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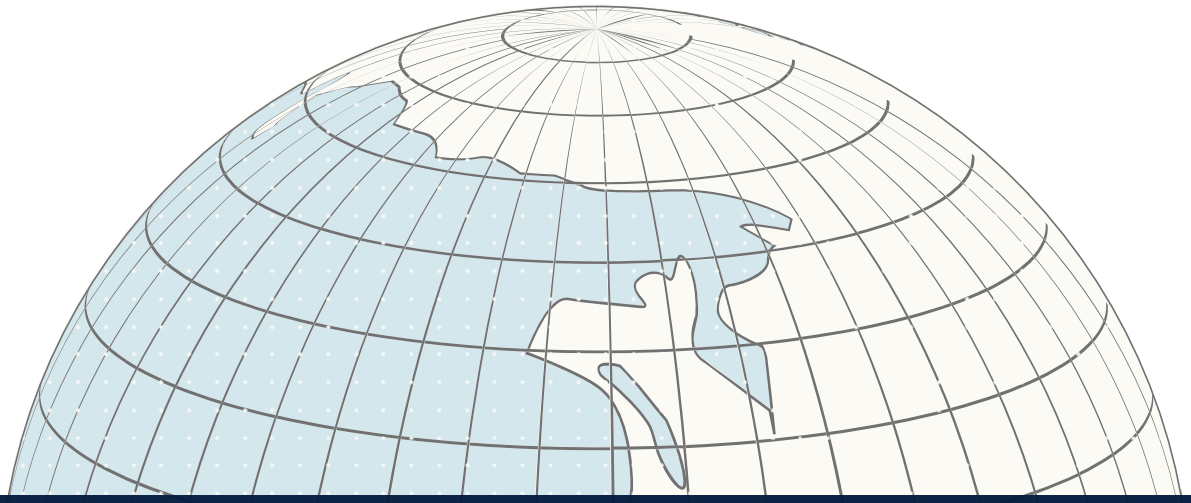

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WITH A FOREWORD WRITTEN BY
HON'BLE MR. JUSTICE G.S. PATEL

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ABOUT
GOVERNMENT LAW COLLEGE, MUMBAI

Government Law College enjoys the distinction of being the oldest law school in Asia and has since its inception in 1885, essayed a seminal role in the evolution of the legal and judicial landscape of India. Any discussion of India's legal system and culture today is incomplete, in fact, meaningless, without a mention of Government Law College, Mumbai. Looking back over the years, one realizes the immeasurable role of this pioneering law institution has played in the judicial, political and historical life of India.

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ABOUT
STUDENTS FOR THE PROMOTION OF INTERNATIONAL LAW, MUMBAI

In an increasingly integrated world with growing transnational interactions, the significance of International Law has never been greater. We, at SPIL, Mumbai, strive towards taking legal studies to an empirical level and promoting law as an area of enquiry and study far beyond the realms of classrooms. SPIL, Mumbai was born in furtherance of a desire to understand the tumultuous nature of International Relations and to promote greater awareness and appreciation of International Law.

This student-based organization seeks to encourage communication and co-operation among students and lawyers internationally. SPIL, Mumbai relentlessly strives to provide greater opportunities for comprehensive studies of international cultures and legal systems, to facilitate global interactions and to publicize educational and career opportunities in International Law. SPIL, Mumbai has successfully organized several events, including a lecture on the working of the International Criminal Court by Professor William Burke White of the University of Pennsylvania, a Model United Nations - Student Exchange Program with students of the School of International Relations, Tehran and the Government Law College International Law Summit- which is held annually, in the month of February. SPIL Mumbai also regularly organizes workshops on the basics of International Law, which have an overwhelming response from Law students across colleges and holds various Debates, Legal Paper Presentations and Intra College International Law Competitions.

"The Rebirth of the Cool"

FOREWORD BY HON'BLE MR. JUSTICE G.S. PATEL

COVID-19 has changed the world in ways we could never have imagined or anticipated. Attempts to draw parallels to previous pandemics tend to focus on public health dimensions. But there is one fundamental difference. The world COVID-19 turned upside down was one entirely — and fundamentally — different from any mankind has known before. COVID-19 is a great leveller. It respects nothing: not age, not race, not gender, and certainly not geographical boundaries.

In ways that we are still discovering, it has irrevocably changed the face of law. The practice of law itself has been forced into a new avatar. But laws and regulations themselves, everywhere, have had to change and adapt to the new demands. These changes have not been at the glacial pace to which lawyers, legislators and judges are accustomed. Everything from travel to medicine has felt the impact; and international law, both private and public, are no exceptions. And these unexpected and unanticipated upheavals (who had ever heard of 'isolating on arrival'? Or mandatory medical tests? Or restrictions on movement?) come at a particularly strange time in global history. The impact 'Brexit' is likely to have cannot be underestimated. In parallel, there are shifts, too, in the way countries deal with each other, and the rights sovereign nations claim to have in regard to the affairs of other states.

In the commercial world, the changes have been perhaps the most seismic. On the one hand, there are these restrictions on travel. On the other, there are new methods of trading and effecting commerce, and there is also now an entirely new working methodology regarding the resolution across borders of commercial disputes. In some of these, one of the commercial parties is a state player — mining rights, for instance — and we have the very curious scenario of private enterprise pursuing recovery against a

sovereign state that has lost in arbitration, and doing this across multiple territorial jurisdictions. Much of this is done without travel, deploying the transborder advantages of Internet-enabled communications. Perhaps now, more than ever before, the spotlight is on international law in all its dimensions. Until only a few years ago, this was the rarefied preserve of law scholars; few in the bustle of day-to-day courtroom work bothered very much with it. Even fewer students paid it any attention.

The revival of SPIL's Journal is, therefore, as timely as it is necessary. The essays and papers in this revival edition span an astonishing range. There is an analysis of a new Scottish legislative bill (directly connected with women's rights and COVID-19) that addresses important contemporary issues of gender equality. There is also an article on 'ecocide' that raises vital questions about our survival as a species and the role international law and judicial bodies have to play in determining (or safeguarding) our collective future. The somewhat shorter piece on lethal autonomous weapons systems (LAWS) — its title evidently inspired by the great science fiction writer, Philip K. Dick, and his novel Do Androids Dream of Electric Sheep?; the source for the iconic film Blade Runner — delivers sharp insights into the future forms of international conflicts; and how far these can be said to be legitimate and lawful. Another essay deals with Space Law (I should not be surprised if its author is a fellow Trekkie, given the inveigled reference to a final frontier) and tests the continuing validity and relevance of a fairly vacuously worded international treaty, especially in an increasingly conflict-driven world. The essay on Hong Kong's National Security Law only barely contains the author's evident outrage at an attempt to legitimize and mask through faux-legislation what is nothing but one of the most egregious human-rights violations in recent times. All the essays show fine scholarship, formidable research and considerable acuity. It is a privilege to be able to read these works, each one deserves, and repays, close study.

These essays show a dauntingly high standard. There could be no better means of reviving a journal. These essays set the bar appropriately high. The frequency of the journal is immaterial, in my view. If work of this calibre is produced just once a year, it is enough. The contribution will extend well forward in time. My compliments to the editorial team and the authors; this is truly exceptional, by any standard. I hope to see the day when becoming the editor of this journal is itself a mark of distinction.

Birth of the Cool is, of course, the 1957 jazz compilation album by the legendary trumpeter, bandleader and composer Miles Davis. Even 64 years later, that album is still widely regarded as innovative, seminal, far ahead of its time and one of the definitive jazz albums of all time. I can only hope that the future accords the same status to this revival edition.

Justice G.S. Patel
Judge, Bombay High Court
Mumbai, 20 March 2021

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EXPLORING APPROPRIATE TESTS OF CONTROL FOR INTERNATIONALISED NON-INTERNATIONAL ARMED CONFLICTS

-Advaya Hari Singh[1]

ABSTRACT

The principle of state responsibility for violations of international humanitarian law (IHL) by its organs is well-established in international law, both in its customary and textual manifestations. Violations of international humanitarian law by an organ of the state attract attribution of the actions to the state itself and trigger the application of the law relating to international armed conflicts (IAC). It is only when an armed non-state actor is engaged in an armed conflict with the active support of another state, does the law begin to get murky in its application. This is because the degree of control that is required to trigger a state's responsibility is ill-defined in international law. The existing jurisprudence of attribution through 'control' is contained in Article 8 of the ILC Articles and judicial decisions which have competed with each other to posit the most appropriate standard of state control for actions of non-state actors, doing so at the cost of certainty and clarity of the law. Analyzing this becomes important because a state's involvement in the armed conflict can potentially convert the non-international armed conflict (NIAC) to an IAC between two states. This article begins by analyzing the reasons for the modern-day distinction that IHL draws between armed conflicts and its utility in the face of customary international law. In Part II, the article distils the law relating to attribution of a non-state actor to the state supporting it, unravelling the multiple interpretations that important judicial decisions have lent to 'control' under Article 8 of the ILC Articles. In Part III, the article argues for a distinct application of the 'effective control' test and 'overall control' test with the latter more suited for converting a NIAC to IAC.

[1] Student at National Law University, Nagpur (India).

INTRODUCTION

International Humanitarian Law is commonly understood as a sub-branch of public international law which aims to "limit the effects of armed conflicts."[2] The existence of an armed conflict becomes a prerequisite for the application of the law. This is an important factor given that International Humanitarian Law, characterized as *jus in bello*, is routinely distinguished from *jus ad bellum* "which provides grounds justifying the transition from peace to armed force."[3] Historically and in the present-day, international humanitarian law has firmly relied on the distinction between armed conflicts for its application.[4] This is borne out by treaty law which, as early as 1949 with the adoption of the Geneva Conventions, entrenched the distinction between international armed conflicts and those not of an international character.[5] The distinction between international armed conflicts (IAC) and non-international armed conflicts (NIAC) was only reinforced when the Additional Protocols I and II (AP) to the Geneva Conventions were adopted in 1977.[6]

Since the application of the appropriate legal regime rests on the type of conflict, identifying the conflict is an important starting point of inquiry. Treaty law provides sufficient guidance for this exercise: Common Article 2 of the Geneva Conventions requires "declared war" or "armed conflict which may arise between two or more of the High Contracting Parties."[7] Common Article 3 of the Geneva Conventions mentions "armed conflict not of an international nature" and the simplistic nature of this provision is compensated for by the commentary of the International Committee of the Red Cross (ICRC). The Commentary defines NIACs as "armed conflicts where at least one Party is not a State" before going on to list specific cases.[8] Further, Article 1 of A.P. II, which applies to NIACs, adopts a more detailed definition of a NIAC as an

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[2]*War & Law*, INT'L COMM. RED CROSS, www.icrc.org/en/war-and-law, (last visited Dec. 19, 2020).
[3]Carsten Stahn, *Jus ad bellum', 'jus in bello' . . . 'jus post bellum'? –Rethinking the Conception of the Law of Armed Force*, 17 EUR. J. INT'L L. 921, 926 (2006).
[4]*How is the Term "Armed Conflict" Defined in International Humanitarian Law?*www.icrc.org/en/doc/assets/files/other/opinion-paper-armed-conflict.pdf.
[5]Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field, art. 3, Aug. 12, 1949, 75 U.N.T.S. 31 [Hereinafter Geneva Convention I].
[6]CecilieHellestveit, *The Geneva Conventions and the dichotomy between international and non-international armed conflict*, in SEARCHING FOR A PRINCIPLE OF HUMANITY IN INTERNATIONAL HUMANITARIAN LAW 86,90(KjetilMujezinović et al. eds.,2012).

[7]Geneva Convention I, art. 2.
[8]Lindsey Cameron et al., *Article 3 - Conflicts not of an international character*, *in* International Committee of Red Cross, COMMENTARY ON THE FIRST GENEVA CONVENTION 126,143 (2016).

armed conflict that takes place between the armed forces of a High Contracting Party and dissident armed forces or other organized armed groups. It further enumerates further elements which are required for meeting the threshold: responsible command in the armed group and territorial control which enables them to carry out sustained and concerted military operations.[9]

These criteria would presumably enable a clear determination of the appropriate law, especially when the distinction in the armed conflicts is straightforward. But this is not always the case and armed conflicts seldom adhere to this seemingly watertight classification. Over the years, while inter-state conflicts have occurred, "the vast majority of armed conflicts after 1949 have been non-international armed conflicts (NIACs) and they still outnumber IACs in the present time."[10] As recently as 2018, 51 NIACs occurred in the territory of 22 states outnumbering the number of IACs which occurred in 7 states.[11]These NIACs assume complex characteristics which make it difficult to determine the applicable law. The most common example of this is the intervention by a foreign state in the NIAC occurring in the territory of another state.[12] More precisely, the intervention through an armed non-state actor (ANSA) by exercising control over it.[13] This article is concerned with this type of armed conflict and the way international humanitarian law responds to NIACs which develop IAC-like characteristics.

Part I of the article explores the reasons for the modern-day distinction that international humanitarian law draws between armed conflicts and its utility in the face of customary international law. This is done because analysis of the law to complex conflicts can only be carried out if there are different legal regimes vying for application to the situation. If a common body of international humanitarian law is applicable, then the intervention of a third party to a conflict is immaterial since a single law will be applicable. With this premise, the article then highlights the growth of 'internationalized' NIACs. In Part II, the article distils the law relating to attribution of an ANSA to the state supporting it, unravelling the multiple interpretations that

[9]David Turns, *The International Humanitarian Law Classification of Armed Conflicts in Iraq since 2003, in*THE WAR IN IRAQ: A LEGAL ANALYSIS (Raul A. Pedrozo ed., 2010) [Describing the scope of application as "so restricted as to render it all but unworkable in practice."].
[10]Gabriella Venturini, *Whither the human in armed conflict? IHL implications of new technology in warfare*, iihl.org/wp-content/uploads/2019/10/Venturini.pdf.
[11]AnnyssaBellal, *The War Report: Armed Conflicts in 2018*, Geneva Academy of International Humanitarian Law and Human Rights (2019), www.geneva-academy.ch/joomlatools-files/docman-files/The%20War%20Report%202018.pdf (last visited Dec. 23, 2020).
[12]Cameron, *supra* note 7, at 146.
[13]*Id*. at 147.

important judicial decisions have lent to 'control', under Article 8 of the ILC Articles on State responsibility. In Part III, the article analyses the suitability of the tests of control to international humanitarian law.

I. INTERNATIONAL HUMANITARIAN LAW AND COMPLEX NIAC

A. The Historical Underpinnings of the Classification of Armed Conflicts

Public international law has traditionally been considered as a branch of law which focuses on regulating inter-state relations.[14] Even international humanitarian law which now, as a distinct sub-branch of public international law, also seeks to regulate conflict within a state's boundaries, essentially finds its historical basis In limiting inter-state armed conflict.[15] Initially, international humanitarian law was marked by reluctance in interfering in conflict which took place within a state, completely unconnected to any other state.[16] This was the result of the Westphalia understanding of international affairs and approached matters of sovereignty with caution.[17] This was understandable given the fact that the recognition of the sovereignty of states required the simultaneous acknowledgement of the notion of *non-interference* in matters which had no international impact.[18] The necessary result of this was that international armed conflicts were not regulated and "(t)here was only one body of law which either applied in *toto* to international conflicts between states (or conflicts treated as such) or it did not apply at all."[19]

This changed with the advent of new limbs in international law which no longer restricted itself to regulating international relations but also extended to protecting and obligating individuals.[20] As Moir writes: (j)ust as a government's treatment of its own citizens in that sphere is now

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[14]BROWNLIE'S PRINCIPLES OF PUBLIC INTERNATIONAL LAW116 (James Crawford ed. 8th ed. 2012); MALCOLM SHAW, INTERNATIONAL LAW2 (7th ed. 2016); ANTHONY AUST, HANDBOOK OF INTERNATIONAL LAW3 (2005).
[15]1 HOW DOES LAW PROTECT IN WAR(Marco Sassoli et al. eds. 3rd ed.).
[16]Dapo Akande,*Classification of Armed Conflicts: Relevant Legal Concepts, in* INTERNATIONAL LAW AND THE CLASSIFICATION OF CONFLICTS193, 194 (Elizabeth Wilmshurst ed. 2012).
[17]*Id*.
[18]James G. Stewart, *Towards a Single Definition of Armed Conflict in International Humanitarian Law: A Critique of Internationalized Armed Conflict*, 850 INT'L REV. RED CROSS 313, 317 (2003).
[19]Akande, *supra* note 15, at 195.
[20]*Id*.at 196[mentioning the rise of "World War II prosecutions for international crimes and the development of international human rights law, beginning with the Universal Declaration of Human Rights 1948."].

regulated by international law, so the humanitarian protection of its citizens in situations of armed conflict is equally a matter of concern for the entire international community."[21] However, it will be inappropriate to paint a picture of absolute non-interference in internal armed conflicts that occurred before the adoption of the Geneva Convention in 1949. This is because there was a considerable interest that states had in the internal affairs of other states.[22] The 1928 Convention on Duties and Rights of States in the Event of Civil Strife attempted, not with the humanitarian intention that guides modern international humanitarian law, to enjoin states from aggravating civil war in other states. Further, states that were warring with armed non-state actors entered into agreements with them or "issued unilateral instructions to their armed forces, a notable example of which is the 1863 Lieber Code."[23]

Even the practice of recognizing the non-state actor involved in an armed conflict with its state as a belligerent only imported the law of neutrality from the laws and customs of war and nothing else.[24] And the view that laws of war could be applied through recognition of belligerency gradually became "obsolete."[25] The ICRC had already begun to work on applying international humanitarian law to Internal Armed Conflicts and two individual Red Cross Societies produced reports on the role that they could play in 'civil war' and 'insurrection' to the 9th International Conference of the Red Cross.[26]

But humanitarian aspirations were overshadowed by the need to preserve friendly international relations. As Jean Pictet notes: "(a)pplications by a foreign Red Cross or by the International Committee of the Red Cross have more than once been treated as unfriendly attempts to interfere in the internal affairs of the country concerned."[27] States like Russia felt that it was "improper" for the ICRC to work for "rebels regarded as criminals by the laws of the land."[28] The stance reflected a larger disconcertment of states' with potential insurgencies in their own territory and support for non-interference contained an implicit expectation of reciprocity from other states. With the "heavily internationalized" Spanish Civil War and the Second World War, the ICRC

[21]LINDSAY MOIR, THE LAW OF INTERNAL ARMED CONFLICT2(2002).
[22]Cameron, *supra* note 7, at 132.
[23]*Id*.
[24]*Id*.
[25]Moir, *supra* note 20, at 19.
[26]Cameron, *supra* note 7, at 134.
[27]JEAN PICTET, GENEVA CONVENTION FOR THE AMELIORATION OF THE CONDITION OF THE WOUNDED AND SICK IN ARMED FORCES IN THE FIELD 39 (1952).
[28]Moir, *supra* note 20, at 22.

renewed its calls for application of international humanitarian law to internal armed conflicts.[29] the result was common article 3 which introduced certain minimum standards applicable to armed conflicts not of an international character.

The generality and minimalistic nature of common Article 3 in laying "down the principles without developing them which has sometimes given rise to restrictive interpretations" prompted the adoption of a more focused legal instrument for regulation of NIACs.[30] The ICRC Commentary notes several deficiencies in the wording of common Article 3 which have hindered its effective implementation: the lack of protection for doctors and medical personnel,[31] lack of specific protection for the civilian population and its silence on relief measures.[32] After several conferences and negotiations throughout the 1960s and 1970s, the A.P. II to the Geneva Conventions was adopted and characterized as a legal instrument which "develops and supplements Article 3 common to the Geneva Conventions of 12 August 1949 without modifying its existing conditions of application."[33] This stipulation merits a closer examination.

On a first glance, it is rather confusing to note the presence of two different legal regimes to a similar type of conflict; A.P. II should have ideally replaced common Article 3. But a complete annihilation of the common article 3 "would have been very dangerous" since the application of A.P. II proceeds on a restrictive set of objective criterion.[34] The introduction of A.P. II created two situations: one, where both common article 3 and A.P. II applied and second, in case the high threshold for the application of A.P. II was not met, only Article 3 would apply.[35] In this way, it was ensured that common Article 3 "retains an automatic existence" and the inapplicability of A.P. II did not affect the application of the minimums standards of common Article 3.[36] With the introduction of A.P. II read together with common Article 3, the distinction between the law of armed conflict in IACs and NIACs has been firmly established.

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[29]Stewart, *supra* note 17, at 317.
[30]*Commentary of 1987, General introduction to the Commentary on Protocol II*, INT'L COMM. RED CROSS, ¶4363, ihldatabases.icrc.org/applic/ihl/ihl.nsf/Comment.xsp?action=openDocument&documentId=0F47AE2F6A509689C12563CD004399DF (last visited Dec. 24, 2020)
[31]*Id*., ¶4364.
[32]Id., ¶4366.
[33] Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts, art. 1(1), Jun. 8, 1977, 1125 U.N.T.S. 609.
[34]Moir, *supra* note 20, at 101; *Id.*
[35]Sylvie Junod, *Additional Protocol II: History and Scope*, 33 AM. U.L. REV. 29, 35 (1983).
[36]*Id*.

B. Questioning the Distinction in Legal Regimes

Despite the well-entrenched distinction between the law of IACs and NIACs, many commentators have questioned the propriety of the distinction given the common element of destruction and suffering shared by both international and internal armed conflicts. There are several significant differences in both the legal regimes. Most critics draw attention to the numerical inequality in the provisions regulating IACs and NIACs: "(t)he GCs and their protocols contain close to 600 articles, of which only CA 3 and the 28 articles in AP II apply to NIACs. So to say that there is an imbalance of Geneva Law is an understatement."[37] The staggering difference is self-explanatory of the lesser extent to which NIACs are regulated by international humanitarian law.

Unlike IACs, rules regulating conduct of hostilities (Hague law) are not applicable to NIACs. Common article 3 contains no rules on distinction and proportionality and A.P. II contains only "modest rules" on this.[38] A.P. II does match the law applicable to IACs in the "prohibition on indiscriminate attacks, methods and means of warfare causing unnecessary suffering and damage to natural environment."[39] A more notable difference is the absence of combatant and prisoner of war (POW) status to those participating in internal conflicts. This implies the lack of an entitlement to "participate directly in hostilities" and permits the state engaged in the internal armed conflict to prosecute the individuals who have participated in the conflict.[40]

Scholars have also raised questions on the continued utility of maintaining the distinction in light of recent developments. One of the prominent developments which have rendered the distinction otiose is customary international law, which is applicable to both IACs and NIACs.[41] The ICRC maintains a comprehensive database of customary rules based on state practice reflected in military manuals, national legislation and case law.[42] According to the ICRC, "90% of the

[37]Douglas Wedderburn-Maxwell, Classic Distinctions and Modern Conflicts in International Humanitarian Law 29(2014) (unpublished Master Thesis, Lund University); Akande, *supra* note 15, at 199-200; Stewart, *supra* note 17, at 320.
[38]Akande, *supra* note 15, at 200.
[39]Stewart, *supra* note 17, at 320; Maxwell, *supra* note 36, at 29.
[40]Stewart, *supra* note 16, at 320.
[41]Evan Ritli, *Unravelling Conventional Boundaries in International Humanitarian Law: The Classification and Regulation of Non-International Armed Conflicts in the Modern World*6 EPIK Journals Online (2015).
[42]*Customary Law*,INT'L COMM.RED CROSS, www.icrc.org/en/war-and-law/treaties-customary-law/customary-law (last visited Jan. 2, 2021).

customary rules of IHL identified . . . applied in both types of conflict."[43] Some still doubt a complete extinguishment of the distinction based entirely on the basis of customary international law: "the ICRC identifies seventeen customary rules applicable in IAC but not in NIAC and five applicable in NIAC but not in IAC."[44]

The lack of some customary international rules which are applicable in either of the regimes does not in way undermine the legitimacy of other rules. In fact, the role of customary international law in blurring the lines between the law applicable to IACs and NIACs has been underscored by the Appeals Chamber of the International Criminal Tribunal for the former Yugoslavia (ICTY) in *Prosecutor v Tadić*[45] (*Tadić*): "(n)otwithstanding... limitations, it cannot be denied that customary rules have developed to govern internal strife."[46] It further stated that:

> *Elementary considerations of humanity and common sense make it preposterous that the use by States of weapons prohibited in armed conflicts between themselves be allowed when States try to put down rebellion by their own nationals on their own territory. What is inhumane, and consequently proscribed, in international wars, cannot but be inhumane and inadmissible in civil strife.*[47]

Apart from the role that customary international law has played in bridging the gap between the legal regimes of IACs and NIACs, developments in treaty law have also reduced this gap to a significant extent. There are several treaties which apply commonly to both IACs and NIACs: the Biological Weapons Convention 1972, the Chemical Weapons Convention 1993, the Convention Prohibiting Anti-Personnel Land Mines 1997, the Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property 1999 and the 2001 amendment which has extended the Convention on Conventional Weapons and its protocols to non-international

[43]KUBO MACAK, INTERNATIONALIZED ARMED CONFLICTS IN INTERNATIONAL LAW(2018).
[44]Adil Ahmad Haque, *Whose Armed Conflict? Which Law Of Armed Conflict?*45 GEORGIA J. INT'L & COMP. L. 475, 483 (2017).
[45]The Prosecutor v., Case No. IT-94-1, Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction (Int'l Crim. Trib. for the Former Yugoslavia Oct. 2, 1995).
[46]*Id*., ¶127.
[47]*Id*.,¶119.

armed conflicts.[48] States even have military manuals which apply international humanitarian law "to any type of conflict whatever its legal characterization."[49]

Despite the growing convergence, there are indications that the distinction is alive and kicking. In fact, after the adoption of the Geneva Conventions in 1949, states had two opportunities to merge the law but expressly rejected such calls. The first time it arose was during the adoption of the A.Ps in 1977, where states chose to maintain a strict distinction and even entrenched it in treaty law. Another opportunity opened up during the preparation for the Rome Statute of the International Criminal Court (Rome Statute) which was adopted several years after the A.Ps.[50] States had ample opportunity here to "abolish the distinction."[51] But it continued to be reflected in the provisions of the Rome Statute with thirty-four war crimes recognized for IACs and only nineteen war crimes for NIACs.[52] It is perhaps a concern of "sovereignty . . . national unity and security" that dissuades states from importing comprehensive protection of the law applicable in IACs to NIACs which are occurring within their territory.[53] In fact, states fear that importing applying IAC standards will require them to grant POW status to belligerents and a corresponding immunity from prosecution for acts which are unlawful under domestic law.[54]

C. The IAC/NIAC Distinction and Complex Conflicts

The distinction between the law applicable to IACs and NIACs runs into difficulty in situations of IACs which turn complex due to the intervention of a third state. The IAC is "a civil war characterized by the intervention of the armed forces of a foreign power."[55] Although their history can be traced back to the Spanish Civil War in the 1930s, there was a surge in internationalized armed conflicts during the Second World War.[56]

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[48]Akande, *supra* note 15, at 200-201.
[49]Macak, *supra* note 42.
[50]The Rome Statute of the International Criminal Court was signed in 1998 and came into force in 2002.
[51]Akande, *supra* note 15, at 206.
[52]Haque, *supra* note43, at 483; Article 8(2)(a) and (b) enumerate war crimes for IACs and Article 8(2)(c) and (e) do so for NIACs.
[53]Akande, *supra* note 15, at 207.
[54]Hellestveit, *supra* note 5, at 103.
[55]Peter Brits, *When history no longer suffice : towards uniform rules for armed conflicts*, 45 SCIENTIA MILITARIA: S. AFR. J. MIL. STUD. 64, 73 (2017).
[56]Dietrich Schindler, *International Humanitarian Law And Internationalized Internal Armed Conflicts*, 22 INT'L REV. RED CROSS 255, 255 (1982).

The impact of the intervention on the applicable law depends on which side the foreign state intervenes: on the side of the state which is fighting with the ANSA or on the side of the ANSA itself.[57] Support by a third state to the state does not affect the nature of the conflict since it is still between an ANSA and two states.[58] It is only when the foreign state intervenes on the side of the ANSA and exercises sufficient control over the latter, does the NIAC begin to turn to an IAC.[59] In fact, most intervening states will do so only through ANSAs and never directly by engaging in armed conflict with the other state. Djemila Carron illustrates this situation aptly:

> Imagine an armed group C engaged in massive hostilities against State B within the territory of this State B. Now, imagine a State A endorsing the actions of armed group C with arms supplies, finances and military advisers. Does this support transform the pre-existent non-international armed conflict (NIAC) between armed group C and State B into an international armed conflict (IAC) between States A and B? What is the *control* State A should have over armed group C for an IAC between States A and B to occur.[60] (Emphasis supplied)

Therefore, it becomes important to identify the link between the ANSA and the foreign state and "the link between the intervention of one or more third parties and the armed conflict is stronger when the intervening power exercises some sort of control over the supported party."[61] International humanitarian law, either in its treaty or customary manifestations, does not contain any criteria to determine the extent of control required to establish a connection.[62] The answer to these issues lays in general international law of state responsibility and is discussed in the next part.

[57]Akande, *supra* note 15, at 207.
[58]Cameron, *supra* note 7, at 147.
[59]*Id*.
[60]Djemila Carron, *When is a conflict international? Time for new control tests in IHL*, 98 INT'L REV. RED CROSS 1019, 1020 (2016).
[61]Tristan Ferraro, *The ICRC's legal position on the notion of armed conflict involving foreign intervention and on determining the IHL applicable to this type of conflict*, 97 INT'L REV. RED CROSS 1227, 1234(2015).
[62]*Id*. at1235-36.

II. DEMYSTIFYING THE TEST OF CONTROL UNDER INTERNATIONAL LAW

The test of internationalization of an NIAC depends on the involvement of the third state in the NIAC and the level of control that it exercises over the ANSA in order for the latter's actions to be considered its own. This is called attribution of conduct to the state and is a necessary condition for holding a state responsible under international law, in addition to a breach of an international obligation.[63] Although attribution is considered in determining state responsibility, it is also utilized to determine the characterization of the armed conflict in international humanitarian law. It helps "to reveal the extent of the relationship between the non-state party and the intervening power and play a crucial role in establishing whether the members of the non-state armed group can be considered agents of the latter."[64]

Article 4 of the International Law Commission's Articles on state responsibility attributes the conduct of a state organ to the state irrespective of the function that the organ performs.[65] This is the "first principle of attribution for the purposes of State Responsibility" and is relatively uncontroversial in application.[66] Issues arise in attributing the conduct of persons or groups which are not organs of the state and, as noted above, this is relevant for the purpose of determining the type of conflict. Article 8 of the Draft Articles provides three ways in which such conduct can be attributed to the State: "(t)he conduct of a person or group of persons shall be considered an act of a State under international law if the person or group of persons is in fact acting on the *instructions of*, or *under the direction* or *control of*, that State in carrying out the conduct." The provision uses *instruction*, *direction* and *control* disjunctively and it is only necessary to establish one of these.[67]

Instruction is "(t)he most clear-cut situation in which state responsibility arises under ARSIWA Article 8 where a State instructs a private person or entity to do something on its behalf.[68] Although direction appears together with control, separated only by *or*, it is an entire separate

[63]International Law Commission, Report on the Work of its Fifty-Third Session, U.N. Doc. A/56/10 (2001), *reprinted in* [2001] 2 YEARBOOK OF THE INTERNATIONAL LAW COMMISSION 32, U.N. Doc. A/CN.4/SER.A/2001/Add.1 (Part 2) [hereinafter ILC Articles of State Responsibility].
[64]Ferraro, *supra* note 60, at 1235.
[65]ILC Articles of State Responsibility, art. 4.
[66]*Id*.
[67]*Id*.
[68]JAMES CRAWFORD, STATE RESPONSIBILITY THE GENERAL PART142 (2013).

way to establish attribution of the conduct to the state. In the context of a foreign intervention in an NIAC, it is highly unlikely for the state to issue specific instructions or directions to the ANSA. Without "express instructions or direction from the state to the non-state actor to commit the act, the question boils down to whether the state exercised a sufficient degree of "control" over the act."[69] The existing jurisprudence on attribution through 'control' has been at the center of controversy, with judicial decisions competing with each other to posit the most appropriate standard of 'control' required to attribute the conduct to the state.

