered was found to be rather insufficient, corrupt, and linked to cultural and political biases. Many different individuals reported as "high-value" were killed instead of the actual intended target which showcases the lack of protocol and room for error within drones.⁵⁹ One example of unethical violations being conducted which speaks to the lack of protocol that exists was in 2014, when unreliable metadata was being used within a specialized unit in the NSA to deliver potential targets for strikes to the CIA.⁶⁰ Many international lawyers have stated how the legality of an armed attack on another state makes no difference to the preciseness and accuracy of a drone strike.⁶¹

As it has been noted, due to the principle of jus ad bellum, if one is to consider drones the same as other conventional weapons of warfare, then the legality surrounding drone strikes of one country on the other rests on proving the reasons for conducting the drone strikes. Any act of aggression is illegal unless one of these three exceptions apply under international law. The first being (1) that the country being attacked has consented to it, (2) the state is acting in self-defence to the use of armed force, (3) the attack has followed the provisions set out in U.N Chapter 7 which authorizes the use of force.⁶² The problem set out with these exceptions is that any drone strike can make a claim on the three cases, making it 'justified'. If every nation is witnessing

⁵⁹ Sonnenberg, Stephan. Chapter 5. Why Drones Are Different. Fisk, Kerstin and Ramos, Jennifer M. Preventive Force: Drones, Targeted Killing, and the Transformation of Contemporary Warfare. 2016. Pg. 121. <https://doi-org.proxy1.lib.uwo.ca/10.18574/nyu/9781479857531.001.0001>

⁶⁰ Ibid. Pg. 125.

⁶¹ Ibid. Pg. 125-126.

⁶² Ibid. Pg. 126.

other states conducting drone strikes in the name of self-protection and state interest, then that will leave them to do the same. This has the risk of increasing the likelihood of all states justifying targeted killings in the name of national security, which can lead to international instability.

The weakness in international law comes from a state's ability to identify its vagueness and use it for its own advantage. Many leaders often ignore parts of international law if it does not meet the objective they are trying to achieve. Eviatar mentions how the U.S. observes the role of international law vaguely and chooses to disregard any parts of it when it conflicts with its own policy or objectives. This is apparent when the U.S. makes the case of going outside geographical borders for the purpose of the mission by claiming its justification for doing so. This is so they are not on the receiving end of skepticism by international lawyers.⁶³ Many states, most notably the United States, have continued to push the limits and boundaries of international law for their own purpose which demonstrates the vulnerability and weakness behind international law. The U.S. made the case of going outside the geographical limits during the "war on terror" operation against terrorist organizations such as the Taliban and al-Qaeda.⁶⁴ The manipulation of the inexplicit laws and regulations have been achieved countless times by the United States and the catastrophic outcome in countries within the Middle East and in Asia which are a testament to this.

⁶³ Daphne Eviatar. Chapter 7. Drones and the Law: Why We Do Not Need a New Legal Framework for Targeted Killing. Fisk, Kerstin and Ramos, Jennifer M. Preventive Force: Drones, Targeted Killing, and the Transformation of Contemporary Warfare. 2016. Pg. 171. <https://doi-org.proxy1.lib.uwo.ca/10.18574/nyu/9781479857531.001.0001>

⁶⁴ Ibid.

The tricky part comes from the laws surrounding a non-international armed conflict (NIAC) which is a conflict between a state and a non-state actor. As Eviatar states, “the law outside of an armed conflict is completely different, however: everyone is a civilian, and therefore not targetable except in extremely limited circumstances”.⁶⁵ Within these circumstances, many states aim to try and find loopholes for military operations because of the limitations presented in NIAC on permitting the use of lethal force. For example, the U.S. will often refer to individuals with the potential of them being innocent civilians as ‘combatants’ or ‘militants’ for targeted killing during terrorist operations for justification within the limitation of NIAC.⁶⁶ Being able to discern when a lethal strike is permissible is one of the difficulties that many states deal with.

Due to the different legal frameworks on the use of force, a state has to seek out and claim whether they are acting within or outside of an armed conflict in order for the correct international law to apply. However, to continue to be vague in order to escape accountability, many states will not make that distinction clear as to whether they are acting within or outside an armed conflict. The Obama administration was guilty of doing this on many different occasions, such as the time of when it claimed to be in an armed conflict against the Taliban and al-Qaeda and it’s “associated forces” but would fail to define those exact “associated forces”. There were many different armed groups that were found to be affiliated with al-Qaeda but were not part of

⁶⁵ Daphne Eviatar. Chapter 7. Drones and the Law: Why We Do Not Need a New Legal Framework for Targeted Killing. Fisk, Kerstin and Ramos, Jennifer M. Preventive Force: Drones, Targeted Killing, and the Transformation of Contemporary Warfare. 2016. Pg. 172. <https://doi-org.proxy1.lib.uwo.ca/10.18574/nyu/9781479857531.001.0001>

⁶⁶ Ibid. Pg. 172-273.

