

**“WORLD COMMUNITY INTEREST” APPROACH TO INTERIM MEASURES ON
“ROBOT WEAPONS”:
REVISITING THE *NUCLEAR TEST CASES***

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I. INTRODUCTION

Forty-four years after the ICJ provisional measures orders in the *Nuclear Test Cases* requesting France stop atmospheric nuclear weapons testing in the South Pacific, we are facing another deadly threat from the use and development of “robot weapons”. Back in the 1970s nuclear weapons were seen as the new frontier in state defensive capability, just as “robot weapons” are today. The ICJ set a precedent for using provisional measures to prevent harm caused by new weapons technology. The orders under art 41 ICJ Statute requested France to avoid nuclear tests causing the deposit of radioactive fall-out on Australian and New Zealand territories. The *Nuclear Test Cases* are instructive on how the Court may deal with new weapons technology, providing clarification on an urgent basis while a case is pending. Although provisional measures were ordered only in relation to atmospheric tests, the ICJ remains the only international judicial body to have ordered cessation of nuclear tests pending a case. In contrast, individual complaints before the HRC and the ECtHR were refused provisional measures to prevent nuclear tests.

II. WHAT ARE “ROBOT WEAPONS”?

Throughout history new weapons have been developed with the aim of limiting combat fatalities and costs, yet causing devastating effects. Technological advances in warfare have created greater distance between the soldier and the battlefield, so the phenomenon is nothing new. What makes “robot weapons” different? “Robot weapons” are weapons with varying degrees of autonomy in critical functions (ie acquiring, tracking,

selecting, and attacking targets) that administer lethal harm (ie injury, suffering or death).¹ They aim to replace human combatants from the theatre of operation and limit casualties, but will lead to gradual removal of “human central thinking activities”² from the lethal force decision-making process with legal and ethical implications. Examples of robot weapons include the development of lethal autonomous weapons using robotics and artificial intelligence; automated weapons systems; remotely-controlled robotic soldiers; bio-augmentation; and 3D printed weapons.³ Below we consider in more detail different types of robot weapons based on their level of autonomy, and utilitarian perspectives on whether robot weapons represent a malevolent or benevolent potential in weapons technology.

A. Types of Robot Weapons and Varying Degrees of Autonomy

Robot weapons generally fall into one of two categories: (1) semi-autonomous, involving levels of automation and remotely controlled human input (eg UAV or “drones”); and (2) autonomous, involving higher levels of independent thinking as regards acquiring, tracking, selecting and attacking targets, without the need for human input. Varying degrees of robot weapon autonomy (ie a level of independent decision-making and action output without the need for human input) can be measured in terms of functionality: the ability to

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¹ Sharkey makes the distinction between ‘automatic robots’ carrying out pre-programmed sequence of operations or moving in a structured environment (eg painting a car); and ‘autonomous robots’ which are controlled by a program but operate in open or unstructured environments and receive information from their sensors to adjust speed and direction: Noel Sharkey, ‘Automating Warfare: Lessons Learned from the Drones’ (2011/2012) 21(2) *Journal of Law, Information and Science* 140, 141.

² Ozlem Ulgen, ‘Autonomous UAV and Removal of Human Central Thinking Activities: Implications for Legitimate Targeting, Proportionality, and Unnecessary Suffering’ (forthcoming) 1-45.

³ Automated weapons systems (eg unmanned maritime aircraft such as Global Hawk; tactical unmanned aircraft such as Watchkeeper; technology demonstration vehicle (TDV) such as Taranis; the Pulsed Energy Projectile; tetanizing beam weapon; laser weapons; and the Precision Airborne Standoff Directed Energy Weapon (PASDEW)). Bio-augmentation (involves using neurotechnologies, including neural implants, to improve performance of the human mind and body. Currently developed by the United States of America Defence Department’s Defense Advanced Research Projects Agency (DARPA), and United States of America government commissioned Brain Research Advancing Innovative Neurotechnologies (BRAIN) initiative). See, United Kingdom Ministry of Defence Joint Doctrine Note 2/11, *The UK Approach to Unmanned Aircraft Systems* (30 March 2011) (*JDN 2/11*); Peter Singer, *Wired for War: The Robotics Revolution and Conflict in the Twenty-First Century* (Penguin, 2009) 84-86.

observe, orient, decide, and act; and the ability to replicate human situational awareness.⁴ Critical functions of acquiring, tracking, selecting and attacking targets are specific robot weapon autonomy measurements, and robot weapons may possess some or all of these functions.⁵

Unmanned armed aerial vehicles ('UAV'), often referred to as "drones", such as MQ-9 Reaper and Predator, are the most ubiquitous and controversial type of robot weapon in current use. UAV are aircraft without pilots remotely controlled by human pilots and intelligence analysts, carrying lethal missiles used to target and kill individuals. They have been used in Afghanistan, Pakistan, Somalia, Yemen, Libya, and now in Syria. They have caused devastating effects such as targeting and killing individuals without due process; killing civilians, including children; and terrorising local populations living in fear for their own safety, lives, mental well-being, and property.

Remotely controlled UAV may have autonomy in terms of navigational decisions but still require human input for key decisions (eg Elbit/Thales Hermes 450 and General Atomics MQ-9 Reaper). These UAV are manually controlled during take-off, can follow flight paths autonomously, and need manual control for diversions, camera steering and landing. All targeting actions are performed manually by a human operator. Elbit/Thales Hermes 450 operates without a lethal payload, undertaking extensive and persistent intelligence, surveillance, and reconnaissance ('ISR'). It provides tactical level imagery and imagery intelligence to unit and formation commanders in the land environment, as used by the British Army in Afghanistan. Autonomy exists in being airborne without a pilot, operating with an automated GPS based system for take-off and landing. But its capability is heavily circumscribed through pre-programming and human input, with an in-built inability to undertake independent lethal targeting.⁶ General Atomics MQ-9 Reaper operates with a lethal payload and sophisticated armed ISR capability. It provides real-time intelligence data to commanders and intelligence specialists. It has an infrared sensor, for night-time surveillance, a colour/monochrome daylight camera, an image-intensifier, a synthetic aperture radar

⁴ Ulgen, above n 2.

⁵ *Report of the ICRC Expert Meeting, Autonomous Weapon Systems: Implications of Increasing Autonomy in the Critical Functions of Weapons* (15-16 March 2016) ('2016 ICRC Report').

⁶ *JDN 2/11*, above n 3, Annex A, A.5.

system to see through smoke and clouds, and ground moving target indicator. Video images are streamed to remote human pilots who take lethal targeting decisions to release laser guided bombs and missiles.⁷

Semi-autonomous robot weapons may be developed with greater autonomy in ‘acquiring, tracking, and identifying potential targets; cueing potential targets to human operators; prioritizing selected targets; timing of when to fire; or providing terminal guidance to home in on selected targets’.⁸ Human input would still be required in terms of decisions to select individual targets and specific target groups.

At the higher end of autonomy, fully autonomous robot weapons will have a lethal targeting capability, without human input controlling what, when, and how it targets. Such weapons require the highest level of situational awareness, replicating “human central thinking activities”.⁹ The US Navy X-47B is an example. Developed as a surveillance, strike and reconnaissance system, public information to date reveals it has autonomous capability in relation to take-off and landing, completing the first autonomous aerial refuelling in 2015. As a combat system it may conceivably develop more autonomous features relating to critical functions.¹⁰

B. Utilitarian Perspectives on the Use of Robot Weapons

Development and use of robot weapons represents a huge shift in the rules, consequences and responsibilities of warfare. They take the impact of distance between the soldier and the battlefield to another level, especially if developed to be fully autonomous. Technology possessing states are keen to pursue greater autonomy for robot weapons without relying on any human input. The US and UK military have active policies developing

⁷ Ibid A.6-A.7; United States of America Department of Defense, Office of the Secretary of Defense, *Unmanned Aircraft Systems Roadmap 2005-2030* (2005) 10 (*‘US Roadmap’*).