The interpretation of 'control' fell for the first time before the International Court of Justice (ICJ) in *Nicaragua v. US*[70] where it had to decide whether violation of international humanitarian law by a non-state armed group, *contras*, could be attributed to the United States. The evidence of the United States' involvement was overwhelming: it had financed, trained, equipped, armed the contras.[71] The Court further noted the United States provided logistical support, supplied information about Sandinista troop movements, supplied aircrafts to the contras.[72] Nicaragua wanted the Court to consider military and paramilitary activities not as part of a civil strife within its territory but as acts of the United States.[73] However, the Court did not consider this argument convincing and refused to attribute the conduct of the contras to the United States and devised an 'effective control' test:

> United States participation, even if preponderant or decisive, in the financing, organizing, training, supplying and equipping of the contras, the selection of its military or paramilitary targets, and the planning of the whole of its operation, is still insufficient in itself for the purpose of attributing to the United States the acts committed by the contras in the course of their military or paramilitary operations in Nicaragua. . . . *For this conduct to give rise to legal responsibility of the United States, it would in principle have to be proved that that State had effective control of the*

[69]Oona A. Hathaway et al., *Ensuring Responsibility: Common Article 1 and State Responsibility for Non-State Actors*, 95 TEXAS L. REV. 540, 547 (2017).
[70]Military and Paramilitary Activities in and against Nicaragua (Nicar. v. US), Judgment, 1986 I.C.J. Rep. 14 (June 27)
[71]*Id*., ¶108.
[72]*Id*., ¶106.
[73]*Id*., ¶114.

military or paramilitary operations in the course of which the alleged violations were committed.[74] *(Emphasis supplied)*

The Court did not elaborate further on what 'effective control' would require but a closer reading of the Court's judgment reveals that it required that the United States to have "directed or enforced the perpetration of the acts contrary to human rights and humanitarian law alleged by the applicant State."[75] This implied that without a State having issued directions for specific operations or forcefully having the rebels carry out the operations, attribution under Article 8 could not happen.[76]

The Appeals Chamber of the ICTY was the next to consider the appropriate test of control under Article 8 in *Tadić*. The factual situation in *Tadić* was different since it was a case which dealt with the individual criminal responsibility of Duško Tadić for committing war crimes and crimes against humanity in the Bosnian genocide. The ICTY had to determine the nature of the armed conflict as an IAC for the purpose of applying Article 2 of the ICTY Statute. Article 2 which dealt with grave breaches of the Geneva Conventions, 1949 was only applicable in IACs. Thus, the ICTY had to determine whether paramilitary conduct of Republic Srpska could be attributed to the Federal Republic Yugoslavia (FRY) and convert the conflict into an IAC between the FRY and Bosnia Herzgovina. The Trial Chamber refused attribution drawing guidance from the ICJ's judgment in *Nicaragua*.[77] On appeal by the Prosecution to the Appeals Chamber, it rejected the ICJ's judgement in *Nicaragua* since it flew in the face of state responsibility:

The rationale behind this rule is to prevent States from escaping international responsibility by having private individuals carry out tasks that may not or should not be performed by State officials, or by claiming that individuals actually participating in governmental authority are not classified as State organs under national legislation and therefore do not engage State responsibility.[78]

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[74]*Id*., ¶115.
[75]*Id*.;Antonio Cassese, *The Nicaragua and Tadić Tests Revisited in Light of the ICJ Judgment on Genocide in* Bosnia, 18 EUR. J. INT'L L. 649, 653 (2007).
[76]Cassese, *supra* note 73, at 653.
[77]The Prosecutor v. Tadić, Case No. IT-94-1, Opinion and Judgment, ¶206 (Int'l Crim. Trib. for the Former Yugoslavia May 7, 1997).
[78]The Prosecutor v. Tadić, Case No. IT-94-1, Judgment, ¶117 (Int'l Crim. Trib. for the Former YugoslaviaJul. 15 1999) [*Tadić, Appeals Chamber*].

The Appeals Chamber drew a distinction between the situation of individuals acting on behalf of a state without specific instructions and . . . an organised and hierarchically structured group, such as a military unit or, in case of war or civil strife, armed bands of irregulars or rebels.[79] It devised a new test of control and held that "(f)or the attribution to a State of acts of these groups it is sufficient to require that the group as a whole be under the *overall control* of the State."[80] Different from the stringent 'effective control' test which required specific instructions by a controlling State for each of the actions, the 'overall control test' required it to only play a broad role in "organising, coordinating or planning the military actions.[81] This was in addition to "financing, training and equipping or providing operational support to the group."[82]

The 'effective control' test was explicitly endorsed by the ICJ in *Bosnia and Herzegovina v. Serbia and Montenegro*[83] where it also regarded the 'overall control' test "unsuitable, for it stretches too far, almost to breaking point, the connection which must exist between the conduct of a State's organs and its international responsibility."[84] In fact, the Court acknowledged the role of the 'overall control' test in determining the type of conflict but noted that this was different "from the degree and nature of involvement required to give rise to that State's responsibility for a specific act committed in the course of the conflict."[85]

III. APPLYING AN APPROPRIATE TEST OF CONTROL IN INTERNATIONAL HUMANITARIAN LAW

The decision of the ICJ in the *Bosnian Genocide Convention* case has brought out a clear distinction between the tests of control for the purpose of State responsibility and for the purposes of determining 'internationalisation' of an NIAC. The ICTY which was required to decide a limited issue of whether the armed conflict was an IAC for the purpose of individual

[79] *Id*.¶120.
[80] *Id*.
[81] *Id*. ¶139.
[82] *Id*.
[83] 2007 I.C.J. Rep. 43.
[84] *Id*., ¶406.
[85] *Id*., ¶405.

criminal responsibility waded into alien waters by critiquing the 'effective control' test.[86] The appropriateness of the 'overall control' test has to be judged in light of the consequences that flow from its application.

Applying the 'overall control' test to a foreign intervention in an NIAC is relevant only for the purposes of characterising the NIAC to an IAC and triggering the more robust law applicable to IACs. It only "means that the intervening power entirely substitutes the non-State Party and becomes itself a Party to the pre-existing armed conflict instead of the non-State armed group."[87] This may be explained through an example: if State A has intervened in an between State B and armed group C and exercises overall control over the latter's actions, State A, through the armed group C, acquires the rights and obligations contained in the Geneva Conventions and A.P.I. State B is also obligated to follow the law applicable in IACs and is entitled to exercise its rights under the law. Both the States Parties now have the duty to protect cultural objects and the natural environment, to take precautions in the conduct of military operations, to ensure that legal advisers are available to instruct military commanders, to repress breaches of the Geneva Conventions and their Additional Protocols, etc.[88]

But a blanket application of the law of IACs may create difficulties. Since the foreign State is fighting through the members of the armed group, does the conversion of the NIAC to an IAC bestow POW status to such members? As a logical consequence of the 'overall control', they must be properly regarded as members of State A and thus granted POW status. But as Clapham notes: "States may baulk at the idea of granting POW status to their own nationals captured in what they may consider an illegal insurrection."[89] He, therefore, proposes that the grant of POW status should not be an automatic result of an NIAC's conversion to IAC but on the fulfilment of the criteria of Article 4 of Geneva Convention III.[90] This would require the armed group to 'belong' to the foreign State under Article 4(A)(1).

[86] *Tadić, Appeals Chamber*, Separate Opinion of Judge Shahbudeen, ¶¶ 17-19.
[87] Ferraro, *supra* note 60, at 1239.
[88] Carron, *supra* note 59, at 1027.
[89] Andrew Clapham, *The Concept of International Armed Conflict in 1949*, *in* and others (eds) THE 1949 GENEVA CONVENTIONS: A COMMENTARY (Andrew Clapham et al. eds. 2015).
[90] *Id*.

Thus, applying the 'overall control' test makes sense because "(p)roving effective control for every single operation would be virtually impossible, because it would require a level of proof unlikely to be attained."[91] The 'overall control' has also been endorsed by the ICRC:

> *In order to classify a situation under humanitarian law involving a close relationship, if not a relationship of subordination, between a non-State armed group and a third State, the overall control test is appropriate because the notion of overall control better reflects the real relationship between the armed group and the third State, including for the purpose of attribution.*[92]

But the importance of the 'overall control test' should not be overemphasised and should be limited to determining the type of conflict and not the responsibility of the foreign State. These two matters are different. Applying the 'overall control' test converts an NIAC to an IAC and obligates the foreign State to ensure that the armed group it controls, and the warring State, complies with the law applicable to IACs.[93] Additionally, it may be relevant at the stage of prosecuting individuals under the Rome Statute's more elaborate provisions applicable in IACs. All that is required through internationalisation is the application of the more comprehensive law applicable to IACs.

It does not need to be applied for attributing specific violations committed by armed groups to the foreign state and attaching the consequence of breaching international humanitarian law on the latter. For the purposes of state responsibility, it is important to retain the 'effective control' test and to require a higher standard of proof to be met. Some commentators propose an even stricter version of the 'overall control' test of internationalisation because the consequences of this require compliance by the ANSA.[94] There are two reasons for a stricter test:

> *A State needs a strict control over an armed group to ensure that the rules of IACs are respected. In the same sense, an armed group would only be able to apply the law of IACs if it was under the close scrutiny of a State. Finally, the State attacked by the*

[91]Ferraro, *supra* note 60, at 1236.
[92]Cameron, *supra* note 7, at 149.
[93]Ferraro, *supra* note 60, at 1250.
[94]Carron, *supra* note 59, at 1035.

armed group would accept applying the law of IACs against its adversary only if the armed group was tightly controlled by another State.[95]

Since the foreign state is intervening only through the ANSA, it is important to ensure that there is sufficient control for it to be able to ensure that the ANSA complies with the obligations under the law applicable to IACs. However, there is disagreement over the use of the secondary rules of attribution to determine the application of primary rules of international humanitarian law.[96] Instead, some authors argue that a test should be developed in international humanitarian law itself for characterising an armed conflict, for e.g. by proving the ANSA's belonging to the intervening state through a *de facto* agreement between them.[97] International humanitarian law may even use the 'overall control' test to determine the type of conflict.

CONCLUSION

There is a difference between attributing actions of an ANSA to a foreign state for 'internationalisation' of the conflict and attributing the actions for the purpose of state responsibility. In the former case, attribution is intended to apply the law relating to IACs and in the latter case, the intervening state becomes responsible for each of the violations committed by the ANSA. The judgment of the ICJ in *Bosnian Genocide Convention* case has given its imprimatur to using two different tests for the dual purposes outlined above. A relaxed 'overall control' test can be applied to internationalise a conflict while the stricter test of 'effective control' can be applied for State responsibility.

This analysis always proceeds on the assumption that there are two different legal regimes applicable to armed conflicts. In fact, the sole purpose of attribution in case of a foreign intervention is to ensure the application of a more comprehensive law. However, a more effective solution would be to lessen the gap between the law applicable in IACs and NIACs. This is easier than done, as the article has shown above. Customary international law can be used

[95] *Id*.

[96] Marko Milanovic, *What Exactly Internationalizes an Internal Armed Conflict?*, EJIL:TALK(May 7, 2010), https://www.ejiltalk.org/what-exactly-internationalizes-an-internal-armed-conflict/.

[97] Akande, *supra* note 15, at 270-71.

to bridge this gap and the ICRC has done substantial work in this area. But robust implementation of customary international law will depend on widespread dissemination of the law so that ANSAs are well-equipped to comply with it. ANSAs will not always have the support of a foreign state since customary international law will apply to even NIACs simpliciter. Given that international humanitarian law aims at reducing suffering and the impact of war, differentiating the applicable law based on the type of armed conflict is abominable. Till a complete convergence does happen, a reliance on the 'overall control' test remains the best way to apply law of IAC.

ECOCIDE, THE 5TH CRIME AGAINST HUMANITY: ELUSIVE DREAM OR INEVITABLE REALITY

-Bhavya Aggarwal[1]

ABSTRACT

Will the climate change crisis usher the world to its inevitable end? If the intersectionality between environmental devastation and climate change proves one thing, it is that humans have no one but themselves to blame for the ecological catastrophe they are currently facing. Artificial altercations made to the environment in the name of 'development' have left the world facing problems like global warming, ozone layer depletion and exhaustion of non-renewable resources. Even as the entire world stands together to combat these issues, the international judiciary's oversight on this matter has left academics and environment lawyers alike, in utter dismay.

This paper aims to explore whether an international law of ecocide is our last chance to save the world from total annihilation. While environmentalists, lawyers and nations want ecocide to be included as the fifth crime against humanity before the International Criminal Court, passing an ecocide amendment will be no easy feat. This is due to the various complications around the law of ecocide. Is direct intent necessary? Will corporates and States be held criminally liable too? Will an ecocide amendment of this nature realistically accomplish the goal of evading the climate change crisis.

INTRODUCTION

The world is too much with us; late and soon,

Getting and spending, we lay waste our powers:

[1] Student at Government Law College, Mumbai (India).

Little we see in Nature that is ours;

We have given our hearts away, a sordid boon!

This Sea that bares her bosom to the moon;

The winds that will be howling at all hours,

And are up-gathered now like sleeping flowers;

For this, for everything, we are out of tune.

-William Wordsworth

Humankind and nature shared a fulfilling relationship of mutual co-existence up until one point. However, evolution of the industrial society replaced this understanding of interdependence with pursuits of materialistic gain. Physical alterations to the environment and interference with the ecosystem in the name of 'development' caused ecological harm that was irreversible in nature. While academics may be unable to pin down the exact act of environmental destruction that gave rise to global warming, ozone layer depletion and the climate change crisis; it is safe to say that years of artificial altercations to our planet paved the way for such an ecological catastrophe. When looked at, international judicial bodies have done a monumental job at safeguarding the rights of every citizen that inhabits the Earth. The United Nations, the International Court of Justice and The International Criminal Court among others serve to deliver true quality in justice by way of fundamental human rights. But what about the rights of the Earth? With the climate emergency right on our doorstep, it is time, if not too late, to hold individuals accountable for causing mass destruction to our environment and committing ecocide – the egregious crime of killing our ecosystems.

1. Meaning of Ecocide

Due to the lack of a concrete legal definition for this rather modern concept, we must retrace our steps back to its inception. Historically, ecocide became known in theory due to its links to the Vietnam War, a concept reiterated by the Swedish Prime Minister Olof Palme in 1972 while

addressing the UN Stockholm Conference on the Human Environment.[2] Scientists at the time associated ecocide with the environmental devastation and human suffering effectuated by the United States military, primarily through the use of substances that were designed to cause harm to plant-based ecosystems in a certain area. Since then, many academics have attempted at conceiving an explanation that would cover the ambit of this term. Professor and biologist, Arthur W. Galston at the Conference on War and National Responsibility asserted that ecocide "*denotes various measures of devastation and destruction which have in common that they aim at damaging or destroying the ecology of geographic areas to the detriment of human life, animal life and plant life*"[3]. Another definition was given by Polly Higgins, international environment lawyer-turned-activist who worked tirelessly, for over a decade, towards the recognition of ecocide as an international crime. Her understanding of ecocide through a legal lens included *"the extensive destruction, damage to or loss of ecosystem(s) of a given territory, whether by human agency or by other causes, to such an extent that peaceful enjoyment by the inhabitants of that territory has been severely diminished."*[4]

2. Inclusion under the jurisdiction of the International Criminal Court

While these interpretations are fairly comprehensive in order to understand the concept of ecocide, terms like 'extensive destruction' and 'other causes' happen to have an unrealistically wide scope. Due to the ambiguity in these parameters, it may seem difficult to establish an international crime which holds humans and corporations alike, accountable for altering the environment that causes perennial harm. In order to approach this obstacle, the International Criminal Court (ICC) has formulated a panel of environment lawyers co-chaired by Justice Florence Mumba, a former ICC judge at the Khmer Rouge Tribunal and Phillipe Sands QC from

[2] Olaf Palme, 1972, *UN Stockholm Conference on the Human Environment*, "The immense destruction brought about by indiscriminate bombing, by large scale use of bulldozers and pesticides is an outrage sometimes described as ecocide, which requires urgent international attention. It is shocking that only preliminary discussions of this matter have been possible so far in the United Nations and at the conferences of the International Committee of the Red Cross, where it has been taken up by my country and others. We fear that the active use of these methods is coupled by a passive resistance to discuss them".

[3] Anja Gauger, et al, *'Ecocide is the Missing 5th Crime Against Peace'*, UK, Human Rights Consortium, (2012)

[4] Polly Higgins, et al, *'Protecting the planet: A proposal for a law of ecocide',* (2013)

the Matrix Chambers to construct a legal definition of 'ecocide' (by early 2021)[5]. Efforts are being made to further accelerate ecocide's inclusion as a potential fifth crime within the Court's jurisdiction – alongside genocide, war crimes, crimes against humanity and the crime of aggression.

The timing of such an inclusion to the ICC surely seems momentous and promising, given the distress caused by climate change on soon-to-be submerged small island nations.[6] While we may agree that an amendment of this nature is a radical idea, indispensable to curb the apparent disaster of climate change; we may pause to wonder if the International Criminal Court is really the appropriate adjudicatory body for environment centric issues. Furthermore, given the powerful intersectionality between ecocide and climate change; unless climate justice is delivered through severe conviction of Heads of State[7], corporations and other influential players involved in environmental decimation; controlling the climate change crisis seems like a far-fetched dream.

This paper attempts to explore such road bumps in the international legal community's quest to remit the responsibility from individual countries to punish environmental offenders. We critically assess whether 20 years later, it is finally time for an ecocide amendment to be included in the Rome Statute, and whether the ICC is adequately equipped to criminalize actions that cause imminent and irreversible harm to our ecosystem. The second part of this paper aims at discussing what a potential amendment on ecocide may look like, considering the historical progress and limitations of the UN proposal of 2010 and the ICC's Office of the Prosecutor's (OTP) Policy Paper on case selection and prioritization. Finally, the author delves upon the

[5] Top international lawyers to draft definition of "Ecocide", STOP ECOCIDE (November 17, 2020), https://www.stopecocide.earth/press-releases-summary/top-international-lawyers-to-draft-definition-of-ecocide

[6] Joseph Foukona, Symposium Exploring the Crime of Ecocide: Climate Change Crisis in the Pacific–What Role Can International Criminal Law Play?, OPINIO JURIS (September 9, 2020), http://opiniojuris.org/2020/09/23/symposium-exploring-the-crime-of-ecocide-climate-change-crisis-in-the-pacific-what-role-can-international-criminal-law-play/

[7] For example, former Ivory Coast President Laurent Gbagbo was tried by the ICC with "Crimes Against Humanity" for post-election violence. Laurent Gbagbo, Former Ivory Coast Leader, Acquitted of Crimes Against Humanity, N.Y. TIMES (January 15, 2019), https://www.nytimes.com/2019/01/15/world/africa/laurent-gbagbo-ivory-coast-icc.html

possible solutions to the ecocide amendment that may fast-track its inclusion to The Rome Statute.

I. ECOCIDE AND INTERNATIONAL LAW: A HISTORICAL ANALYSIS

A. Ecocide and The Rome Statute

The Rome Statute is the founding treaty that established the International Criminal Court for grave crimes like Genocide, Crimes Against Humanity, War Crimes and Crimes of Aggression.[8] While there is a pressing need to include ecological devastation within the ambit of the ICC, its decades-long exclusion is no innocent error. The initial drafting of The Rome Statute categorized ecocide as a Crime against Peace which was objected to by the United States, United Kingdom and the Netherlands, following which it was left out of the draft convention. Whether it was because of the opposition cast by such powerful countries, or due to the lack of concrete provisions, the reason why ecocide was excluded from the final treaty is unknown.[9] Technically, ecocide is encapsulated in The Rome Statute Article 8 (2)(b)(iv)[10] under the purview of war crimes[11]. On close inspection of the language of the provision, we observe that the conditions precedent to the crime of ecocide namely 'widespread, long-term and severe' are exhaustive in nature making the threshold of successful prosecution unattainably high. This implies, that in order to successfully prosecute an environmental offender; the act of environmental obliteration must have met all three prerequisites to the crime of ecocide, namely the act being widespread, long-term and severe. In case, even one condition precedent is absent; the perpetrator may evade his criminal responsibility.

[8] The Rome Statute is a treaty that established the International Criminal Court. It was adopted on July 17, 1989 and became effective on July 1, 2002. [hereinafter Rome Statute]. The International Criminal Court (ICC) is an international tribunal with jurisdiction to prosecute individuals for crimes against humanity, war crimes, genocide and aggression. The State Parties to The Rome Statute, INTERNATIONAL CRIMINAL COURT, https://asp.icc-cpi. int/en_menus/asp/states%20parties/pages/the%20states%20parties%20to%20the% 20rome%20statute.aspx

[9] Anja Gauger, et al, *'Ecocide is the Missing 5th Crime Against Peace'*, UK, Human Rights Consortium, (2012)

[10] Rome Statute, Article 8(2)(b)(iv) 'widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated'.

[11] Rome Statute, 1998, Article 8(2)(b)

Secondly, for an ecological destruction to be prosecuted before the ICC, such damage must take place amidst an international armed conflict.[12] Due to the exclusion of all non-wartime activities, pollution, deforestation, oil spill and any other man-made crisis; corporations and States cannot be prosecuted, making the provision for environmental damage redundant.

Finally, the issue of limited jurisdiction of the ICC. The Court serves to prosecute only individual persons[13] with no personal jurisdiction to prosecute corporations. In the light of this, establishing individual criminal responsibility on company executives without any concrete evidence becomes a serious obstacle. With respect to geographical and temporal jurisdiction, the Court is only authorized to exercise jurisdiction on individuals in the territory of a State Party for crimes that were committed after the inception of the ICC i.e. 1 July, 2002.[14] This causes a serious issue of accountability as many countries including the USA, China and India are not party to the ICC with a number of countries from the African region who have signalled dissent from remaining a State Party to The Rome Statute.

B. Proposal to the UN Law Commission by Polly Higgins

Right after the inclusion of Crimes of Aggression to The Rome Statute in 2010,[15] lawyer environmentalist Polly Higgins submitted a proposal to the UN Law Commission[16] with an ecocide amendment to the Statute covering acts and omissions committed by Heads of State,

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[12] Mark A Drumbl, *'International Human Rights, International Humanitarian Law, and Environmental Security: Can The International Criminal Court Bridge The Gaps?'* ILSA Journal of International & Comparative Law, https://core.ac.uk/download/pdf/51091789.pdf

[13] Andrew Clapham, *'Extending International Criminal Law beyond the Individual to Corporations and Armed Opposition Group'*, Journal of International Criminal Justice, 6/5, (November 2008), 908-910.

[14] Mark Klamberg, Commentary Rome Statute: Part 2, Articles 11-21, Oxford University Press, Oxford 2002, pp. 543-552, https://www.casematrixnetwork.org/cmn-knowledge-hub/icc-commentary-clicc/commentary-rome-statute/commentary-rome-statute-part-2-articles-11-21/

[15] International Criminal Court, Assembly of States Parties, Review Conference, The Crime of Aggression, ICC Doc. RC/Res. 6 (June 11, 2010).

[16] Polly Higgins, et al, *'Protecting the Planet: A Proposal For The Law of Ecocide',* Crime, Law and Social Change-An interdisciplinary Journal ISSN 0925-4994

individuals, corporations and other entities even during peacetime (as opposed to the provision under Article 8(2)(b)(iv)).[17]

According to her draft definition of ecocide[18], acts and omissions included all activities which caused widespread or long-term "*ecological, climate or cultural loss" or "damage to or destruction of ecosystems and territories*" – without being exhaustive in nature – that tend to severely diminish peaceful enjoyment of ecosystems and territories by inhabitants. The meaning of the terms "widespread, long-term or severe" were endorsed from an existing UN treaty[19] that defines widespread as "*encompassing an area on the scale of several hundred kilometers*," long-lasting as "*lasting for a period of months, or approximately a season*," and severe as "*involving serious or significant disruption or harm to human life, natural and economic resources or other assets*."[20]

Through her ecocide amendment, Higgins aimed at establishing a "*pre-emptive duty of care*"[21] that created an obligation on all countries to not harm the planet. The proviso affixed no requirement of criminal intent for the commission of ecocide, making individuals strictly liable for the crime. By removing specific intent, the law made the severity of the conviction solely based on the degree of harm caused. This ensured that corporations could be held liable even in the absence of intention to cause harm. Furthermore, by holding an individual like the head of the company liable rather than the corporate entity; corporations would be under the pressure to resort to clean energy alternatives, scale back on exploitative mining, and abandon soil and water contamination.

[17] *Id.* at 9.

[18] Ecocide Law, MISSION LIFEFORCE, https://www.missionlifeforce.org/ ecocide-law

[19] Understanding Regarding Article I of the Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques (ENMOD)

[20] Understanding Relating to Article I Rep. of the Conference of the Comm. on Disarmament, U.N. GAOR, 31st Sess., Supp. No. 27, at 91–92, U.N. Doc. A/31/2 (1976)

[21] *Id.* at 15

In the pursuit to give 'rights to our planet Earth', the ecocide amendment was proposed as a crime against all life and not just human life.[22] Therefore, the ambit of 'inhabitants' with rights of peaceful enjoyment of their territory included "*indigenous occupants and/or settled communities of a territory consisting of one or more of the following: (i) humans, (ii) animals, fish, birds or insects, (iii) plant species, (iv) other living organisms.*"[23]

The amendment proposal of 2010 paved the way for substantial discussion regarding environmental crime in the international sphere. Despite the failure of the International Law Commission's initiative to include the ecocide amendment at that time; it stirred discussions on interpreting the law in cases that involved illegal exploitation of natural resources, environmental damage and land grabbing with the Policy Paper from the ICC OTP in 2016.

C. ICC Office of the Prosecutor's 2016 Policy Paper on Case Selection and Prioritization: A step towards the international crime of ecocide

In order to prioritize and put additional focus on criminal activities involving destruction of the environment, land-grabbing and illegal exploitation of resources; the ICC published a policy paper by the Office of the Prosecutor (OTP) in 2016.[24] The paper called for various international tribunals along with the ICC to scrutinize the involvement of corporations in environmental obliteration during peacetime. While the Policy Paper did not suggest the inclusion of ecocide as a fifth crime under the jurisdiction of the ICC, it aimed to *"give particular consideration to prosecuting Rome Statute crimes that are committed by means of, or that result in, inter alia, the destruction of the environment, the illegal exploitation of natural resources or the illegal*

[22] For the text of proposed model law, see Ecocide Crime, ERADICATING ECOCIDE, https://eradicatingecocide.com/the-law/the-model-law/

[23] Anthony J. Colangelo & Peter Hayes (2019) An International Tribunal for the Use of Nuclear Weapons, Journal for Peace and Nuclear Disarmament, 2:1, 219-252, DOI: 10.1080/25751654.2019.1624248

[24] Donald K Anton, *'Adding a green focus: The Office of the Prosecutor of the International Criminal Court highlights the 'environment' in case selection and prioritisation'* (2016), https://www.researchgate.net/publication/311351164_Adding_a_green_focus_The_Office_of_the_Prosecutor_of_the_International_Criminal_Court_highlights_the_'environment'_in_case_selection_and_prioritisation

dispossession of land"[25]. Thus, cases where environmental obliteration results into a crime against humanity – like the involvement of business and government leaders in the ostensible land-grabbing in Cambodia[26] – would be investigated under Article 7 of The Rome Statute.[27] Such a provision vastly increases the ambit of investigation, as cases of forced eviction of indigenous population or destruction of an ecosystem generally fall into the broad definition[28] of ecocide.

Further, the Prosecutor assured cooperation to States litigating individuals who have violated The Rome Statute as they stated that *"The Office will also seek to cooperate and provide assistance to States, upon request, with respect to conduct which constitutes a serious crime under national law, such as the illegal exploitation of natural resources, arms trafficking, human trafficking, terrorism, financial crimes, land grabbing or the destruction of the environment."*[29]

The Policy Paper enclosed the criteria based on which it would select cases, namely the gravity of the crime, the offender's degree of responsibility and the manner of commission with priority being given to the most serious crimes that concern the international community. Through this Policy Paper, environmental damage was made a considerable factor while evaluating the gravity of the crime, by way of the manner of commission and the impact of the crime.[30] Although the

[25] Office of the Prosecutor, Policy Paper on Case Selection and Prioritization, INT'L CRIM. CT. (2016), https://www.icc-cpi.int/itemsDocuments/20160915_OTP- Policy_Case-Selection_Eng.pdf.

[26] Chris Arsenault, 'Cambodian Land Grabs Are 'Crimes Against Humanity', Lawyers tell the ICC, THOMAS REUTERS FOUNDATION, https://www.reuters.com/article/us-foundation-cambodia-landgrabs-idUSKCN0HW1R420141007

[27] Rome Statute, art 7(2)(a), 'Attack directed against any civilian population" means a course of conduct involving the multiple commission of acts referred to in paragraph 1 against any civilian population, pursuant to or in furtherance of a State or organizational policy to commit such attack'

[28] *Id.* at 22

[29] Office of the Prosecutor, Policy Paper on Case Selection and Prioritization, INT'L CRIM. CT. (2016), https://www.icc-cpi.int/itemsDocuments/20160915_OTP- Policy_Case-Selection_Eng.pdf.

[30] See Regulations of the Office of the Prosecutor, ICC-BD/05-01-09, reg. 1.1 (Apr. 23, 2009), 29.2. The gravity of the offence as an element for the court to decide to the admissibility of a case pursuant to Article 17.1 (d) of the Rome Statute, and prosecutor in determining whether to start an investigation under Article 15.3 or Art. 53 of the Rome Statute. For example, Regulation 29 of the OTP Regulations provides generally that, in assessing the gravity

Paper did little to strengthen the ICC's jurisdiction over environmental crime; the inclusion of environmental destruction as a factor for the existing crimes marked an important milestone in recognising ecocide under the ambit of Crimes Against Humanity and maybe even as the missing Crime Against Peace.

Unfortunately, despite the publication of the Policy Paper in 2016, i.e., almost four years ago; the much-anticipated rise in prosecutions due to ecological obliteration, destruction of natural resources or land grabbing (which were coined as aggravating circumstances by the Policy Paper) has been elusive. What is more disappointing is the blatant silence in the OTP regarding the extensive government-led land-grabbing in Cambodia and the 'Lago Agrio Victims' in Ecuador[31] which failed to qualify for preliminary examinations. Since the publication of the Policy Paper, environmental exploitation has had little impact in delivering convictions for crimes against humanity.[32]

II. NEED FOR ECOCIDE TO BE RECOGNISED AS AN INTERNATIONAL CRIME

A. Inadequacy of the current international law

The lack of accountability for ecological devastation in The Rome Statute gives way to state-authorised corporate immunity, under the umbrella of which industries commit calamitous ecocide without the fear of any repercussions.

The only article in the ICC statute that remotely addresses the eco-centric consequences of a crime is Article 8(2)(b)(iv) which requires *"widespread, long-term and severe damage to the environment which would be clearly excessive in relation to the concrete and direct overall*

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for the purposes of initiating an investigation, the Prosecutor shall consider inter alia the scale, the nature, the manner of commission, and the impact of potential crimes.

[31] For example: One of the worst environmental catastrophes involving oil spillage in 4400 square kilometers of the Amazon forest constituting as severe crimes against humanity

[32] Bosco Ntaganda's conviction in July 2019: The grounds of conviction involving exploitation of natural resources were dismissed by the Court and he was charged for Crimes Against Humanity for the war crime of pillage related to enemy property

military advantage anticipated"[33] much like Article 20(g) of the ILC Code of Offences against Peace and Security.[34] The Statute fails to define the ambit of the 'damage to the environment'. In reference to other international provisions to expound such parameters, we find that most agreements fail to define 'environmental damage' per se[35]. Due to such failure in outlining the extent of anthropogenic environmental destruction under the Statute, stakeholders disregard the possibility of criminal liability and continue causing irrevocable harm to the environment. Further, Article 8(2)(b)(iv)'s rigidity with regard to environmental destruction 'only during the course of an international conflict'[36] restricts the imposition of criminal liability and recognition of a broader crime of ecocide before the ICC.

The ICC OTP Policy Paper of 2016 aimed at creating significance around ecological obliteration, destruction of natural resources or land grabbing and the role they played in crimes currently punishable under the ICC. However, due to the insubstantial application of the uncodified law, it remains 'an internal document of the Office, and as such, it does not give rise to legal rights.'[37]

The strongest proof of non-application of environmental rights is the case of Bosco Ntaganda in the ICC Trial Chamber VI[38]. The perpetrator was convicted on 18 counts of war crimes and crimes against humanity, while his criminal activities involving illegal exploitation of natural resources in the Democratic Republic of Congo and war crime of pillage of natural resources were dismissed by the Court. Ntaganda was instead charged for the pillage of household goods

[33] Rome Statute, Article 8 (2)(b)(iv). (emphasis added)

[34] ILC Draft Code of Crimes Against the Peace and Security of Mankind (1996), Article 20 (g) in the case of armed conflict, using methods or means of warfare not justified by military necessity with the intent to cause widespread, long-term and severe damage to the natural environment and thereby gravely prejudice the health or survival of the population and such damage occurs.

[35] For example, e.g. the 1988 Convention on Regulation of Antarctic Mineral Resources Activities (CRAMRA) (not in force), Article 1(15)).