the war with the United States, and instead were involved in their own civil wars and domestic disputes. However, the U.S. had grouped them in with those “associated forces”.⁶⁷

The United States has not followed the original intent of the International Humanitarian Law treaty the way other states around the world have. The way the U.S. is able to do so is through the ambiguous wording found in the International Covenant Civil and Political Right (ICCPR) treaty which is created by the Universal Declaration of Human Rights which speaks to the concerns regarding the geographical scope of state’s obligation to protect these rights. Article 2 of the ICCPR makes the claim that within each state party to the covenant, respect must be extended to all individuals within its territory and subject to its jurisdiction.⁶⁸ Eviatar mentions the obscurity within the language used as it is not clear whether the state party commits both respect and ensure rights to those within its territory and as well as subject to its jurisdiction or give respect to individuals everywhere and only ‘ensures rights’ to those subject to its territory and jurisdiction.⁶⁹ The vagueness in the language leaves states to interpret the obligations the way they see fit, which leaves them in a position not to apply the laws accurately. As it follows, the U.S. very conveniently claimed that the treaty applies only within its borders and to those that are subject to its jurisdiction. The U.S. alongside Israel are the only two states that have conducted a high level of targeted killings outside their borders.⁷⁰

⁶⁷ Daphne Eviatar. Chapter 7. Drones and the Law: Why We Do Not Need a New Legal Framework for Targeted Killing. Fisk, Kerstin and Ramos, Jennifer M. Preventive Force: Drones, Targeted Killing, and the Transformation of Contemporary Warfare. 2016. Pg. 171. <https://doi-org.proxy1.lib.uwo.ca/10.18574/nyu/9781479857531.001.0001174>.

⁶⁸ Ibid. Pg. 180.

⁶⁹ Ibid. Pg. 181.

⁷⁰ Ibid. Pg. 181-183.

When it comes to the manipulation and unlawful use of data, many authors have pointed to the lack of domestic institutional frameworks to protect vital data from security breaches. Vacek makes note of the legal negligence the world is seeing within cybersecurity concerns for UAS operations.⁷¹ It is found that existing federal laws have not done a sufficient job of addressing the liability for cybersecurity negligence and data breaches that have a strong probability of occurring. Vacek makes the claim that “Federal laws regulating certain aspects of cybersecurity and the data chain do, of course, exist. The problem is that they set up only coarse, piecemeal regulation of remotely sensed data.”⁷² There seems to be a gap in the regulation of data chains and the collection and use of them that authors have been pointing out. Within the United States for example, the Federal Aviation Administration (FAA) has no existing statutory or adjudicated authority to regulate the collection and usage of data chains within UAS operations. The FAA simply holds no authority to regulate such matters, which has contributed to the absence of a regulatory structure for data chains of remote data by drones.⁷³ The lack of an institutional framework has led to difficulty in assessing the implication it can have on ethical standards on use of data for weapon use.

The additional problem that comes out of the vagueness behind regulatory frameworks in the face of technology is from the technological capabilities itself. As technology is capable of doing far beyond what our minds can, it can lead to tricky situations. Due to the nature of technology, many can commit cyber-attacks and other crimes without forming a trail by being anonymous. Identifying the perpetrator becomes one issue, but also characterizing a cyber

⁷¹ Joseph J. Vacek. “The Next Frontier in Drone Law: Liability for Cybersecurity Negligence and Data Breaches for UAS Operators.” *Campbell Law Review* 39 (1): 2017. Pg. 135.

⁷² *Ibid.* Pg. 147.

⁷³ *Ibid.*

incident accurately and ascribing it to the proper category in an attempt to apply the correct legal rules becomes another, as Fidler states.⁷⁴ The law has not been advanced enough to make changes to its level of efficiency. Law is appealing due its predictable nature and stability which makes changing it harder, especially when state institutions are weak and the state laws coexists with other norms.⁷⁵ The difficulty of identifying the right application of laws towards cyber incidents is shown through the example of the Chinese infiltration of US government computers being labelled as a form of attack or an act of terrorism when it is really an act of espionage. Due to the limited scope and lack of applicability of international rules on espionage, this leaves the U.S. with restricted options on how to correctly address the cyberespionage since they do not see it as an act of war or terrorism.⁷⁶

Much of what has been established here is that the weakness of international law surrounding drone warfare and cybersecurity is due to the language that was used to formulate the laws and clauses within treaties. Thus, allowing states the advantage to manipulate it for an interpretation that fits their agenda. The weakness and ambiguity in the language surrounding international laws and treaties mixed with the recently developed technological advancements has left many bewildered. It has become difficult for lawmakers, human right activists, and scholars within the field to find ways to address this issue. It becomes difficult when the subject matter one is dealing with continues to evolve day by day making it difficult for old laws to keep up. Technological warfare will continue to change and advance making it an easier arena for

⁷⁴ David P Fidler. Chapter 10: Cyberattacks and international human rights law. Casey-Maslen, Stuart. Weapons Under International Human Rights Law. 2014. Pg. 306.