⁸ United States of America Department of Defense Directive, *Autonomy in Weapons Systems*, No. 3000.09 (21 November 2012) 14 (*‘US Directive’*).

⁹ See Section III.B below.

¹⁰ Northrop Grumman, ‘X-47B UCAS Makes Aviation History ... Again!’, <<http://www.northropgrumman.com/Capabilities/x47bucas/Pages/default.aspx>>; *US Roadmap*, above n 7, 11.

robotics technology, which they share with friendly states.¹¹ The US has a declared policy of use and development of fully autonomous robot weapons.¹² The UK is not far behind in pursuing robot weapons technology development, although current policy is not to pursue fully autonomous capability. China, India and Pakistan are developing or selling such technology. But there are varying perspectives on whether robot weapons represent a malevolent or benevolent potential in weapons technology.

1. The Moral Duty to Protect Soldiers

Strawser argues that the principle of unnecessary risk provides a moral duty to use UAV because they do not violate the demands of justice, do not make the world worse, or expose your own combatants to potentially lethal risk unless incurring such a risk aids in the accomplishment of good in some way that cannot be gained via less risky means.¹³ Although he considers fully autonomous robot weapons ‘morally impermissible’, it is worth engaging with Strawser’s argument to see if it can be applied to justify fully autonomous robot weapons.

Warfare presents a unique set of circumstances in which combatants face inherent risks. From a national interest and utilitarian perspective, the moral duty to protect soldiers is understandable. But, apart from cases of state negligence in training, preparing, and equipping military personnel, combatant casualties are expected and unavoidable. They do not constitute an ‘unnecessary risk’. Replacing combatants with robot weapons disregards the former’s professional training and dignity derived from a military code of ethics based on discipline, courage, and restraint. There is also an inherent asymmetry between states using robot weapons and states reliant on human combatants, creating insecurity and

¹¹ United Kingdom Ministry of Defence Report *Strategic Trends Programme: Global Strategic Trends – Out to 2045* (30 April 2014) 67-73; *JDN 2/11*, above n 3; United States of America Department of the Navy, *The Navy Unmanned Undersea Vehicle (UUV) Master Plan* (9 November 2004) (*‘US Master Plan’*); *US Roadmap*, above n 7; *US Directive*, above n 8.

¹² *US Master Plan*, above n 11; *US Roadmap*, above n 7.

¹³ Bradley Jay Strawser, ‘Moral Predators: The Duty to Employ Uninhabited Aerial Vehicles’ (2010) 9(4) *Journal of Military Ethics* 342-368.

unpredictability in the conduct of warfare which makes neither the combatant nor target safe.¹⁴

2. Cost-benefit Reasoning

Arguably, resourcing and financing costs of conventional warfare may be outweighed by potential savings made from replacing combatants with efficient machines. Time and money may be saved by investing in robot weapons technology to engage in combat situations with precision and efficiency.¹⁵ Autonomy in unmanned air systems, for example, reduces the number of personnel needed to operate them.¹⁶ It may require only one person to control multiple unmanned systems with automated processing and analysis of information. Robot weapons might also be used to substitute or expand existing ground forces.¹⁷ Such practical, cost-benefit reasons sit rather uncomfortably with more pressing concerns about compliance with international humanitarian law principles of legitimate targeting, proportionality, and prevention of unnecessary suffering.¹⁸ It also raises concerns about the extent of human input and supervision to be able to establish legal responsibility. Indeed, the cost-benefit is not entirely evident given the extensive financial resourcing that will be necessary to ensure robot weapons are predictable, reliable, and operationally compliant with international humanitarian law.¹⁹ Cost-benefit reasoning may also be susceptible to

¹⁴ In relation to inherent asymmetry and human dignity, see Ozlem Ulgen, ‘Human Dignity in an Age of Autonomous Weapons: Are We in Danger of Losing an ‘Elementary Consideration of Humanity?’ (2016) 8(9) *ESIL Conference Paper Series* 1-19, 7-8 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2912002> (forthcoming in OUP edited collection - updated copy with author).

¹⁵ *JDN 2/11*, above n 3, paras 102-103.

¹⁶ United States of America Department of Defense, *Unmanned Systems Integrated Roadmap FY2011-2036* (2011) 44.

¹⁷ United States of America Department of Defense, *Unmanned Systems Integrated Roadmap FY2013-2038* (2013) 19 and 68.

¹⁸ See, Ulgen, above n 14, 24-5.

¹⁹ Ozlem Ulgen, ‘Pre-deployment common law duty of care and Article 36 obligations in relation to autonomous weapons: interface between domestic law and international humanitarian law?’ (forthcoming) 1-18.

efficiency-driven, short-term decisions which in the long-term result in combatant casualties or breaches of international humanitarian law.²⁰

3. Saving Civilian and Combatant Lives?

It may be argued that the potential sophistication and superior capability of robot weapons in precision targeting will reduce civilian and combatant casualties. Such a speculative utilitarian rationale operates outside the basic common rules of international humanitarian law which apply to all parties and require interaction and interrelatedness between human combatants and human targets in order to limit harm (eg prohibition on use of poison and poisoned weapons under art 23(a) of the Regulations annexed to the 1899 *Hague Convention II* and the 1907 *Hague Convention IV*; fundamental guarantees under art 75 of the 1977 *Additional Protocol I to the Geneva Conventions* of 12 August 1949 (API)). Too much faith and optimism is placed in the precision and casualty-reducing capability of robot weapons. If we look at the example of current use semi-autonomous robot weapons such as UAV, there is a disparity between perceived UAV precision targeting capability and actual harm caused.²¹

4. The “Irrational Soldier” Argument

The “irrational soldier” argument maintains that soldiers are susceptible to fatigue, emotions (eg revenge), and unpredictability which can debilitate a soldier’s performance and ethical judgment to the extent of enabling commission of war crimes and atrocities.²² Such “negative” human characteristics can be eliminated by using robots weapons. But this argument makes questionable assumptions about human and robotic rational thinking capacity and conduct in warfare.²³ Humans have rational thinking capacity to prevent

²⁰ See, eg, *Smith and Others v Ministry of Defence* [2013] UKSC 41 (negligence claims by military personnel against the United Kingdom Ministry of Defence for failures to provide target identity devices that allow automatic confirmation as to whether a vehicle is a friend or foe; and situational awareness equipment that permits tank crews to locate their position and direction of sight accurately).

²¹ See, Section IV.E below.

²² Ronald C Arkin, *Governing Lethal Behaviour in Autonomous Robots* (CRC Press, 2009); Ronald C Arkin, ‘Lethal Autonomous Systems and the Plight of the Non-combatant’ (2014) 1 *Ethics and Armed Forces* 1 (work was supported in part by the U.S. Army Research Office under Contract #W911NF-06-1-0252).