[36] Rosemary Mwanza, "Enhancing Accountability for Environmental Damage under International Law: Ecocide of a Legal Fulfilment of Ecological Integrity", Melbourne Journal of International Law 19 (2018).

[37] Office of the Prosecutor, Policy Paper On Case Selection And Prioritisation, 15 September 2016, https://www.Icc-Cpi.Int/Itemsdocuments/20160915_Otp-Policy_Case-Selection_Eng.Pdf (accessed 20 March 2020).

[38] The Prosecutor v. Bosco Ntaganda Situation: Situation in the Democratic Republic of the Congo, Trial Chamber VI, 08 July 2019

and appliances, denoting the underdeveloped jurisprudence between international crime and ecocide. Another case that showcases the inadequate application of environmental obliteration is the 'Bemba Case'[39] where despite the Trial Court having found that the MLC soldiers had committed war crimes of pillaging, the Appeals Chambers reversed the inferior court's judgement and annulled all charges of crimes against humanity as well as war crimes against the defendant.[40]

Beyond the 2016 Policy Paper and The Rome Statute, the absence of a codified international treaty on pressing environmental issues is another key reason for the non-existence of an international crime against the environment. Fragmented and incomprehensive environmental treaties of the past direct nations to formulate domestic laws to comply with the treaty with no follow-up as to domestic countenance of such laws. With recognition of ecocide as an international crime under the ICC, environmental law will receive fundamental recognition for the very first time, forcing culpable stakeholders to be held criminally accountable for their role as a 'climate villain.'[41]

B. Oncoming climate change crisis

An urgent objective of the inclusion of ecocide as an international crime under the ICC is to curb the precipitous rise of climate change. Article 2(1)(a) of the Paris Agreement recognised the impact of climate change and stated that in order to combat the threat of climate change crisis; the planet needs to reduce its global temperature increase to well below 2 degrees centigrade above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 degrees centigrade above pre-industrial levels.[42] Despite the exigency of the targets of the Paris Agreements, minor efforts are being taken to meet these objectives. The global temperature

[39] Trial Chamber III Situation in the Central African Republic in the Case of the Prosecutor V. Jean-Pierre Bemba Gombo, 21 March 2016, ICC-01/05-01/08-3343.

[40] Trial Chamber III Situation in the Central African Republic in the Case of the Prosecutor V. Jean-Pierre Bemba Gombo, 21 March 2016, ICC-01/05-01/08-3343.

[41] During the climate strike in New York, the image of Darren Woods, the CEO of Exxon Mobil was placed on a 15 feet tall cardboard clutching a bag of fake, bloodied money. The puppet of Woods wore the label "Climate Villain."

[42] https://unfccc.int/sites/default/files/english_paris_agreement.pdf

prediction has risen to a total of 5 degrees centigradewhich is much higher to the figures contained in the Paris Agreement.[43]

The trapping of carbon dioxide in the atmosphere which is triggering the rising global temperature will lead to catastrophic rise in sea levels across the planet. This is precisely why soon-to-be submerged small island nations[44] are front-lining the efforts to pursue the inclusion of ecocide as an international crime; because once the sea-level rises to a calamitous level, these low-lying coastal regions will be the first to become inhabitable.[45] In order to avoid the subsequent crimes of forced mass migration and crimes against human dignity in the future; inclusion of ecocide to aid the global fight against climate change becomes imperative and urgent.

Experts anticipate the onset of 'climate wars' of various kinds with the escalation of climate change. The shift in maritime boundaries due to the rise in sea levels may be the foremost of conflicts as States scrimmage with each other to preserve their resources.[46] The outset of such conflicts due to resource scarcity can already be seen in Darfur, Sudan.[47]

Various reports from the Intergovernmental Panel on Climate Change (IPCC) show 8-figure death tolls in the coming decades. The previous annual death rate of 400,000 due to climate change linked events, is expected to reach six million by 2030 unless there are drastic shifts made from reliance on fossil fuels that cause emission of hazardous greenhouse gases.

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[43] Paris Agreement, art 2(a), 'Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;'

[44] *Id.* at 5

[45] Étienne Piguet, Antoine Pécoud and Paul De Guchteneire, '*Migration and Climate Change'*, Cambridge, Cambridge University Press, *(2011), 12-15.*

[46] *Joshua Lusthaus, Shifting Sands: Sea Level Rise, Maritime Boundaries and Inter-State Conflict, (*Published Online, Political Studies Association, *(2010), 114-115.*

[47] Joshua Busby, 'Why Climate Change Matters More than Anything Else', (*Published Online, Foreign Affairs* Vol. 49, (2018), 52-53.

Another key necessity for making ecocide a crime is to halt financial institutions from funding ecocidal activities solely because 'it is not an offence'. Establishing ecocide as an international crime will help break-off and re-channel finance from fossil fuel companies to industries engaged in renewing the natural resources of our ecosystem.

In light of such a harrowing reality, initiatives like the Stop Ecocide campaign work in the exclusive direction of making destruction of ecosystems an international crime with significance identical to genocide, crimes against humanity, war crimes and crimes of aggression. This must be done with an aim to right the wrongs of the past decades which allowed damaging industrial activities at the cost of widespread and systematic harm to nature.

C. Moral awakening

In essence, categorizing ecocide as an international crime punishable before the ICC creates a moral imperative for individuals and corporations alike, to not harm the environment. It becomes their duty as an upstanding citizen of the society to enjoy and let their fellow citizens enjoy the peaceful habitation of a certain territory.

Academics like Mark Allen Gray have suggested the need to categorize ecocide as a crime to designate the international community's moral outrage[48] towards the plummeting of earth's natural resources at the hands of negligent violation of human rights.[49] Just like the moral outrage that paved the way for humanitarian laws after the second world war, Gray states that, *"International intolerance towards environmental destruction increasingly mirrors the moral outrage underlying the Nuremberg Charter and Judgment" that resulted in the formation of new humanitarian laws."*[50]

[48] Mark Allan Gray, The International Crime of Ecocide, 26 CAL. W. INT' LL.J. 215, 216 (1996).

[49] Gray's formulation of ecocide: "Ecocide is identified on the basis of the deliberate or negligent violation of key state and human rights and according to the following criteria: (1) serious, and extensive or lasting, ecological damage, (2) international consequences, and (3) waste. Thus defined, the seemingly radical concept of ecocide is in fact derivable from principles of international law.

[50] *Id* at 30.

A punishment for any crime is devised with the aim of it acting like a deterrent for the citizens. By coining ecocide as an international crime, we establish a deterrent to the commission of ecocidal activities, preventing individuals from physically altering the environment in fear of its repercussions.

Recently, the discussion on ecocide has acquired high-profile support from diplomatic and spiritual leaders like Pope Francis, who are inducing an 'ecological awakening' among their followers[51], and activists like Greta Thunberg who are garnering support for ecocide to become the fifth category of international crime.[52] According to these diplomatic leaders, an ecological conversion of this form is imperative for the sake of mankind's future generations. Initiatives such as this push to retrace and re-examine the unsustainable patterns of demand and supply which cater to the unending human wants at the cost of pillaging our ecosphere. By imposing a duty of care, we make it pertinent for humans to be vigilant about their ecocidal activities and how these contribute in languishing the planet.

III. PROBLEMS WITH THE LAW OF ECOCIDE

A. Establishing intent with elements like actus reus, mens rea and strict liability

A major loophole in the formulation of ecocide as an international crime is the absence of an outline of various elements that establish the commission of ecocide. The underdeveloped ambit of these elements, namely actus reus, mens rea and strict liability prevent ecocide from becoming a codified international law. This section circumvents such gaps in the elements associated with the crime of ecocide.

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[51] Wesley J. Smith, *'Pope Supports Classifying 'Ecocide' as an International Crime',* NATIONAL REVIEW (September 17, 2020) https://www.nationalreview.com/corner/pope-supports-classifying-ecocide-as-an-international-crime/

[52] Eu Leaders are Called on to #face the Climate Emergency & Support Making Ecocide an International Crime, STOP ECOCIDE (July 16, 2020), https://www.stopecocide.earth/press-releases-summary/greta-to-eu-leaders-support-making-ecocide-an-international-crime

1. Actus Reus

It is imperative that a precise threshold is set in place to distinguish the actus reus of ecocidal crimes from conventional environmental offences. Falling back on the existing Article 7 of the Rome Statute to define the severity of ecocidal crimes may be anti-climactic due to the limited definition[53]. This may rule out devastation activities caused by negligence and ones carried out without a pre-planned criminal intent, for example like in the case of oil spills.

Further, it is crucial that the action which constitutes an ecocidal crime takes into account the scale and severity of the act, and its effect on the environment in order to accelerate preliminary investigations for timely prosecution.[54] In order to prevent ecocide from being regarded as another *'ultimum remedium'*.[55] The definition of ecocide should not limit prosecution only for the most heinous crimes against the environment. Unless such emphasis is put in the conceptualization of actus reus, only the most serious incidents of environmental destruction like the Chernobyl nuclear accident, the Bhopal gas tragedy or substantial oil spills[56] may get recognised acts of ecocide.

Thus, the oncoming terminology of ecocidal activities must not confine itself to the current exhaustive parameters of *"wide-spread, long term and severe damage to natural environment"* as prescribed in Article 8(2)(b)(iv) of the ICC Statute or as under Additional Protocol I of the Geneva Convention to prevent restricting ICC's jurisdiction in trying ecocidal crimes.

[53] Rome Statute, art 7, 3 https://www.icc-cpi.int/resource-library/documents/rs-eng.pdf

[54] See Office of the ICC OTP policy paper n.1, at 12.

[55] See further, Douglas Husak, "The Criminal Law as Last Resort", 24 Oxford Journal of Legal Studies 2 (2004) 207–235.

[56] This could include, for example, the Torrey Canyon oil spill off the coast of Cornwall, Great Britain in 1967; the Amoco Cadiz spill off the coast of Brittany, France in 1978; and the Exxon Valdez oil spill off the coast of Alaska, United States in 1989.

2. Mens Rea and strict liability

As per the current understanding of ecocide and potential examples cited by the Stop Ecocide Foundation (SEF), ecocidal crimes may range from deliberate military action like the use of Agent Orange and nuclear weapons during the Vietnam war, to human acts of negligence like Fukushima, Chernobyl and the Bhopal gas tragedy. In order to establish the 'crime' of ecocide, proving the degree of *mens rea* in cases of environmental offences with no direct intent (like in the case of oil spills or nuclear disasters) may be a serious challenge.[57] According to Article 30 of the Rome Statute, the existing intent requirement states that *"a person shall be criminally responsible and liable for punishment for a crime within the jurisdiction of the Court only if the material elements are committed with intent and knowledge."*[58] The specific prerequisites requiring the person to 'engage in the conduct' and 'specifically mean to create or be aware of the consequences' may severely hamper the prosecutions of environmental damage that the ecocide law aims to minimize. In order to address this shortcoming, the Draft Ecocide Act of 2011 proposed to include ecocide as a strict liability offence.[59] The strict liability standard was more likely to encourage preventive and cautious behaviour by strengthening "the polluter pays" and other precautionary principles.[60]

However, imposing strict liability in criminal law is looked down upon, with little support from the drafters of the current ecocide law. Academics like Allison Danner and Jenny Martinez state that, "*Strict liability, where the defendant need not have any blameworthy mental state, is rare and disfavoured in criminal law*."[61] With the unattainably high threshold of proving direct intent

[57] See F. Megret, "International Criminal Law", in J. Beard and A. Mitchell (eds.), International Law in Principle (2009). See also Frederic Megret, "The Case for a General International Crime against the Environment", in Sebastien Jodoin and Marie-Claire Condonier Segger (eds), Sustainable Development, International Criminal Justice and Treaty Interpretation (CUP, 2013)

[58] Rome Statute, Article 30 https://treaties.un.org/doc/Treaties/1998/07/19980717%2006-33%20PM/Ch_XVIII_10p.pdf

[59] This proposal appeared in the Draft Ecocide Act (2011), Art. 12. See further, http://eradicatingecocide.com (accessed 15 March 2020). See also, Pereira, note. 38.

[60] Mark Allan Gray, The International Crime of Ecocide, 26 CAL. W. INT' LL.J.

215, 216 (1996).

[61] Allison Marston Danner & Jenny S. Martinez, Guilty Associations: Joint Criminal Enterprise, Command Responsibility, and the Development of International Criminal Law, 93 CAL. L. REV. 75, 147 (2005)

under The Rome Statute, alongside an international environmental law which may not impose strict liability; ecocide may remain a 'paper tiger' for prosecution of environmental crimes.[62]

B. Provisions in The Rome Statute: State versus individual or corporate responsibility

With respect to the categories of individuals to be prosecuted for the crime of ecocide, there are wavering opinions even amidst the drafters of this law. While Justice Mumba categorised responsibility between the state or a particular individual; SEF Chair Jojo Mehta suggested to classify ecocide as a corporate crime. As far as corporate accountability is concerned, the provisions under The Rome Statute do not provide for prosecution against corporate entities, the inclusion of which will require unrealistic amendments to the Statute. On the other hand, Benjamin Ferencz, former Nuremberg Chief Prosecutor firmly believed that for a real-time prosecution of ecocidal crimes, corporate atrocities should be penalized via a specific individual from the corporate entity.

Individual accountability in case of ecocidal crimes committed by corporate entities may be very challenging. In cases involving illegal economic activities that cause environmental obliteration; identifying and assigning liability on a single perpetrator may be difficult, due to the big number of players involved.

With regard to state responsibility for ecocide, in 2001 while the draft proposal of Articles of State Responsibility by the International Law Commission (ILC) specifically suggested criminal responsibility of States for unethical environmental practices, the final version of the 2001 ILC

[62] For example, the UNEP study reports that wildlife crime is a particularly persistent problem in Africa, Asia and Latin America, where all kinds of species – mammals, birdlife, reptiles and amphibians, insects, and plants – are affected. Asia, North America, and the European Union are common destinations for wildlife trafficking, alongside the Gulf countries for illegal charcoal and illegal gold from African countries. Moreover, countries in Asia are increasingly becoming major consumer markets of a wide range of illegal wildlife resources and products including rare highly valuable wood like rosewood. Another example of serious and illegal harms to the environment committed during peacetime include the 600 tons of caustic soda and petroleum residues were dumped in open-air public waste sites in Abidjan, Ivory Coast, in August 2006.

articles[63] merely identified the repercussions for the violation of peremptory norms of international law – keeping these norms ambiguous about environmental crime. Even the various commentaries[64] by the ILC on the articles of state responsibility – although not exhaustive – do not mention any consequences for environmental harm. The absence of 'massive pollution' and 'environmental catastrophes' in the final draft of the ILC articles proves the resistance faced by this article from the State Parties of the commission.[65] This goes to show that the traditional international criminal law may identify individual criminal liability, but criminal responsibility of the state is a development that may or may not surface in the distant future.[66]

C. Ecocide And The Paradox Of 'Inter-' And 'Trans-Nationality'

With regard to the activities included in ecocide, the views are rather paradoxical. While the SEF lists gold-mining and cobalt extraction as a key issues to be addressed by ecocide, several nations might disregard[67] the possibility of losing access to natural resources on their sovereign land that have the potential of producing new technologies.

Another issue is of the types of environmental crimes that fall under the ambit of ecocide as an international crime. Apart from environmental crimes that affect more than two nations

[63] See 2001 International Law Commission (ILC) Draft Articles on the Responsibility for Internationally Wrongful Acts 48, Report of the ILC to the United Nations General Assembly adopted in the fifty-third session, UN Doc. A/56/10 (2001).

[64] See Draft articles on Responsibility of States for Internationally Wrongful Acts, with commentaries 2001, Article 40, commentary 6, at 286.

[65] Ibid

[66] See Christian Tomuschat, "International Crimes by States: an Endangered Species?", in K. Wellens ed., International Law: Theory and Practice – Essays in Honour of Eric Suy, Martinus Nijhoff (1998) at 259; Geoff Gilbert, "The Criminal Responsibility of States" 39 International and Comparative Law Quarterly 345 (1990). Theodor Meron, "Is International Law Moving Towards Criminalization?" 9 European Journal of International Law (1998) at 21.

[67] For example, Brazilian president Jair Bolsanaro's comments on deforestation in the Amazon, to the effect that the Brazilian rainforest is sovereign territory and the rest of the world should mind its own business, foreshadows some of the political resistance the concept is likely to face.

(transnational or supranational crimes), does ecocide cover crimes affecting the nation responsible for those activities and its neighbouring state (transboundary environmental crimes)?

International environmental crimes would also comprise of ecocidal activities that affect the ecosphere, therefore including illegal trade of ozone-depleting material[68], dumping of hazardous wastes[69], illegal trade and transport of wildlife[70] among others. It is important that all environmental crimes are criminalized on the international stage in order to create a coherence within nations beyond boundaries that allow for a universal jurisdiction for the trying of such crimes, rather than making it a sovereign issue. This would enable the ICC to prosecute environmental offenders even from countries that have not ratified The Rome Statute. Without the eradication of inter-nationality and trans-nationality, perpetrators that demonstrate blatant unwillingness to curb deforestation, mining of natural resources and more cannot be brought to environmental justice.

D. Whether ICC Is The Appropriate Adjudicating Authority To Prosecute Environmental Crimes

1. Environmental crimes' struggle to remain relevant alongside human rights abuses

The central purpose of the establishment of the ICC was to correct the wrongs of World War 2 and address the perpetrators for the human rights abuses conducted by them.[71] Their purpose has always been to prosecute grave crimes that threaten the *peace, security and well-being* of the world. The biggest success of The Rome Statute till date has been their ability to create a

[68] Montreal Protocol on Substances that Deplete the Ozone Layer, opened for signature 16 September 1987, entry into force 01 January 1989, 1522 UNTS 3.

[69] Basel Convention on the Control of Transboundary Movement of Hazardous Waste and Other Waste and their Disposal, 1673 UNTS 126. 22 March 1989; 05 May 1992.

[70] Washington Convention on International Trade in Endangered Species of Fauna and Flora (CITES), 993 UNTS 243, adopted on 03 March 1973; in force 07 January 1975.

[71] Peter Sharp, Note, Prospects for Environmental Liability in the International Criminal Court, 18 VA. ENVTL. L.J. 217 (1999).

framework of laws that prosecutes the conduct prohibited by them. The core crimes have a direct link to the principal goal of safeguarding the peace and security of mankind. However, the same may not be the case with environmental crimes which leads to ecocide getting side-lined among the broad array of international crimes.

Environmental crimes if not curtailed, will lead to the depletion of non-renewable natural resources of our planet. Scarcity of such resources may cause international conflict which may finally endanger the peace and security of people. However, academics like Mark Notaras are not entirely convinced about this assumption[72] and believe that there might be an alternate result which may not end with a war for resources. Drawing from this notion, it may be safe to say that while the ICC will acknowledge the inclusion of ecocide within The Rome Statute, it may not be disposed to favour anthropogenic activities over human rights abuses.

2. The problem of jurisdiction

According to a recent study by Global Carbon Project, countries that are the biggest polluters on the planet are China, the United States, India and Russia in that order[73]. Coincidentally, these States are also not parties to The Rome Statute, and by extension outside the jurisdiction of the ICC. While the inclusion of ecocide under The Rome Statute would be a big step forward in curtailing the climate change crisis, its scope would be limited due to ICC's lack of jurisdiction over the key polluters of the world. Without having these participants under the ambit of the ICC, the most notorious environmental offenders stay outside the reach of prosecution.

Secondly, Article 8(2)(b) of The Rome Statute prescribes an exhaustive list of war crimes punishable before the ICC. Violations not enshrined under these provisions stay outside the jurisdiction of Court. With regard to environmental crimes, the only provision that remotely allows for judicial interpretation of ecocidal crimes is Article 8(2)(b)(iv) which includes environmental obliteration as a war crime causing "widespread, long-term and severe damage…

[72] Mark Notaras, Should Ecocide Be Deemed a Crime against Peace?, OUR WORLD https://ourworld.unu.edu/en/should-ecocide-be-deemed-a-crime-against- peace [https://perma.cc/8H35-2NYJ] (last visited Apr. 29, 2019).

[73] Top 10 most polluting countries in the world: https://gulfnews.com/photos/news/who-are-the-worlds-biggest-polluters-1.1572250802844?slide=1

in relation to the concrete and direct overall military advantage anticipated". This essentially means that acts of environmental devastation will only be prosecuted when carried out during an international armed conflict. Due to this limited ability and inflexibility of the ICC to prosecute acts of environmental devastation, any jurisprudential development of ecocide under The Rome Statute may not be very effective.

Apart from the shortcomings in the ICC's geographical and temporal jurisdiction, the Court's personal jurisdiction also has its limitations. While the Court can confer individual criminal responsibility on "natural persons"[74], state and corporate criminal responsibility does not fall under the Court's jurisprudence. The lack of state's criminal responsibility may be overlooked due to provisions in the Statute that provide for individual heads of state to be prosecuted for "core crimes"[75].

However, the majority of ecocidal crimes are carried out by corporations during their quest of profit maximization. These acts of ecocide generally take place during times of peace, further removing it from the ambit of Article 8(2)(b)(iv) of the Statute. In such circumstances, the absence of a provision[76] that holds corporate entities responsible for environmental obliteration limits the application of a law[77] that aims at curbing the climate change crisis.

[74] Rome Statute, art. 25 ("The Court shall have jurisdiction over natural persons pursuant to this Statute.").

[75] For example, the ICC tried former Ivory Coast President Laurent Gbagbo, with "Crimes Against Humanity" related to post-election violence. He is the first former head of state to stand trial at the ICC, and was acquitted on January 15, 2019. Laurent Gbagbo, Former Ivory Coast Leader, Acquitted of Crimes Against Humanity, N.Y. TIMES (Jan. 15, 2019), https://www.nytimes.com/2019/01/15/world/ africa/laurent-gbagbo-ivory-coast-icc.html [https://perma.cc/9W3B-4G5H].

[76] Although a provision to prosecute "legal persons" was proposed in the draft, the same was not approved: Mohammad Saif-Alden Wattad, Rome Statute & Captain Planet: What Lies Between Crime Against Humanity and the Natural Environment, 19 FORDHAM ENVTL. L. REV. 265, 279 (2009).

[77] Many believe that such corporate entities can be prosecuted by holding the heads of such corporations accountable under Article 28(b) of the Statute for crimes committed under the individual's effective authority. Although the Article specifically refers to military commander liability (US v. Yamashita) and may not be applicable in the case of a chief office of a corporate entity.

VI. AUTHOR'S SUGGESTIONS TO THE ONCOMING DRAFT PROPOSAL OF THE ECOCIDE LAW

A. Setting appropriate sanctions in place

The environmental provisions of The Rome Statute bear two limitations that hinder the efficacy of trying perpetrators who commit ecocidal crimes before the ICC. Due to the Statute's ambit of who can be prosecuted being limited to "natural persons", and the requirement of environmental crimes to have been committed during an armed conflict between two or more nations; the ICC doesn't do much to deter environmental desecration. Therefore, an essential alteration to the draft proposal on the ecocide law must include the provision to widen the personal and temporal jurisdiction of the ICC. This may entail assigning criminal liability to States and corporate entities who were previously outside the purview of the international court. Further, as corporate offenders indulge in activities causing environmental obliteration during peacetime, Article 8(2)(b)(iv) of the Statute needs to be altered accordingly to include both peacetime and wartime acts of ecocide.

With regard to the current punishment provision prescribed in The Rome Statute, convictions before the ICC involve sentencing in the form of fines, forfeiture of the proceeds from committing the crime and imprisonment.[78] Apart from acting as a deterrent for individuals that are committing environmental crimes, the ecocide law also aims at minimizing the harm that is being done to the environment. Keeping this in mind, the author suggests that a mandatory provision in punishments for environmental crimes under the Statute must include the rehabilitation of the environment. Along with accumulating the fines imposed on the perpetrator

[78] Rome Statute, art 77, '1. Subject to article 110, the Court may impose one of the following penalties on a person convicted of a crime referred to in article 5 of this Statute: (a) Imprisonment for a specified number of years, which may not exceed a maximum of 30 years; or (b) A term of life imprisonment when justified by the extreme gravity of the crime and the individual circumstances of the convicted person. 2. In addition to imprisonment, the Court may order: (a) A fine under the criteria provided for in the Rules of Procedure and Evidence; (b) A forfeiture of proceeds, property and assets derived directly or indirectly from that crime, without prejudice to the rights of bona fide third parties.

for the benefit of the victims, we must not overlook that the direct victim of environmental crimes is the environment itself.

B. Subsidies in return for obtaining jurisdiction

With the primary polluters of the world not being signatory to The Rome Statute, incorporating ecocide to be tried before the ICC may become anti-climactic due to the Court's jurisdictional limitations. Unless, alternate bases of jurisdictions are devised to bring law-breaking nations under the geographical jurisdiction of the ICC. Subsidies could be granted to States for projects carried out in State Parties of the Statute in return for jurisdiction to examine, scrutinize and – if found in violation – possibly litigate nations who conduct ecocidal activities. Thus, for example if a corporation from India (a non-signatory of The Rome Statute) avails a subsidy for development of a corporate project on the territory of a State Party of The Rome Statute, in case they carry out certain activities involving environmental desecration that violates the ecocide law, they will be well-within the jurisdiction of the ICC to be prosecuted for the ecocidal crime.

This, along with the 'effects approach' which grants jurisdiction to the ICC over non-signatories if the effects of their ecocidal activities are felt on the territory of State Parties would make substantial progress in holding environmental offenders accountable despite their decision to not ratify The Rome Statute.

C. An independent International Environment Court

While inclusion under the purview of the ICC appears to be promising, it comes with its own set of limitations which may not necessarily translate into an optimum environmental law. In order to mitigate the life-threatening advances of climate change, we require a legal mechanism that solely monitors the nations' compliance with the environmental law and standards put into place. The existing international statutes lack the provisions to solve anthropogenic disputes and prosecute environmental crimes. Additionally, due to the lack of a codified environmental law

coupled with few cursory environmental treaties, acts of environmental obliteration that have caused transboundary harm in the past have never been litigated.

Unless there is a concrete mechanism that specializes in studying complex scientific evidence in cases violating environmental law; the severity of harm caused and the degree of punishment to be imposed might never be assessed accurately.

Another key reason for an alternative to the International Criminal Court for the prosecution of environmental crimes is to impose an 'erga omnes' obligation in matters that affect the earth's ecosystem. An adjudicatory authority that imposes its constitution on all; without the prejudice of nations being signatories or not is essential in order to access justice.

The alternative international courts which may be sought to litigate environmental matters may be the International Criminal Court or the International Court of Justice. However, for either courts to provide compulsory geographical jurisdiction, major changes will have to be made to the Statutes that govern these Courts, which might not be an easy feat due to its interminability. Therefore, the creation of an effective tribunal with effective enforcement of nations' obligations towards the environment will produce real-time progress in warding off climate change.

CONCLUSION

The development of environmental law in the past may be regarded as mediocre at best. While Article 8(2)(b)(iv) comes with the lacuna of criminalizing 'widespread, long-term and severe damage' to the environment with an unattainably high threshold of occurring during an international armed conflict; Polly Higgins' proposed law on ecocide seems unrealistically expansive – effectively making all corporations strictly liable just for running an operation that may generate emissions. Recently, an expert drafting panel headed by Justice Florence Memba and Professor Phillips Sands QC was convened to devise a legal definition for 'ecocide' making it a potential contender for being termed as an international crime before the ICC.

However, does ICC's lack of prosecutors and judges bearing expertise in the field of international environmental law allow for ineffective jurisprudence? Is the ICC really the

appropriate adjudicatory authority to prosecute the crime of ecocide? What about the deficiency of resources required to study scientific evidence that usually surface in an environmental crime?

Incorporating an amendment on ecocide in the pre-existing Statute will be a long-drawn process. After the submission of the draft, in order to be adopted it must be approved with a two-thirds majority vote – that is 122 countries. While no country has an explicit veto power, a process of this stature could take anywhere between three to seven years.

Even with these shortcomings, developing a law that prosecutes ecocide is a progressive idea. It creates a juristic personhood for nature, finally pronouncing that environmental harm is not a victimless act after all. If anything, the biggest victim in all of this is our planet which equally deserves to be compensated. That along with the people suffering due to these acts of environmental obliteration, the planet suffers too. More importantly, it finally bestows 'rights to the planet' and makes harming the environment an internationally recognised criminal offence.

As ecocide gathers momentum to accomplish far-reaching reforms and eradicate the biblical notion that man has dominion over nature; nations in the meantime must engage in 'save-the-world' activities to curb environmental harm which is leading to climate change.

Irrespective of ecocide becoming an international crime, it is imperative that countries make a conscious effort to strengthen their domestic laws to prosecute environmental harm. In addition to this, creation of biosphere reserves as a new form of protected environmental area may help preserve the ecosphere and promote the importance of healthy nature.

The signing of the Paris Agreement marked a major step forward for mankind in combating the climate change crisis. It specifically addressed the issue of environmental harm, generating initiatives to mitigate climate change, as well as finance and fashion initiatives towards a greener future. However, that is not enough. An important next step for tackling the climate change crisis would be to effectively deter individuals, corporations and nations from negligently causing environmental harm. This is where the categorization for an international crime of ecocide enters the debate. By assigning strict criminal liability for egregious crimes against the environment, we ensure that nations' commitment towards combating climate change is not a gutless declaration but one with a serious plan of action.

UNDERSTANDING SPACE LAW: THE LACUNAE THAT PAVED THE WAY FOR COMMERCIALISATION AND MILITARISATION

-Tanushree Ajmera and Abhishree Manikantan[1]

ABSTRACT

In the aftermath of the technological breakthrough of the 21st century, States find themselves critically dependent on a "space-river" governed by the Outer Space Treaty, which has significantly prioritised the military and the private commercial interests of a few spacefaring state and non-state actors. Built on the legacy of the Cold War, the treaty while failing to delimit the scope of international law in outer space, has on one hand botched the principle of "common heritage of mankind," on the other served the individual ambitions of various space actors.

This paper takes up the necessary question: whether the prospects for stability in space, the final frontier of the 21st century, can be left unsecured in the hands of an ill-equipped piece of law that has failed the modern test of values of "loyalty, mutual trust, and benefit of all humankind." To this end, the paper analyses the historical development of the treaty while outlining the implications of the diplomatic binary phase prevalent at the time. It argues that the lacunae of the space legal regime have not only failed in preventing the contemporary military uses of outer space but also proved futile in controlling the increasing role of private commercial entities in space. The aim of the research is to discuss the inadequacies of the present space treaties with the intent to contribute possible suggestions in tune with changing dynamics in outer space.

INTRODUCTION

The Greek philosopher, Aristotle described "vacuum" as abhorrent and against the laws of nature. Accordingly, throughout the Middle Ages, it was believed to be a place where neither man nor his explorative ambitions belonged.[2] Multiple centuries later, the underlying intent of the statement remains as accurate as ever in the context of outer space, which is the closest known estimate to vacuum. Out of all the environments human beings have ventured into for military, economic, and scientific advancements, outer space to date remains the most inhospitable. The near absence of gravity, the presence of ionizing cosmic rays and the existence

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[2] EDWARD GRANT, MUCH ADO ABOUT NOTHING: THEORIES OF SPACE AND VACUUM FROM THE MIDDLE AGES TO THE SCIENTIFIC REVOLUTION, 9-11 (Cambridge University Press, 2011).

of high-energy, together form an unpredictable and ultimately dangerous territory.[3] Yet, despite these terrible difficulties posed, space and celestial bodies remain a constant source of wonder and speculation.

In fact, the study of celestial objects and phenomena under Astronomy has been traced to a period as early as 2000 B.C. in the Rigveda of Ancient India.[4] It has been one of man's earliest ambitions to conquer space and explore its depths, something which has been extensively featured in sci-fi thrillers over the years.

Space is effectively ruled by an amalgamation of three social elements – the scientific community, the military and private commercial actors. While initial forays into space were perhaps made in the name of science and advancement of knowledge, there have always been those who wished to make use of the final frontier for their own purposes – or those of their country. Recent leaps in space technology can be attributed quite clearly to the ambitions of wealthy corporations looking to open the doors to new forms of business. Correspondingly, the Space Age was initially dominated by the imminent need for enhanced military prowess.

This paper is an attempt to understand the development of space law from the very onset of the Space Age well into contemporary times. It will primarily focus on the latter two social elements, the military, and the commercial entities, as it endeavours to understand the shortcomings of the existing international space regime and analyse it in terms of modern developments in space technology.