⁷⁵ Nico Krisch. The Dynamics of International Law Redux, Current Legal Problems, Volume 74, Issue 1, 2021.

⁷⁶ David P Fidler. Chapter 10: Cyberattacks and international human rights law. Casey-Maslen, Stuart. 2014. Weapons Under International Human Rights Law Pg. 306.

states to take advantage of. We will now be turning to a comparative case study analysis that looks to the US drone operations in Pakistan and Yemen to demonstrate the ways U.S. manages to conduct itself to find loopholes in order to manipulate international laws. The chapter will be able to illustrate what was discussed in this chapter through a tangible case.

Chapter 5: A Comparative Case Study involving the U.S. Drone Operations in Pakistan and Yemen

The reason for choosing Pakistan and Yemen for the purpose of examination and cross-case comparison is not only due to the fact that they both hold the highest level of vulnerability to drone strikes by the U.S. but, furthermore, their geographical locations can offer insight into the analysis of drone operations and the weakness in laws. Given that Pakistan is a country in South Asia and Yemen is a state in the Middle East, this case selection can showcase how both regions have been involved in the cross fires against the U.S., and can enable this examination to seek out the similarities and differences in the operations. As it would be too broad in nature to highlight every single angle where the U.S has taken advantage of the misleading and ambiguous context of international law, the focus of this comparative case study will be to demonstrate the applicability and confusing aspect of consent and self-defence within international law.

Background on the U.S. Drone Program into Pakistan and Yemen

The region that saw the largest amount of drones within Pakistan is what is known as the Federally Administered Tribal Areas (FATA) or also known as ‘Pakistan lawless frontier,’ which has a predominantly Pashtun population. FATA found itself in the middle of the U.S. War on Terror which was an occurrence coming from the U.S. invasion of Afghanistan in 2001. During that time, members of al-Qaeda and Taliban within Afghanistan had crossed the border into Pakistan FATA in hopes to seek refuge. As Cachelin claims “the autonomous nature of the region aided the Taliban and al-Qaeda in carving out a “state-within-a-state”, establishing a

sphere of influence outside of Pakistan's central government".⁷⁷ The period from 2002 to 2004 was when drones were used simply for surveillance purposes of the region and its activities; however, by 2004 the U.S. had launched its first drone strike in Pakistan which took out Nek Muhammad, the official Taliban commander and connections of support to al-Qaeda. Since FATA is outside of the government's jurisdiction, this has been heavily exploited by the U.S., due to the lack of constitutional protection.⁷⁸ Pakistan became the state that was high priority to the U.S. in their counter-terrorism operation, and left the state unstable.

The first ever Obama administrative drone strike in Yemen commenced on May 5th, 2011 yet, prior to that, during George W. Bush administration, the first ever attack on Yemen soil occurred in 2002 that killed six individuals in a private vehicle. The drone was initially being used for aerial surveillance and intelligence gathering during the Balkan Wars of 1990s, yet they quickly turned it into weaponry for use in 2001.⁷⁹ The reasoning for the targeted killing in the 2002 drone attack was based on the suspicion that one of the individuals in the vehicle was suspected to be an al-Qaeda militant who was linked to the October 2000 USS Cole bombing in the Port of Aden. This event is what inspired public condemnation of the drone operations in Yemen by both the public and the Yemeni Brigadier General as it led to more instability in the state. It followed that the state of Yemen banned any drone activities on its borders, until the one in 2011.⁸⁰

⁷⁷ Shala Cachelin. "The U.S. Drone Programme, Imperial Air Power and Pakistan's Federally Administered Tribal Areas." *Critical Studies on Terrorism* 15, no. 2): 2013. Pg. 445. doi:10.1080/17539153.2021.2013025.

⁷⁸ Ibid.

⁷⁹ Stephen Ceccoli. "'The Language We Use Matters': Streams, Narratives, and the Obama Administration Drone Strike Program in Yemen." *Presidential Studies Quarterly* 49, no. 2019. Pg. 511. doi:10.1111/psq.12526.

⁸⁰ Ibid.

The Problem with Consent

To begin, the concept of consent must be explored as it was established earlier that it is one of the fundamental exceptions given in the case of a state employing a drone strike on another state. Consent is a precarious matter to navigate as many scholars have pointed out due to the conceptual nature of it. In terms of technicality within international law, one would see how the U.S. was justified in employing drone strikes due to the lawfulness of consent, yet it is not always that simple. Byrne speaks to how drone strikes conducted by the U.S. towards Pakistan and Yemen are in accordance with international law due to the principle of ‘intervention by invitation’ and looks to Article 20 of the International Law Commission Draft Articles of State Responsibility to sketch out its applicability in the case of the U.S. Government official consent to the drone strikes by external states in order for it to be carried out against the NSAs that reside in the consenting host country. Consent to intervention is a prominent idea behind international law. Byrne makes the claim that the overarching literature on drones has overlooked the ‘intervention by invitation’ justification.⁸¹ The idea of where consent comes from and who gets to grant it will be looked at later on.