²³ Ulgen, above n 14, 15-6.

unethical conduct. Human emotions (eg fear, shame, anger) are not always to be considered as detrimental to conduct in warfare and may operate as restraints against excesses. They may also assist in navigating complex environments requiring human judgment. So it is by no means certain that an unemotional robot can better perform tasks in warfare. This argument also disregards human agency in the creation and failures of robot weapons, which may be programmed to follow set tasks using calculating logic but with limited, defective, or no ethical considerations.

Having considered the utilitarian arguments relating to development and use of robot weapons, we now turn to consider specifically why robot weapons represent a global interest issue impacting on humanity and require a “world community interest” approach to interim measures.

III. “WORLD COMMUNITY INTEREST” APPROACH TO INTERIM MEASURES

Elkind’s early work on interim protection considered the function performed by principles of legal systems in protecting common specific interests.²⁴ A comparative analysis of international and municipal legal systems revealed that both serve an interest in trying to prevent disputing parties resorting to self-help or violence. The general principle of interim measures, found in both international and municipal systems, seeks to protect the specific interest of preventing violence. In Roman law, for example, interdicts were used to prohibit violence against a person placed in possession of property. In the Middle Ages, possessory assizes in England instituted expeditious trials to prevent men, who were in fact in possession, from being disturbed pending trial of their title. The purpose was to prevent the issue from being fought in battle. Today’s use of injunctive relief, whether at municipal or international level, is rooted in the need to preserve the peace.²⁵ At the international level, prevention of aggravation or extension of a dispute is the primary function of provisional measures, which necessarily involves prevention of violence as mirrored in municipal law. Threats to the peace occur when a party perceives it may be ‘irreparably injured or that it will

²⁴ Jerome B Elkind, *Interim Protection: A Functional Approach* (Martinus Nijhoff Publishers, 1981) 17-9.

²⁵ *Ibid* ch 2.

be forced to endure an unendurable situation’, leading to desperation and desperation leading to violence.²⁶

New Zealand’s pleadings in the *Nuclear Test Cases* were characterised as ‘asserting some world community interest’ concerning the threat posed by atmospheric nuclear tests to world peace and security, human health of present and future generations, and the environment.²⁷ “World community interest” can be defined as global interest issues that impact on humanity, transcend individual state interests and the inter-state dimension, and typically require transnational regulation.²⁸ Disputes that transcend parties’ interests with potential impact on global security and humanity represent a “world community interest” over which the ICJ should have jurisdiction.²⁹ In *Costa Rica v Nicaragua*, Judge Cançado Trindade reasserts the ‘autonomous legal regime’ of provisional measures, and how the principle of humanity has expanded their scope of protection beyond the inter-state dimension.³⁰ More recently in *Obligations Concerning Negotiations Relating to Cessation of the Nuclear Arms Race and to Nuclear Disarmament (Marshall Islands v India)*, Judge James Crawford referred to the possibility that ‘disputes can crystallize in multilateral fora involving a plurality of States’,³¹ and the *South West Africa Cases* are authority for this.³²

There is a “world community interest” in the potential use of robot weapons because they may aggravate or extend inter-state disputes, and violate human rights and international

²⁶ Elkind, above n 24, 222-30.

²⁷ Ibid 222; ‘Application Instituting Proceedings submitted by the Government of New Zealand’, *Nuclear Tests Cases (New Zealand v France)* [1978] II ICJ Pleadings 7-8.

²⁸ See, eg, Antônio Augusto Cançado Trindade, *International Law for Humankind — Towards a New Jus Gentium* (Martinus Nijhoff Publishers, 2010); *Questions relating to the Obligation to Prosecute or Extradite (Belgium v Senegal) (Provisional Measures)* [2009] ICJ Rep 139, 174 [21]-[25] (Judge Trindade) (provisional measures transcending inter-state dimension), 190 [71] (*erga omnes* obligations as superior common values in the international law for humankind), 196 [92] and 199 [104] (the legal community of the whole of humankind) (*Obligation to Prosecute or Extradite*).

²⁹ See, eg, *Ahmadou Sadio Diallo (Republic of Guinea v Democratic Republic of Congo) (Judgment)* [2010] ICJ Rep 639, 806 [227]-[228] (Judge Trindade) (*Ahmadou Sadio Diallo*).

³⁰ *Certain Activities carried out by Nicaragua in the Border Area (Costa Rica v Nicaragua) (Judgment)* [2015] ICJ Rep 665, 1 (Judge Trindade) (*Certain Activities by Nicaragua - Judgment*).

³¹ *Obligations Concerning Negotiations Relating to Cessation of the Nuclear Arms Race and to Nuclear Disarmament (Marshall Islands v India) (Jurisdiction)* (International Court of Justice, General List No 158, 5 October 2016) [19]-[21] (Judge Crawford).

³² *South West Africa Cases (Ethiopia v South Africa; Liberia v South Africa) (Preliminary Objections)* [1962] ICJ Rep 319, 346.

humanitarian law. States possessing such weapons technology can use violence against individuals/groups within other states without recourse to due process. Targeted individuals/groups are killed, and local populations may suffer collateral physical and psychological harm. Obviously the loss of life constitutes ‘irreparable injury’, which is a traditional circumstance for authorising interim measures. But there is also a less apparent form of harm in being forced to endure an ‘unendurable situation’ (ie living in a constant state of fear and anxiety; not knowing when, where or who a robot weapon will strike and kill; and the potential for violation of territorial sovereignty at any time). ‘Irreparable injury’ covers a definitive harmful result when a robot weapon is deployed to kill an individual, whereas an ‘unendurable situation’ relates to ongoing harmful effects which the complainant cannot be expected to endure pending the outcome of a dispute. Both circumstances exist in the potential use of robot weapons and three possible grounds emerge to stop their use through interim measures: prevention of aggravation or extension of inter-state disputes; prevention of human rights violations; and prevention of violations of international humanitarian law. These grounds are developed in more detail in Section IV in relation to a hypothetical case of Pakistan requesting ICJ provisional measures.

A. Emerging Opinio Juris under the UN CCW Process

On 16 December 2016 the Fifth Review Conference on the UN *Convention on Certain Conventional Weapons* (‘CCW’) agreed a Final Declaration to formalise states parties’ discussions on lethal autonomous weapons systems (‘LAWS’) through the establishment of a Group of Governmental Experts (‘GGE’).³³ After several informal and expert meetings since 2014, this is a historic step towards multilateral deliberation of the legal and ethical issues surrounding LAWS, demonstrating increasing state concern. Although the process is fraught with political and practical obstacles, it is the first global institutional initiative at norm-creation and codification of rules governing robot weapons which may even lead to a legally binding instrument. The first set of GGE meetings, due to take place in

³³ *Final Document of the Fifth Review Conference*, Agenda Item 18, UN Doc CCW/CONF.V/10, (23 December 2016) 9 <<https://documents-dds-ny.un.org/doc/UNDOC/GEN/G16/441/02/pdf/G1644102.pdf?OpenElement>>.

August 2017, were cancelled due to unpaid state contributions. Subject to sufficient funds being available, the next meeting is scheduled for November 2017.³⁴

With 124 states parties to the CCW, the CCW process brings together diplomats, legal, and military experts to deliberate and draft rules on weapons control and disarmament. At the Fifth Review Conference the majority of states agreed that LAWS represent new and complex challenges to international humanitarian law requiring further in-depth discussions. Switzerland and Cuba prepared position papers respectively proposing consideration of scientific and technological advances in the context of compliance with international humanitarian law, and expressing concern that LAWS would not be able to comply with the principles of distinction and proportionality.³⁵ Many other states referred to ethical concerns about humans delegating life and death decisions to machines,³⁶ and considered LAWS to be contrary to human dignity, humanity, and the Martens Clause.³⁷ Oral and written *Exchange of Views* reveal three main state positions emerging: (1) potential user or developer states; (2) preventative prohibition states; and (3) the Russian abstention. In between are “undecided” states supportive of formalised discussions but, as of yet, unclear about what LAWS are and their potential impact.