I. A "SPACE RACE" LED MILITARIZATION

The desire to enter space and establish control over it stems from man's innate nature to overpower, exploit, and dominate everything in his path. Under the garb of awe and wonder, states increasingly find themselves wanting to stake their claim on the high ground. To this end, despite the difficulties – rather, the massive costs of overcoming them – countries are turning space into the next frontier for building a strategic military defence. In 2019, Government Space Programs of Euroconsult released a report totalling the global space budget to USD 70.9 billion in the year 2018.[5]

[3] Richard B. Setlow, *The hazards of space travel*, 4(11), EMBO REPORTS, 1013–1016 (2003), https://doi.org/10.1038/sj.embor.embor7400016.
[4] INDIAN ASTRONOMY - HISTORY OF ASTRONOMY, https://explorable.com/indian-astronomy (last visited May 15, 2020).
[5] Simon Seminari, *Op-ed: Global government space budgets continues multiyear rebound*, SPACE NEWS, (November 24, 2019), https://spacenews.com/op-ed-global-government-space-budgets-continues-multiyear-rebound/.

While this space-military-dependence seems unproblematic to technologically advanced nations, the lawlessness with which it is being pursued is in fact terrifyingly dangerous. Over the years multiple space treaties, especially the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, 1967 (the "Outer Space Treaty" or "OST") have tried establishing a global space governance regime, however to no avail. This is mainly due to the fact that military inviolability in space is rooted in the limited accomplishments of the Cold War.[6] A piece of law is viable only to the extent that it can survive the modern test of values despite the demise of the social construct it was built on.[7] Hence, to understand the lacunae in the current space regime, it is important to first trace the history it was built on.

A. A Historical Background

On October 4, 1957, the Soviet Union launched the world's first artificial satellite, *Sputnik 1* into a low altitude elliptical Earth orbit from Baikonur, Kazakhstan.[8] The successful launch struck a direct blow to the United States' pursuit of space dominance and marked the commencement of a "Space Race," [9] which initially involved two conflicting superpowers striving to prove the other as technologically inferior.

In *Sputnik 1,* the United States recognised a scientific advancement that posed the tactical threat of a deliverable nuclear warhead, an Intercontinental Ballistic Missile. [10] The palpable tension between the two nations modelled the serious possibility of another warfare, one which might disrupt the delicate post World-War II peace with nothing less than a devastating nuclear attack.

To eliminate this risk, the United Nations ("UN") General Assembly set up the Committee on the Peaceful Uses of Outer Space ("COPUS") in 1959 to ensure that the use and exploration of space is done for security, peace, development and benefit of all humanity.[11] The driving force behind the negotiation of multilateral outer space agreements, COPUS as of 2019 has 95 committee member states,[12] including the major space faring countries China, Russia, India, and the United States.

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[6] MYRIAM DUNN CAVELTY, ET AL., STRATEGIC TRENDS 2015: KEY DEVELOPMENTS IN GLOBAL AFFAIRS, 69 (Oliver Thränert, Martin Zapfe, 2015).
[7] P. J. Blount, *Renovating Space: The Future of International Space Law*, 40, DENV. J. INT'L L. & POL'Y, 515, 515, (2011).
[8] *Sputnik*, NASA, https://www.history.nasa.gov/sputnik (last visited Jun 15, 2020).
[9] P. J. Blount, *Renovating Space: The Future of International Space Law*, 40, DENV. J. INT'L L. & POL'Y, 515, 516, (2011).
[10] Dwayne Day, *The Sputnik Non-surprise*, THE SPACE REVIEW (Sept. 8, 2009) http://www.thespacereview.com/article/1457/1.
[11] UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS COPUOS, https://www.unoosa.org/oosa/en/ourwork/copuos/index.html (last visited February 14, 2020).
[12] UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS COPUOS,

On October 10, 1967, COPUS laid out the Outer Space Treaty.[13] Marked as the biggest accomplishment of the Committee, the foundational treaty till date serves as the "Constitution" for governing outer space activities. Moreover, it has proven fundamental in providing a legal framework for the current space regime.

Building on the principles of international law, the treaty promoted understanding and international cooperation in order to maintain security and peace.[14] Article III of the treaty further established the principles of international law, including the Charter of the United Nations, as the governing law in outer space.[15]

B. Space Diplomacy in Cold War Era

It is imperative to note that although polyadic in nature, the treaty was constructed during a time when the world was experiencing a binary phase. With two superpowers competing for dominance, the political and societal pressures confronting the drafters were colossal. Guided by the necessity to tackle the immense strategic risk posed by the Cold War, the drafters aimed to reduce the increasing tensions between the Soviet Union and the United States. On one hand, the drafters had to provide enough self-serving incentives to these nations to garner their support for the law while on the other, strike a balance by restricting States from placing *"in orbit around the earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner."*[16] The dramatic result of such delicate space diplomacy led to differing interpretations of the treaty that have eventually rendered it powerless in ensuring the non-militarization of space.

In the first instance, Article IV(1) of the treaty only imposes restrictions on the placement of nuclear weapons or other weapons of mass destruction, thereby presumably excluding prohibition on the stationing of any other weapons, such as laser or conventional weapons, in outer space for military purposes. States have often interpreted this as a green flag entitling them to use space for military purposes, provided they do not deploy or involve the specifically mentioned nuclear weapons or weapons of mass destruction.[17]

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https://www.unoosa.org/oosa/en/ourwork/copuos/members/evolution.html (last visited February 10, 2020).
[13] Ricky J. Lee, *Jus Ad Bellum in Outer Space: The Interrelation between Article 103 of the Charter of the United Nations and Article IV of the Outer Space Treaty*, 45, PROC. ON L. OUTER SPACE, 139 (2002).
[14] Outer Space Treaty, art. III.
[15] UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS COPUOS,
https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/outerspacetreaty.html (last visited February 15, 2020).
[16] Outer Space Treaty, art. IV.
[17] Cheng, *The Legal Status of Outer Space and Relevant Issues: Delimitation of Outer Space and Definition of Peaceful Use*, 11, J. SPACE L., 89, 102, (1983).

In the second instance, Article IV(2) of the Treaty permits *"the use of military personnel for scientific research or for any other peaceful purposes"* and *"the use of any equipment or facility necessary for peaceful exploration of the moon and other celestial bodies."*[18] Both the Soviet Union and the United States initially accepted the "non-military" interpretation of "peaceful purposes."[19] This meaning was derived from the similarly worded Article 1 of the Antarctic Treaty, 1959 which stated that Antarctica shall be solely used for peaceful purposes. It further prohibited any other measures of military nature including testing of any type of weapons.[20]

However, the Soviet Union later retracted its opinion by continually sending military payloads into space. The action was not only disruptive but also of unlawful nature as it violated the "non-military" clause of the treaty. Further, the Soviets increased their dependence on space technology for military defence and planning.[21] Threatened by the actions of its contemporary rival, the United States took the legal approach. The intent was to either hold the Soviet Union accountable, which seemed far-fetched in the Cold War era or catch up to its military ambitions in space.

To this end, the United States sought to take advantage of the supposed uncertainty surrounding the meaning of "peaceful purposes" by changing its meaning from "non-military" to "non-aggressive."[22] It followed that States could conduct activities in space so long as they do not "use threat of force" as per Article 2 of the UN Charter.[23] The alteration resonated with the permitted use of non-aggressive military actions under Law of the sea, which is of particular importance to space law – supposedly more than the Antarctic Treaty. Interestingly, the idea behind space a "common heritage of mankind" is in fact based on the suggestions by Arvid Pardo, "the father of the Law of the Sea," who at the United Nations General Assembly in 1967, proposed that the seabed and the ocean floor beyond national jurisdiction be shared by all without domination of any country.[24] Therefore, while upholding the Law of the Sea supported justification, other member states including the Soviets accepted the modification.

The obvious advantage of rejecting "peaceful" as a complete bar on military activities, was the access to the right of self-defence under Article 51 of the UN Charter.[25] States maintained that they possessed the right to defend themselves against threats in outer space. Here, the application of international law in interpreting the provisions of the Outer Space Treaty becomes extremely relevant to the discussion. The drafters of the treaty extended the application of international law

[18] UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS COPUOS, https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/outerspacetreaty.html (last visited February 16, 2020).
[19] Mitchell Ford, *War on the Final Frontier: Can Twentieth-Century Space Law Combat Twenty-First Century Warfare?*, 39:1, HOUS. J. INT'L L. 237, 242, (2017).
[20] Antarctic Treaty, art. I.
[21] *Supra* note 18 at 242.
[22] *Supra* note 18 at 242-243.
[23] UN Charter, art. 2, ¶ 4.
[24] M. Bourbonniere, *National security law in outer space: the interface of exploration and security*, 70, J. AIR L. & COM., 16 (2005).
[25] U.N. Charter, art. 51.

including the UN Charter under the principle of *legi generali*, which is applied to overcome the lacunae in the existing legal systems.[26] However, they failed to limit the extent to which the law could be applied. Article 103 of the UN Charter proclaims it as the "superior law," which means that in case of a conflict, the obligations under the Charter shall prevail over those under the OST.[27] In the context of the interpretation of Article IV of the OST, the prevalence of international law over the treaty resulted in legal validation of military activities in space under the garb of self-defence.

The aim of the authors is not to undermine the application of international law in the exploration of outer space. One of the central provisions of the United Nations Charter is the essential concept of sovereign equality, which purports to base the existence of a state not on its economic or military power but on its virtuous status as a state.[28] It is due to this principle that under the treaty all states are deemed equal, and in the spirit of international cooperation, each state is free to undertake exploratory missions in space in the interest of all humankind. However, the discrepancies between the two laws have enabled states to protect their individual interests and build a pattern of abuse of law. For example, both the United States and the Soviet Union have repeatedly pointed out that, by excluding "outer space" from requirements under peaceful purposes, the drafters have restricted the broad prohibition of military activities only to the moon and other celestial bodies and not outer space in general.[29] Put simply, states have construed the limitations under the treaty to mean that there is no express prohibition on the military use of outer space.

II. BREAKDOWN OF UNITED STATES - SOVIET UNION POLICY OF DÉTENTE

Throughout the second half of the 20th century, space law was used as a platform to depict the fluctuating turmoil surrounding political relations between the United States and the Soviet Union. When warmed, these relations increased cooperation and when worsened, caused ties to cut off. The relationship between the United States and the Soviet Union observed a period of détente from 1963-1975. This led to the formation of agreements such as the Limited Test-Ban Treaty in 1963, the Strategic Arms Limitation Treaty in 1972, among others. [30]

[26] LOH Ing Hoe et al., *Article III Of The 1967 Outer Space Treaty: A Critical Analysis*, 8(5), INT'L J. ACAD. RES. BUS. SOC. SCI., 330, 339. (2018).
[27] UN Charter, art. 103.
[28] *The Concept of Sovereign Equality of States in International Law*, 2(1), GIMPA L. REV., 14-34, (2016).
[29] *Supra* note 12 at 140.
[30] JAMES CLAY MOLTZ, CROWDED ORBITS, 151 (Columbia University Press, 2014).

In tandem with the Cold War Politics, July 1975 saw the last welcoming establishment of a special bilateral working group for mutual space projects.[31] Unfortunately, the invasion of Afghanistan by the Soviets in December 1979 killed all possible hope for any additional cooperation in space. Further, the imposition of martial law in Poland, placement of cruise missiles and Pershing rockets in Europe by NATO, and hurried deployment of SS-20 medium-range nuclear missiles by the Soviet Union marked a period of terror in the Space Age.[32]

Historically, security treaties have a reputation for succeeding only in times of mutual cooperation. In this regard, the space governance remained somewhat "triumphant" during the period when the two superpowers collectively vouched for averting a further escalation of on-going weaponization. The formula was that both the Soviet Union and the United States seemed to value their own assets more than the ability to destroy the assets of the adversary.[33] In the narrowest sense, this meant avoiding permanent deployment of specific weapons in orbit if the mutual interest so demanded.[34]

Therefore, the massive impact of the failure of the current space regime was felt for the first time with the breakdown of Soviet-U.S. détente. From 1960-80, the Soviet Union had extensively developed anti-satellite weaponry by the name of co-orbitals, which first synced and then detonated the target satellite. In the aftermath of the breakdown, mutual suspicion grew to such an extent that in the 1980s, that the United States responded to the co-orbitals with a more advanced air-launched kinetic anti-satellite weapon, ASM-135 distinguished for its hit-to-kill method.[35] Moreover, U.S. President Ronald Reagan launched a Strategic Defence Initiative, also known as "Star Wars," which aimed to deploy thousands of space-based interceptors to defend against Soviet missiles.[36] In the "First Space War," better known as the Gulf War of 1991, the United States extensively used its satellite capabilities to win over the conflict.[37] This shifted the paradigm of operations in space in support of conventional weapons.

Today, military space operations have mainly three forms, (i) in-orbit proximity operations to spy on other satellites;[38] (ii) use of anti-satellite (ASAT) technology to debilitate satellites;[39] and (iii) launching long-range target missiles that pass through outer space for military strategic

[31] *Supra* note 29 at 151-152.
[32] Roald Sagdeev et al., *United States-Soviet Space Cooperation during the Cold War*, NASA, https://www.nasa.gov/50th/50th_magazine/coldWarCoOp.html.
[33] Roger G. Harrison, *Space and Verification*, 1, POLICY IMPLICATIONS, 9, (2011).
[34] *Supra* note 5 at 69-70.
[35] Talia M. Blatt, *Anti-Satellite Weapons and the Emerging Space Arms Race*, HIR, (May 26, 2020), https://hir.harvard.edu/anti-satellite-weapons-and-the-emerging-space-arms-race/.
[36] Chris Bowlby, *Could a War in Space Really Happen,* BBC NEWS, (December 19, 2015), https://www.bbc.com/news/magazine-35130478.
[37] Kubo Mačák, *Silent War: Applicability of the Jus in Bello to Military Space Operations*, 94, INT'L L. STUD., 1, 3, (2018).
[38] Subrata Ghoshroy, *The X-37B: Backdoor weaponization of space?*, 71, BUL. ATOMIC SCI., 19, 22 (2015).
[39] *Supra* note 34.

purposes.[4041] Currently, the most worrisome of the three is the development of kinetic anti-satellite ("ASAT") technology, which has the potential to physically collide with another satellite at high velocity to destroy the latter's functioning. Ballistic missiles, drones, etc. come under this category.[42] As discussed above, the Outer Space Treaty only prohibits nuclear weapons or weapons of mass destruction. Since anti-satellite or conventional military weaponry does not *per se* fall in either category, their use falls well within the established norms.

The end of Soviet-U.S. détente, hence, has clearly displayed the ill-effects of power-driven diplomacy being constructed on a house of cards. Space governance, if left with unsecured agreements and treaties that serve the individual interests of nations, has the potential to shatter the beneficial interest of all humanity.

A. ASAT: A Weapon of War

To add to the complexity of the space race, the revolutionary advancement in technology in the last quarter of the 20th century has increased the dependence of spacefaring nations on satellite applications for conducting military operations.[43] From the low-bandwidth uses of Global Positioning Systems ("GPS"), signals intercepts, voice communications, and low-resolution radar remote sensing imagery, to high-bandwidth uses of live video streaming, high-resolution optical remote sensing imagery, and television broadcasting, satellites are responsible for a whole host of modern military operations. For instance, in the *"War on Terror"* operations in Afghanistan and Iraq where ground communications infrastructure was often unavailable or unsecured, these satellite applications offered an instrument to overcome such limitations. Moreover, with the introduction of private and commercial satellites as significant service providers for the military in recent years, this movement towards digital communications has significantly upped the stakes in the race.[44]

Anti-satellite weaponry has thus garnered global appeal as a way to challenge traditional military supremacy. It is apparent, however, that the failure of the current space regime in protecting the strategic and tactical value of satellite applications under Article IV of the OST, has essentially rendered them genuine military targets in outer space.

Countries like China and India are using the space race to gain an advantage over their traditionally superior opponents.[45] In an ideal scenario, a conflict-like situation could be handled

[40] John E. Shaw, *The Influence of Space Power upon History 1944–1998*, 46, AIR POWER HIST., 20, 23 (1999).
[41] *Supra* note 36 at 7.
[42] *Supra* note 34
[43] Bob Silberg, *Bringing NASA Satellite Data Down to Earth*, NASA: ENERGY INNOVATIONS, (May 4, 2015), http://climate.nasa.gov/news/2271/bringing-nasasatellite-data-down-to-earth/.
[44] Ricky J. Lee et al., *Military Use of Satellite Communications, Remote Sensing, and Global Positioning Systems in the War on Terror*, 79, J. AIR L. & COM., 69, 72, (2014).
[45] *Supra* note 34.

if both sides believe that the other is capable of rendering its military blind and unarmed. For instance, if two ASAT equipped countries destroy each other's military satellites, they essentially leave themselves defenceless in the face of a third adversary who might take advantage of their incapacitation.

However, the basic drawback in this "ideal scenario" was highlighted by China in 2007, when it successfully conducted a debris generating test of KE-ASAT, destroying one of its own defunct weather satellites.[46] In its wake, the test left 3,000 potentially hazardous tiny fragments circulating in a heavily used belt of Earth orbit.[47] In another case of February 10, 2009, two communication satellites, commercial Iridium-33 and Russian Kosmos-2251 collided in a brutally risky accident 789 kilometres above a Siberian Peninsula, leaving behind over 200,000 pieces of space junk.[48]

The biggest concern of the international space community was that if the untraceable fragments collided with a sensitive spot on any satellite, it would be impossible to determine whether it was deliberate or not. The obvious response is to assume the worst and retaliate to the hostile act with force. Additionally, the treaty's silence on such situations has paved the way for regularization of such unfavourable activities – as is seen in the case of addressing the legality of China's ASAT of 2007, where countries opted for diplomatic protests over legal accountability.

On March 27, 2019, almost 12 years after China, India conducted its first successful KE-ASAT test. India's ballistic missile defence interceptor, the Prithvi Delivery Vehicle Mark-II (PDV MK-II), struck and destroyed an Indian Microsat-R satellite. In comparison to the Chinese ASAT test, the Indian demonstration produced around 130 untraceable and about 270 traceable fragments. The fact that the untraceable fragments could decay in perhaps a few weeks, brought a wave of calm over the international community. However, the relief was only short-lived, as the test thrust the motion towards debris-causing tests which can turn space into a highly unwelcoming environment, as correctly depicted in the academy award-winning sci-fi thriller, Gravity.[49]

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[46] Mike Gruss, *U.S. Official: China Turned to Debris-free ASAT Tests Following 2007 Outcry*, SPACE NEWS (January 11, 2016), https://spacenews.com/u-s-official-china-turned-to-debris-free-asat-tests-following-2007-outcry/.

[47] Carin Zissis, *China's Anti-Satellite Test*, COUNCIL ON FOREIGN RELATIONS, (February 22, 2007), https://www.cfr.org/backgrounder/chinas-anti-satellite-test.

[48] Nicholas L. Johnson, *Preserving the Near-Earth Space Environment with Green Engineering and Operations*, NASA, https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20090032041.pdf.

[49] Ashley J. Tellis, *India's ASAT Test: An Incomplete Success,* CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE, (April 15, 2019), https://carnegieendowment.org/2019/04/15/india-s-asat-test-incomplete-success-pub-78884.

III. SPACE: A MULTIPLAYER GAME IN THE 21ST CENTURY

Despite a lack of rapprochement, both the Soviets and the United States maintained a no-war scenario in the 20th century. However, space is a multiplayer game in the 21st century. There is an idea that certain key players in the current scenario might value the destruction of their opposition's assets in space more than the preservation of their own assets, which is a recipe for creating an environment of suspicion. For instance, North Korea has repeatedly conducted space launches that resemble an Inter-Continental Ballistic Missile test under the shielded concept of "peaceful non-aggressive purposes" of the treaty. Dr Robert Soofer, the Deputy Assistant Secretary of Defence for nuclear and missile defence policy of United States asserted that the endeavours to develop nuclear ballistic missiles by North Korea were catered towards its long-drawn ambition to threaten the United States homeland, allies, and partners. When confronted with this unanimous criticism from European countries and the United States regarding the missile tests, a spokesperson of the Foreign Ministry of North Korea stated that the missiles are "self-defensive" in nature against what the country believes is aggression by the United States and South Korea.[50]

The entry of relatively small nations such as North Korea into the Space Race is essentially ironic. That a treaty built around the bipolar era of the Cold War would one day serve the individual interests of a small nation like North Korea, is something neither the United States nor the Soviets could have predicted. If this is an indication of the risk of territorial conflict looming over the world, then it can easily be presumed that such a war might involve modern space military weaponry such as kinetic ASAT. With increasing rivalries among nations such as China and the United States in East Asia; Russia and the United States in Eurasia; and India and China in South Asia, this threat is as apparent as ever. Interestingly, all of these spacefaring countries have successfully demonstrated their anti-satellite launch capabilities. With the establishment of the United States Space Force as a branch of the U.S. Armed Forces, the United States in particular, has integrated a possible scenario of space warfare into its military planning.[51]

In the 1950s it was widely believed space would not stay peaceful. Every action undertaken, every successful negotiation and every signed treaty since then has subconsciously attributed to fuel this belief. When the Soviets designed the space station in 1965, based on their serious analysis of a possible military conflict in space, they armed it with cannons and small rockets. Equally, the United States had planned on depicting its nuclear strength by causing an explosion on the Moon, the impact of which could have been seen by the naked eye on Earth.[52]

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[50] Jacob Fromer, *North Korea may be ready with "even more capable" ICBM: Pentagon official,* NK NEWS, (March 12, 2020), https://www.nknews.org/2020/03/north-korea-may-be-ready-with-even-more-capable-icbm-pentagon-official/.
[51] *Supra* note 5 at 65.
[52] S*upra* note 35.

The 72 countries[53] active in space today are carrying forward this legacy, it is almost as if they are waiting for the inevitable space war to happen, and in the meanwhile are equipping themselves with enough weaponry to emerge victoriously. Adding to the riot, the onset of the 21st century has opened floodgates to renewed interests of private commercial entities in the space regime. However, with the ever-intensifying space race today, the major concern remains the same – an increasing militarisation of space fuelled by a treaty that is proving incapable of preserving the beneficial interest of all civilisations.

IV. THE COMMERCIAL WINDOW TO SPACE IS NOW OPEN

Although the 20th century was fixated on the military benefits of outer space, Yuri Gagarin's historic spaceflight around the earth in 1961[54] and Neil Armstrong's landing on the moon in 1969[55] are the events that laid the foundation for the lofty space-ambitions seen today. This was the first giant leap humankind took into outer space, proving that humans can survive in the "vacuum" with the correct technology.

Space exploration inherently involves remarkably high costs – to the tune of billions of dollars[56] – which are difficult to meet without government aid, and hence, for about the first 50 years, space exploration was primarily the prerogative of the State. However, the 21st century has seen a paradigm shift from government-led space exploration to increasing participation by private entities. Billionaires such as Elon Musk, CEO of *SpaceX*, Jeff Bezos, founder of *Blue Origin* and Richard Branson, co-founder of *Virgin Galactic* are considered pioneers in this field. These companies are working towards ventures such as space tourism and mining, as will be discussed in depth subsequently. This section will focus on the rapid commercialisation and privatisation of outer space and attempt to analyse its probable legal ramifications.

V. THE CURRENT TRENDS IN SPACE

The discussion on the commercialization of the space industry is often presumptively linked to privatisation. Therefore, it is imperative to understand that the former is a process by which a

[53] THE SPACE REPORT ONLINE, https://www.thespacereport.org/ (Last visited May 29, 2020).
[54] *Yuri Gagarin*, NASA, https://starchild.gsfc.nasa.gov/docs/StarChild/whos_who_level2/gagarin.html.
[55] *July 20, 1969: One Giant Leap For Mankind*, NASA, https://www.nasa.gov/mission_pages/apollo/apollo11.html.
[56] *Space Shuttle and International Space Station*, NASA, https://www.nasa.gov/centers/kennedy/about/information/shuttle_faq.html

hitherto freely existing product is converted into a profit-making entity.[57] For instance, coal as a mineral was used free of cost for generations until it was commercialised for fuel purposes. Conversely, privatisation refers to situations wherein public sector enterprises are sold or transferred completely to the private sector, as exemplified by the privatisation of the erstwhile Indian public company, Bharat Aluminium Company Limited (BALCO) via disinvestment in 2001.[58]

The commercialization of the space sector began in earnest with the introduction of satellite technology and its increasing use in all fields of life. *Telstar 1,* launched in 1962, was the first satellite capable of trans-Atlantic TV transmission and also the world's first privately-sponsored satellite to enter orbit.[59] In the last two decades, the demand for cutting edge, high-resolution satellite imagery has increased manifold, prompting commercial entities such as Google to send up more such earth-observing satellites.[60] Today, apart from satellite technology, newer start-ups are exploring other means of exploiting space as well.

As more and more private individuals enter the space sector, it is apparent that in the 21st-century space is no longer being utilised for "the common interest of humankind."[61] The Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, 1984 ("Moon Treaty") had envisioned an international regimen to govern the exploitation of natural resources on the Moon and celestial bodies,[62] in the absence of which, the United Nations was expected to suspend commercial growth of the space sector and also limit its exploitation as a consequence of scientific investigations. However, as the flag-bearer of capitalism, the United States impeded the move.[63] It is also notable that during the drafting of the Outer Space Treaty, the Soviet Union had proposed to outlaw all non-governmental activity in space, which was yet again blocked by the United States.[64] Clearly, the decisions not only disregarded the common heritage principle but also sowed the seeds of cut-throat competition driven by need.

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[57] *Commercialisation,* CAMBRIDGE DICTIONARY, https://dictionary.cambridge.org/dictionary/english/commercialization.
[58] Rohit Saran, *Privatisation row: Disinvestment Ministry comes to grips with fallout of Balco controversy,* INDIA TODAY, https://www.indiatoday.in/magazine/economy/story/20010521-privatisation-row-disinvestment-ministry-comes-to-grips-with-fallout-of-balco-controversy-776142-2001-05-21.
[59] *July 12, 1962: The Day Information Went Global,* https://www.nasa.gov/topics/technology/features/telstar.html.
[60] *Commercial Satellites,* http://gsp.humboldt.edu/OLM/Courses/GSP_216_Online/lesson3-2/commercial.html.
[61] Outer Space Treaty, art I.
[62] Moon Treaty, art. XI, ¶ 5; *See also:* Moon Treaty, art. XI, ¶ 7.
[63] Daniel A. Porras, *The "Common Heritage" of Outer Space: Equal Benefits for Most of Mankind*, 37, CAL. WEST. INT'L. L. J., 143, 161 (2006); https://scholarlycommons.law.cwsl.edu/cgi/viewcontent.cgi?article=1130&context=cwilj.
[64] Christopher Johnson, *The Outer Space Treaty at 50,* THE SPACE REVIEW, https://www.thespacereview.com/article/3155/1.

A. Unleashing the Competitive Streak

The age of industrialisation brought with it a huge increase in the world's requirement for minerals and other finite resources. Since its advent over two centuries ago, the needs and requirements of the world market, economy and the average human have grown exponentially. Together they paved the way for a flourishing mining industry, which has left the mineral deposits of earth critically depleted.[65] In these dire circumstances, profit hungry entrepreneurs and industrialists have turned their gaze skywards, into space. They see a USD 5 trillion potential in the space-resource mining industry as asteroids and other celestial bodies are rich reservoirs for heavy metals that are necessary components of computers and smart phones.[66]

Unfortunately, the last six decades have not shown the speed of progress anticipated at the inception of the Space Age. A necessary catalyst for progress and innovation is competition, something that has only recently been introduced to the space sector. This may be largely due to the near-monopoly governments around the world had on space exploration, aided by the erstwhile prohibitively high operational costs. However, the commercial market has proved to be a willing financier of any endeavour so long as the benefits are clearly laid out, and this has altered the scenario drastically. For instance, *Virgin Galactic* is selling seats to passengers on future spacecraft to tour outer space at relatively meagre prices.[67] Some governments have also adopted this strategy, such as the Russian government, which began selling seats on their spacecrafts to passengers interested in visiting the International Space Station ("ISS").[68] The USA's National Aeronautics and Space Administration ("NASA") is also planning to open the ISS for space tourism[69] in partnership with *SpaceX*, who became the first private company to safely launch astronauts into space with their successful mission to the ISS on May 30, 2020.[70]

At this juncture, it is imperative to realise that commercialisation is a process that cannot be completely stopped. While this paper will highlight the ill effects uncontrolled growth in this sector can have on the environment of earth and space, it will focus more on pointing out the loopholes in the existing legal framework and devising a strategy to regulate future commercial endeavours into outer space.

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[65] Pradeep Mehta, *The Indian Mining Sector: Effects on the Environment & FDI Inflows*, CCNM Global Forum on International Investment, OECD, (2002) https://www.oecd.org/env/1830307.pdf.

[66] Dr Cassandra Steer, *Why Outer Space Matters for National and International Security,* CENTRE FOR ETHICS AND THE RULE OF LAW, UNIVERSITY OF PENNSYLVANIA, (Jan 2020), pp.12, https://www.law.upenn.edu/live/files/10053-why-outer-space-matters-for-national-and.

[67] Mike Wall, *Virgin Galactic gearing up to start selling suborbital spaceflight tickets again*, SPACE.COM, (FEBRUARY 26, 2020) https://www.space.com/virgin-galactic-spaceshiptwo-reservations-one-small-step.html.

[68] John Lewis, Christopher Lewis, *A Proposed International Legal Regime for the Era of Private Commercial Utilization of Space,* 37(3) GEO. WASH. INT'L L. REV., 745, 745 (2005).

[69] *NASA Considers Selling Seats on the Spacecraft Used For Space Station*, NDTV, (November 20, 2018) https://www.ndtv.com/science/nasa-considers-selling-seats-on-the-spacecraft-used-for-international-space-station-1950402.

[70] *NASA Astronauts Launch from America in Historic Test Flight of SpaceX Crew Dragon,* NASA, (May 31, 2020) https://www.nasa.gov/press-release/nasa-astronauts-launch-from-america-in-historic-test-flight-of-spacex-crew-dragon.

B. Privatising Outer Space

The world today has nine countries capable of orbital launch. More and more often, these nations have been aligning with commercial players to achieve their space goals. For instance, in 2017 the Indian Space Research Organisation ("ISRO") for the first time contracted a private company to make a complete, heavy-duty satellite.[71] India also seems to be considering utilising private--sector innovations to augment its space capabilities as part of the *Aatma Nirbhar Bharat Abhiyan*, a move backed by nascent plans to share ISRO's facilities with private players.[72] The Chinese government, too, allowed private companies to build and launch satellites in 2014, after which many of them began securing multi-million dollar satellite investment deals.[73] Conversely, the private sector has always been deeply involved in the developmental aspects of the space industry in the United States. More recently since 2015, NASA has begun giving out contracts to SpaceX and Boeing to launch its astronauts, rather than relying upon Russian launches as they have been since the NASA space shuttles were retired in 2011.[74]

Recent years have also seen a substantial tilt in favour of space-oriented start-ups in various parts of the world, aside from the well-known companies belonging to billionaires such as Elon Musk and Jeff Bezos. For instance, Moon Express Inc. is another American privately held start-up that aims to provide transportation to the Moon for the government as well as commercial actors. It is known for being the first company to receive government approval to send a robotic spacecraft beyond traditional Earth orbit in 2016.[75] Goonhilly Earth Station Ltd., a United Kingdom based company, aims to develop deep space communications systems and has been in the market since the launch of *Telstar 1* in 1962.[76] In Japan, iSpace was founded in 2010 with the intention to mine resources from the Moon to help sustain modern life on earth.[77] SpaceIL is an Israeli non-profit organisation founded in 2011 to land the first Israel-based spacecraft on the moon.[78] Planetary Resources, acquired by ConsenSys Space, aims to be the first company to mine minerals from an asteroid.[79]

These examples illustrate the increasing participation of private companies in the field. Most of these corporations are based in the developed parts of the world, but organisations like SpaceIL

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[71] *ISRO embraces private sector, outsources satellite manufacture*, ECONOMIC TIMES, (Apr 02, 2017) https://economictimes.indiatimes.com/news/science/isro-embraces-private-sector-outsources-satellite-manufacture/articleshow/57971440.cms?from=mdr.

[72] Rajeswari Rajagopalan, *India's Space Program: A Role for the Private Sector, Finally?,* SCIENCE THE WIRE,(MAY 22, 2020) https://science.thewire.in/space/nirmala-sitharaman-indian-space-programme-isro-private-sector/.

[73] PETER WARD, THE CONSEQUENTIAL FRONTIER: CHALLENGING THE PRIVATIZATION OF SPACE, 118 (2019).

[74] Rachel Mitchell, *Into the Final Frontier: The Expanse of Space Commercialization,* 83 MO. L. REV. 429, 432 (2018), https://scholarship.law.missouri.edu/mlr/vol83/iss2/9.

[75] MOON EXPRESS, http://moonexpress.com/ (last visited on May 29, 2020).

[76] *About Us*, GOONHILLY EARTH STATION, https://www.goonhilly.org/about-us/about-ges-ltd (last visited on May 29, 2020).