Byrne sets out the importance of invoking a doctrinal methodology by adopting an epistemological understanding of international law which demonstrates it as being subject to differing and competing interpretations by states, non-state actors, and institutions, which influences the way it will operate practically. Byrne goes on to state “by adopting this epistemological position, it is acknowledged that international law cannot be conceived of as a

⁸¹ Max Byrne. “Consent and the Use of Force: An Examination of ‘Intervention by Invitation’ as a Basis for US Drone Strikes in Pakistan, Somalia and Yemen.” *Journal on the Use of Force and International Law* 3 (1): 2016. Pg. 97. <https://doi.org/10.1080/20531702.2015.1135658>.

static and monolithic structure in which, for instance, the use of drones in a specific situation can be said with absolute certainty to be legal.”⁸² International law simply cannot function within one setting and have its applicability be received a singular way. This understanding is what is crucial in understanding consent for Byrne. Smith cites Heyns worries relating to the lack of consensus amongst states on the rules of applying international law.⁸³ An example of competing interpretation to observe here is when looking at Article 51 of the UN Charter which speaks to self-defence and permits the state to act if being attacked until the UN Security Council intervenes. Critics of the U.S. have stated that this interpretation means what it says, and that self-defence can only occur when enough force has been applied by the attacking state. U.S. supporters on the other hand state that self-defence is lawful when the windows of opportunities to defend is closing.⁸⁴ This line of reasoning by U.S. supporters matches Guzman’s theory on rationalization and self-interest being the reason why states comply within international law. The U.S. have rationalized jumping to the opportunity to drone strike based on intel that the targeted individual is available to kill, even when legally, it has not met the criteria for self-defence. For the U.S., meeting the criteria for self-defence is not important if it means they lose the opportunity to take out a targeted individual that poses threat to their state.

The doctrine of intervention by invitation is not found within international law but rather the elements of consent (*lex generalis*) are found within Article 20 of the Draft Articles on State Responsibility (DASR). The underlying essence behind the proposition of consent within Article

⁸² Max Byrne. “Consent and the Use of Force: An Examination of ‘Intervention by Invitation’ as a Basis for US Drone Strikes in Pakistan, Somalia and Yemen.” *Journal on the Use of Force and International Law* 3 (1): 2016. Pg. 98. <https://doi.org/10.1080/20531702.2015.1135658>.

⁸³ Adam Smith. “Drones as Techno-Legal Assemblages.” *Law, Technology and Humans* 4 (2): 2022. Pg. 153. <https://doi.org/10.5204/lthj.2333>.

⁸⁴ *Ibid.* Pg. 154.

2(7) of the UN Charter is that it sets the international arena to be respectful of the autonomy of states and have a sovereign equality be established for all states.⁸⁵ The reasoning behind a state giving another state the permission to employ an attack within its borders is due to the practice of acknowledging state autonomy, but furthermore, the state is able to govern all activities that is occurring within its borders.⁸⁶ What this does is that consent for another state participating in the use of force as a mode of carrying out sovereignty allows for the removal of a specific use of force from jus ad bellum framework of the UNC. This is because the use of force is an exercise of state's agency and political independence.⁸⁷

The U.S. drone operations have been administered lawfully on the idea that it is practicing the rule of consent and the jus ad bellum doctrine of self-defence as Byrne notes.⁸⁸ It is written clearly within the International Law Commission (ILC) that consent must be given freely and in an intelligible manner that is expressed by the state instead of assuming that the state would have given consent in a certain context. The International Criminal Justice very firmly makes clear that the consent must be voluntary and that it can be withdrawn at any moment without any formal procedure.⁸⁹

The element that makes it questionable whether the U.S. acted in good faith and was within the realm of being lawful with the drone strikes is if the states that were giving consent

⁸⁵Max Byrne. "Consent and the Use of Force: An Examination of 'Intervention by Invitation' as a Basis for US Drone Strikes in Pakistan, Somalia and Yemen." *Journal on the Use of Force and International Law* 3 (1): 2016. Pg. 98. <https://doi.org/10.1080/20531702.2015.1135658>.

⁸⁶ Ibid. Pg. 99.

⁸⁷ Ibid.

⁸⁸ Ibid. Pg. 102.