1. Potential User or Developer States

Potential user or developer states are generally open to formal discussions yet reiterate the importance of military necessity and the need to protect the civilian technology

³⁴ *Letter from Chair of Convention on Certain Conventional Weapons*, 6 June 2017, UNOG <[https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/3D20EDEBBF0E6B68C125813A00566285/\\$file/Letter_CCW+MSP+Chairperson_6Jun2017.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/3D20EDEBBF0E6B68C125813A00566285/$file/Letter_CCW+MSP+Chairperson_6Jun2017.pdf)>.

³⁵ Swiss Working Paper, *Towards a “compliance-based” approach to LAWS*, Informal meeting of experts on lethal autonomous weapons systems (LAWS) Geneva, 11-15 April 2016 <[https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/D2D66A9C427958D6C1257F8700415473/\\$file/2016_LAWS+MX_CountryPaper+Switzerland.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/D2D66A9C427958D6C1257F8700415473/$file/2016_LAWS+MX_CountryPaper+Switzerland.pdf)>; Swiss Working Paper, *S&T and the CCW - Consideration of developments in science and technology that may be relevant to the work of the Convention on Certain Conventional Weapons (CCW)*, 5 December 2016, CCW/CONF.V/WP.4; Cuban Working Paper, *Considerations on Lethal Autonomous Weapons System* <[https://www.unog.ch/80256EE600585943/\(httpPages\)/9F975E1E06869679C1257F50004F7E8C?OpenDocument](https://www.unog.ch/80256EE600585943/(httpPages)/9F975E1E06869679C1257F50004F7E8C?OpenDocument)>.

³⁶ UN Digital Recordings Portal, *CCW 5th Review Conference of the High Contracting Parties*, Exchange of Views: Austria, Brazil, Holy See, Mexico, Pakistan, Panama, The Netherlands, Venezuela (12 December 2016); Algeria, Colombia, Croatia, France (13 December 2016) <<http://conf.unog.ch/digitalrecordings/#>> (‘UN Digital Recordings Portal’).

³⁷ *Ibid* Exchange of Views: Ecuador, Panama (12 December 2016); Costa Rica, Guatemala, (13 December 2016).

industry. Korea and Japan expressed support for the GGE but with concern that discussions should not hamper developments in civilian technology. As a leading country in the development of fibre optics, Japan noted the dual-use purpose of LAWS and that it would not be easy to distinguish between civilian-use (eg disaster relief and domestic law enforcement) and military-use. But it also affirmed that it would not develop LAWS for warfare.³⁸ State representatives often characterised the CCW's main objective as 'balancing military necessity with humanitarian considerations',³⁹ suggesting that regulation or prohibition of robot weapons should be guided by national security interests as well as compliance with principles of international humanitarian law. But states also recognise that military necessity should be framed within a broader context of ethical, human rights, and international humanitarian law considerations. Mexico, for example, favours discussions 'with the objective to prioritise an ethics-based approach since assumptions that enhance their [LAWS'] military value have been superseded and have no place in the CCW.'⁴⁰

During the 2015 UN negotiations, the UK favoured restricting discussions to 'emerging technologies' rather than weapons technology, such as UAV, currently in use.⁴¹ At the 2016 Fifth Review Conference the UK, France, and the Netherlands insisted that any further discussion of LAWS should be in relation to 'emerging technologies', and this position was adopted by consensus in the final text of the Declaration, which refers to the establishment of 'an open-ended Group of Governmental Experts related to emerging technologies in the area of lethal autonomous weapons systems'.⁴² This potentially excludes

³⁸ Ibid Exchange of Views: Japan (12 December 2016), Korea (13 December 2016).

³⁹ Ibid Exchange of Views: Cameroon, China, Cuba, Korea, Russia, Turkey (12 December 2016); *Statement by Mr Neil Benevides, Chargé d'Affaires, Permanent Representation of Brazil to the Conference on Disarmament*, 12 December 2016 - 'CCW has been paramount in striking a balance between humanitarian concerns and military needs' (copy with author); *Statement by Ambassador Amandeep Singh Gill, Permanent Representative of India*, 12 December 2016 <[https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/7C66638FB6B0C169C125808E00467D04/\\$file/India.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/7C66638FB6B0C169C125808E00467D04/$file/India.pdf)>. It mentions 'stipulating measures to mitigate humanitarian concerns arising from the use of specific weapons and weapons systems also take into account the military necessity of such weapons, thus striving to strike a balance between the two concepts'.

⁴⁰ Cf *Statement by Mexican at the 2016 Meeting of Experts in LAWS*, 11 April 2016 <[https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/44FB014A6029D721C1257F920057E636/\\$file/2016_LAWS+MX_GeneralExchange_Statements_Mexico.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/44FB014A6029D721C1257F920057E636/$file/2016_LAWS+MX_GeneralExchange_Statements_Mexico.pdf)>; UN Digital Recordings Portal, above n 36, Exchange of Views: Mexico (12 December 2016).

⁴¹ Harriet Grant, 'UN Delay Could Open Door to Robot Wars, Say Experts', *The Guardian* (online), 6 October 2015 <<https://www.theguardian.com/science/2015/oct/06/autonomous-weapons-un-delay-robot-wars>>.

⁴² *Final Document of the Fifth Review Conference*, above n 33.

consideration of UAV and other types of robot weapon technologies currently in development or partial use. Given that states have yet to define what constitute LAWS and ‘emerging technologies’, and they are not legally required to disclose or share information, this leaves too much scope for individual state discretion to classify robot weapons as falling outside any multilateral norm-creation and codification framework. A number of states also take the position that discussions include semi-autonomous weapons, such as UAV, or that categorisation of LAWS should be on the basis of level of autonomy.⁴³

2. Preventative Prohibition States

A second group of states support formal discussions leading to a preventative prohibition of LAWS through the adoption of a legally binding instrument.⁴⁴ The prohibition would be extensive, covering acquisition, development, testing, production, deployment, and use of LAWS, and modelled on Protocol IV (Blinding Laser Weapons), which serves as a precedent for prohibition of a weapon prior to its deployment.⁴⁵ With reference to the precautionary principle, they call for an immediate ban and regard LAWS as ethically, morally, and legally undesirable.⁴⁶ But with greater state interest in more in-depth discussions about the nature, definition, and impact of LAWS, some states in this group have modified their position to take account of the need for further information and the possible beneficial uses of robotics and artificial intelligence. Algeria, for example, supports a preventative prohibition on the acquisition, development, testing, deployment, and use of LAWS, but with

⁴³ See, eg, UN Digital Recordings Portal, above n 36, Exchange of Views: Panama and Nicaragua (12 December 2016), Venezuela (13 December 2016).

⁴⁴ As of 30 July 2017, out of 124 states parties to the CCW 19 states support a ban: 16 states parties (Algeria, Argentina, Bolivia, Chile, Costa Rica, Cuba, Ecuador, Guatemala, Holy See, Mexico, Nicaragua, Pakistan, Panama, Peru, State of Palestine, Venezuela); 1 signatory state (Egypt); 2 states that are not parties (Ghana, Zimbabwe).