[77] *About Us*, ISPACE, https://ispace-inc.com/aboutus/ (last visited on May 29, 2020).

[78] *The Mission*, SPACE IL, http://www.spaceil.com/mission/ (last visited on May 29, 2020).

[79] PLANETARY RESOURCES, https://www.planetaryresources.com/ (last visited on May 29, 2020).

demonstrate how even less-developed nations benefit from corporate competition. Also of note is the example of the government of Chile, which established its spacefaring agency in 2001. Ordinarily, it would have to request the national space organisation of a country capable of orbital launch to send its satellites to space. With commercial parties able to step in and fulfil this demand, however, the Chilean government is able to invite bids to implement its space endeavours without directly benefiting another nation. This is an actual account of what the government of Chile has been actively pursuing since 2007.[80]

With this context, clearly, it is now crucial to designate rules and regulations and lay down parameters within which these nascent companies and even governments must function. Not having comprehensive, watertight legislation to govern space exploration and exploitation has the potential to engulf the world in turmoil as each nation competes over resources and territory in space to establish its dominance.

VI. THE LAW OF SPACE – A COMMERCIAL PERSPECTIVE

At present, there exist five treaties to govern space law. These are (1) Outer Space Treaty, 1967; (2) the Agreement on the Rescue of Astronauts, the Return of Astronauts, and the Return of Objects Launched into Outer Space, 1968 ("Rescue Agreement"); (3) the Convention on International Liability for Damage Caused by Space Objects, 1972 ("Liability Convention"); (4) the Convention on Registration of Objects Launched into Outer Space, 1976 ("Registration Convention"); and (5) the Moon Treaty, 1984.[81]

Of these, the Outer Space Treaty and the Moon Treaty are of specific importance to this paper. Both treaties expressly agree on the fact that *"Outer space, including the moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means."*[82] However, there exists a dichotomy in the interpretation of this clause. Non-space powers contend that this provision acts as a bar to any state desiring to mine space resources as such an act would require the permission of all humankind. Conversely, nations with spacefaring capabilities argue that this clause prohibits the permanent appropriation of celestial bodies by States and not the consumption of resources by private entities.[83] Seeing as the same treaties have also catered for future prospects of exploiting space, however, it is reasonable to infer that the latter interpretation is correct. For instance, Article VI of the OST

[80] Zach Meyer, *Private Commercialization of Space in an International Regime: A Proposal for a Space District*, 30, NW. J. INT'L L. & BUS., 241, 248 (2010), https://scholarlycommons.law.northwestern.edu/cgi/njilb.
[81] *Space Law Treaties and Principles*, UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS, http://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties.html.
[82] Outer Space Treaty, art. II; *See also* Moon Treaty, art. XI, ¶ 2.
[83] Adam G. Quinn, *The New Age of Space Law: The Outer Space Treaty and the Weaponization of Space*, 17 MINN. J. INT'L L. 475, 481 (2008), https://scholarship.law.umn.edu/mjil/63.

firmly establishes that in case any activities are carried out in space by non-governmental organisations, they would require prior authorisation and continuous supervision by the appropriate State Party.[84]

Read in conjugation, it is clear that the Outer Space Treaty and the Moon Treaty both foresaw the possibility of future exploitation of space resources. The Outer Space Treaty laid the foundation for prohibiting unilateral appropriation of celestial bodies and outer space by States or sovereigns, while the Moon Treaty elaborated upon the concept and defined the procedure for allowing commercial exploitation. It is unfortunate, however, that the Moon Treaty has been ratified by only 18 countries.[85] This rejection has largely been because the term "common heritage of mankind"[86] is seen as an allusion to socialism and the phrase "equitable sharing" [87] is described as vague and unspecific in terms of how it would affect private profits.[88] Spacefaring nations also seem to have avoided this treaty since it purports to place immense burdens upon them in terms of preservation of the environment of earth and celestial bodies, free access for all nations to space resources, etc. This is despite the provision for a review process present in the treaty itself, which further allows for considering *"the question of implementation of the provisions of article 11, paragraph 5 on the basis of the principle mentioned in paragraph 1 of that article and taking into account in particular any relevant technological developments.*[89] The only saving grace is that India, a fast-upcoming space power, is a signatory to the Moon Treaty. The above discussion illustrates the importance of this treaty in the long term for facilitating large-scale commercial exploitation of these treasure troves of resources. That India is a signatory implies that there is a possibility for the treaty to gain international relevance in the near future. However, at the moment, the Moon Treaty does not bind any of the major spacefaring nations, including the USA, Russia and China, which is a cause for concern. These countries are at the forefront of space exploitation and in the absence of an applicable international obligation, have resorted to formulating their own laws and acting solely for their personal benefit. It bears reiteration that this sort of behaviour is exactly what will lead to turmoil and anarchy in space, further reinforcing the requirement for a revamped space treaty.

[84] Outer Space Treaty, art. VI.
[85] *Status of International Agreements Relating to Activities in Outer Space*, UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS, https://www.unoosa.org/documents/pdf/spacelaw/treatystatus/TreatiesStatus-2020E.pdf.
[86] Moon Treaty, art. XI, ¶ 1.
[87] Moon Treaty, art. XI, ¶ 7, cl. 4.
[88] Rachel Mitchell, *Into the Final Frontier: The Expanse of Space Commercialization,* 83 MO. L. REV. 429, 436 (2018), https://scholarship.law.missouri.edu/mlr/vol83/iss2/9.
[89] Moon Treaty, art. XVIII.

A. Legal Space Regime in the Domestic Sphere

The USA has had a domestic law for space for the last 36 years. In consonance with the demands of the OST,[90] the US Congress passed the Commercial Space Launch Act of 1984 by virtue of which, the launch of space vehicles or payloads was prohibited within the boundaries of the nation unless the private parties had been duly certified by the Federal Aviation Administration ("FAA").[91] Most other space laws enacted pertained to near-earth satellites,[92] until 2015, when President Barack Obama signed the US Commercial Space Launch Competitiveness Act ("SPACE Act") into law. This statute exists to *spur private aerospace competitiveness and entrepreneurship.*

The SPACE Act specifically allows and encourages US citizens and registered companies to engage in commercial activities in space and entitles them to *"possess, own, transport, use, and sell asteroid resource or space resource obtained in accordance with applicable law",*[93] thereby granting property rights to private citizens over outer space resources. It may be argued that the legislation only grants ownership of the space resource and not the celestial body itself. However, the fact remains that enshrined in the maxim *nemo dat quod non habet*[94] is an established common law principle that only a government that has sovereign rights over territory may grant property rights to its citizens.[95] Further, the OST imposes liability upon its State parties to compensate for any damage caused by private ventures into space.[96] In pith and substance, this implies that the Outer Space Treaty considers private space endeavours part and parcel of State activity. Thus, it is concluded that the US Congress has effectively attempted to circumvent the non-appropriation provision of the Outer Space Treaty[97] by indirectly claiming sovereignty over asteroids via their private citizens and companies under the garb of the principle of *legi generali* under international law, as discussed previously. This is a view that has been espoused by international law scholars as well.[98]

Following in the footsteps of the USA is Luxembourg, which has long established itself as an ally to all entrepreneurial endeavours in the space sector and has reaped significant economic benefits. Though lacking in space capability, this European nation is a party to the Outer Space Treaty, 1967 and the Liability Convention, 1972 via ratification and is also a signatory to the

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[90] Outer Space Treaty, art. VI.
[91] Commercial Space Launch Act, 1984 - H.R.3942.
[92] *Commercial Law Resources,* NASA, https://www.nasa.gov/offices/ogc/commercial/Comm_subst_areas_text.html.
[93] US Commercial Space Launch Competitiveness Act, 2015, Section 51303.
[94] *Nemo dat quod non habet,* OXFORD REFERENCE, https://www.oxfordreference.com/view/10.1093/oi/authority.20110803100228794.
[95] Austin C. Murnane, *The Prospector's Guide to the Galaxy*, 37 FORDHAM INT'L L.J. 235, 259 (2013), https://ir.lawnet.fordham.edu/ilj/vol37/iss1/12.
[96] Outer Space Treaty, art. VII.
[97] Outer Space Treaty, art. II.
[98] Justin Rostoff, *"Asteroids for Sale": Private Property Rights in Outer Space, and the SPACE Act of 2015,* 51 NEW ENG. L. REV. 373 (2017), https://newenglrev.com/asteroids-for-sale-private-property-rights-in-outer-space-and-the-space-act-of-2015/.

Rescue Agreement of 1968 and the Registration Convention of 1975.[99] So far, it is the only other country to have adopted a comprehensive legislation specific to space resource mining in an attempt to establish itself as the centre for space business. The Exploration and Use of Space Resources Act which came into force on August 1 2017, is remarkably similar to the SPACE Act of the United States. It provides, in no uncertain terms that *"space resources are capable of being owned"*[100] and therefore, it is subject to the same line of argument as above. What makes this piece of legislation more interesting, and commercially viable for a small, non-spacefaring nation such as Luxembourg, is the fact that it extends the ambit of the legislation to any company with a registered office in Luxembourg.[101] This provision will enable foreign investments and encourage the setting up of space companies and start-ups in Luxembourg over any other country in the world.

Interestingly, other nations participating in this new space race are doing so without even a domestic law in place. In fact, the space laws of other nations are quite broad in their ambit. For instance, Japan's space legislation pertains mainly to the development and launch of artificial satellites and rockets – but in 2017, the Japanese government entered into a five-year space mining contract with Luxembourg.[102] China, fast developing into a space force to be reckoned with, has grandiose plans to use moon resources for expanding its economy.[103] Russia is also planning to join the new space race, despite its official stance on the subject being a strict upholding of the "province of humankind" principle.[104] Most of these countries have at least some form of domestic space regulation.[105]

On the other hand, India is the only spacefaring nation that does not yet have any concrete, specific space legislation. While its vision is primarily for the peaceful exploration of space for the benefit of science, in recent times it has encouraged the participation of private firms in the sector to increase its space competency.[106] An established principle of international law is that once a treaty is ratified, the State Party is under obligation to ensure that its domestic laws are consistent with the treaty.[107] The examples cited above are of nations that have signed and

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[99] *Legal Framework,* LUXEMBOURG SPACE AGENCY, https://space-agency.public.lu/en/agency/legal-framework.html; *See also:* https://www.unoosa.org/documents/pdf/spacelaw/treatystatus/TreatiesStatus-2020E.pdf.
[100] LUXEMBOURG, Law of July 20th, 2017 on the Exploration and Use of Space Resources, art. 1.
[101] LUXEMBOURG, Law of July 20th, 2017 on the Exploration and Use of Space Resources, art. 4.
[102] *Luxembourg, a rising star in the space industry,* DELOITTE, https://www2.deloitte.com/lu/en/pages/technology/articles/luxembourg-space-industry-companies.html.
[103] Jack Burke, *China's New Wealth-Creation Scheme: Mining the Moon,* NATIONAL REVIEW, (June 13, 2019) https://www.nationalreview.com/2019/06/china-moon-mining-ambitious-space-plans/.
[104] *Russia Joins Asteroid Mining Space Race,* MINING JOURNAL, (7 MARCH 2019) https://www.mining-journal.com/exploration/news/1358127/russia-joins-asteroid-mining-space-race.
[105] SPACE RESOURCE UTILIZATION: A VIEW FROM AN EMERGING SPACE FARING NATION, 36-37 (Annette Froehlich, 2018).
[106] Rajeswari Pillai Rajagopalan, Pulkit Mohan and Rahul Krishna, *India in the final frontier: Strategy, policy and industry,* ORF Special Report No. 100, January 2020, Observer Research Foundation, https://www.orfonline.org/research/india-in-the-final-frontier-strategy-policy-and-industry/.
[107] *Chapter Five: National legislation and the Convention – Incorporating the Convention into domestic law,* UNITED NATIONS DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS,

ratified the Outer Space Treaty.[108] Ergo, they are bound by its terms and under obligation to frame domestic laws consistent with such terms. Formulating a domestic law consistent with international obligations is necessary to ensure that these obligations to the international community are being fulfilled. Unfortunately, at present, the international space treaties are toothless. Without a means to enforce the obligations, nations may simply ignore them without fear of repercussions, of which the USA's move to enact the SPACE Act is a clear example. In light of the possible outcomes of unregulated commercialisation of space discussed subsequently, it is necessary to devise a robust, internationally accepted regulatory framework to avoid disasters, which are backed up by each nation's domestic laws.

B. The Cons of Commercially Exploiting Space

Given the predominantly capitalist character of the global market today, there is little doubt that commercialising outer space and its resources cannot be stopped but if done correctly, it will greatly boost the world economy.

Today, lower earth orbit is populated by a huge number of artificial satellites.[109] As discussed earlier, the destruction of artificial satellites – either by ASAT technology or due to collisions – releases a large number of high-speed particles that pose a significant risk to other satellites and the ISS. Further, this debris can fall to the Earth and damage territory and infrastructure. Countries have so far avoided major property damage on earth due to falling debris, but the recent uncontrolled descent of the 20-ton Chinese rocket, *Long March 5B,* highlights the dangers of such an event.[110]

Admittedly, it is not only collisions between satellites that need to be discussed and prepared for. As previously mentioned, the possibility of mining resources from asteroids in the near future is real. A common result of mining is the release of dust into the atmosphere. As asteroids have weak surface gravity, it is plausible that mining activities would lead to the breakage of some of its pieces, leading to the formation of a "debris stream".[111] Most of such commercial mining plans aim to make use of near-earth celestial bodies and therefore, it is conceivable that this debris stream would enter the Earth's orbit and collide with the existing satellites, creating more hazardous space junk. Once again, attributing liability for such an event is difficult. Parameters

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https://www.un.org/development/desa/disabilities/resources/handbook-for-parliamentarians-on-the-convention-on-the-rights-of-persons-with-disabilities/chapter-five-national-legislation-and-the-convention.html.

[108] Status of International Agreements Relating to Activities in Outer Space, UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS, https://www.unoosa.org/documents/pdf/spacelaw/treatystatus/TreatiesStatus-2020E.pdf.

[109] Adam Mann, *Space: The Final Frontier of Environmental Disasters?*, WIRED, (JULY 15, 2013) https://www.wired.com/2013/07/space-environmentalism/.

[110] Nora McGreevy, *A Huge Hunk of Space Debris Fell to Earth,* SMITHSONIAN MAGAZINE (May 14, 2020) https://www.smithsonianmag.com/smart-news/huge-hunk-space-debris-fell-earth-monday-180974855/.

[111] Logan Fladeland, Aaron C. Boley, Michael Byers, *Meteoroid Stream Formation Due to the Extraction of Space Resources from Asteroids,* SPACEREF, (DECEMBER 3, 2019) http://spaceref.com/news/viewsr.html?pid=53088.

need to be laid down based upon which a neutral party may decide whether the incident was accidental or intentional – in which case, it could also be construed as an act of war. Having a robust legal system in place to avoid such circumstances, and contingency plans in case they do will go a long way in protecting the integrity of artificial satellites in low-earth orbit.

Space technology has come a long way in the last decade. With asteroid mining on the cards, it is probable that soon humans would be mining rare-earth minerals from the far reaches of the solar system. However, seeing how the Earth's resources have been indiscriminately extracted to meet industrial demands, it is apparent that unless strong regulations are established and implemented, the rest of the solar system will also meet the same fate in as little as 500 years.[112] Degradation of the environment of celestial bodies, a concept first envisioned in the Moon Treaty,[113] is another problem that will manifest itself once asteroid mining becomes a norm. From a commercial perspective, space resources need to be extracted in a sustainable manner because after a point, even they are finite and non-renewable. If at some moment in the distant future, humankind is able to exhaust the resources of every planet and celestial body in the solar system, it would need to switch energy sources fast, much like the energy crisis faced today. Sustainable use of space resources is the only way forward in this respect.

Similarly, the aspect of potential colonisation of other planets is also to be considered since, as mentioned, private firms like *Moon Express* and *SpaceX* aim to soon colonise the Moon and Mars, respectively.[114] While mankind has an established history of colonising newly discovered territories and thoroughly exploiting them, the moral and ethical ramifications of such an act in outer space require careful consideration. This was also notably explored in the movie *Avatar.*

The present space regime is woefully unprepared to handle these challenges. While they discuss these issues in vague and abstract terms, it is important to remember that in 1967 these were a distant possibility and the focus of the time was on preventing a nuclear war. As such, the time to re-open international deliberation on these points is upon us.

[112] Brandon Specktor, *Space Mining Could Ruin Our Solar System If We Don't Establish Protected Places Now, Researchers Warn*, LIVE SCIENCE, (MAY 14, 2019) https://www.livescience.com/65472-scientists-propose-solar-system-national-park.html.
[113] Moon Treaty, art. VII.
[114] Kashmira Gander, *Moon Express: How close are humans to living in space?* (9 August 2016) https://www.independent.co.uk/news/science/moon-express-how-close-are-humans-to-colonising-space-a7174361.html.

CONCLUSION

From its preamble, the Outer Space Treaty seems to reaffirm *"the prospects opening up before mankind as a result of man's entry into outer space."*[115] From its embellished principles of equality, the treaty seems to enshrine the core values of international space law. However, it is the main concept of the treaty that has failed to adapt to challenges posed by conventional space actors.

To understand these challenges better, take, for instance, an analogy drawn between space and the Yellow River in ancient China. Also known as the "cradle of Chinese civilization," the river was the source of fertile soil and irrigation water. The many tribes that lived alongside the river considered it their lifeblood. However, every few years the river would rage a torrent to wipe away villages. After years of suffering, the tribes finally realised that they cannot combat the challenge of devastating floods individually. Hence, they coalesced to form the Xia Kingdom. To battle the crushing floods, the leaders of the kingdom built dams and dug hundreds of kilometres of canals that first carried excess water outside of the city into the countryside, and eventually down to the sea. The unity not only provided control in the form of the distribution of water but also brought unparalleled prosperity to the people.[116]

Similar to the tribes of Yellow River, nations in the 21st century are living alongside a space-river, depending on it for their prosperity and exposed to its dangers. A common heritage to all humankind, space is indeed a river of infinite possibilities which will be essential to the welfare of humanity in the future. However, as much as countries are dependent on space for their prosperity, its exploration comes with great dangers such as micrometeorites, solar flares, radiation, debris etc.

No country can single-handedly control or regulate such an unpredictable space environment. China's debris-generating KE-ASAT test put all spacefaring nations in danger, including China itself! Further, no country can police disruptive space technology on its own. Even though the United States and the Soviet Union jealously protected their space technology, they did not prevent new entrants of the Space Race from obtaining it otherwise in subsequent decades. In an intolerant xenophobic world, countries tend to follow their contemporaries in a high-risk-high-gain technological path. Such a Space Race, however, has no other end but the bottom. Hence, there is an ardent need to unite space actors through a Xia-kingdom-space regime, which can make the climate of space more controlled and less volatile. The Outer Space Treaty needs to be revamped to establish global loyalty, which is imperative in ensuring that all state and non-state actors are held true to their international obligations.

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[115] Outer Space Treaty, Preamble.
[116] Kallie Szczepanski, *The Yellow River's Role in China's History*, THOUGHT CO., (July 28, 2019), https://www.thoughtco.com/yellow-river-in-chinas-history-195222.

Renegotiating the Outer Space Treaty is imperative in order to address its various shortcomings. Some might argue that no treaty can cover all possible scenarios, and to this end, the open language of the treaty has a great advantage in facilitating better communication between States. However, with the entry of private actors, it is important to recognise that the commercialisation of the space sector is not only dependent on good communication. If left unregulated, the commercial actors can severely disrupt the balance of ethical conduct and respect for the environment, be it that of earth, any other celestial body or space itself. Moreover, in the context of nations, two States disagreeing on fundamental values are bound to confront each other sooner or later. Unlike the Cold War Era, the goal today is to not only avoid conflict in space but also reap its benefits for economic prosperity.

Therefore, the existing treaties need to be revamped, amended, and modernised. Their aim, as a whole, must be on the lines of: i) establishing loyalty and unity at a global level to avoid conflict; ii) prohibiting the use of conventional weapons in space; iii) defining "peaceful purposes" as "non-military purposes"; iv) tackling exchange of disruptive space technology for the benefit of all humanity; iv) creating strict legal repercussions for destabilising space environment; v) delimiting the application of international law in space governance system; vi) devising a robust legal regime to govern commercial space actors; vii) defining regulations to guide potentially dangerous concepts like space mining and colonisation of other celestial bodies; viii) preventing over-exploitation of space by non-State actors; ix) holding states as well as commercial actors jointly and severally accountable for violation of space laws; x) ensuring peaceful use by holding State and non-State actors true to their international obligations; xi) finally, proposing the establishment of an organisation that can enforce international obligations in space, with repercussions for every country that violates the existing law.

If nations continue to pursue their selfish interests, they are not only exposing themselves to major destruction but also preventing themselves from exploring infinite possibilities in space. Hence, states need to discard the legacy of the Cold War in order to develop trust and mutual loyalty towards the common heritage that is space.

DO KILLER ROBOTS HAVE TO DREAM OF DEAD SHEEP? DISCARDING AD HOMINEM FROM PER SE LEGALITY ASSESSMENT

-Altamash Kadir[1]

ABSTRACT

Lethal Autonomous Weapons Systems are a nascent technology. Thus, the per se legality of these weapons is uncertain under international law. Legal literature has been steadily contributing to the understanding of such weaponry. The interdisciplinary nature of this topic enables diversity in perspectives. However, the sheer quantity of the arguments against these weapons dilutes the discourse surrounding them. This is especially troublesome when some of these arguments are irrelevant to making the per se legality assessment for these weapons. Some of the criteria for compliance are incompatible with even human beings. For the purposes of this article, such a standard would be considered to be made as an ad hominem attack. These attacks can be defined by their lack of evidence and false equivalence. This article would clarify the fairness of the legal standards proposed for LAWS. Subsequently, assessing LAWS for their consistency with a fairer characterisation. This article juxtaposes these standards in three key respects. First, their approximation to human beings. Second, transcending human beings. Third, their emulation of human life. The purpose of this article is to visualise what ideal regulation for LAWS can look like.

INTRODUCTION

An *ad hominem* or a "to the man" argument is often irrelevant.[2] The reason for this is that such arguments are conditional on human behaviour.[3] This is especially problematic for assessing *per se* legality. *Per se* or "by itself" is the inherent lawfulness of an object.[4] Weaponry that is

[1] Student at Government Law College, Mumbai (India).

[2]*See* United States—Definitive Safeguard Measures on Imports of Wheat Gluten from the European Communities, Panel Report of July 31, 2000, WTO Doc. WT/DS166/R at 6.

[3]An *ad hominem* argument is an argument that is directed towards a person individually. Since this is an attack that exclusively attacks the individual, instead of engaging with the realities of their arguments. *See,* AARON X. FELLMETH & MAURICE HORWITZ, GUIDE TO LATIN IN INTERNATIONAL LAW 43 (2009) ('Guide to Latin').

[4]*See,* [Guide to Latin 220.

unlawful *per se* does not become lawful by being used for lawful purposes.[5]*Per se* legality is conditional upon the inherent nature of the weapon, not upon the use.[6] The issue with *ad hominem* arguments is that they do not relate to the nature of the weapon with the designed purpose or expected normal use.[7] They relate to the human beings controlling the weapons and their intentions. This complicates the process of assessing *per se* legality. This becomes even more relevant to autonomous weaponry. This is where human control becomes significantly more irrelevant and the line separating the combatant and the weapon blurs.[8]

If automation can affect so many parts of human society, armed conflicts are and would be no different.[9] It is now possible to program the ability to independently search for, and engage targets based on specified variables like constraints and descriptions into military systems.[10] These weapons are defined by their autonomy. The most commonly used terminology to define these weapons is "Lethal Autonomous Weapons Systems" ("LAWS"). Contemporary discourse facilitates an asymmetrical realization of whether these weapons are consistent with present legal standards. Often, criticism relies upon a false equivalence between a standard for human beings and one for artificial intelligence. This is counter institutive and unfair.

I. LETHAL AUTONOMOUS WEAPONS SYSTEMS

A. What Are These Killer Robots?

There is a variety of terminology used, to label these machines, extending from the most commonly used LAWS[11] to the similar "Lethal Autonomous Robots"[12] or even the self-

[5]*See* Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. Rep.226 (July 8), ¶39. ('Nuclear Weapons')

[6]*See* YORAM DINSTEIN, THE CONDUCT OF HOSTILITIES UNDER THE LAW OF INTERNATIONAL ARMED CONFLICT 31 (2016).

[7]*See* ANDREW CLAPHAM & PAOLA GAETA, THE OXFORD HANDBOOK OF INTERNATIONAL LAW IN ARMED CONFLICT 288 (2014).

[8] The line between combatant and weapons blurs, as LAWS are both the weapons and the combatant through their autonomous nature and destructive capabilities. The regulation applicable to both the combatant and weaponry is applicable to LAWS.

[9]Industries are facing significant automation in the *status quo*. *E.g.*, Rajesh Kumar Singh, *Coronavirus pandemic advances the march of 'cobots'*, REUTERS, July 20, 2020, https://www.reuters.com/article/us-health-coronavirus-automation-idUSKCN24L18T (last visited Jan 15, 2021).

[10] *See* Rebecca Crootof, *The Killer Robots Are Here: Legal and Policy Implications*, 36 CARDOZO L. REV. 1837 (2015).

[11]*E.g.* Nicholas W. Mull, *It Is Time to Move Beyond the 'AI Race' Narrative: Why Investment and International Cooperation Must Win the Day*, NORTHWESTERN JOURNAL OF TECHNOLOGY AND INTELLECTUAL PROPERTY 2021 (2017).

explanatory "Killer Robots".[13] This article extends its ambit towards any weaponry with the capability of dispersing force autonomously.

1. Where Did They Come From?

The issue faced while assessing presently operational LAWS is the fact that their deployment and use is majorly confidential. Therefore, the understanding of their functionality is part superficial and part theoretical or academic. Currently, there are two prominent systems for LAWS. Human-in-the-loop ("HITL") is a system that requires human interaction for a LAWS to retaliate.[14] Human-on-the-loop ("HOTL") is a system that just allows the LAWS to engage targets while allowing human intervention to stop it.[15]

Even though a debate pertaining to what system is preferable is ongoing, this article does not pick a side; both of the systems may have their own merits and demerits. Instead, what is more important is how these systems co-relate to the aforementioned standards for compliance under international law. For example, the SGR-A1 is a sentry gun and is considered as the first unit to have an integrated system that includes surveillance, tracking, firing, and voice recognition.[16] Therefore, it may be the first LAWS that is actually functional. However, the application of HITL and HOTL on the SGR-A1 is what creates most of its controversy.[17]

Since HITL relies upon human judgment to deploy lethal force, the LAWS acts simply as a weapon. Generally, the use of HITL should be consistent with international law in a *per se* manner. HOTL ends up being trickier to assess, as it relies completely upon the autonomy of the LAWS, unless the human intervenes. This standard for LAWS has one commonality, some human intervention. Therefore, the question that arises here is whether these systems are autonomous *per se* or not. The answer consistent with that is, a LAWS is supposed to be negative. Human control deals with the concerns pertaining to humanity and accountability of

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[12]*E.g.,* UNHRC, Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions, Christof Heyns, p.20, U.N. Doc. A/HRC/20/22 (Apr. 10, 2012).

[13]*E.g.*, BONNIE DOCHERTY, JULIA FITZPATRICK & TREVOR KECK, LOSING HUMANITY: THE CASE AGAINST KILLER ROBOTS (2012).

[14]*See* John Nay and Katherine J. Strandburg, *Generalizability: Machine Learning and Humans-in-the-Loop*, RESEARCH HANDBOOK ON BIG DATA LAW (2019).

[15]*See* Markus Wagner, *Taking Humans Out of the Loop: Implications for International Humanitarian Law* JOURNAL OF LAW INFORMATION AND SCIENCE, 21 (2011).

[16]*See* Jean Kumagai, *A Robotic Sentry For Korea's Demilitarized Zone*, IEE SPECTRUM, 44 (2007).

[17]*See* Trisha Ray, *Beyond the 'Lethal' in lethal autonomous weapons: Applications of LAWS in theatres of conflict for middle powers*ORF OCCASIONAL PAPERS (2018).

LAWS. However, neither HITL nor HOTL allow for real autonomy. This article deals with hypothetical weaponry that is more autonomous than HITL and HOTL.

2. Where Will They Go?

The development of artificial intelligence is only increasing. The development of LAWS is already gaining momentum. Although nations like the United States of America ("USA") promise of meaningful human control over their LAWS,[18] there can never be any surety pertaining to it. Allegations regarding Russia developing an autonomous undersea torpedo already exist.[19] However, rumours aside, Russia,[20] China,[21] Israel,[22] South Korea,[23] and the USA are at some stage of development at the least. Therefore, it is reasonable to anticipate an increase in the development, deployment and use of LAWS.

B. Pre-Emptory Ban

There are campaigns that exist to ban the development, deployment and use of LAWS. The codification of a pre-emptive ban on blinding lasers through CCW Protocol IV is cited as an instance of this working out.[24] However, most of the applicability or inapplicability of that Customary International Law provisions on the *per se* legality of LAWS are dealt with in the latter part of this article. International law is a creature of consent, without the consent of the nations that are engaging in the development of LAWS, this ban would not in any way stop the development. It may be effective in stopping the nations that consent to the ban. The previously

[18]*See* Robert Hunter Ward, *RPA Ethics: A Focused Assessment*, SWJ, April 17, 2019, https://smallwarsjournal.com/jrnl/art/rpa-ethics-focused-assessment (last visited Jan 15, 2021).

[19] *See* Barbara Starr & Zachary Cohen, *US says Russia 'developing' undersea nuclear-armed torpedo*, CNN, February 3, 2018, https://edition.cnn.com/2018/02/02/politics/pentagon-nuclear-posture-review-russian-drone/index.html (last visited Jan 23, 2021).

[20]*See* Tom O'connor, *Russia's Military Challenges US and China By Building a Missile That Makes Its Own Decisions*, NEWSWEEK, July 20, 2017, https://www.newsweek.com/russia-military-challenge-us-china-missile-own-decisions-639926 (last visited Jan 23, 2021).

[21] *See* Udi Shaham, *Development in Israel of terrorist-killing robots is no state secret*, THE JERUSALEM POST, February 26, 2017, https://www.jpost.com/Israel-News/Politics-And-Diplomacy/Kara-I-wasnt-revealing-state-secrets-about-the-robots-482616 (last visited Jan 23, 2021).

[22]*See* Dave Makichuk, *Is China exporting killer robots to Mideast?*,ASIA TIMES, November 8, 2019, https://asiatimes.com/2019/11/is-china-exporting-killer-robots-to-mideast/ (last visited Jan 23, 2021).

[23]*See* David B. Larter, *The US Navy says it's doing its best to avoid a 'Terminator' scenario in quest for autonomous weapons* DSEI, September 12, 2019, https://www.defensenews.com/digital-show-dailies/dsei/2019/09/12/the-us-navy-says-its-doing-its-best-to-avoid-a-terminator-scenario-in-its-quest-for-autonomous-weapons(last visited Jan 23, 2021).

[24]*See* Precedent for Preemption: The Ban on Blinding Lasers as a Model for a Killer Robots Prohibition, HUMAN RIGHTS WATCH (2020), https://www.hrw.org/news/2015/11/08/precedent-preemption-ban-blinding-lasers-model-killer-robots-prohibition (last visited Jan 23, 2021).

mentioned CCW Protocol IV is only agreed to by 109 countries and it has been over two decades. Another example of a ban on LAWS working is cluster munitions. Similarly, the Convention on Cluster Munitions has also been signed by 108 countries. Interestingly, countries like the USA that initially spoke of the military utility of cluster munitions still stand by it and have not signed the Convention.[25] Similarly, in addition to the USA, Russia and other nations have also opposed a ban on LAWS.[26] Therefore, even if a majority of countries are to support and codify a ban on LAWS, these minority countries are not forced into upholding the ban and are not likely to either.