⁸⁹ Ibid. Pg. 104.

were ‘legitimate governments’. Within Article 20 DASR in the ILC, the validity behind the consent rides on the legitimacy of the government that is granting it. As Byrne states, the legitimacy of the government is what allows for the distinction between a state and a government as the state cannot give it out, although the government can.⁹⁰ Robinson makes clear of the distinction between state and a government with a state being a judicial entity of the international system and a government are the legally coercive organization for the state that are making the decisions.⁹¹ A representative from the state is only capable of giving consent which would mean it would be the government in that scenario granting it. The lack of clarity comes from the framework regarding the issue of whether a government exerts de facto or de jure control over the host state as international law does not make clear what is determinative of the legitimacy.⁹²

Pakistan

Pakistan’s legal position when observing the role of drones is still uncertain. When looking into Pakistan, the requisite official is relevant when it comes to drone use within the state because of the differing political offices within the government. Since Pakistan has the President as the head of state and Prime Minister who is elected by the National Assembly, the confusion comes from who grants the consent in the scenario of an armed conflict. Thus, it is found that the President is merely non-essential, and it is rather the Prime Minister as the de jure principal official that is able to exercise consent for third party states to use force. This is because of

⁹⁰ Max Byrne. “Consent and the Use of Force: An Examination of ‘Intervention by Invitation’ as a Basis for US Drone Strikes in Pakistan, Somalia and Yemen.” *Journal on the Use of Force and International Law* 3 (1): 2016. Pg. 108. <https://doi.org/10.1080/20531702.2015.1135658>.

⁹¹ Edward Heath Robinson. “The Distinction Between State and Government.” *Geography Compass* 7 (8): 2013. Pg. 556. <https://doi.org/10.1111/gec3.12065>.

⁹²Max Byrne. “Consent and the Use of Force: An Examination of ‘Intervention by Invitation’ as a Basis for US Drone Strikes in Pakistan, Somalia and Yemen.” *Journal on the Use of Force and International Law* 3 (1): 2016. Pg. 108. <https://doi.org/10.1080/20531702.2015.1135658>.

Pakistan's constitution, according to which the President need only be informed by the Prime Minister on matters related to internal and foreign policy. An additional element within the political institutional structure is the Chief of Army Staff who is appointed by the President on the advice of the Prime Minister who can also grant consent and act on behalf of the state.⁹³

Pakistan saw itself holding different positions in terms of the allowance of U.S. drone operations within its territory. It allowed for confusion as to what was permitted and what was not, in addition to the uncertain language of international law and the implementation of consent. The weakness of following international regulations surrounding consent is showcased with the case of Pakistan and the U.S. In 2004, during the ongoing U.S. war on terror, the former President of Pakistan, Pervez Musharraf, had consented to the U.S. drone strikes, but this consent was later withdrawn. Pakistan had never approved of an extensive use of combat drones. In Parliament, Pakistan passed a resolution that stated that U.S. drone strikes had violated state sovereignty and requested for the immediate halt of these strikes.⁹⁴ The U.S. did not oblige, and instead continued its military operations. As it was mentioned, under international law, if a state at any point withdraws consent, it must be obliged by the third-party state conducting its military operation. The U.S. did not follow international law, instead breaking protocol as it continued with the drone strikes. Then, in 2009, Pakistan President Zardari had mentioned to the CIA Chief to go on with the drone strikes against the al-Qaeda leaders, only for Pakistan to later appeal to the Human Rights Council for the termination of them. The Pakistani Ambassador at the time

⁹³ Max Byrne. "Consent and the Use of Force: An Examination of 'Intervention by Invitation' as a Basis for US Drone Strikes in Pakistan, Somalia and Yemen." *Journal on the Use of Force and International Law* 3 (1): 2016. Pg. 117-118. <https://doi.org/10.1080/20531702.2015.1135658>.

⁹⁴ Ullah, Imdad. 2021. Chapter 5: Pre-emption and the US drone attacks in Pakistan. Pg. 103. <https://doi.org/10.4324/9781003145486>.

along with UN Special Rapporteur on Human Rights and Counter-Terrorism took the appeal on the grounds that the drones violated the principle of fundamental rights and humanitarian law.⁹⁵

The idea of multiple institutions and actors within the state being capable of consenting becomes problematic that international law has not addressed. A situation can arise where the Prime Minister might have opposing views to another body of government which also possesses the authority to act on behalf of the state. This occurred in 2008 in Pakistan when former Prime Minister Yousuf Raza Gilani had publicly condemned drone strikes yet, opposingly, former Chief of Army Staff General Ashfaq Kayani had called for a higher presence of U.S. drone operations within Pakistan.⁹⁶ The leadership in Pakistan was troubled by the U.S. dominance into the country and assumed that it would be a superior outcome to allow for U.S. operations than interject as Pakistan prioritized its own survival.⁹⁷ It is still unclear why the decision making in Pakistan as to when saying yes or no is so incoherent. Ahmad points to the mixed responses to drone strikes in Pakistan from officials. He alludes that Pakistan seemed to have retracted its consent from the growing public pressure.⁹⁸

As it can be seen, international law does not foresee itself for the situation of what to do or the code of conduct to follow once a state has withdrawn its consent. At most, international

⁹⁵ Ullah, Imdad. 2021. Chapter 5: Pre-emption and the US drone attacks in Pakistan. Pg. 103.

<https://doi.org/10.4324/9781003145486>.