⁴⁵ *Additional Protocol to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to have Indiscriminate Effects (Protocol IV, Entitled Protocol on Blinding Laser Weapons)*, opened for signature 13 October 1995, 2024 UNTS 163 (entered into force 30 July 1998) (*‘Protocol IV on Blinding Laser Weapons’*); See, UN Digital Recordings Portal, above n 36, Exchange of Views: Egypt and Costa Rica (13 December 2016).

⁴⁶ UN Digital Recordings Portal, above n 36, Exchange of Views: Nicaragua (12 December 2016), Guatemala, Peru, Egypt (called for a moratorium on development of LAWS until an eventual ban could be agreed) (13 December 2016); Pakistan (12 December 2016) <[https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/11B913BABA32AB2C125808E003697BB/\\$file/PakistanStatement-CCW+++RevCon-General+Debate-12Dec.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/11B913BABA32AB2C125808E003697BB/$file/PakistanStatement-CCW+++RevCon-General+Debate-12Dec.pdf)>; *Statement by H.E. Archbishop Ivan Jurkovič, Permanent Observer of the Holy See*, 12 December 2016 (copy with author).

a somewhat modified position. It distinguishes LAWS from robotics and artificial intelligence used in non-lethal autonomous systems for humanitarian, medical, military, and scientific use. It recognises potential advantages ‘for the well-being of humanity and the legitimate rights of developing countries to technological and socio-economic progress.’⁴⁷

3. The Russian Abstention

The Russian Federation abstained from voting for formalisation of LAWS discussions under the GGE. Apart from the abstention, not really having any binding effect as decisions are made by consensus, Russia’s statements leading up to the vote revealed concerns about premature formalisation of discussions without clarity on the definition of LAWS, and state defence interests:

In principle our country is not against a discussion within the CCW of matters related to arms development. At the same time we are convinced that the substantiveness of such discussions directly depends on a clear understanding of their subject. We doubt that it is reasonable to prematurely formalize the discussion on lethal autonomous weapons systems (LAWS), which has been conducted for several years. We will share our approaches in a more detailed way at the meetings of the Main committees.⁴⁸

The abstention is in relation to supporting or not supporting the establishment of a GGE to formally discuss LAWS, and any future decisions of the GGE. It seems a tactical position to adopt in order to see to what extent, in particular, potential user or developer states genuinely engage with, or undermine, the GGE process. Judging by the financial difficulties of the CCW and the resultant cancellation of the first GGE meeting, perhaps Russia is prudent in holding back from discussions which will lead to disclosure of technological capability and potentially compromise state defence. For a dominant world power and Security Council permanent member to take such a position points to the potential for robot weapons to become the next arms race, creating further instability in the international legal

⁴⁷ Cf *Statement by Algerian Delegation at the 2016 Meeting of Experts in LAWS*, 11 April 2016 <[https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/EBA56386AE5E61A1C1257F9200579F4F/\\$file/2016_LAWS+MX_GeneralExchange_Statements_Algeria.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/EBA56386AE5E61A1C1257F9200579F4F/$file/2016_LAWS+MX_GeneralExchange_Statements_Algeria.pdf)>; UN Digital Recordings Portal, above n 36, Exchange of Views: Algeria (13 December 2016).

⁴⁸ *Statement by the Head of the Delegation of the Russian Federation, Deputy Director-General of the Department for Nonproliferation and Arms Control of the Ministry of Foreign Affairs of the Russian Federation, Vladimir I. Yermakov*, 12 December 2016, 3-4 (copy with author).

order. This further bolsters the need for a “world community interest” approach to interim measures on robot weapons.

B. Removal of “Human Central Thinking Activities”

From an ethical standpoint there is a question as to whether humans should delegate ultimate decisions of life and death to machines. “Human central thinking activities” are essential in warfare and involve the ability to feel, think and evaluate, and the capacity to adhere to a value-based system in which violence is not the norm governing human relations.⁴⁹ Such ability and capacity uniquely identifies how humans engage in qualitative analysis through exercising judgment and reasoning in the theatre of operation. With the capacity to feel, think, and evaluate, humans can adhere to a value-system, show empathy, experience fear and shame, which all represent potential restraints or qualifiers on the use of force and any resultant harm.

Judgment is used in deciding the extent and timing of force. Soldiers engage in automatic reasoning when they obey orders, warn and take action against incoming threats, and distinguish between military targets and civilians in uncomplicated and controlled scenarios. Commanders engage in deliberative reasoning, implementing the principle of proportionality under art 51 API, by assessing whether an attack is expected to cause excessive incidental loss of civilian life in relation to the concrete and direct military advantage anticipated, taking into account location, terrain, accuracy of the weapon used, weather conditions, the nature of the military objective, and technical skills of combatants. If the loss is deemed excessive then they must abort the attack under art 57(2)(a)(iii) API. Deliberative reasoning is also required to distinguish between military targets and civilians in mixed and uncontrolled scenarios, such as counter-insurgency operations and internal conflicts.⁵⁰ These examples illustrate how combatants use judgment and reasoning to implement principles of feasible precautions, distinction, and proportionality.

Remotely-operated UAV currently in use have varying degrees of autonomy, with some human input exhibiting these attributes. But the more autonomous the UAV becomes

⁴⁹ Ulgen, above n 14; Ulgen, above n 2.

⁵⁰ See Noel Sharkey, ‘Towards a Principle for the Human Supervisory Control of Robot Weapons’ (2014) 2 (May-August) *Politica & Società* 1-16. Sharkey explores the strengths and weaknesses of automatic and deliberative reasoning, and their impact on supervisory control of robot weapons.

the less likely it is to possess “human central thinking activities”; namely, the complex cognitive capabilities to appraise a given situation, exercise judgment, and restrain from taking action or limiting harm. Unlike humans who can pull back at the last minute or choose a workable alternative, robot weapons have no instinctive or intuitive ability to do the same. In complex scenarios of asymmetric warfare perception and attribution of intentions, fears, and desires in human targets becomes important. If a robot weapon cannot attribute intentions, fears, and desires to others it has limited ability to distinguish between threatening and non-threatening behaviour, which is crucial for identifying legitimate targets.

Comparing humans to machines, there is a clear difference between the logic of a calculating machine and the wisdom of human judgment.⁵¹ Machines perform cost effective and speedy peripheral processing activities based on quantitative analysis, repetitive actions, and sorting data (eg mine clearance; and detection of improvised explosive devices). They are good at automatic reasoning and can outperform humans in such activities, but lack the deliberative and sentient aspects of human reasoning necessary in warfare. The use of discretion in decisions regarding preventing unnecessary suffering, taking feasible precautions, and assessing proportionality, is absent in robots.⁵²

Having established that robot weapons represent a global interest issue impacting on humanity and requiring a “world community interest” approach to interim measures, let us now consider how this would work in the case of Pakistan requesting provisional measures from the ICJ and whether the requirements would be satisfied.

IV. HYPOTHETICAL CASE OF PAKISTAN REQUESTING PROVISIONAL MEASURES

Article 41 of the ICJ Statute provides that the Court has the power to ‘indicate, if it considers that circumstances so require, any provisional measures which ought to be taken to preserve the respective rights of either party.’ As this is a purely inter-state procedure, states

⁵¹ Joseph Weizenbaum, *Computer Power and Human Reason: From Judgment to Calculation* (W.H. Freeman and Company, 1976) 213. Weizenbaum discusses limitations of computer-based logical thinking after he developed the ELIZA computer programme to mimic the behaviour of a psychoanalyst; argues that computer intelligence is ‘alien to genuine human problems and concerns’ 213, and that ‘there is an aspect to the human mind, the unconscious, that cannot be explained by the information-processing primitives, the elementary information processes, which we associate with formal thinking, calculation, and systematic rationality’ 223.