C. The Applicable Law

There are three sources foundational for arguments against the *per se* legality of LAWS. The principles from these sources are divided with preference to their overlap with each other in the latter parts of this article. On 8 July 1996, the International Court of Justice ("ICJ") rendered an advisory opinion on The Legality of the Threat or Use of Nuclear Weapons. Even though the opinion was not binding, it was instrumental in the development of the primary legal standard for the usage of weaponry. This opinion was the first time that the ICJ recognized the cardinal obligation against the deployment of weapons that are illegal *per se* as per Customary International Law ("CIL").[27] According to the ICJ, these are weapons that are of a nature to cause unnecessary sufferings, indiscriminate by nature or inconsistent with Martens Clause, which are principles of humanity and the dictates of public conscience.[28] These principles also overlap with obligations under international agreements. The fact that LAWS operate as both the combatant as well as the weapon ensures that they come under the ambit of Conventions like the Geneva Conventions and its Protocols that create the bedrock of International Humanitarian Law ("IHL"), when the nations enlisting the services of a LAW are parties to these instruments. Furthermore, under the obligation inherent to Article 1 common, a LAW must be capable of

[25]*See* Stuart Hughes, *Global cluster bomb ban comes into force*, BBC News, August 1, 2010, https://www.bbc.com/news/world-10829976(last visited Jan 23, 2021).
[26]*See* Damien Gayle *UK, US and Russia among those opposing killer robot ban*, THE GUARDIAN, March 29, 2019, https://www.theguardian.com/science/2019/mar/29/uk-us-russia-opposing-killer-robot-ban-un-ai(last visited Jan 23, 2021).
[27]*See* Nuclear Weapons, ¶79.
[28]*See* Nuclear Weapons, ¶78.

respecting the Geneva Conventions,[29] to comply with the requirements of the Conventions, at all times.[30] This is considered *pre facto* in nature.[31]With the right to life being an exception,[32] International Human Rights Law ("IHRL") does not apply to armed conflicts.[33] However, much like other weaponry, LAWS cannot only be used during armed conflicts but also for the purposes of enforcement. Therefore, the guarantees provided under the International Covenant on Civil and Political Rights ("ICCPR") are majorly applicable to LAWS being used for the purpose of enforcement along with the right to life. Furthermore, Article 2 (1) of the ICCPR obligates nations to respect and ensure the rights in the ICCPR within their territories.[34] It is a duty to implement the ICCPR guarantees[35] and to take steps to ensure that all persons are afforded the enjoyment of the rights under the ICCPR.[36] This duty extends to a weapon review obligation in terms of their compatibility with the right to life under ICCPR.[37]

II. HUMAN APPROXIMATION

Artificial intelligence is not human intelligence. That does not mean that it is incompatible with human standards. Hypothetically, if it were possible to programme certain requisite conditions on the behaviour of LAWS, it would be *per se* legal. There are three human-approximate standards. First, human dignity under the ICCPR. Second, humane treatment under the Geneva Conventions. Third, principles of humanity under the Martens Clause. These standards are ridden with their own *ad hominem* fallacies. These standards also fail at the false equivalence they attempt to provide. This is true because most of the material on such criticisms grossly

[29] Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field Art. 1, Aug. 12, 1949, 75 U.N.T.S. 31 ('Geneva Convention I'); Geneva Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea Art. 1, Aug. 12, 1949, 75 U.N.T.S. 85 ('Geneva Convention II'); Geneva Convention Relative to the Protection of Civilian Persons in Time of War Art. 1, Aug. 12, 1949, 75 U.N.T.S. 287 ('Geneva Convention III'); Geneva Convention Relative to the Treatment of Prisoners of War Art. 1, Aug. 12, 1949, 75 U.N.T.S. 135 ('Geneva Convention IV').
[30]*See* Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, 2004, I.C.J. Rep.136 (July 9), ¶158.
[31] *See* G.A. Res. 60/147, ¶3 (a) (Mar. 21, 2006). ('2005 Principles')
[32]*See* HRC General Comment No.36 (2018), U.N.Doc.CCPR/C/GC/36, ¶65. ('HRC GC 36').
[33]*See* HRC GC 36, ¶63.
[34] International Covenant on Civil and Political Rights, 16 December 1966, United Nations, Treaty Series, vol. 999, p. 171, Art. 2(1), Art. 2(1). ('ICCPR')
[35] HRC General Comment No.31 (2004), U.N.Doc.CCPR/C/21/Rev.1/Add.13, ¶13. ('HRC GC 31').
[36]*See* Sergio Euben Lopez Burgos v. Uruguay, Communication No. R.12/52, U.N. Doc. Supp. No. 40 (A/36/40) at 176 (1981), ¶12.3.
[37]*See* HRC GC 36, ¶65.

overestimate humanity. It chooses to attack LAWS for not having the abilities that human beings also do not possess. This ends up being unfair.

A. Human Dignity Under Article 10 of the ICCPR

Article 10 of the ICCPR pertains to human dignity. Persons deprived of their liberty are to be treated with humanity and with respect for the inherent dignity of the human person.[38] There are two arguments for the incompatibility of LAWS with Article 10 of the ICCPR. First, the International Committee of the Red Cross ("ICRC") in relation to the delegation of the decision to kill or injure. Second, Christof Heyns in relation to the reduction of human beings as targets.

According to ICRC, delegating the execution of a task to a machine may become acceptable. The delegation of the decision to kill or injure is not. This requires applying human intent to each decision. The evidence presented for this is, "*For some, autonomous weapon systems conjure up visions of machines being used to kill humans like vermin, and a reduced respect for human life due to a lack of human agency and intention in the specific acts of using force*"[39]. This is *ad hominem,* as there is no evidence presented to the connection between human dignity and human agency. There are three distinct problems with this argument. First, the only evidence presented here pertains to conjuring up visions out of fear. If this is true and fear deprives human dignity, human conduct would also be considered depriving of human dignity. This is true, because of how the "for some" can be looked at. If fear for some were sufficient, every army and every weapon would be guilty of depriving human dignity. Second, no correlation is ever presented for the pertinence of human intent here. This is impermissibility to delegate; the ability to kill is never substantiated. Third, a standard for what behaviour deprives human dignity is never presented. There could always be safeguards programmed in the LAWS to ensure certain acts of violence are prohibited. The propensity for compliance is significantly more for the LAWS, as it has no alternative. For example, the ICRC holds that to respect human life, actors must take steps to minimise killing.[40] The LAWS can fulfil criteria similar to this.

According to Christ of Heyns, "*to allow machines to determine when and where to use force against humans is to reduce those humans to objects; they are treated as mere targets. They*

[38]*See* ICCPR, Art. 10.
[39]*See* ICRC, "Ethics and Autonomous Weapons Systems: An Ethical Basis for Human Control?" (Apr. 3, 2018), 11.
[40]*See* ICRC, *The Fundamental Principles of the International Red Cross and Red Crescent Movement*, ICRC, August,2015, https://www.icrc.org/sites/default/files/topic/file_plus_list/4046the_fundamental_principles_of_ the_ international_red_cross_and_red_crescent_movement.pdf (last visited Jan 23, 2021).

become zeros and ones in the digital scopes of weapons which are programmed in advance to release force without the ability to consider whether there is no other way out, without a sufficient level of deliberate human choice about the matter"[41]. This is *ad hominem*, as there is no exclusivity of this harm. There are two problems with this argument. First, there is no evidence provided for what deprives human dignity. Second, this human to object reduction is an assumption never substantiated in terms of its exclusivity. No evidence is provided for why human choice here matters. It would be likely to programme LAWS to kill the least amount of people possible and prioritise less lethal weapons. Furthermore, this never clarifies how this is assessed in human beings.

B. Humane Treatment Under Article 3 Common to the Geneva Conventions

Article 3 common to the Geneva Conventions pertains to humane treatment. Persons taking no active part in the hostilities shall be treated humanely in all circumstances without any adverse distinction.[42]There are two arguments for the incompatibility of LAWS with Article 3 common to the Geneva Conventions. First, Human Rights Watch ("HRW") in relation to compassion extending to the standard for minimisation of harm. Second, Amanda Sharkey in relation to ethical artificial intelligence. Furthermore, according to Olivia Goldhill, artificial intelligence would also not possess the legal and ethical judgment necessary to minimise harm on a case-by-case basis.[43] Both of these arguments come to the same conclusion. HRW's material deals with why human beings are capable of this minimisation and Amanda Sharkey's material deals with why artificial intelligence is not. Therefore, both of the arguments are individually assessed prior to their juxtaposition.

According to the HRW, in order to treat other human beings humanely, one must exercise compassion and make legal and ethical judgments.[44] Here, 'compassion' is the "stirring of the soul which makes one responsive to the distress of others".[45]To show compassion, an actor must be able to experience empathy. This is the understanding and sharing the feelings of another and

[41]*See* Christof Heyns ¶21.
[42]Geneva Convention I, Art. 3; Geneva Convention II, Art. 3; Geneva Convention III, Art. 3; Geneva Convention IV, Art. 3
[43] Olivia Goldhill, *Can We Trust Robots to Make Moral Decisions*?, Quartz, April 3, 2016, https://qz.com/653575/canwe-trust-robots-to-make-moral-decisions/ (last visited Jan 23, 2021).
[44] Human Rights Watch, *Heed the Call: A Moral and Legal Imperative to Ban Killer Robots*, © 2018 Russell Christian/Human Rights Watch ('HRW").
[45]*See* JEAN PICTET, THE FUNDAMENTAL PRINCIPLES OF THE RED CROSS: COMMENTARY (1979).

be compelled to act in response.[46] It contends that this leads to the minimisation of physical and psychological harm.[47] The evidence here is "judgement" being defined as "the ability to make considered decisions or come to sensible conclusions" in the English Oxford Living Dictionaries.[48] According to Amanda Sharkey, artificial intelligence should not be used in circumstances that demand moral competence and an understanding of the surrounding social situation. They described robots as "ethical" or "minimally ethical".[49]

Their claims are *ad hominem*, as the binary here is unfair. The comparative cannot be benevolent human beings and bloodthirsty artificial intelligence. There are three co-related problems with these arguments. First, compassion is treated as a mechanism for change. This could imply two things. One, compassion is always going to minimise harm. Two, compassion is always more likely to minimise harm. Neither have ever been proven to work. However, the latter does not even prove the propensity for it to be working to be more than artificial intelligence. The word "judgement" in the English Oxford Living Dictionaries does not factor in compassion.[50] This is only about the outcome. That is the minimisation of harm. Second, it could be possible to program LAWS to minimise harm. If the result is all that matters out of this argument, it can be accessed on both sides. Third, LAWS may not possess all the legal and ethical judgment necessary to minimise harm on a case-by-case basis, but it possesses more than what human beings do. If experience shapes this calculus for judgement, simulations are more efficient than human lives. Therefore, these simulations could enable artificial intelligence to surpass human experience. Programmed restrictions are a better deterrent for violence than empathy. Furthermore, deployment of LAWS could be conditional on the ethical questions a situation may possess.

C. Principles of Humanity Under the Martens Clause

The principles of humanity are mentioned in the Martens Clause. In cases not covered by the law in force, the person remains under the protection of the principles of humanity.[51] The ICJ

[46] HRW.
[47] JEAN PICTET, DEVELOPMENT AND PRINCIPLES OF INTERNATIONAL HUMANITARIAN LAW (1985), 62.
[48] HRW.
[49] Amanda Sharkey, Can we program or train robots to be good?. Ethics Inf Technol 22, 283–295 (2020).
[50] *See* HRW.
[51] *See*Protocol Additions to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (adopted 8 July 1977, entered into force 7 December 1978) 1125 U.N.T.S. 3 Art. 1(2) ('Protocol I").

referred to these principles as an effective means of addressing the rapid evolution of military technology.[52] It failed to define what these principles mean.[53] Human dignity under the ICCPR and humane treatment under the Geneva Conventions are both commonly referred to as the principles of humanity. This is the part where there is more academic contribution. However, these principles may also be those that are recognized as the conduct acceptable by humanity. This conduct is a prohibition on attacking civilians, sparing civilians as much as possible, limitations of means and methods of warfare, abiding by the notion of chivalry, prohibition on torture and prohibition on collective punishment.[54] These principles may include operating in good faith.[55] None of these criteria, however, relates to *per se* legality. It relates to legality by use. This functionality can be programmed.

III. HUMAN TRANSCENDENCE

The *ad hominem* fallacy is explicitly apparent when accompanied by unintuitive evidence. This is especially true about the conditionality of possessing human judgment to be efficacious at warfare and compatible with the law. The assumption that human judgment somehow evolves soldiers is preposterous. The capabilities that human judgement holds are gross overestimation. This part differs for compliance standards in the last part. LAWS are not as compatible as human beings are, but are significantly more so. Two human-transcendent standards deal with human judgement. First, the principle of proportionality. Second, the principle of distinction. Proportionality and distinction form the bedrock of IHL. These principles are present in different forms in different international instruments.

A. Proportionality and Human Judgement

Proportionality is determined on a case-to-case basis. The use of force is unlawful when it is disproportionate to its military necessity.[56] It is present in various forms. Under CIL, a weapon that inflicts harm greater than that unavoidable to achieve legitimate military objectives are of a

[52]*See* Nuclear Weapon, ¶78.
[53]The ICJ in Nuclear Weapons never defined what 'principles of humanity' were.
[54]*See* Theodor Mero, *The Martens Clause, Principles of Humanity, and Dictates of Public Conscience,* (2000) 94 American Journal of International Law 78, 82-83 ('Mero"); *See also* A. Cassese, *The Martens Clause: half a loaf or simply pie in the sky?* (2000) 11 EJIL 187, 202–207 ('Cassese").
[55]*See* GARY D. SOLIS, THE LAW OF ARMED CONFLICT: INTERNATIONAL HUMANITARIAN LAW IN WAR 5-6 (2016).
[56]*See* MALCOLM N. SHAW, INTERNATIONAL LAW 1031 (6 ED. 2008).

nature to cause unnecessary sufferings.[57] Similarly, proportionality is present in Article 51(5)(b) and 57 of Additional Protocol I to the Geneva Conventions.[58] Under the ICCPR, the right to life is the supreme right.[59] It acknowledges that every human has this right and imposes the duty to ensure that nobody is deprived of it arbitrarily.[60] Even the UDHR upholds this right.[61] The word 'Arbitrary' here refers to a failure in applying the force used in a proportionate manner.[62] However, this standard is to be fulfilled by the combatant and not the weapon. However, this is not the case with a LAW, as it is self-governing. Compatibility with proportionality is determined by the test of 'reasonable person'. The test assesses whether a person could have expected excessive civilian casualties to result from the attack after making reasonable use of the information available to them.[63]There are two arguments for the necessity of human judgement to proportionality. First, to balance the force used in the response to the threat. Second, to be restrained by emotion while using force.

According to Peter Asaro, the test requires human judgement,[64] as human beings rely on their judgement to balance the force used in the response to the threat.[65] This false equivalence assumes that human beings are inherently and exclusively capable of proportionate warfare. However, the point that differentiates human soldiers and LAWS is the ability to pre-empt reactions. The algorithm foundational to LAWS is built upon simulations. These simulations are going to be more than what human experience can let soldiers individually carry within their judgement.

According to Armin Krishnan, a LAWS does not possess natural inhibition to not kill or hurt human beings[66] Human soldiers have resistance to killing, due to restraint created by emotion.[67] Inversely, A LAWS does not possess the basic human notion of prejudices and racial superiority

[57]*See* Nuclear Weapons, ¶79.
[58] Protocol I Arts. 51(5)(b) and 57.
[59]*See* HRC GC 36, ¶2.
[60] ICCPR Art. 6 (1).
[61]*See* Universal Declaration of Human Rights (adopted 10 December 1948) UNGA Res 217 A (III) Art. 3.
[62]*See* Camargo (on behalf of Suarez de Guerrero) v Colombia, Merits, Communication No 45/1979, U.N. Doc. CCPR/C/15/D/45/1979. ¶¶13.2-13.3.
[63]*See* Prosecutor v Galić, Case No. ICTY-98-29, Judgment, ¶58 (Dec. 5, 2003).
[64] Peter Asaro, *On Banning Autonomous Weapon Systems: Human Rights, Automation, and The Dehumanization Of Lethal Decision-Making*, 94 IRRC, 687-709 (2012).
[65] *See* INTERNATIONAL COMMITTEE OF THE RED CROSS, COMMENTARY ON THE ADDITIONAL PROTOCOLS OF 8 JUNE 1977 TO THE GENEVA CONVENTIONS OF 12 AUGUST 1949, 679 (1987).
[66]ARMIN KRISHNAN, KILLER ROBOTS: LEGALITY AND ETHICALITY OF AUTONOMOUS WEAPONS 130 (2016).
[67]*See* DAVE GROSSMAN, ON KILLING: THE PSYCHOLOGICAL COST OF LEARNING TO KILL IN WAR AND SOCIETY 4 (2009).

that often leads to violations of the conduct of warfare to begin with. Therefore, at best this becomes value-neutral. However, human beings can never match the limitations programming can set within LAWS.

B. Distinction and Human Judgment

Weapons incompatible with distinction are inherently reprehensible due to their uncontrollable and unpredictable effects[68]and therefore are incapable of being targeted at a military objective.[69] Under CIL, these weapons are indiscriminate by nature. They are classified by their effect on combatants and civilians,[70] as they affect civilians and military personnel without distinction.[71] The distinction is present in Articles 48, 51(2) and 52(2) of Additional Protocol I to the Geneva Conventions.[72]According to the International Criminal Tribunal for the former Yugoslavia in *Prosecutor v. Kupreškić et al.,* this rule exists to protect civilians.[73] This is a restriction on the conduct allowed in engaging with combatants to ensure that civilians are not needlessly injured.[74] According to Theodor Mero, distinction is among the principles of humanity.[75]There is one argument for the necessity of human judgement to distinguish. That human judgement is instrumental in distinguishing between civilians and combatants.

According to Marcello Guarini and Paul Bello, LAWS lack the qualities that human enforcement uses to assess the seriousness of a threat and the need for a response, as a system without emotion, it cannot predict the emotions or action of others based on that of its own.[76] Furthermore, according to Noel Sharkey, human qualities facilitate determinations on battlefields, where combatants often conceal their identities.[77]The sensory and vision systems

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[68]*See* UNGA Res. 2603 A (XXIV) (16 December 1969).

[69]*See* Legality of the Threat or Use of Nuclear Weapons, Judgment, 1996 I.C.J. Rep.226, ¶24 (July 8) (dissenting opinion of Higgins J.).

[70]*See* Nuclear Weapons, ¶79.

[71] Prosecutor v. Martić, Case No. IT-95-11-T, Judgement ¶29 (Int'l Crim. Trib. for the Former Yugoslavia June 12 2007) ('Martić').

[72] Protocol I Arts. 48, 51(2) and 52(2).

[73] *See* Prosecutor v. Tadić, Case No. IT-94-1, Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction, ¶106 (Int'l Crim. Trib. for the Former Yugoslavia Oct. 2, 1995); *See* Martić, ¶56; Prosecutor v. BlaškićCase No. IT-95-14-T, Judgement, ¶162 (Int'l Crim. Trib. for the Former Yugoslavia Mar. 3 2000).

[74] Prosecutor v. Kupreškić et al., Case No. IT-95-16-T, Judgement ¶702 (Int'l Crim. Trib. for the Former Yugoslavia Jan. 14 2000).

[75] Mero, 78 82-83; Cassese, 202–207.

[76] Marcello Guarini and Paul Bello, *Robotic Warfare: Some Challenges in Moving from Noncivilian to Civilian Theaters,* Robot Ethics: The Ethical and Social Implications of Robotics, 129, 138, (2012) ('Guarini and Bello").

[77] Noel Sharkey, *Killing Made Easy: From Joysticks to Politics,* Robot Ethics: The Ethical and Social Implications of Robotics, 111, 118 (2012).

may be able to detect humans, but not reliably tell combatants from immune actors, as there is no programmable definition of what constitutes a 'civilian'.[78]This false equivalence assumes that human beings are inherently and exclusively capable of distinguishing between actors. A distinction is equally difficult to translate for a human being and a LAW because neither a machine nor a human being can determine whether an unknown person is a member of an organisation since it is not necessary to interpret intentions and emotions in making that determination.[79] However, LAWS can be connected to large data pools to assess identities along with having cameras to make the assessment. This is not possible with human beings. The scope of LAWS could be restricted exclusively to individuals on lists developed by national defence organisations.

IV. HUMAN EMULATION

Since LAWS is a combatant, its decisions have consequences. This is where the question of accountability rises. There are three accountability standards for combatants that become important to LAWS. First, to be prosecuted under the Geneva Conventions and the ICCPR. Second, to be rehabilitated under the ICCPR. Third, to be reviewed under Additional Protocol I to the Geneva Conventions.

A. Prosecution

All four of the Geneva Convention have the obligation to prosecute for grave breaches of their Articles.[80] The grave breaches are defined in each of their subsequent Articles. The first and second Geneva Conventions provides for four breaches "*willful killing, torture or inhuman treatment, including biological experiments, willfully causing great suffering or serious injury to body or health, and extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly*".[81] The Third Geneva Convention substitutes the fourth breach with "*compelling a prisoner of war to serve in the forces of the hostile Power, or willfully depriving a prisoner of war of the rights of fair and regular trial prescribed in this*

[78]*See* Noel Sharkey, *The evitability of autonomous robot warfare*, 94 IRRC, 787–799 (2012).
[79]*See* Guarini and Bello 129, 138.
[80] Geneva Convention I, Art. 49; Geneva Convention II, Art. 50; Geneva Convention III, Art. 129; Geneva Convention IV, Art. 146.
[81]Geneva Convention I, Art. 50; Geneva Convention II, Art. 51.

Convention".[82] The Fourth Geneva Convention substitutes the fourth breach with "*unlawful deportation or transfer or unlawful confinement of a protected person, compelling a protected person to serve in the forces of a hostile Power, or willfully depriving a protected person of the rights of fair and regular trial prescribed in the present Convention, taking of hostages and extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly*".[83] Under the right to remedy, the ICCPR obligates to provide remedy for breaches of the ICCPR guarantees.[84]A failure to investigate and where appropriate prosecute gives rise to a separate breach of the ICCPR.[85] There are two arguments for the incompatibility of LAWS with these Articles. First, relating to *mens* rea. Second, relating to superior or command responsibility.

According to Jens David Ohlin, LAWS are incapable of acting with a guilty intent.[86]The *mens rea* constituting 'willful' in relation to the breaches includes guilty intent.[87]However, the problem with this argument is that this does not invalidate LAWS. It only claims non-possession of the intent to kill. Therefore, this argument inadvertently concedes to the violence committed to be out of mistake or malfunction. The argument is premised on the accountability gap inherent to LAWS.[88] This is *ad hominem* because it attacks LAWS on non-criteria for compatibility with the Geneva Conventions.

According to HRW, LAWS are incompatible with the doctrine of command responsibility.[89] Under the doctrine of "superior or command" responsibility superiors and commanders are indirectly criminally liable for a subordinate's crime[90] when they have the information of the crime or have failed to acquire such knowledge.[91] The argument here becomes that since this is limited to measures within their power. A person cannot be punished for not doing the

[82]Geneva Convention III, Art. 130.
[83]Geneva Convention IV, Art. 147.
[84]ICCPR Art. 2 (3).
[85]*See* HRC GC 31, ¶¶15-18.
[86] Jens David Ohlin, *The Combatant's Stance: Autonomous Weapons on the Battlefield*, 92 INT'L L. STUD. 1, 24-27 (2016).
[87]*See* Blaškić, ¶152.
[88]*E.g.,* Thompson Chengeta, *Accountability Gap: Autonomous Weapon Systems and Modes of Responsibility in International Law* 45(1) Denv J Int'l L & Pol'y 1 (2020).
[89] HRW.
[90]*See* Prosecutor v. Hadžihasanović and ors., Case No. IT-01-47-AR72, Decision on Interlocutory Appeal Challenging Jurisdiction in Relation to Command Responsibility, ¶57 (Int'l Crim. Trib. for the Former Yugoslavia, Jul. 16, 2003).
[91]*See* Prosecutor v. Kayishema and Ruzindana, Case No. ICTR-95-1-T, Judgement, ¶703 (May 21 1999).

impossible, that is understanding how a LAW would think.[92] However, the problem with this argument is that this does not invalidate LAWS. It only claims non-possession of the information. This too is *ad hominem* because it attacks LAWS on non-criteria for compatibility with the Geneva Conventions.

The issue with both of these arguments is that they treat non-violation as incompatibility. However, the conversation on the accountability gap is an important one. On that note, Rebecca Crootof proposed the notion of "war torts" in their article. They reject the characterization of all wrongs committed by the state during armed conflicts as 'crimes'. Instead proposing that the change in terminology and the classification of certain wrongs as 'torts' could help with regulating LAWS, as the damage caused by any and all machinery during armed conflict can then be used as the cause of action to seek compensation for the purposes of restoration.[93]

B. Rehabilitation

A punishment apparently conveys to criminals that they wronged the victim and recognizes the victim's moral claims.[94]The right to remedy does not stop at prosecution. It also encompasses reparations including rehabilitation and guarantees of non-repetition.[95] According to Robert Sparrow, it is impossible to punish LAWS as a human, because it cannot fathom physical and physiological pain and by this logic, cannot be deterred.[96]This is *ad hominem*, because the exclusivity of fear as the means for reformation is never proven. Comparatively, it should be easier to ensure that certain acts are never repeated by a LAWS.[97] The deterrence of certain acts through reprogramming could ensure non-repetition better than fear.

C. Review

Weapons review is pertinent for compliance with international law. Under Article 36 of Additional Protocol I to the Geneva Conventions, the study, development, acquisition or

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[92] *See* Prosecutor v. Delalić et al, Case No. IT-96-21-T, Judgement, ¶395 (Int'l Crim. Trib. for the Former Yugoslavia Nov 16, 1998).
[93] Rebecca Crootof *War Torts: Accountability for Autonomous Weapons*, 164 U. Pa. L. Rev. 1347 (2016).
[94]*See* DINAH SHELTON, REMEDIES IN INTERNATIONAL HUMAN RIGHTS LAW. 3RD REV. ED 13 (2015).
[95] *See* 2005 Principles Arts. 18-23.
[96]*See* Robert Sparrow, *Killer Robots*, 24 Journal of Applied Philosophy, 62, 72 (2007).
[97]For the purposes of this part, 'certain acts' refers to the acts the LAWS has to be rehabilitated for. The fulfillment of guarantees of non-repetition can be fulfilled well by LAWS, as they can be programmed to never commit the actions that it is programmed to not partake in.

adoption of a new weapon, means or method of warfare should be accompanied by a determination of whether it is compatible with the international legal obligations of the state.[98] There are two separate discussions around this Article. First, on the CIL nature. Second, on efficacy. Natalia Jevglevskaja argues against its CIL nature quite succinctly, by stating how there is a lack of *opinio juris* and state practice along with pointing out the falsity of the claim that this obligation is a corollary to any other international obligation. It is important to understand that the Article, CIL or not, does not amount to any real compliance. Since there is no method for review provided, States can decide the procedure themselves. There is no guarantee for these procedures to be fair, ethical and unbiased. However, this is still relatively better than the contrary. States like India, Iran, Malaysia, Singapore, and Turkey do not have weapons review mechanisms.[99]Most of the discussion regarding the CIL nature of this review obligation is superficial. It also acts as a smokescreen for the efficacy of the obligation. Furthermore, the duty to implement the ICCPR guarantees under Article 2 (1) extends to a weapon review obligation too. This duty is to review weaponry for its compatibility with Article 6 (1), during the development and deployment of weaponry.[100] However, the standard for this duty is not provided either. Therefore, review obligations hold little to no utility in ensuring compliance with international law.

CONCLUSION

Artificial intelligence is nascent. All that it can do is grow. With the propensity to cause harm being present, regulation must be fair, equitable and uniform. The scope of conversations regarding LAWS is plagued with *ad hominem* fallacies. These criticisms are often irrelevant to legal assessment of LAWS. The purpose of this article was to shed light on such instances of irrelevance. It attempted to discard the *ad hominem* arguments and propound over what would amount to sufficient regulation. It pointed to aspects of regulation that seemingly hijacked the conversations surrounding LAWS. It studied the futility of these aspects. This article intends to open new dimensions in conversations on LAWS. The regulation we possess right now is

[98] Protocol I Art .36.
[99] Natalia Jevglevskaja, *Weapons Review Obligation under Customary International Law* 94 INT'L L. STUD. 186 (2018).
[100] *See* HRC GC 36, ¶65.

inefficient. It is time to stop pretending. Killer Robots are here and they are here to stay. The best that can be done is regulating it through legal instruments.

In Human Approximation, the article addressed the human-approximate standards put upon LAWS for the purposes of compliance with principles of humanity, human dignity and humane treatment. This was unfair, as the criteria used for compliance is not something that even human beings can fulfil. In Human Transcendence, the article addressed the human judgement standard for compliance with proportionality and distinction. This was conditional on assumptions. This was also the standard where LAWS can provide better compliance than human beings were. In Human emulation, the article addressed concerns pertaining to prosecution, rehabilitation and review of LAWS. The claims pertaining to prosecution and rehabilitation attempt to equate the inability to violate with non-compliance. It is also possible to design regulation to create structures of accountability for LAWS. The assertions on the CIL nature of review obligations are unfounded. However, even if these assertions were not, the vagueness in the obligation ensures the propensity to exploitation. The conversations regarding the *per se* legality of LAWS need to evolve.

AN ANALYSIS OF FORCE MAJEURE IN INTERNATIONAL INVESTMENT LAW PERTINENT TO THE CHALLENGES OF COVID-19

-Anoushka Singha and Yashasvi Suroliya[1]

ABSTRACT

Globally, judicial systems regulate the consequences of unanticipated events on State and contractual obligations through provisions such as that of force majeure. This essay examines the invocation of force majeure clauses in international investment law as a defence against non-performance and non-responsibility in times of turbulence. A defence of force majeure essentially excuses a party from its contractual obligations in the event of unforeseen circumstances. Although the threshold of impossibility of performance has been lowered to that of 'impracticability', various other challenges such as the degree of foreseeability, neglect in alternate performance and delay in communication of impediment cause arbitration tribunals to rarely enforce force majeure clauses. This essay analyses the usefulness of this claim with reference to the COVID-19 outbreak by expounding upon the various policies and series of measures undertaken around the world, which may have proved to be disruptive in contractual compliance for foreign investors as well as States.

INTRODUCTION

Normalcy, internationally and domestically speaking, can be disrupted by a number of occurrences like wars, natural disasters, riots and rebellions, plagues or trade restrictions. Such unprecedented times can impinge upon the capabilities of States to comply with their contractual obligations towards investors. States may be unable to protect investment assets or personnel from armed conflicts of natural calamities or become deficient financially, making it impossible

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to fulfil their obligations or debts. These events affect not only internal populations but also the interests of foreign investors, States and companies, thus finding importance in international law.

Judicial systems around the world have felt the need to regulate the consequences of uncontrollable events that derange the performance of legal obligations, throughout history. Deriving from both, the French legal notion of *vis major* and the English *doctrine of impossibility*, international law recognizes *force majeure* as both, a defence from responsibility as well as the impossibility of performance as a ground to terminate an accord.[2]

The outbreak of COVID-19 and its subsequent evolution into a global pandemic in 2020 has led to an unprecedented degree of domestic as well as international disruptions in trade and commerce, and as a result, has caused widespread commercial loss and business interruptions. Strict lockdown measures, border closures, travel bans, suspension of non-essential businesses and enterprises, and other preventive measures employed by States, as well as fiscal policies undertaken to revive failing domestic economies, are rapidly giving rise to disputes between States and foreign investors. In light of this, it is important to analyze the defences and protections available to States and other non-performing parties under international law. This essay focuses on one such defence, i.e., the principle of *force majeure*, with due consideration to the special applicability it has in such precarious and uncertain times.

We first look at a contemporary analysis of events and policies undertaken during COVID-19 that are likely to have legal ramifications arising out of breach of obligations under international investment agreements. Next, we address the principles of *force majeure* and challenges to invoking a *force majeure* defence, including the relevant international jurisprudence with regards to the same. We conclude with the contemporary challenges that States are likely to face in protecting themselves against liability through the invocation of *force majeure*, and suggestions for measures that can be undertaken by States, investors, and tribunals alike to provide adequate and just redressal for such disputes.

[2]Federica I Paddeu, A Genealogy of Force Majeure In International Law, 82 BYBIL 381, 385-386 (2012).

I. COVID-19 MEASURES UNDERTAKEN BY STATES

COVID-19, by virtue of its unique status as not just a public health, but also an economic crisis, has caused a myriad of complications for States and foreign investors across the globe. Rapid spread, asymptomatic carriers that made the virus hard to detect and mitigate in its nascent stages, and early instances of negligence and oversight in dealing with COVID-19 have led to governments worldwide resorting to a vast array of draconian measures of questionable efficacy, to curb the spread of the virus. Among these, the ones most likely to attract legal action for breach of obligations under BITs and IIAs, include (i) nationalization of private industries, namely healthcare and hospitals; (ii) restrictions on the export of medical equipment and more recently, COVID-19 vaccinations; (iii) fiscal policies such as bailouts, financial aid and stimulus packages to address the economic crisis plaguing domestic economies. The nature of claims that are rapidly arising as a result of these measures vastly fall under violations of the fair and equitable treatment (FET) standard, national treatment standard accorded to covered foreign investments, and protection against indirect expropriation, as enshrined in most bilateral investment treaties.