⁹⁶ Max Byrne. "Consent and the Use of Force: An Examination of 'Intervention by Invitation' as a Basis for US Drone Strikes in Pakistan, Somalia and Yemen." *Journal on the Use of Force and International Law* 3 (1): 2016. Pg. 118.

<https://doi.org/10.1080/20531702.2015.1135658>.

⁹⁷ Asifa Jahangir. "Underlying Implicating factors of U.S. War on Terror and its Unintended Consequences for Pakistan." *Journal of Political Studies*. 2019.

⁹⁸ MAHMOOD AHMAD "The United States Use of Drones in Pakistan: A Politico-Strategic Analysis." *Asian Affairs* 41, no. 1. 2014. Pg. 25. <http://www.jstor.org/stable/44074537>.

law makes clear that the third-party state must immediately stop any strikes once the consent has been retracted. The U.S. continued on with the strikes even after the consent had been withdrawn, which this demonstrates the inability of international law to be sufficiently clear and authoritative. International law does not find itself being able to accommodate for the situation when different parts of governments make opposing statements that contradict one another in the claims for consent or in the situation of when the third-party state does not follow the demands of the host state being attacked. It may seem that international law is not at fault, however, it does not provide coherent instructions to the state as to whose consent to abide by.

Yemen

For Yemen's requisite official, the Hadi regime is the legitimate government of Yemen, leaving it in charge of foreign affairs and being capable of granting consent according to the DASR. The first consent that was given on behalf of the state of Yemen for drone operations was by former President Saleh and then was maintained by his successor, President Hadi.⁹⁹ The *de jure* legitimacy for Yemen as a state is not of suspicion as both presidents came to power legally through elections that abides Article 106(a) of the Constitution of Yemen. The problem arises from whether the government is effective enough and has the necessary tools to act accordingly and assert legitimacy.¹⁰⁰

Due to the shaky nature of the political history in Yemen, it is unclear what parts of the government hold legitimacy, with constant domestic battles of competing regimes and rebel

⁹⁹ Max Byrne. "Consent and the Use of Force: An Examination of 'Intervention by Invitation' as a Basis for US Drone Strikes in Pakistan, Somalia and Yemen." *Journal on the Use of Force and International Law* 3 (1): 2016. Pg. 119. <https://doi.org/10.1080/20531702.2015.1135658>.

¹⁰⁰ *Ibid.* Pg. 112.

groups fighting to take power. The debate within international law on the idea of consent and use of force is highlighted from Yemen's political situation and the instability it faces. If a state is undergoing a civil war, within international law, that state loses the ability to grant consent. To add to the complexity of the situation, international law has made it unclear what constitutes a civil war as it lacks definition in the doctrine of consent.

What is interesting about the case in Yemen is that unlike Pakistan, the reason for feeling the pressure to consent to drone operations comes from the Yemeni government's dependency on obtaining foreign legitimacy to rule the country. The Yemeni government was not looking to offend the U.S. government because of this reason and therefore was cooperative with the demands of the U.S. The Yemen government found itself consenting to the drone strikes while, furthermore, being cooperative with the U.S. military and CIA.¹⁰¹ This line of reasoning is explained by Thomas Frank legitimacy theory which looks to explain why states comply and obey rules.

The four factors that determine whether a state complies according to Frank is, determinacy, symbolic validation, coherence, and adherence. When these four factors are in attendance, it translates to pressure forming towards compliance. However, Guzman points to weakness in this theory as Frank does not explain coherently why the four factors are important and how they interact with one another to form the pressure for compliance.¹⁰² Although Frank might come out short in his explanations for his theory, it does not take away the fact that it

¹⁰¹ Ullah, Imdad. 2021. Chapter 5: Pre-emption and the US drone attacks in Pakistan. Pg. 103-104.

¹⁰² Andrew T Guzman. "A Compliance-Based Theory of International Law." California Law Review 90, no. 6. 2002. Pg. 1834-1835

explains Yemen's reasoning for compliance well. It would seem that any state can benefit from the ambiguity within international law, yet with Yemen it shows that is not the case. Stronger states over fragile states are able to take advantage of the weakness presented in the legal framework because most of the time, stronger states are operating and exerting dominance by utilizing what the fragile state might not have. In the case of Yemen, the government does not hold legitimacy which would allow them to rule the country domestically and be taken seriously internationally, and in order to come in possession of legitimacy, it would need to obey to the demands of the stronger state. This demonstrates that stronger states are able to manipulate the regulations that fit their agenda merely because they have the facilities and power to.

Pakistan was not riding on obtaining foreign legitimacy such as Yemen, but rather fell into the pressure of the U.S. demands for the survival of the state which would be achieved through the extraction of al-Qaeda members that were hiding in the state. As Ullah states in his chapter "It is interesting to note that both Pakistan and Yemen often deployed political argumentation to oppose the US drone attacks. They did not refer to any specific legal norm or principle in their opposition."¹⁰³ This could possibly be due to the fact that there were not enough legal norms to justify why the strikes were unlawful for Yemen and Pakistan due to the targeted individuals residing in those states.