⁵² Eliav Lieblich and Eyal Benvenisti, ‘The Obligation to Exercise Discretion in Warfare: Why Autonomous Weapons Systems Are Unlawful’ in Nehal Bhuta, Susanne Beck, Robin Geiß, Liu Hin-Yan, Claus Kreß (eds), *Autonomous Weapons Systems Law, Ethics, Policy* (Cambridge University Press, 2016).

are the relevant parties and, in theory, would have standing to make an application on the basis that continued use of robot weapons constitutes an ‘unendurable situation’. In practice, applications are more likely to be made by states directly affected. Article 41 does not define or stipulate ‘circumstances’ appropriate for provisional measures, highlighting the Court’s discretionary power. The Court’s jurisprudence has developed basic requirements of prima facie jurisdiction over a dispute, and risk of irreparable prejudice and urgency.

A. Prima Facie Jurisdiction under 1959 US-Pakistan Treaty of Friendship and Commerce

Provisional measures are part of the Court’s incidental jurisdiction so it must be established that it has prima facie jurisdiction over a dispute in the main case. The Court need not be satisfied definitively of jurisdiction, yet it ought not to act under art 41 where there is a manifest absence of jurisdiction.⁵³ This represents a compromise between protecting the Court’s power to deal with urgent cases and give effect to final judgments, and protection of state sovereignty through consent to jurisdiction.⁵⁴ A dispute exists where there is a ‘disagreement over a point of law or fact, or a conflict of legal views or of interests between two persons’.⁵⁵ It could also involve a difference of opinion on interpretation of an ICJ judgment.⁵⁶ Prima facie existence of a dispute constitutes a necessary condition for establishing prima facie jurisdiction.

A key early start in the use of robot weapons has been American UAV strikes in Afghanistan, Iraq, Pakistan, Yemen, Somalia, Libya and now Syria. Among these states, Pakistan is the only one with potential to establish ICJ prima facie jurisdiction. American UAV strikes in Pakistan violate Pakistan’s territorial sovereignty and cause loss of life, contrary to customary international law and treaty law, which means there is prima facie existence of a dispute over which the Court could exercise jurisdiction. Reports of Pakistan’s apparent consent to strikes under former President Musharraf have not been officially

⁵³ *Obligation to Prosecute or Extradite* [2009] ICJ Rep 139, 147 [40]; *Fisheries Jurisdiction Cases (UK v Iceland) (Provisional Measures)* [1972] ICJ Rep 12, 15 [15] (*‘Fisheries Jurisdiction’*).

⁵⁴ Karin Oellers-Frahm, ‘Expanding the Competence to Issue Provisional Measures—Strengthening the International Judicial Function’ (2011) 12(5) *German Law Journal* 1279, 1284.

⁵⁵ *Mavrommatis Palestine Concessions (Greece v United Kingdom) (Judgment)* [1924] PCIJ (ser A) No 2, 7, 11.

⁵⁶ See, eg, *Request for Interpretation of the Judgment of 15 June 1962 in the Case Concerning the Temple of Preah Vihear (Cambodia v Thailand) (Provisional Measures)* [2011] ICJ Rep 537, 544 [31] (*‘Temple of Preah Vihear’*).

confirmed, and the current government considers them a violation of Pakistan's territorial sovereignty.⁵⁷

In *Writ Petition No. 1551-P/2012*, the Pakistani Peshawar High Court held that American UAV strikes violated Pakistan's territorial sovereignty, and the prohibition on the use of force. It called upon the Pakistani government to complain to the UN Secretary General and request that an independent war crimes tribunal be set up to consider whether American actions constituted war crimes. In recognizing such a tribunal's jurisdiction the Court also recognized its incidental jurisdiction:

to direct the US Authorities/Government to immediately stop the UAV strikes within the airspace/territory of Pakistan and to immediately arrange for the complete & [sic] full compensation for the victims' families of the civilians of Pakistan both for life & [sic] properties at the rate & [sic] ratio laid down under international standards.⁵⁸

The provisional measure request is to 'immediately stop the drone strikes' before commencing proceedings on substantive matters alleging war crimes and violations of human rights, and whether state responsibility is established to require compensation.

Pakistan recognized the ICJ's compulsory jurisdiction back in 1960, but the US terminated its declaration accepting compulsory jurisdiction during the *Nicaragua Case* and this remains in place today.⁵⁹ Pakistan's declaration excludes disputes relating to multilateral treaties so that a dispute alleging violations of the *UN Charter* would not work, although it could accept jurisdiction under special agreement. Given the complete withdrawal by the US, the next best option is to establish jurisdiction on the basis of the *1959 US-Pakistan Treaty of Friendship and Commerce*. Article XXIII(2) contains a compromissory clause recognizing the Court's jurisdiction for both parties:

⁵⁷ Mark Mazetti, 'A Secret Deal on Drones, Sealed in Blood', *New York Times* (online), 6 April 2013 <http://www.nytimes.com/2013/04/07/world/asia/origins-of-cias-not-so-secret-drone-war-in-pakistan.html?_r=0>; Nic Robertson and Greg Botelho, 'Ex-Pakistani President Musharraf Admits Secret Deal with U.S. on Drone Strikes', *CNN* (online), 12 April 2013 <<http://edition.cnn.com/2013/04/11/world/asia/pakistan-musharraf-drones/>>; Amnesty International Report, *Will I Be Next? US Drone Strikes in Pakistan* (2013), Section 8, <<http://www.amnestyusa.org/sites/default/files/asa330132013en.pdf>>.

⁵⁸ *Writ Petition No. 1551-P/2012*, 11 April 2013, [6], [22(ii)], [22(vii)], (Peshawar High Court, Pakistan).

⁵⁹ *Pakistan Declaration Recognising the Jurisdiction of the Court as Compulsory*, 13 September 1960, <www.icj-cij.org/jurisdiction/?p1=5&p2=1&p3=3&code=PK>; *United States Department of State Letter and Statement concerning Termination of Acceptance of ICJ Compulsory Jurisdiction*, (1985) 24 ILM 1742. For reasons and consequences of the American withdrawal, see, Sean D Murphy, 'The United States and the International Court of Justice: Coping with Antinomies' in Cesare Romano (ed), *The Sword and the Scales: The United States and International Courts and Tribunals* (Cambridge University Press, 2009).

Any dispute between the Parties as to the interpretation or application of the present Treaty, not satisfactorily adjusted by diplomacy, shall be submitted to the International Court of Justice, unless the Parties agree to settlement by some other pacific means.

Compromissory clauses are common in bilateral treaties of amity or establishment and the intention of the parties in accepting them is clearly to provide a right of unilateral recourse to the ICJ in the absence of agreement to employ some other pacific means of settlement.⁶⁰ They have a ‘sleeping beauty’ quality; contained in an otherwise dormant treaty but may be revived at any point to establish the Court’s jurisdiction over a dispute.⁶¹ The Treaty provides that both parties are ‘desirous of strengthening the bonds of *peace* and friendship traditionally existing between them and encouraging closer economic and cultural relations between their peoples’,⁶² which necessarily means upholding customary international law principles of territorial sovereignty, prohibition on the use of force, good faith, and peaceful cooperation. UAV strikes violate the Treaty’s purpose and customary international law.