For example, Spain, which emerged as the third worst-hit country during the early days of the pandemic, nationalized all its private hospitals and healthcare providers, to better facilitate, through governmental intervention, the functioning of public health systems struggling under the massive bulk of COVID-19 patients.[3] All private hospitals were made open to the public free of cost. On similar lines, the Chinese government took over various pharmaceutical companies and manufacturing units, requisitioning the mass production of personal protection equipment and other medical supplies to effectively curb the spread of the virus. All such measures by State governments are vulnerable to claims of (in)direct expropriation of investments by aggrieved foreign investors, who have substantial capital contributions to private health care industries.

[3]Jon Henley, Kim Willsher & Ashifa Kassam, *Coronavirus: France imposes lockdown as EU calls for 30-day travel ban*, The Guardian (Mar. 16, 2020), https://www.theguardian.com/world/2020/mar/16/coronavirus-spain-takes-over-private-healthcare-amid-more-european-lockdowns.

In India, a ban was instituted on the export of personal protection equipment, to boost domestic production capacity and supply of essential medical commodities to the country's most vulnerable health care workers. Although the ban was relaxed in August 2020, medical goggles and NBR gloves continue to remain in the restricted category of exports.[4] Such an exports ban was also put in place by Italy. Similarly, the European Union has announced measures pertaining to export control of vaccine doses being manufactured within its borders, in an attempt to curb delivery shortfalls to EU member states.[5] Thus, vaccine companies will now have to seek permissions from the EU for the export of vaccines to non- EU states (with a few exemptions), and receiving such approval will be contingent on the companies having fulfilled their contractual obligations concerning vaccine dosage deliveries to EU countries first. Foreign investors who have invested in the manufacture of these products, especially vaccines, are likely to suffer a substantial hit to the economic value of their investment as well as the returns on their capital in the wake of these measures. It could be purported that such measures are in gross contravention to the investor's legitimate investment-backed expectations, giving rise to a breach of the fair and equitable standard of treatment.

With respect to fiscal policies, a number of controversial legislative actions have been taken by governments. The Indian Government's recent amendments to the Bankruptcy and Insolvency Code, with the objective of providing protection to businesses, particularly MSMEs, during this period of economic upheaval, include- an increase in the threshold for initiation of corporate insolvency resolution process to Rs. 1 crore and what seems to be a permanent ban on the initiation of proceedings under Sections 7, 9, 10 of the Code for a default arising on or after March 25, 2020, for a period of six months (or up to one year as may be notified). While the time period for the calculation of default seems to be pegged at six months (extendable up to a year), there is significant ambiguity with respect to the suspension on the initiation of insolvency proceedings with respect to these defaults. While the main provision states that the suspension

[4]Himanshu Parekh, Manish Aggarwal, et al., *India: Government and Institution Measures in Response to COVID-19*, KPMG (July 8, 2020), https://home.kpmg/xx/en/home/insights/2020/04/india-government-and-institution-measures-in-response-to-covid.html.

[5]Gavin Lee, *Coronavirus: WHO criticises EU over vaccine export controls*, BBC News (1st February, 2021), https://www.bbc.com/news/world-europe-55860540.

may be in operation for six months, the proviso to the Section 10A of the Insolvency and Bankruptcy Code (Amendment) Ordinance, 2020[6] suggests that insolvency proceedings can never be initiated for the said default. This is likely to have a clearly detrimental impact on foreign investors, who have significant capital contributions and stakes in these companies. In the inevitable event of default in payments and inability to pay their debts, Indian companies will be protected against legal action being brought against them by foreign investors, who are now unable to exercise their rights and remedies under the Code, given the amendments. This opens up claims concerning a breach of the fair and equitable standard of treatment and national standard of treatment, pursuant to an investor's legitimate, reasonable expectations at the time of conclusion of the contract.

Italy, too, has introduced a moratorium on the payment of corporate debt, as well as strict rules for FDI screening.[7] This mechanism controls the extent to which a foreign entity can invest in the businesses of strategic (or essential) industries, in the wake of COVID-19. Although the measures were primarily undertaken to protect businesses from foreign takeovers during the pandemic, they could be construed as a violation of umbrella clauses in BITs, which place obligations on States to promote, protect and maintain an environment conducive for foreign investments within their territory. This would bring a claim against FDI Screening within the jurisdiction *rationemateriae* of investor-state dispute resolution tribunals.

The Peruvian government was served notice of potential ICSID claims arising out of its decision to suspend the collection of toll fees on the country's road network.[8]

The question of legal ramifications as a consequence of bailouts to domestic companies, primarily airlines, is also an important angle to note. Travel bans and strict border closures were

[6]Abhishek Kumar and Siddharth Pandey, *India: Insolvency And Bankruptcy Code (Amendment) Act, 2020: A Step Forward,* The Mondaq (7th July, 2020), https://www.mondaq.com/india/insolvencybankruptcy/936938/insolvency-and-bankruptcy-code-amendment-act-2020-a-step-forward.

[7]Alessandra Tronconi, Dario Arban, et al., *Italy: Government and Institution Measures in Response to COVID-19,* KPMG (June 10, 2020), https://home.kpmg/xx/en/home/insights/2020/04/italy-government-and-institution-measures-in-response-to-covid.html.

[8]Cosmo Sanderson, *Peru Hit With Claim by Road Concessionaire,* Global Arbitration Review (June 11, 2020), https://globalarbitrationreview.com/article/1227863/peru-hit-with-claim-by-road-concessionaire.

initiated by almost all countries to control the spread of the virus, which resulted in large scale losses for both domestic and international airline companies. However, as countries gradually resumed domestic flights and eventually reopened their borders, states have executed several agreements, to the tune of billions of dollars, to bail out domestic airline companies crippled by the pandemic. The Trump administration sanctioned a 25 billion USD bailout to prop up a number of domestic and state-owned airlines.[9] However, internationally owned airlines not receiving similar financial aid from states may raise claims of a breach of the national standard of treatment clause, as a result of the bans and subsequent selective bailouts.

II. PRINCIPLES OF FORCE MAJEURE

Force majeure, under international law, is codified in the International Law Commission's Articles on the Responsibility of States for Internationally Wrong Acts (ILC) under Article 23 as 'a circumstance precluding the conformity of an international obligation'; one which excuses a State from the performance of its international obligations granted that the State did not cause or assume the risk of the impeding circumstance. [10]

Force majeure, as a principle, differs all around the world, with varying requirements and conditions that change as per their jurisdictions. With respect to international investment laws, *force majeure* is typically found as a clause under contracts, which are often tailored as per the parties' mutual requirements regarding nature of the business, climate and weather, trade restrictions, etc. Therefore, in order to enumerate contractual uniformity, the International Chamber of Commerce (ICC) introduced a standard *force majeure* clause, thus providing investors around the world a shaping tool to draft agreement specific *force majeure* clauses,

[9]Alan Rappeport and Niraj Chokshi, *Crippled Airline Industry to Get $25 Billion Bailout, Part of It as Loans,* The New York Times (April 14, 2020), https://www.nytimes.com/2020/04/14/business/coronavirus-airlines-bailout-treasury-department.html.

[10]International Law Commission, Articles on Responsibility of States for Internationally Wrongful Acts, Art 23, annexed to UNGA A/RES/56/83 (28 January 2002).

"Force Majeure" means the occurrence of an event or circumstance ("Force Majeure Event") that prevents or impedes a party from performing one or more of its contractual obligations under the contract, if and to the extent that the party affected by the impediment ("the Affected Party") proves:

a) that such impediment is beyond its reasonable control; and

b) that it could not reasonably have been foreseen at the time of the conclusion of the contract; and

c) that the effects of the impediment could not reasonably have been avoided or overcome by the Affected Party.

The conditions stated above can be construed as mandatory pieces to the puzzle that is the invocation of a *force majeure* clause. In simpler terms, firstly, the event must be completely unforeseen and irresistible, one which constraints the non-performing party from opposing or avoiding.[11] Next, the event must be beyond control, untainted to be consequential from the party's own actions.[12] Lastly, the unforeseeability, irresistibility and uncontrollability must make it 'materially impossible' for the defaulting party to fulfil its obligations, wherein the term 'materially impossible' implies absolute inability and not just increased difficulty in performance.[13] Additionally, the ICC provides a list of presumed *force majeure* events that are deemed to qualify as uncontrollable and unforeseeable such as wars, acts of terrorism, extreme natural events like tsunamis and volcanic eruptions, explosions and destructions, currency restrictions or labour disturbances like boycotts and strikes,[14] allowing the advantage of pre-fulfilment of two out of three conditions to the affected party.

As per the ICC, the main consequence of successfully invoking *force majeure* is the allowance to relief from the duty to perform contractually, as well as release from the responsibility of

[11]International Law Commission, Draft Articles on Responsibilities of States for Internationally Wrongful Acts with commentaries, Article 23, para 2, 2001.

[12]Ibid.

[13]Ibid.

[14]International Chamber of Commerce, ICC Force Majeure and Hardship Clause, § 3, 2020.

damages, either wholly and permanently or partially and temporarily, according to the nature of the impediment. A *force majeure* event, does not, however, entitle a party to claim sustained damages as a consequence of the impediment. It is further notable, that relief from contractual liabilities is only ascertained from the time at which the impediment creates inabilities for the defaulting party to perform, provided that the notice thereof is given to the other party without delay. Therefore, a timely notice of an event causing a delay in performance to the other party is crucial, in order to seek relief. It is also provided that, both parties of a contract possess the right to terminate the same, in case of a prolonged *force majeure* event which essentially deprives either party, more than it reasonably profits. The Notes to the ICC Clause, do however specify that it is not sufficient to prove the occurrence of an uncertain, unprecedented event in order to grant relief to a non-performing party. It must also be proved that the event could not have been practically avoided, to the satisfaction of the non-defaulting party, which would expect that the defaulting party should have foreseen, if not the event itself, then at least the effects of it. [15] This evidentiary burden falls at the crux of a tribunal's decision, as to the occurrence of a f*orce majeure* event.

III. INTERPRETATION OF FORCE MAJEURE BY INTERNATIONAL TRIBUNALS AND CHALLENGES TO INVOCATION IN LIGHT OF COVID-19

Given the significant disruptions caused to supply chains resulting in the non-performance of contractual obligations, and emergency provisions enacted by States for the protection of domestic businesses at the expense of foreign investors, a large number of investor-state disputes are likely to arise. Therefore, it is important to analyze the invocation of *force majeure* as valid grounds for precluding liability under international law.

Unfortunately, it is found that the invocation of a *force majeure* defence is rather challenging, due to the lack of clarity around the meaning of the above-stated conditions, perhaps largely caused by the blurry scope of contractual *force majeure* clauses. The scope of the defence is

[15]International Chamber of Commerce, ICC Force Majeure and Hardship Clause, Introductory Note, 2020.

heavily influenced by the party invoking it; for investors, even impediments like heavy storms can prove to be out of control leading to non-performance, which can't be said for a State shying away from international obligations since a State is definitely more equipped with authority and resources than an investor company. Moreover, while contractual *force majeure* clauses are commonly customized and precise, the same under international law tend to be open to a large scope owing to the large scale.

From a jurisprudential standpoint, the interpretation of *Force Majeure* under Article 23 of the ILC Articles on State Responsibility by investor-state arbitration tribunals has led to the evolution of a significantly high threshold to preclude non-performance by the defaulting party. For the successful invocation of *force majeure*, there exist four cumulative requirements that must be fulfilled. In considering the applicability of *force majeure*, courts look to whether: (i) there exists an unforeseeable event or irresistible force (the triggering event), beyond the control of the State/party; (ii) performance is truly impossible or impracticable, i.e. there exist no alternative methods for fulfilling its obligations or the ability to mitigate the consequences of the unforeseeable event; (iii) the State/party must not have contributed to the situation and (iv) delay in notice being served by the defaulting party to the non-defaulting party, about the invocation of *force majeure* to preclude non-performance. The high burden of proof placed on the defaulting States particularly could affect the viability of Article 23 in defending governmental measures taken in the wake of COVID-19.

A. Unforeseeability

The foreseeability of an event implies that the defaulting party did in fact have the opportunity to assume and prepare against its risks, making the absence of the same, crucial to claim an event to be uncontrollable. Further, the event in question must have been neither foreseen nor of an easily foreseen kind.[16] Since the composition of a *force majeure* clause differs from contract to contract, arbitration tribunals are usually strict in determining whether the party possessed either

[16]International Law Commission, Draft Articles on Responsibilities of States for Internationally Wrongful Acts with commentaries, Article 23, para 2, 2001.

the ability or the compulsion, or both, of identifying an unprecedented event. Hence, the degree of unforeseeability and its acceptance varies frequently.

The dispute in *Autopista v. Venezuela*[17]arose out of a contract that required the Respondent state to periodically increase highway tolls. In the arbitration proceedings, Venezuela raised a *force majeure* defence, stating that it was unable to comply with its contractual obligations because the increase in tolls resulted in widespread protests. In its analysis of the criterion of "material impossibility", the tribunal applied a less stringent threshold of "reasonable impracticality". It concluded that expecting the Venezuelan government to deploy armed or paramilitary forces in order to control or mitigate the protests, and thereby uphold its commitment under the contract, was an unreasonable interpretation of the impossibility standard. However, setting the bar high, the ICSID tribunal denied Venezuela's claim to unforeseeability, stating that the country had experienced similar protests when gasoline prices were increased in the past, which means that such an event could have been foreseen while drafting of the agreement. Furthermore, the tribunal stated that for an event to be foreseeable, it does not have to be a possibility- it is enough that it could not be ruled out as one.

Despite similarities in the factual circumstances, the tribunal in *RSM v. Central African Republic*[18] arrived at a different conclusion. RSM claimed that political turmoil and civil unrest in the Central African Republic (CAR) made it materially impossible for it to fulfil its obligations under the contract, and subsequently, the Respondent state was requested for a suspension of the same. The request was denied, and RSM approached an arbitration tribunal seeking an extension of the contract. The investor invoked the *force majeure* clause to justify non-performance, owing to the political and civil unrest in the Central African Republic. Here, even though the State possessed a history of frequent political instability, the tribunal held that the situation was not foreseeable. The reasoning employed by the tribunal, in this case, involved a more nuanced focus on the general political and security atmosphere at the time, and the type and magnitude of the past unrest. It was observed that the occurrence of the latter could not have

[17]AutopistaConcesionada v. Republic of Venezuela, ICSID Case No. ARB/00/5, Award, (Sept. 23, 2003).

[18] RSM Production Corp v. Central African Republic, ICSID Case No. ARB/07/02, Award, (Dec. 7, 2010).

indicated the occurrence of a security situation that would render the contractual performance impossible, thus qualifying the defence of *force majeure*.

The unforeseeability of an event, thus, largely depends upon the circumstances of the party invoking it. Generally, the threshold for unforeseeability is higher for a State than for a foreign investor, owing to the fact that events such as war and political calamities are clearly more foreseeable for a State than an investor company, for whom even small events such as strikes could spin out of control. For the successful invocation of *force majeure* due to unforeseeability, apart from the event itself, all elements affecting non-performance namely the scope, magnitude, form, frequency, timing and intensity of the event must be considered.

B. Material Impossibility

The standard of impossibility for the invocation of *force majeure* is codified as that of 'material impossibility', clarifying that increased difficulty in performance does not constitute *force majeure*. However, the ICC, in its model clause, employs the 'the test of commercial reasonableness' which states that an impediment in performance of contractual obligations is sufficient.[19]

The Secretariat of the United Nations Convention on Contracts for the International Sales of Goods (CISG), in a commentary, stated that:

> *'Even if the non-performing party can prove that he could not reasonably have been expected to take the impediment into account at the time of the conclusion of the contract, he must also prove that he could neither have avoided the impediment nor overcome it nor avoided or overcome the consequences of the impediment. This rule reflects the policy that a party who is under an obligation to act must do all in his power to carry out his obligation and may not await events which might later justify his non-performance.'*

[19]International Chamber of Commerce, ICC Force Majeure and Hardship Clause, § 6, 2020.

The same approach resounds in the ICC Clause in Section 1(c) which states that a defaulting party should be able to prove the non-existence of any reasonable means of contractual performance. Tribunals do, although, expect defaulting parties to attempt to perform alternately. This is observed in the case of Macromex Srl. v. Globex Int'l Inc[20], wherein the contract required the purchase of chicken leg quarters to be delivered into Romania but due to an outbreak of avian flu, the Romanian government was forced to stop all chicken imports which weren't certified by a particular date. The tribunal, suggesting that the sellers could have alternately, shipped to a port of a non-affected country, denied the claim to impossibility of performance.

In the case of *Royal Moroccan Football Federation v. African Football Confederation*[21], the Claimant state, Morocco, was slated to host the 30th African Cup of Nations but declined to do so on grounds of the rapid spread of the Ebola virus epidemic in West Africa. Upon the Royal Moroccan Football Federation's (FRMF) withdrawal, the event was hosted in Guinea instead. The FRMF was prohibited from participating in the event and further fined USD 1 Million by the African Football Confederation (CAF). The decision was appealed by the FRMF before the Court of Arbitration for Sport, and it was argued by the Claimant that the Ebola epidemic was a *force majeure* event that made it impossible for Morocco to host the African Cup of Nations. Although the tribunal found the penalties imposed by the CAF to be disproportionate and unjustified, it still did not accept the Claimant's *force majeure* defence— the hosting of the event had become difficult, but not impossible, and there was not sufficient evidence to demonstrate that Morocco had done its best to avoid the consequences of the *force majeure* event by exploring alternative remedies for the fulfilment of its contractual obligations. Thus, Morocco had to pay a fine of 50,000 USD.

Similarly, in the case of National Oil Corp v. Libyan Sun Oil Co., the defendant invoked *force majeure* as the U.S. government declared that U.S. passports were invalid for travel to Libya, which led to impediment in performance as citizens of the U.S. could not enter Libya, where the

[20]MacromexSrl. v. Globex Int'l Inc, AAA Case No. 50181T 0036406 (Interim Award dated Oct. 23, 2007).

[21]Fédération Royale Marocaine de Football v. ConfédérationAfricaine de Football, CAS 2015/A/3920, Award of 17 November 2015.

obligations were to be performed. The tribunal went on to reject the claim, reasoning that the defendant could have alternately hired non-U.S. personnel for the contractual performance.[22]

Therefore, tribunals expect to observe that not only the event could not have been avoided but also that any and all modes of performance were undoable, in order to establish that an event prompted impossibility of performance.

C. Non-Performance Resulting from State Action

With respect to investor-State arbitration, in order to claim non-performance due to *force majeure*, it must be proved that the State did not contribute to the impediment i.e., the event was not a consequence of State action. For instance, if investors sustain damages as a result of destruction by state organs amid conflicts and wars, a defence of *force majeure* could be employed; but if a State pleads non-performance on grounds where the impediment was caused by its own organs in the form of policies or hostilities, the defence will succeed only if the necessity of the situation is sufficiently proved. [23]

D. Delay

In order to claim a *force majeure* defence, timely communication, notifying the non-defaulting party of the impediment and its consequences, is crucial. This allows the non-defaulting party an opportunity to alleviate the consequences of the event towards the agreement. Tribunals, enforce this condition strictly, as seen in ICC No. 2478/1974[24] wherein even though it was well established that the event in question was undeniably a case of *force majeure*, the failure to provide timely notice, lapsing a period of six months, deprived the non-performing party of a successful *force majeure* claim.

[22]National Oil Corp v. Libyan Sun Oil Co. ICC Case No. 4462/1985.

[23]International Law Commission, Articles on Responsibility of States for Internationally Wrongful Acts, Art 25, annexed to UNGA A/RES/56/83 (28 January 2002).

[24]ICC Award No. 2478 IN 1974, YCA 1978, at 222 et seq. (also published in: Clunet 1975, at 925 et seq.).

It is also important to consider the wording, language and specific provisions of *force majeure* clauses in individual international investment agreements. Tribunals often place heavy emphasis on the definition, scope and grounds precluding non-performance of contractual obligations in the *force majeure* clause of the relevant contract itself. For example, the dispute in the case of *Gujarat State Petroleum Corporation Limited v. Republic of Yemen*[25] arose during the Arab Spring protests, as a result of widespread riots, attacks, tribal clashes, and kidnappings, leading to the declaration of a State of Emergency in Yemen. A group of Indian investors sued Yemen, seeking declaratory relief on the valid termination of its contracts with the Respondent state, citing the above-mentioned circumstances as a *force majeure* event. However, as per the relevant contract between the investor and the State, a *force majeure* event was classified as "war, riot, strike, etc. or any cause not due to the fault or negligence of the Party invoking *force majeure*, whether or not similar to the foregoing, provided that any such cause was beyond the reasonable control of the party invoking *force majeure*." Thus, there existed only two requirements under the *force majeure* clause of the contract for a party to successfully invoke it. First, the event must not be due to the fault or negligence of the Party choosing to invoke it. Second, the event should be beyond the reasonable control of such a party. The tribunal rejected the Respondent state's claim that the additional requirements of unforeseeability and impossibility were required to be fulfilled.

CONCLUSION

Although the global health and economic crisis created by COVID-19 has caused massive and seemingly unavoidable disturbances to ordinary trade and economic practices, both on domestic and international levels, these circumstances may not be sufficient for countries to preclude non-performance and breach of their treaty obligations under international law. Indeed, international jurisprudence seems to err on the side of caution by placing a high burden of proof on the

[25]Gujarat State Petroleum Corporation Limited v. Republic of Yemen, ICC Case No. 19299/MCP, Award, (10th July, 2015).

responsible State, even in past cases of widespread economic instability, public health crises, or civil unrest, among others.

Taking into account the above analysis, it is reasonable to expect that a lot of governmental measures, while implemented in the interest of combatting the pandemic, may not pass the high liability threshold imposed under the *force majeure* clause. For example, given its geographical location and relative delay in the spread of the virus, it can be argued that India did not take significant steps to avoid the consequences of the pandemic, given that it had a reasonable opportunity to come up with a contingency plan that would have allowed the State to fulfil its treaty obligations with respect to exports despite COVID-19. Similarly, Italy may find itself in an unfavourable position when trying to prove the "material impossibility" of the performance of its obligations, i.e., continuing to allow the acquisition of Italian companies. Given its tenuous nexus of the FDI Screening measure with the economic security or protection of public health, it could be argued that the former is simply a disguised restriction on trade and investment.

Lastly, the nature of COVID-19 was such that governmental action was a critical turning point on the basis of which the magnitude of damage and losses caused to domestic and international institutions was determined. Indeed, several reports on governmental negligence and mismanagement of the pandemic have revealed that such oversights led to an exacerbation of the virus's worst effects and devastations, which means countries like Spain[26] and China[27] will find it hard to prove that their own actions did not contribute to the situation of *force majeure.*

Thus, despite COVID-19 seemingly fitting the bill of a *force majeure* event, the above analysis shows that there exist manifold practical difficulties plaguing its successful invocation. Tribunals must, therefore, employ a reasonable threshold of the "material impossibility" standard, after an individual evaluation of the unique circumstances in every country giving rise to the situations of non-performance. It is also incumbent upon States to pay special attention to the drafting of

[26]Alex Ward, *How Spain's coronavirus outbreak got so bad so fast – and how Spaniards are trying to cope*, The Vox(Mar. 20, 2020), https://www.vox.com/2020/3/20/21183315/coronavirus-spain-outbreak-cases-tests.

[27]Devashish Giri,Responsibility of China for the Spread of COVID-19: Can China Be Asked to Make Reparations, The Jurist (April 10,2020), https://www.jurist.org/commentary/2020/04/devashsish-giri-china-covid19-reparations/.

treaties executed hereafter, particularly the *force majeure* clauses, given the emergence of new strains of the virus which could similarly hamper trade and commerce in the future.

PANIC DURING A PANDEMIC; AN EXAMINATION OF MEDICO-LEGAL PROBLEMS FACED BY FRONTLINE HEALTHCARE WORKERS

-Riya Narichania[1]

ABSTRACT

The exponential rise in the number of cases of COVID 19 has caused considerable strain on the medical fraternity for treatment of those afflicted by the virus. The conspicuous absence of international regulations governing medical practice and ethics during a pandemic has only increased confusion and panic amongst healthcare workers. This has inevitably resulted in a rise in medico-legal issues. These issues are varied, some of them are related to discrimination in treatment and deviation from the principles of medical ethics while others are related to malpractice and complications associated with the advent of telemedicine. Similarly, the reluctance of doctors to treat patients on account of the occupational hazards of COVID-19 in the workplace has become a cause for concern. The rectification of such complications will require the active involvement of the State in drafting legislations, creating a conducive work environment for doctors and most importantly being a source of information for healthcare workers.

This article aims to analyse the medico-legal issues that will emerge as the virus spreads its tentacles and highlights the need for an international legislation to regulate medical practice and ethics in the world, especially during a pandemic.

INTRODUCTION

The COVID-19 pandemic has wantonly transgressed borders and countries, creating a public threat and leaving a trail of death and destruction in its wake. It is now an opportune time to seek reliance on international law and legislate on the basis of advice of international medical and legal bodies.

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International law has appeared to be responsive to several disasters including pandemics.[2] Aung San Suu Kyi, in her recent statement to the International Court of Justice, said *"International law may well be our only global value system, and international justice a practice that affirms our common values."*[3]

Healthcare professionals are working in an environment that requires a departure from standard procedure. In order to increase the efficacy of the healthcare system, it is imperative for the government to ensure that certain latitudes are afforded to doctors and medical staff while handling patients. Physicians, nurses, and other frontline workers have always adopted a patient-centric practice; the sudden shift to patient care guided by public health considerations creates confusion, especially for those medical personnel who are not accustomed to working under challenging situations with limited resources.[4] Unfortunately, there exists a wide lacuna in the international legal framework governing medical ethics. Medical Ethics are entirely governed by the State through domestic legislations and codes. of ethics. The World Medical Associations' International Code of Medical Ethics ["WMA Code of Ethics"] elucidates the obligations and duties of doctors.[5] However, it is pertinent to note that this Code is only advisory in nature and cannot be enforced.

Most medico-legal cases mainly arise on the issue of consent, lack of duty of care and deviation from the rules of professional ethics.[6] The absence of an international convention that regulates medical ethics may play a role in the significant amount of medico-legal lawsuits that will arise towards the end of the pandemic. The State must take measures to ensure that healthcare professionals are not vexed with baseless and frivolous lawsuits.

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[2] Phillipe Sands, COVID-19 Symposium: COVID-19 and International Law, OPINIO JURIS, (Mar 30,2020) http://opiniojuris.org/2020/03/30/symposium-covid-19-and-international-law/

[3] Application of the Convention on the Prevention and Punishment of the Crime of Genocide (The Gambia. v. Myanmar), Judgment, 2019, I.C.J. Rep. 19, ¶ 2 (Dec 11)

[4] Nancy Berlinger, *Ethical Framework for Health Care Institutions & Guidelines for Institutional Ethics Services Responding to the Coronavirus Pandemic*, THE HASTINGS CENTER, (Mar 16,2020). https://www.thehastingscenter.org/ethicalframeworkcovid19/

[5] THE WMA INTERNATIONAL CODE OF MEDICAL ETHICS, World Medical Association (2006)

[6] Bello T. Esq & Dr. C.A. Nkanta *Medico-Legal Issues in Clinical Practice: An Overview*, 1 (1) DJO, 89, 90-92. (2017) https://www.researchgate.net/publication/336402648_Medico_-Legal_Issues_in_Clinical_Practice_An_Overview

This article aims to analyse the medico-legal problems that healthcare professionals will face during the pandemic and seeks to provide solutions for the same. The author will attempt to address the issues of discrimination in healthcare systems of a State (A), medical confidentiality (B), lack of informed consent (C), privacy concerns that may arise while using telemedicine as a method of treatment and diagnosis (D), refusal to treat a patient (E), lack of malpractice insurance (F).

THE MEDICO-LEGAL PROBLEMS CAUSED BY COVID-19 AND SOLUTIONS OFFERED

A. Discrimination and Inequities in the Healthcare System of a State

Ethnic, religious, racial minorities, the aged and those belonging to lower economic groups have been left vulnerable and helpless during the pandemic on account of the high rate of transmission of disease, high mortality rate, unequal access to personal protective equipment ["PPE"] and quality healthcare facilities.[7] The Right to Health, as mentioned in Article 12 of the International Covenant of Economic Social and Cultural Rights ["ICESCR"] envisages easy access of healthcare facilities to everyone, especially the marginalized sections of society, without discrimination.[8] Signatories of the ICESCR must recognise the ideals set out in the treaty and abide by them.

Affluent citizens in the United States of America ["USA"] have had speedy and easy access to COVID-19 tests while front-line medical professionals and those with blatant signs of infection have had to wait for a long period of time.[9] This injudicious allocation of resources has only revealed the existence of inequalities in healthcare systems around the world.[10] Governments have

[7] *COVID-19 and Human Rights We are all in this together*, UNITED NATIONS (Apr, 2020) https://www.un.org/sites/un2.un.org/files/un_policy_brief_on_human_rights_and_covid_23_april_2020.pdf
[8] ICESCR General Comment No. 14: The Right to the Highest Attainable Standard of Health (Art. 12)

[9] Juliet Eilperin & Ben Golliver, VIPs go to the head of the line for coronavirus tests, THE WASHINGTON POST, March 19, 2020 https://www.washingtonpost.com/health/2020/03/19/nba-players-celebrities-coronavirus-test-access/
[10] *Id.*

to move away from arbitrary testing and test on a need-based approach to prevent healthcare facilities from being burdened with an avalanche of medico-legal suits.

This Pandemic has brought several ethical dilemmas into sharp and uneasy focus. An important point of consideration is whether inequality exists in a situation where selective treatment is being offered to patients. One train of thought is that each individual should be held equal in the eyes of the physician and should be equally able to access the same level of healthcare resources.[11] The 'Right to Health' is the right to the 'highest attainable standard of physical and mental health'.[12] This includes the '*creation of conditions which would assure to all medical service and medical attention in the event of sickness'* and '*prevention, treatment and control of epidemic, endemic, occupational and other diseases*'.[13] States are generally obliged to grant treatment for COVID 19 to whoever wishes to avail of it. This demonstrates that Italy's decision to prioritize those with a higher chance of survival and give them all available medical resources, represents a prima facie breach of these obligations; but in a situation of a critical shortage of resources and manpower, there may be valid defences that could excuse such breaches.[14]

The utilitarian theory explores the argument that one should aim to help the maximum number of people possible. If treatment is offered to those who don't have a chance of survival, then not only will they die, but those with a higher likelihood of survival will also perish.[15] This becomes a medical as well as a legal conundrum. To extend clarity to physicians and remove the burden of taking morally difficult decisions, the Medical Councils and governments of States should deliberate on a plan of action. They must ensure that doctors are not placed in such invidious positions where they have to pick who gets to live and who dies.[16] There must be clarity in instructions to doctors whether treatment should be offered equally to all or on a priority basis. The author believes that selective and priority treatment must be reserved as a last resort measure.

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[11] Olivia Goldhill, *Ethicists agree on who gets treated first when hospitals are overwhelmed by coronavirus*, Quartz (March 20, 2020) https://qz.com/1821843/ethicists-agree-on-who-should-get-treated-first-for-coronavirus/
[12] International Covenant on Economic, Social and Cultural Rights, Art 12
[13] *Id.*
[14] Tim F. Hodgson, *COVID-19 Symposium: COVID-19 Responses and State Obligations Concerning the Right to Health (Part 1)*, OPINIO JURIS, (Apr 1,2020) http://opiniojuris.org/2020/04/01/covid-19-symposium-covid-19-responses-and-state-obligations-concerning-the-right-to-health-part-1/
[15] Goldhill, *supra*, n.8.
[16] Hodgson, *supra* n. 14.