This chapter was a demonstration to showcase one of the weaker aspects of international law regarding drone warfare, which concerns the regulations surrounding consent. A cross-comparison was conducted with Pakistan and Yemen to bring forth an insight as to what compels

¹⁰³ Ullah, Imdad. 2021. Chapter 5: Pre-emption and the US drone attacks in Pakistan. Pg. 104.

a state to give consent and how international law plays a role in it. The concluding chapter will speak to what can be done in the attempt to restore or make improvements in the field of international law when it comes to drone warfare and the ever-changing environment of technological developments and whether international law is truly effective.

Chapter 6: Is International Law Clear Enough? Where to Turn Next

International law falls short when providing a regulatory framework that is authoritative enough to be followed when it comes to states using force on other states. Governments are easily able to manipulate the legal framework to fit their agenda and military operations. The U.S. did so during the Obama administration as they had gone ahead and fashioned legal rationales to justify the drone program. These rationales were made to deal with the legal problems that came from being involved militarily. The U.S. knowingly exploited the uncertainties that were present in the law to then further have the legal rationales put pressure on accepted understanding of the norms that regulated the use of force as Mignot-Mahdavi explains.¹⁰⁴

As Ka mentions, drone usage is in compliance with IHL as IHL does not prohibit or see anything wrong with the death and casualties of civilians caught in crossfire, but rather finds problems only if the attack is deliberate towards civilians.¹⁰⁵ The complication with this viewpoint is that there is no protection towards civilians within this matter. It is easy for states to justify their military operation, and the attack is conducted within the realm of consent or self-defence. There is nothing actively protecting civilians if drone operations are taken too far, as the state conducting the act is not negligent to the unnecessary deaths. International law does not present a limit towards drone operations which can cause further harm to civilians.

¹⁰⁴ Rebecca Mignot-Mahdavi. "The Institutionalization of Drone Programs." Chapter. In *Drones and International Law: A Techno-Legal Machinery*, 2023. 41–86. Cambridge Studies in International and Comparative Law. Cambridge: Cambridge University Press. Pg. 69-70.

¹⁰⁵ Kanchan Ka. "USE of Drones Under International Humanitarian Law." *Vidhigya: The Journal of Legal Awareness*. 2015. Pg. 52. <https://doi.org/10.7249/RR2972>.

There is a notable contradiction between state practice and *opinio juris* when it comes to sovereign authority over airspace as a customary international law norm. The states that were victims of surveillance through drones fought on the case that it was a violation of their sovereign airspace and, thus, a violation of international law. Due to the weakness of international law framework and the misuse of interpretation, many states that were conducting the surveillance were able to escape wrongfulness and justify their actions on grounds that are acceptable in international law. These being self-defence or drone malfunction.¹⁰⁶

Changes in Law

In terms of changes and what can be done to deal with the challenges that are presented in international law, Boyle claims that drones are not as monumental towards providing a change in law as one might think. Although drones do present legal and ethical dilemmas, they do not affect the applicability of traditional legal and ethical standards of armed conflict. Drones only represent the technological change and evolution within warfare.¹⁰⁷ The legal foundation and framework in international law is meant to stay the same and have the ability to apply to every aspect of international affairs despite the evolving changes in society. Boyle makes the statement that many scholars find that drones can still continue to be discussed within the traditional legal and ethical frameworks governing armed conflict and that drastic changes are not necessary.¹⁰⁸ Other scholars would critique this viewpoint and claim that change is in fact necessary and if not

¹⁰⁶ Joshua L. Cornthwaite. "Can We Shoot down That Drone?: An Examination of International Law Issues Associated with the Use of Territorially Intrusive Aerial and Maritime Surveillance Drones in Peacetime." 2019. Pg. 514.

¹⁰⁷ Michael J. Boyle. "The Legal and Ethical Implications of Drone Warfare." *The International Journal of Human Rights* 19 (2): 2015. Pg. 106. <https://doi.org/10.1080/13642987.2014.991210>.

¹⁰⁸ Michael J. Boyle. "The Legal and Ethical Implications of Drone Warfare." *The International Journal of Human Rights* 19 (2): 2015. Pg. 106. <https://doi.org/10.1080/13642987.2014.991210>.

change, at least improvements made to the legal and ethical standards within international law. Anderson and Waxman make this exact point. They claim that even if the law of armed conflict has been demonstrated to be effective and adaptable in regulating changes and evolutions in armed military technology, the combination of technological evolution and low visibility of drone usage can inhibit development of law. It is found that there is less time than in the past based on the pace of weapon technology changes for states to develop their own domestic understanding of how the law of armed conflict applies to them.¹⁰⁹ It might be that the law is coherent enough in that it is still capable of accommodating the changing times, however, it does not mean that it is effective in doing so and can meet the demands.