Precedent exists for using compromissory clauses to establish jurisdiction even when the respondent state objects. In the *Nicaragua Case*, Nicaragua successfully relied on art XXIV of the *Treaty of Friendship, Commerce and Navigation between the United States of America and Nicaragua* of 21 January 1956 in so far as it related to a dispute concerning the interpretation or application of the Treaty.⁶³ Jurisdiction was still established in the *Nicaragua Case* despite the US subsequently terminating the Treaty. Thus, if Pakistan brings proceedings but the US objects and seeks to terminate the Treaty under art XXIV(3), it could

⁶⁰ *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v USA) (Jurisdiction)* [1984] ICJ Rep 392, 427 [81] (*Military and Paramilitary Activities - Jurisdiction*); see earlier case, *United States Diplomatic and Consular Staff in Tehran (United States of America v Iran) (Judgment)* [1980] ICJ Rep 3, 27 [52]. In the case the US invoked a similar clause against Iran and the ICJ confirmed the clause was intended to enable unilateral recourse to the Court.

⁶¹ Christian J Tams, ‘The Continued Relevance of Compromissory Clauses as a Source of ICJ Jurisdiction’ (2009) 21 <<http://ssrn.com/abstract=1413722>>; Matina Papadaki, ‘Compromissory Clauses as the Gatekeepers of the Law to be ‘Used’ in the ICJ and the PCIJ’ (2014) 5(3) *Journal of International Dispute Settlement* 560-604.

⁶² *Treaty of Friendship and Commerce between the United States of America and Pakistan*, United States of America-Pakistan, 404 UNTS 259 (entered into force 12 February 1961), Preamble (emphasis added).

⁶³ *Military and Paramilitary Activities - Jurisdiction* [1984] ICJ Rep 392, 426-429 [79]-[83].

only terminate after giving Pakistan one year's written notice and even then there is no guarantee that the Court will decline to exercise jurisdiction.

B. Risk of Irreparable Prejudice and Urgency

Article 41 ICJ Statute does not refer to 'irreparable harm' or 'irreparable injury' but the Court's jurisprudence has developed to assess whether there is a risk of 'irreparable prejudice' to the rights of parties pending a decision.⁶⁴ What constitutes 'irreparable prejudice' depends on case-specific facts and the rights claimed, which must be plausible and linked to the claim on the merits (otherwise known as the plausibility requirement).⁶⁵ At a general level, a *risk* or *possibility* of harm to the practical implementation or enforceability of rights constitutes 'irreparable prejudice.'⁶⁶ It has been deemed to exist in situations involving imminent execution of individuals, violations of territorial sovereignty, illegal military and paramilitary activities in another state, and ongoing genocidal acts.⁶⁷ Even if rights can be restored at a later stage, the Court does not need to be satisfied of absolute irreparability and can still grant an order.⁶⁸

Provisional measures apply to urgent situations where there is a 'real and imminent risk' that irreparable prejudice may be caused to the rights in dispute before the Court gives

⁶⁴ *Fisheries Jurisdiction* [1972] ICJ Rep 12, 16 [21]; *Nuclear Tests Case (Australia v France) (Provisional Measures)* [1973] ICJ Rep 99, 103 [20] ('*Nuclear Tests Case - Australia*'); *Nuclear Tests Case (New Zealand v France) (Provisional Measures)* [1973] ICJ Rep 135, 139 [21] ('*Nuclear Tests Case - New Zealand*').

⁶⁵ *Obligation to Prosecute or Extradite* [2009] ICJ Rep 139, 151 [56]-[57]; *Certain Activities carried out by Nicaragua in the Border Area (Costa Rica v Nicaragua) (Provisional Measures)* [2011] ICJ Rep 6, 18 [53]-[54] ('*Certain Activities by Nicaragua - Provisional Measures*'); *Temple of Preah Vihear* [2011] ICJ Rep 537, 545 [33]; International Court of Justice, *Rules of Court* (adopted 14 April 1978) art 73(1).

⁶⁶ *Nuclear Tests Case - Australia* [1973] ICJ Rep 99, 105 [29] referring to 'the possibility that damage to Australia might be shown to be caused by the deposit on Australian territory of radio-active fall-out resulting from such tests and to be irreparable'; *Questions of Interpretation and Application of the 1971 Montreal Convention arising from the Aerial Incident at Lockerbie (Libyan Arab Jamahiriya v United Kingdom) (Provisional Measures)* [1992] ICJ Rep 3, 84 [6] (Judge Ajibola).

⁶⁷ *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v USA) (Provisional Measures)* [1984] ICJ Rep 169 ('*Military and Paramilitary Activities*'); *Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina v Serbia and Montenegro) (Provisional Measures)* [1993] ICJ Rep 3 ('*Crime of Genocide*'); see generally Eva R Rieter, *Preventing Irreparable Harm. Provisional Measures in International Human Rights Adjudication* (Intersentia, 2010) 14-36.

⁶⁸ *Arbitral Award of 31 July 1989 (Guinea-Bissau v Senegal) (Provisional Measures)* [1990] ICJ Rep 64, 81-83 (Judge Thierry).

its final decision.⁶⁹ Irreversibility of prejudice is a key determining factor in cases where the Court has ordered provisional measures (eg individuals awaiting the death penalty; nuclear testing; gross human rights violations).⁷⁰ In the *Nuclear Test Cases* urgency was in relation to the risk of ‘irreparable, and harmful, somatic and genetic effects’ from exposure to radiation, ‘the uncertain physical and genetic effects to which contamination exposes the people ... causes them acute apprehension, anxiety and concern’, and ‘there could be no possibility that the rights eroded ... could be fully restored’.⁷¹ Other examples of urgency include the *Nicaragua Case* where Nicaragua claimed ‘the lives and property of Nicaraguan citizens, the sovereignty of the State and the health and progress of the economy are all immediately at stake’;⁷² and the *Genocide Case* involving an emergency humanitarian crisis in the former Yugoslavia.

C. Prevention of Aggravation or Extension of Dispute

Using violence through advanced weapons capability to inflict serious harm on individuals, without recourse to due process or non-violent means, serves to aggravate a dispute by causing desperation of victims and/or their families to seek revenge through violent retaliation. The potential multiple harm impact from robot weapons is an aggravating feature: violation of territorial sovereignty to attack individuals; violation of fundamental human rights to life, due process, freedom from torture and freedom from crimes against humanity; and the threat to international peace and security. Robot weapons attacking humans pose an existential threat to present and future generations, adversely impacting on communities’ liberty and their ability to create secure and stable environments. Unless and until international legal rules are established to regulate or ban UAV and other robot weapons, their inherent danger can only be prevented by interim measures. Possession and deployment of robot weapons is perceived by states as a strategic political and military

⁶⁹ *Certain Activities by Nicaragua - Provisional Measures* [2011] ICJ Rep 6, 21 [64]; *Obligation to Prosecute or Extradite* [2009] ICJ Rep 139, 152-62].

⁷⁰ *LaGrand (Germany v USA) (Provisional Measures)* [1999] ICJ Rep 9; *Nuclear Tests Case - Australia* [1973] ICJ Rep 99; *Nuclear Tests Case - New Zealand* [1973] ICJ Rep 135; *Crime of Genocide* [1993] ICJ Rep 3.