Governments should ensure that the response measures to tackle COVID 19 do not discriminate against minority religions or ethnicities and that the healthcare workers provide equal treatment to individuals from different socio-economic backgrounds.[17]

B. Importance of Maintaining Doctor-Patient Confidentiality During COVID-19

It has been noticed that in several health crises in the past, patients have been mistreated, abused and ostracized from society. Ebola survivors in West Africa have had to deal with the stigma that has led to loss of employment, ill-treatment, eviction and social isolation.[18] This example illustrates the trouble survivors could face if the confidentiality rule was violated. The WMA Code of Ethics requires a doctor to respect a patient's right to confidentiality unless the patient is in imminent harm which requires a breach of confidentiality or if the patient consents to it.[19]

Hospitals have responded to the pandemic differently; some have been actively communicating information that may lean towards violation of confidentiality rules; others refuse to publicly disclose if one of their patients has COVID-19 to reduce chances of lawsuits. Hospitals are operating in a grey area currently, not knowing if they are fully complying with privacy laws[20]

Doctor-patient confidentiality, a binding covenant, first mentioned in the Hippocratic Oath is still upheld globally. While disclosing data to public authorities it must be ensured that only necessary information is disclosed. It should be ensured that patient confidentiality is maintained as health authorities identify those who may have been exposed to the virus.[21] In South Korea, it was seen that public health alerts regarding COVID 19 may not have been discreet enough to protect the privacy of patients.[22]

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[17] *Human Rights Dimensions of COVID-19 Response*, HUMAN RIGHTS WATCH (March 19, 2020 12:01AM), https://www.hrw.org/news/2020/03/19/human-rights-dimensions-covid-19-response#_Toc35446585
[18] *Id.*
[19] WMA International Code Of Medical Ethics, World Medical Association, 2006.
[20] Alex Kacik, *Hospitals balance disclosure and privacy as COVID-19 spreads*, MODERN HEALTHCARE (Mar 12, 2020 04:54 PM) https://www.modernhealthcare.com/operations/hospitals-balance-disclosure-and-privacy-covid-19-spreads
[21] *Human Rights Dimensions of COVID-19 Response*, HUMAN RIGHTS WATCH (March 19, 2020 12:01AM) https://www.hrw.org/news/2020/03/19/human-rights-dimensions-covid-19-response#_Toc35446585
[22] *Coronavirus privacy: Are South Korea's alerts too revealing?*, BBC NEWS, 5 Mar, 2020. https://www.bbc.com/news/world-asia-51733145

The setting up of a department within each hospital to deal with statistics and information dissemination would help to prevent any disclosure of confidential information. Junior doctors and new recruits could be assigned to this department with a supervisor overseeing their work. The department employees could be given a list of instructions illustrating what information classifies as confidential and what is essential to disclose. Without such a department in place, doctors may have to give information to the authorities themselves and with limited knowledge in public healthcare statistic information requirements; they may disclose confidential data and be held liable.

C. Legal Complications That Arise Due to Lack of Informed Consent

Informed consent is when a patient specifically consents to the proposed medical procedure. The physician must inform the patient about all of the risks and complications that may occur during the treatment, including the minor and rare side effects. It is the responsibility of the attending doctor to mention alternative treatments available.[23] Only after a patient is truly informed about the potential risks of a medical procedure can he give informed consent to the procedure.[24]

In extenuating circumstances like this, it becomes difficult to adhere to all the guidelines due to lack of time, deteriorating mental state of the patient and overcrowding of health care facilities. In order to prevent legal complications, it would be advisable to try to adhere to the guidelines provided by the State. Alternatively, the health care facilities must draft several documents for different forms of treatment and procedures which explain all the necessary details needed for a patient to make an informed decision. The same document can be read thoroughly and signed by the patient or their next of kin before the commencement of treatment.

The landmark judgement of Jacob Mathews v State of Punjab states that in order "*To prosecute a medical professional for negligence under criminal law it must be shown that the accused did something or failed to do something which in the given facts and circumstances no medical*

[23] Bevinahalli N. Raveesh et al, *Preventing medico-legal issues in clinical practice*, ANN INDIAN ACAD NEUROL, 2016
[24] Emily Rubin & James L. Bernat, *Consent issues in neurology*, NEUROL CLIN, 2010

professional in his ordinary senses and prudence would have done or failed to do."[25] This judgment shields doctors from frivolous criminal lawsuits and only permits the prosecution of those physicians who have committed acts of gross negligence.

D. Telemedicine and Privacy Concerns Surrounding it

Telemedicine has become increasingly relevant because medical personnel are unable to handle the sudden inflow of patients. The current global stock of PPE is insufficient, especially masks, ventilators and gowns. Hence, telemedicine proves to be a safe method of consultation for both doctors as well as patients. The World Health Organisation ["WHO"] has encouraged the use of telemedicine to evaluate suspected cases of COVID-19 to minimize the footfall of patients in health care facilities.[26]

The Telemedicine Practice Guidelines (Guidelines), 2020 ["Telemedicine guidelines"] laid down in India acknowledges the necessity and the efficacy in delivering healthcare through information and communications technology. It focuses on providing healthcare to patients residing in India. The telemedicine guidelines outlined the importance of privacy and security of the patient records and the importance of strict adherence to the Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002[27]

Telemedicine is a unique method of consultation for treatment, however, there are several ethical and legal aspects that need to be addressed in a prudent manner to prevent medico-legal complications.[28] These aspects include an inadvertent breach of medical confidentiality, leaking of a patient's confidential data; incorrect diagnosis; lack of informed consent and jurisdictional problems that may arise in the event of cross border consultation.[29]

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[25] Jacob Mathew v State of Punjab (2005) 6 SCC 1:2005 S.C.C. (CRI) 1369 A.I.R. 2005 SC 3180.
[26] *Rational use of personal protective equipment (PPE) for coronavirus disease (COVID-19)*, interim guidance, 19 March 2020,WORLD HEALTH ORGANIZATION.
[27] *India preps up for virtual consultations amidst COVID 19 crisis*, LIVE MINT, Apr 7, 2020. https://www.livemint.com/brand-post/india-preps-up-for-virtual-consultations-amidst-covid-19-crisis-11586244397931.html
[28] Benedict Stanberry, *Legal and ethical aspects of telemedicine*, 12 (4) JOURNAL OF TELEMEDICINE AND TELECARE 166, 166-175 (2006)
[29] *Id.*

Privacy concerns in telemedicine consist of issues relating to the secure storage and controlled access to private data and the general security of the electronic medical record.[30] Another concern is that telemedicine is a new segment of medical practice and thus remains uncovered by several malpractice insurance covers.[31] This would require healthcare workers to invest in malpractice insurance that covers liability under the telemedicine category. The author notes that it would be beneficial for doctors to engage in training to avoid 'tele-negligence'.[32]

In order to rectify these lacunae in the telemedicine guidelines of India, it is necessary to inform the patient that the technology used may not be potentially secure and get their express confirmation that they are aware of the consequences. All appropriate privacy safeguards must be adopted to prevent leakage of confidential information. This form of doctor-patient interaction must be considered to be an 'extension of access', not a waiver of a doctor's own standards of responsibilities and obligations.

Physicians must take a decision as to whether they are able to adequately assess the patient without a physical examination. If an iota of doubt persists in their mind regarding the quality of treatment they provide to their patients via telemedicine, they must refrain from using it as a method of consultation. When offering virtual consults, the risks and benefits must be elaborately explained so that the patient is able to make an informed decision. All medical advice, medication, and communication must be recorded by the physician and kept in a secure place. This is required in the event of a lawsuit, in case it is necessary to explain the approach taken later.

E. Legal Liability That Can Arise for Refusing to Treat A Patient

Refusal of treatment by a doctor can endanger a patient's life and render him helpless. Doctors have undertaken an oath to help the sick, however, this must certainly not be at the expense of their own physical health. In Bolivia, a patient was refused entry into four hospitals by doctors because

[30] Gary W. Dunn, *Legal Issues Confronting 21st Century Telehealth*, BC MEDICAL JOURNAL (Aug 2004), https://bcmj.org/articles/legal-issues-confronting-21st-century-telehealth
[31] Guilo Nattari, *Telemedicine Practice: Review of the Current Ethical and Legal Challenges* 26 (12) TELEMEDICINE AND E-HEALTH (2020)
[32] *Id.*

they stated that they did not have access to PPE.[33] The accountability, in such a situation, lies with the government and not the doctors, as they were compelled to work with insufficient PPE.

Frontline healthcare workers, like all other humans, have an equal Right to Health as granted by the United Nations.[34] The refusal of a patient to wear the recommended PPE puts their healthcare provider's life at hazard. Doctors in the United Kingdoms' ["UK"] National Health Services are being 'bullied' into treating Covid-19 patients.[35] In the UK 72% of doctors cannot avail of an FFP3 mask when required, 77% stated that there was a shortage of long-sleeved gowns, 43% are unable to get hold of goggles when needed.[36] In such situations, it should be considered reasonable for a doctor to willfully refuse to treat a patient.

Physicians in India have certain duties towards their patients, mainly an obligation toward the sick and ailing. Even though it is not mandatory for a physician to treat every person availing his service, he should be ready to help the sick and pay heed to the mission of the medical profession. No physician can arbitrarily refuse treatment to a patient.[37] A doctor is free to choose whom he will serve; however, he must respond to any request for his assistance in an emergency situation.[38]

The Medical Council of New Zealand does not expect any doctor to involuntarily put themselves in any position of danger to treat a patient in an emergency[39] The American Medical Association has stated that a physician's ethical duties to his patient always remain unchanged, even if it puts his health at risk. The risks of providing care to patients should be evaluated against the ability to provide care in the future.[40] These two medical associations have starkly different laws, but New

[33] Alonso G. Dunkelburg, *COVID-19 Symposium: COVID-19 and the 'Western Gaze,* OPINIO JURIS (Apr 7, 2020)
[34] International Covenant on Economic, Social and Cultural Rights, Art 12
[35]Denis Campbell, *Doctors lacking PPE 'bullied' into treating Covid-19 patients*, THE GUARDIAN, Apr 7, 2020. https://www.theguardian.com/world/2020/apr/06/nhs-doctors-lacking-ppe-bullied-into-treating-covid-19-patients
[36]DAUK in The Guardian, *Doctors lacking PPE 'bullied' into treating Covid-19 patients*, DAUK, (Apr 6, 2020). https://www.dauk.org/news/2020/4/6/doctorsbulliedintonotwearingPPE
[37] Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002, chapter 2, 2002.
[38] Id.
[39] Dr Samantha King, *Coronavirus medicolegal questions and answers*, MEDICAL PROTECTION, (20 March, 2020) https://www.medicalprotection.org/newzealand/casebook-resources/articles-and-features/view/coronavirus-medicolegal-questions-and-answers
[40] *Physicians' Responsibilities in Disaster Response & Preparedness,* Code of Medical Ethics Opinion 8.3, AMERICAN MEDICAL ASSOCIATION https://www.ama-assn.org/delivering-care/ethics/physicians-responsibilities-disaster-response-preparedness

Zealand's approach appears to be more humane towards physicians. It may be advisable for all countries to follow New Zealand's precedent and extend the same to their own doctors.

If a doctor feels that he is being made to work in a manner that renders him vulnerable to catching the disease then he must raise concerns with his healthcare facility or appropriate authority. Doctors may also raise a plea with WHO or any Human Rights organization.

F. Complications That Arise Due to Lack of Malpractice Insurance

Tough or even questionable decisions may need to be swiftly taken in the interest of the patient and society during a pandemic[41]. The endurance of doctors may be tested to the limit, with limited resources and limited PPE protection. Therefore, these circumstances ought to be considered as mitigating factors in adjudicating complaints or lawsuits. The Government and Judiciary need to be realistic by applying the law strictly to the letter rather than the spirit. The only requisite yardstick to rid a doctor of legal liability ought to be good faith.

Malpractice liability has become a concerning factor for retired doctors and recent graduate medical students who have volunteered their services to assist overburdened hospitals, as they no longer have professional liability insurance or medical malpractice insurance. [42] While insurance doesn't absolve the doctor of legal liability, it indemnifies the doctor of financial liability while battling a lawsuit.

The Epidemic Diseases Act came into effect in 1897 to combat the bubonic plague in British era India. It states that no suit or other legal proceeding shall lie against any person for anything done or in good faith intended to be done under this Act[43]. This provision in the 123-year-old colonial era statute may prove to be a helpful safeguard to protect medical personnel in India from unnecessary legal action.

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[41] *Coronavirus: medico-legal update*, MDU, Apr 6,2020. https://www.themdu.com/guidance-and-advice/latest-updates-and-advice/coronavirus-medico-legal-update

[42] Dr. MedLaw, *Medicolegal Issues During the COVID-19 Pandemic*, PHYSICIAN'S WEEKLY, (Apr 23, 2020) https://www.physiciansweekly.com/medicolegal-issues-during-the-covid-19-pandemic/

[43] The Epidemic Diseases Act, 1897, Sec 4, 1897. (India)

The State of Florida is pushing for an amendment of sections of the state's so-called 'Good Samaritan Act' to protect physicians working during the pandemic from legal liability. Governors in Arkansas, Arizona, Connecticut, Illinois, Kentucky, Massachusetts, New Hampshire, Nevada, New York, Vermont and Wisconsin have issued orders shielding doctors from medico-legal lawsuits, according to the American Medical Association.[44] Despite this situation, some states in the USA appear to be more 'plaintiff friendly' than others.[45]

Bearing in mind the exorbitant costs associated with defending lawsuits, all doctors and frontline healthcare workers must ensure that they have malpractice insurance cover. It may be useful for the State to offer such cover to doctors for pandemic related treatments. The high-pressure situations doctors' face during the pandemic is bound to result in some errors. The finest form of risk management is to obtain a suitable insurance cover, especially in situations where doctors haven't been granted legal immunity by the state.[46]

CONCLUSION

WHO recommends all frontline healthcare workers to follow established occupational safety procedures, participate in occupational safety and health training provided by employers or the government, follow protocol to assess and treat patients, treat patients with respect, empathy and dignity and adhere to doctor-patient confidentiality rules[47]

Countries around the world have stressed upon strengthening their public healthcare laws to prepare themselves for extraordinary circumstances such as pandemics. The Constitution of Australia provides the Federal government with legislative powers to quarantine its citizens.[48] The

[44] Christine Saxton, *Healthcare groups ask Florida governor for legal immunity during COVID-19 pandemic*, MIAMI HERALD, April 23, 2020. https://www.miamiherald.com/news/health-care/article242239046.html
[45] *COVID-19 Practice Management Issues,* AMERICAN COLLEGE OF PHYSICIANS, *(Apr 27, 2020). https://www.acponline.org/practice-resources/covid-19-practice-management-resources/covid-19-practice-management-issues*
[46] *Id.*
[47] *Coronavirus disease (COVID-19) outbreak: rights, roles and responsibilities of health workers, including key considerations for occupational safety and health*, WORLD HEALTH ORGANISATION.
[48] Geetika Srivastava, To fight a pandemic like Covid-19, India needs overarching healthcare laws, BUSINESS STANDARD, Last updated on March 22, 2020. https://www.business-standard.com/article/current-affairs/to-fight-a-pandemic-like-covid-19-india-needs-overarching-healthcare-laws-120032201137_1.html

Robert T Stafford Act permitted President Trump to unilaterally invoke an emergency order.[49] The Federal Food, Drug and Cosmetic Act, permits unapproved drugs or vaccines to be used in times of emergency.[50] Other countries must take inspiration from such legislations and draft legislations of a similar nature. Taking into account the lack of robust international laws to deal with the pandemic, the Right to Health in the ICESCR must be referred to, as a rough framework for doctors to navigate through this situation. Frontline health care workers have a herculean task ahead of them and the States must be sympathetic towards their struggles while framing regulations and legislations.

Patients, as well as the State, must give credence to the fact that all acts of a doctor are being carried out in good faith, except those which amount to gross negligence or culpable neglect.

WHO has given instructions to make COVID 19 testing a priority. The UK ignored their plea and the US openly alluded to issuing budget cuts to WHO.[51] The author would like to reinforce the need to pay heed to international organisations' instructions. The WMA Code of Ethics, in addition to the domestic legislations on medical ethics, must be strictly adhered to.

No country has been able to overcome this pandemic effectively without errors along the way and the only reasonable course is to act collectively with the support of international organisations, mobilise resources and provide strategic responses to collective problems.

[49] *Id.*
[50] *Supra n.* 49
[51] *WHO head: 'Our key message is: test, test, test,* BBC NEWS, Mar 16, 2020. https://www.bbc.com/news/av/world-51916707/who-head-our-key-message-is-test-test-test

TACKLING PERIOD POVERTY: A COMMENTARY ON SCOTLAND'S FREE PERIOD PRODUCTS BILL

Akshita Tiwary[1]

ABSTRACT

Menstruation is a natural phenomenon experienced by every woman in her lifetime. Maintaining menstrual health and hygiene is of utmost importance. However, this luxury is not available to every female. Period poverty results in a lack of access to safe and hygienic menstrual products. This, in turn, creates several other issues which ultimately affect women's rights to health, education, work and dignity.

On 24th November 2020, Scotland unanimously passed The Period Products (Free Provision) (Scotland) Bill which aspires to provide period products free of charge universally to persons living in Scotland. With this, Scotland becomes the first country in the world to strive for the abolishment of period poverty and to guarantee menstrual equity.

The given legislative commentary seeks to analyse the various provisions of the law to determine its positive impacts. The Bill's Policy Memorandum is appraised to shed light on the rationale behind the introduction of the Bill. Further, the commentary evaluates how such a law is in keeping with Scotland's commitments under international human rights law. Finally, it describes how this law is not only beneficial legally but also socially, and encourages other nations to take a similar step to further the cause of women's rights and empowerment.

INTRODUCTION

Stigmatisation concerning menstruation has been observed since time immemorial. It is paradoxical how motherhood is glorified; yet menstruation, a phenomenon that is linked to motherhood and fertility, is frowned upon.[2]Menstruation is much more than a mere

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[2]Archana Patkar**,** *Celebrating Womanhood: Break the Silence!*20 (Water Supply and Sanitation Collaborative Council ed., 2013), www.wsscc.org/sites/default/files/content/Research article files/mhm - celebrating womanhood final

physiological process; it tends to affect a woman's physical and social well-being as well. Conversely, how a woman deals with menstruation depends on various socio-economic factors like the financial ability to purchase menstrual products. That every woman bleeds is a truth universally acknowledged; however, access to hygienic period products is not unconditionally granted.

Period poverty has been defined as the lack of access to safe and hygienic menstrual products.[3] Most women belonging to low-income backgrounds face this issue globally. Financial constraints, along with the increased costs of pads, tampons and pain medication, prevent women from being able to purchase these materials. Period poverty has a severe impact on several human rights. It affects women's right to health and dignity, and harms their educational and economic opportunities. All this, in turn, perpetuates discrimination against them in society.[4]

Amidst the coronavirus pandemic last year, Scotland took a major step to tackle this issue. On 24th November 2020, the Scottish Parliament unanimously passed *The Period Products (Free Provision) (Scotland) Bill* ('the Bill'), which aims to provide period products free of charge.[5] Thus, Scotland became the first country in the world to take such a historic step in order to end period poverty. The following legislative commentary aims to analyse the different provisions of this law. Moreover, it seeks to argue how such a Bill conforms to and upholds international human rights law standards, and should be enacted by other nations as well to further the cause of women empowerment.

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report.pdf.

[3]*Menstruation and human rights- Frequently asked questions*, UNITED NATIONS POPULATION FUND (May 2020), https://www.unfpa.org/menstruationfaq#Period%20Poverty.

[4]KerinaTull, *Period poverty impact on the economic empowerment of women*, KNOWLEDGE, EVIDENCE AND LEARNING FOR DEVELOPMENT HELPDESK REPORT (Jan. 23, 2019), https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/14348/536_Period_Poverty_Impact_on_the_Economic_Empowerment_of_Women.pdf?sequence=3.

[5]Megan Specia, *Tackling 'Period Poverty,' Scotland Is 1st Nation to Make Sanitary Products Free*, THE NEW YORK TIMES (Nov. 24, 2020), https://www.nytimes.com/2020/11/24/world/europe/scotland-free-period-products.html.

I. THE RATIONALE BEHIND THE BILL

The Bill was introduced in the Scottish Parliament by Monica Lennon MSP, a member of the Parliament.[6] As per the Policy Memorandum ('Memorandum') that was prepared, the main purpose of the Bill is to provide period products free of charge on a universal basis.[7]The Memorandum explains in detail how period poverty has a grave impact on the health and well-being of menstruators. It can force menstruators to use period products longer than it is recommended, which can result in infections.[8] Prior health conditions like endometriosis or polycystic ovary syndrome that lead to heavier or irregular periods make such products an indispensable necessity.[9] According to a survey conducted by Plan International in the United Kingdom, one in seven girls faced difficulty in affording period products, while one in ten girls were unable to afford them.[10] The problem becomes even more glaring when the stigma attached to menstruation is taken into account, which made 48% of girls aged between 14 and 21 years embarrassed by their periods.[11]

In light of these circumstances, the Bill aims to provide access to period products in educational institutions as well as public service bodies like hospitals.[12] Further, only minimal information is required to gain access to these products, like the person's name and the first part of their postcard,[13] which protects menstruators' right to privacy. The Memorandum suggests some innovative ways like postal delivery as an alternative to collecting these products in person that can have a wider reach in rural areas as well.[14] Hence, the Bill seeks to achieve equal opportunities in order to protect and promote the human rights of all menstruators, regardless of age, gender, disability and financial backgrounds.[15] It is also expected to improve social capital[16] and good governance.[17]

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[6]Claire Diamond, *Period poverty: Scotland first in world to make period products free*, BBC (Nov. 24, 2020), https://www.bbc.com/news/uk-scotland-scotland-politics-51629880.
[7]Period Products (Free Provision) (Scotland) Bill Policy Memorandum, paras. 4, 5 [hereinafter *Policy Memorandum*].
[8]*Id.*, para. 8
[9]*Id.*, para. 9
[10]*Plan International UK's Research on Period Poverty and Stigma*, PLAN INTERNATIONAL UK (Dec. 20, 2017), https://plan-uk.org/media-centre/plan-international-uks-research-on-period-poverty-and-stigma.
[11]*Id.*
[12] Policy Memorandum, *supra* note 6, para. 59.
[13]*Id.*, para. 39
[14]*Id.*, para. 42
[15]*Id.* at 17-18.
[16]*Id.*, para. 87.
[17]*Id.*, para. 95.

II. AN ANALYSIS OF THE PROVISIONS OF THE BILL

Section 1 reflects on one of the most important features of the Bill. It creates an obligation upon local authorities to ensure free access to period products for all those in need.[18] Bestowing accountability upon local authorities, like the municipalities, is beneficial because of the wider reach that these institutions have. They are also the first set of governments who are closest to the people, which enables them to exercise their power effectively. This creates a greater chance for proper implementation of the law in reality, as opposed to a law that merely exists on paper. Further, Section 1(2) states that such period products are to be "*sufficient according to the person's needs*" while in Scotland. This leeway guarantees that: *(a)* there is no minimum limit on the number of products to be given to an individual; and *(b)* these products can include anything, ranging from pads to tampons to pain medication, that can provide relief to a woman. Section 1(3)(a) also allows another person to obtain such products on behalf of the designated person.

Next, Section 5 obliges education providers (including higher educational institutions)[19] to provide free access to period products to all pupils and students during their entire course of education.[20]This provision is extremely essential as it encourages girls and women to attend educational institutions, notwithstanding the hindrance posed by menstruation. It has often been observed that in addition to the physical pain and discomfort experienced during periods, lack of sanitary products and pain medication also forces girls to stay at home during their cycle.[21]Fear of menstrual accidents and inadequate facilities can prevent them from fully participating in school activities.[22] Against this background, Section 5 is a blessing in disguise. It motivates menstruators to attend school regularly by assuring access to free period products while at school. This can go a long way in encouraging women's education and alleviating the embarrassment and discomfort caused by menstruation.

Section 6 of the Bill makes it mandatory for specified public service bodies to provide free period products to persons within their premises. Furthermore, if such a public service body operates from multiple sites, then all these different locations need to provide access within

[18]Period Products (Free Provision) (Scotland) Bill 2020, § 1(1).
[19]*Id.*, § 5(4)(ii).
[20]*Id.*, § 5(5).
[21]Mariana de la Roche Wills, *Just how much can menstruation affect girls' education?*, APOLITICAL (June 17, 2020), https://apolitical.co/en/solution_article/just-how-much-can-menstruation-affect-girls-education.
[22]*Id.*

their respective premises.[23] This provision is vital since it largely dispenses with problems related to menstruation during employment. Not only does this warrant that menstruators do not take any sick leaves (paid or unpaid) which may negatively affect their work-life,[24] it also creates a safe space that would tend to normalize conversations surrounding menstruation at the workplace. Needless to say, this positive environment can encourage more and more women to have satisfactory professional careers, leading them to be independent.

An interesting feature of the Bill is mentioned in Section 6A, which states that all free period products should be obtainable reasonably and in a manner that respects the dignity of those who seek them.[25]Further, there should be reasonable choices available for different types of products.[26] The presence of this Section indicates the farsightedness of the Scottish government in devising a law which would be independent of possible ambiguities. It is a testament to their commitment to respect and protect human rights and freedoms of menstruators,[27] and to ascertain that this law does not fall short of its actual purpose during execution.

The rest of the Bill deals with technical aspects, including rules and regulations pertaining to implementation. Guidance is to be provided by the Scottish Ministers to the local authorities, education providers and specified public service bodies to carry out their functions in an efficient manner under the Bill.[28] The Bill also makes it mandatory to consult users of these free products about which kind of period products can be acquired free of charge and how they ought to be acquired, along with the ways in which these products should be distributed.[29] The beauty of this law is the inclusivity it seeks to achieve, by aspiring to give free period products not only to cisgender females, but also to transgender women, non-binary women, etc. Hence, every provision of the Bill talks about providing these products to "*persons who require them*".[30] Finally, the executive authorities are mandated to give

[23]Period Products (Free Provision) (Scotland) Bill 2020, § 6(1B).
[24]Marni Sommer et al., *Managing menstruation in the workplace: an overlooked issue in low- and middle-income countries*, International Journal for Equity in Health (2016), https://equityhealthj.biomedcentral.com/track/pdf/10.1186/s12939-016-0379-8.pdf.
[25]Period Products (Free Provision) (Scotland) Bill 2020, § 6A(a).
[26]*Id.*, § 6A(b).
[27] Inga T. Winkler & Virginia Roaf, *Taking the Bloody Linen out of the Closet: Menstrual Hygiene as a Priority for Achieving Gender Equality*, 21 CARDOZO J.L. & GENDER 1 (2014) [hereinafter *Winkler &Roaf*].
[28]Period Products (Free Provision) (Scotland) Bill 2020, § 6B.
[29]*Id.*, § 6D.
[30]*Id.*, § 1(1), § 5(1), § 6(1), § 6D(4).

information to the public, about the matters falling under the Bill, thus making them accountable to the people at large.[31]

III. ADHERENCE TO INTERNATIONAL HUMAN RIGHTS LAW

Menstrual hygiene is a crucial human rights issue.[32]Consequently, aspects related to menstrual health are inextricably linked to and impacted by period poverty. Elemental international human rights treaties and documents deal with the issue of menstrual hygiene in varying degrees. While this topic may not be the focal point of these conventions, it is definitely an essential underlying right given proper interpretation.

Since menstruation is an important physiological process, protecting menstrual health comes within the ambit of the 'right to health'. Article 12 of the International Covenant on Economic, Social and Cultural Rights ('ICESCR') recognizes the right of everyone "to enjoy the highest attainable standard of physical and mental health".[33]General Comment No. 14 on the right to health specifies that this right includes enjoyment of necessary facilities, goods and services that can help one in attaining the highest possible standard of health.[34]The document also establishes the 'availability, accessibility, acceptability and quality' framework to provide access to such health-related goods and services that one may require.[35] A special focus on women's right to health confirms the obligation of states parties to take adequate steps in order to promote this right.[36]Further, General Comment No. 22 addresses the duty of states parties to remove social misconceptions, prejudices and taboos related to menstruation so as to not obstruct women's right to sexual and reproductive health.[37]

The Convention on the Elimination of All Forms of Discrimination against Women ('CEDAW') is a principal international treaty that addresses women's rights and gender equality. Like ICESCR, it also obliges states parties to take all measures to ensure equality in

[31]*Id.*, § 7.
[32]Winkler &Roaf, *supra* note 26.
[33]International Covenant on Economic, Social and Cultural Rights art. 12(1), Jan. 3, 1976, 999 U.N.T.S. 3 [hereinafter *ICESCR*].
[34]UN Committee on Economic, Social and Cultural Rights, *General comment no. 14, Article 12, Right to health*, Aug. 11, 2000, E/C.12/2000/4, para. 9.
[35]*Id.*, para. 12.
[36]*Id.*, para. 21.
[37]UN Committee on Economic, Social and Cultural Rights, *General comment no. 22, Article 12, Right to sexual and reproductive health*, May 2, 2016, E/C.12/GC/22, para. 48.

access to health care services to preserve women's health.[38] In General Recommendation No. 34, states were advised to create conditions to enable rural women and girls to practice menstrual hygiene and access sanitary pads.[39] General Recommendation No. 36 commented on women's right to education being affected due to lack of information on menstrual issues which resulted in reduced school participation.[40]

Since the United Kingdom has ratified the ICESCR[41]and CEDAW,[42]Scotland observes and implements these treaty rights.[43] In the present case, the Bill demonstrates Scotland's commitment to duly safeguard menstrual health and prevent period poverty. Insufficient menstrual hygiene creates a host of problems, some of which have serious ramifications on women's physical and mental health.[44] Guaranteeing 'menstrual equity' by making period products universally accessible plays a vital role in protecting women's health. Not only this, but such menstrual equity also tackles other human rights affected by period poverty[45] like the right to dignity,[46] right to education,[47] right to work[48], right to non-discrimination[49] and gender equality.[50] Hence, the comprehensiveness of the Bill should be applauded for its conformity with international human rights law standards in defending women's rights and promoting empowerment.

[38]Convention on the Elimination of All Forms of Discrimination against Women art. 12(1), Sept. 3, 1981, 1249 U.N.T.S. 13 [hereinafter *CEDAW*].
[39]UN Committee on the Elimination of Discrimination against Women, *General recommendation no. 34 on the rights of rural women*, Mar. 4, 2016, CEDAW/C/GC/34, para. 85(b).
[40]UN Committee on the Elimination of Discrimination against Women, *General recommendation no. 36 on the right of girls and women to education*, Nov. 16, 2017, CEDAW/C/GC/36, para. 30.
[41]*Ratification Status for United Kingdom of Great Britain and Northern Ireland*, UN TREATY BODY DATABASE, https://tbinternet.ohchr.org/_layouts/15/TreatyBodyExternal/Treaty.aspx?CountryID=185.
[42]*CEDAW: a superhero for women in Scotland*, ENGENDER, https://www.engender.org.uk/content/cedaw/.
[43]*Human rights*, SCOTTISH GOVERNMENT, https://www.gov.scot/policies/human-rights/our-international-obligations/.
[44]*Menstrual Hygiene a Human Rights Issue*, HUMAN RIGHTS WATCH (Aug, 27, 2017, 12:01 AM), https://www.hrw.org/news/2017/08/27/menstrual-hygiene-human-rights-issue.
[45]VeronicahKiende, *Examining Period Poverty*, UAB INSTITUTE FOR HUMAN RIGHTS BLOG (Nov. 11, 2019), https://sites.uab.edu/humanrights/2019/11/11/examining-period-poverty/.
[46]UN G.A. Res. 217 (lll) A art. 1, Universal Declaration of Human Rights (Dec. 10, 1948); International Covenant on Civil and Political Rights art. 1, Dec. 16, 1966, 999 U.N.T.S. 171 [hereinafter *ICCPR*].
[47]ICESCR, *supra* note 32, art. 13; CEDAW, *supra* note 37,art. 10.
[48]ICESCR, *supra* note 32, art. 6(1);CEDAW, *supra* note 37, art. 11(1).
[49]ICCPR, *supra* note 45, arts. 2(1), 26;ICESCR, *supra* note 32, art. 2(2).
[50] CEDAW,*supra* note 37, arts. 3, 5(a).

CONCLUSION

Needless to say, this law is a welcome change among circles advocating for an end to period poverty. By shedding light on the social consequences pertaining to menstruation and attempting to change the societal outlook towards it, the positive impacts of the Bill extend beyond simply preserving the legal rights of menstruators. It cannot be denied that the phenomenon of menstruation leads to the social exclusion of females due to the surrounding stigmas and prejudices attached to it. In such a scenario, when the Parliament actively passes a law providing free menstrual products, conversations related to menstruation increase and it is no longer considered to be shameful or taboo. Apart from making women comfortable, such a transition can also make society more sensitive to the struggles of the fairer sex in order to promote mutual respect and prevent discrimination based on gender.

It can be said that the elimination of period poverty and access to menstrual products is at the intersection of UN Sustainable Goals 4 (quality education) and 5 (gender equality).[51]Hence, other countries may also take a lesson from Scotland and try to replicate such a Bill within their own territories to abolish period poverty and support women's rights.

The Bill, in its present form, seems quite promising. This is not to say that problems may not be encountered at later stages during implementation. As is the case with any new law that is made, its execution will not be completely easy. However, since this is the first time in the world that such a law has been made, its execution can help in identifying possible lacunae that were overlooked in order to give a better idea to the government and lawmakers for the future. Nonetheless, the careful deliberation of the Scottish Parliament in drafting and adopting the Bill is highly commendable. One can only hope that other nations will soon follow suit in this aspect.

[51]İlayda Eskitaşçıoğlu, *Access to Menstrual Products is a Constitutional Right. Period.*, VERFASSUNGSBLOG (Dec. 5, 2019), https://verfassungsblog.de/access-to-menstrual-products-is-a-constitutional-right-period/.

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