If change is not done by a neutral institution, it leaves states that hold more power to force change in international law which in turn benefits them. Taking the U.S. for example, the Obama administration justified its use of drones within the rules of law and made it clear that it was not 'breaking' international law. This line of reasoning was used within the U.S. agenda to influence and create change to the rules in international law and to build a normative order which would continue to allow them to bend the rules without it being seen as bending the rules.¹¹⁰ The reason why the U.S. would be capable of doing this is because international law is formed on normative practice. For change in international law to occur, Birdsall states "Norms influence state practice; changing norms can lead to changes in state behaviour which in turn influences

¹⁰⁹ Kenneth Anderson and Matthew C. Waxman. Chapter 13. Legal policy challenges of armed drones and autonomous weapon systems. 2019. Pg. 155.

¹¹⁰ Andrea Birdsall. "Drone Warfare in Counterterrorism and Normative Change: US Policy and the Politics of International Law." *Global Society* 32, no. 3. 2018. Pg. 252. doi:10.1080/13600826.2018.1456409.

international law”.¹¹¹ The U.S. did not want to be publicly perceived as a state that breaks the law, so it was in their interest to change the rules by defying norms and practices.

One of the concerns that scholars and lawmakers should be looking to address in terms of the legal and ethical issues of drone warfare is whether we can rely on combat machines that are fully autonomous to comply with IHL standards such as distinction and proportionality.¹¹² Furthermore, there needs to be a review into the cyber operations and networks of information. In the modern cyber/net-work era calls for a reinterpretation of the rules of engagement for superiors. As new information comes in the digital age on potential targets, choices of weapons, the positions of enemies, and civilian population, it calls for an analysis in the responsibility for awareness for superiors.¹¹³

It can be helpful for nations to look to other states for productive policies and legislations regarding drone usage, such as looking to Japan for the development of a superior legal framework. The U.S. has been rather slow on the implementation of policies and legal frameworks when it comes to drone operations. Japan’s approach to passing legislation has been noted to be quicker and better at reacting than the U.S. Congress. This is due to Japan’s government promotion of aerial technology, familiarity with drone devices, and foundation of government established UAS regulations. Many scholars have pointed to how the U.S. was slow to implement any changes to its policy due to unprecedented fears of machine technology and

¹¹¹ Andrea Birdsall. “Drone Warfare in Counterterrorism and Normative Change: US Policy and the Politics of International Law.” *Global Society* 32, no. 3. 2018. Pg. 245. doi:10.1080/13600826.2018.1456409.

¹¹² Dan Saxon. *International Humanitarian Law and the Changing Technology of War*. 2013. Pg. 5.

¹¹³ *Ibid.* Pg. 9.

instead of accepting the evolving nature of society and having a reactive attitude, they were slow and fearful.¹¹⁴

Although the legal foundations within international law is hesitant to change as this is not the purpose of this chapter, it is not naïve to expect adjustments to the legal and ethical frameworks to adapt to the evolving nature of drone use. Adaptability should be seen not only at the international level but domestically amongst governments. There needs to be a reactive approach on the occurrence of certain situations within drone warfare such as the mode of action if multiple governing authorities have opposing views on consent. This chapter is not concerned with providing a ‘solution’ to the problems seen in international legal frameworks but rather a push towards a new direction.

¹¹⁴ Kaitlin D. Sheets. “The Japanese Impact on Global Drone Policy and Law: Why a Laggard United States and Other Nations Should Look to Japan in the Context of Drone Usage.” *Indiana Journal of Global Legal Studies* 25 (1). 2018.

Conclusion

We began this trajectory of insight into drone warfare and cybersecurity by asking the question of how international law affects drone warfare and use of artificial intelligence? More precisely, how does international law effect the way drones are used and what boundaries have to be put in place between states? Where has international law failed people and leaders when it comes to protection against drones and the role of cybersecurity? These questions lead to the potential hypothetical answer to be the ambiguity of international law as the culprit of the failures we see in international law when it comes to drone warfare and surveillance.

Through our analysis, we know now that from our observation of not only the law but the actions of states in the international arena that the law is dependent on the fact that it operates on interpretation, thus making it a weaker framework to be abided by. This is precisely how the U.S. got away with continuing drone operations despite states retracting their consent. It is a mixture of the law being ambiguous and being unprepared to handle a multitude of different scenarios. International law never prepared for the scenario of states that were political unstable, as it has now been seen that many different political institutions and actors can claim opposing views regarding consent. Some countries may not always be clear in presenting a unanimous decision regarding actions that other states can take and international law has been unequipped to deal with this matter.

The purpose of this work was not to ‘fix’ international law but to point out the reasons why many states have continued to use manipulative tactics in warfare through technological

weapons. States might bend the law for their benefit and the world can blame them entirely or one can assess if the blame is also to be put on the lack of foundational assertiveness and clarity in laws and regulations. There should be a call for action on the improvement for a system that was built on an old and retired framework. The principles embedded within international law can continue to be acknowledged and put in practice, however, the world must analyze how development needs to take place to compliment the changing times with issues related to cybersecurity, the role of artificial intelligence, and drone warfare.

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