⁷¹ *Nuclear Tests Case - New Zealand* [1973] ICJ Rep 135, 140-141 [28]. See also *Nuclear Tests Case (Australia v France) (Judgment)* [1974] ICJ Rep 253, 425-26 (Judge Barwick).

⁷² *Military and Paramilitary Activities* [1984] ICJ Rep 169, 182 [32].

advantage rather than a “world community interest”. Early developers of robot weapons may set legal or non-legal standards according to their own rather than wider international community interests, and may abuse their position by coercing or threatening other states to comply with their demands, undermining the principle of equality of states. Use of robot weapons constitutes a significant change in how harm is created and prevented in international society, lowering the threshold for use of force making conflict more likely.⁷³

D. Prevention of Human Rights Violations

States possessing robot weapons technology can use violence against individuals/groups within other states without recourse to due process. This potential capability to target and eliminate individuals clearly denies the right to life and due process, requiring urgent action. Robot weapons with autonomous capability in the critical functions of selection and attack represent a real and immediate risk of irreparable harm to the person in causing injury, suffering, and death. This breaches the rights to life and due process, and the principle of human dignity in life and death, guaranteed under international human rights law and many constitutions.⁷⁴ In *Legality of the Threat or Use of Nuclear Weapons*, the ICJ noted that deprivation of life concerns human rights but then moves into *lex specialis* of international humanitarian law when involving lethal ‘use of a certain weapon in warfare’. In principle, the right not to be arbitrarily deprived of life applies in the context of war, and the test of what constitutes arbitrary deprivation of life is determined by international humanitarian law. Thus, whether a particular loss of life, through use of a certain weapon in warfare, is to be considered an arbitrary deprivation of life contrary to art 6 ICCPR, can only be decided by reference to the law applicable in armed conflict and not deduced from the terms of the ICCPR itself.⁷⁵ But where robot weapons are used during peacetime (eg for domestic law

⁷³ See generally, Report of the ICRC Expert Meeting on *Autonomous weapon systems: technical, military, legal and humanitarian aspects* (9 May 2014) 9-10.

⁷⁴ See *Universal Declaration of Human Rights*, GA Res 217A (III), UN GAOR, 3rd sess, 183rd plen mtg, UN Doc A/810 (10 December 1948) art 3 (*‘UDHR’*); *International Covenant on Civil and Political Rights*, opened for signature 19 December 1966, 999 UNTS 171 (entered into force 23 March 1976) art 6(1) (*‘ICCPR’*); *UDHR* art 5 and *ICCPR* art 7; *UDHR* art 6 and *ICCPR* art 16; *UDHR* art 10 and *ICCPR* art 14(1); Paolo Carozza, ‘Human dignity in constitutional adjudication’ in Tom Ginsberg and Rosalind Dixon (eds), *Comparative Constitutional Law* (Edward Elgar, 2011).

⁷⁵ *Legality of the Threat or Use of Nuclear Weapons (Advisory Opinion)* [1996] ICJ Rep 226, 240 [25] (*‘Legality of the Threat or Use of Nuclear Weapons’*).

enforcement) human rights law will still apply. The ability of UAV to target and eliminate individuals in Pakistan clearly denies the right to life and due process, requiring urgent action.

E. Prevention of Violations of International Humanitarian Law

International humanitarian law does not contain specific rules relating to robot weapons. However, they would still have to comply with existing international humanitarian law principles of distinction, proportionality, unnecessary suffering, and feasible precautions. And here lies a real concern: the technology does not exist to make fully autonomous robot weapons compliant with international humanitarian law, especially not the possibility of replicating “human central thinking activities”. UAV and other robot weapons are not advanced enough to guarantee legitimate and accurate targeting, and crucially lack human cognitive abilities to exercise judgment in challenging situations to make proportionality decisions.⁷⁶ This can lead to collateral physical and psychological harm to local populations, and adversely impact on the liberty of communities living under constant fear of attack on life, property, security and livelihoods.⁷⁷ The sound and visual effect of the UAV attacking and killing could amount to serious psychological violence; an act of inhumane treatment, under crimes against humanity, against family members, friends and the local population, even though they were not subject to the attack and killing.⁷⁸

Does this mean robot weapons are indiscriminate and capable of causing unnecessary and superfluous injury? Moreover, similar to the prohibition of blinding laser weapons under

⁷⁶ Ulgen, above n 2. Ulgen addresses how UAV violate principles of legitimate targeting, proportionality, and unnecessary suffering.

⁷⁷ Stanford International Human Rights and Conflict Resolution Clinic and Global Justice Clinic at NYU School of Law, *Living under drones: death, injury, and trauma to civilians from us drone practices in Pakistan* (September, 2012) (Stanford Report) ch 3; Sudarsan Raghavan, ‘In Yemen, US airstrikes breed anger, and sympathy for al-Qaeda’, *The Washington Post* (online), 30 May 2012 <www.washingtonpost.com/world/middle_east/in-yemen-us-airstrikes-breed-anger-and-sympathy-for-al-qaeda/2012/05/29/gJQAUmKI0U_story_2.html>. Raghavan cites the case of a Yemeni soldier who initially fought against al-Qaeda but, after learning that his nephew was killed by a drone strike, left the army and sympathized with the group.

⁷⁸ *Prosecutor v Aleksovski (Judgment)* (International Criminal Tribunal for the Former Yugoslavia, Trial Chamber I, Case No IT-95-14/1-T, 25 June 1999) [190]. The Court stated that broadcasting on loudspeakers the noise and screams of prison inmates subjected to physical violence by prison guards, constituted ‘serious psychological abuse of the detainees’.

Protocol IV, should they therefore be prohibited before they are developed or deployed?⁷⁹ Robot weapons are potentially indiscriminate and capable of causing unnecessary suffering. The level of autonomy and extent of human control are determinative factors. In any case, the greater the level of autonomy, especially in relation to selecting and attacking human targets, the greater the ethical and legal dilemmas.

Significant numbers of civilian casualties from UAV strikes potentially make them indiscriminate because their effects cannot be limited in accordance with art 51(4)(c) API. Effects include civilian casualties and fatalities, destruction of civilian property, loss of livelihood due to fear of venturing outside, and severe psychological harm officially diagnosed as Post Traumatic Stress Disorder.⁸⁰ UAV strikes have caused civilian deaths without necessarily evidencing a concrete and direct military advantage. Since the first reported UAV strike in Yemen in 2002, persistent strikes have taken place in Pakistan's north western territories with reports of civilian casualties.⁸¹ UAV strike figures in relation to Pakistan show disparity between perceived precision targeting capability and actual harm caused: one study shows from 2004 to 2011 an estimated 280 UAV strikes resulted in between 1,717 and 2,680 estimated total deaths of which 17% -17.5% were classified as non-militant;⁸² another shows 114 UAV strikes from 2004 to 2010 resulted in between 830 and 1,210 individual deaths of which around 550 to 850 were described as militants in reliable press accounts, resulting in a civilian fatality rate of 32 per cent.⁸³ A 2014 analysis of UAV

⁷⁹ *Protocol IV on Blinding Laser Weapons*, above n 45; See UN Digital Recordings Portal, above n 36, Exchange of Views: Egypt and Costa Rica (13 December 2016).

⁸⁰ United Kingdom, *Written evidence from the All Party Parliamentary Group on Drones (APPG)*, House of Commons 772 Defence Committee, 24 March 2014, [24] (Dr Peter Schaapveld's, forensic psychologist, evidence on drones in Yemen).

⁸¹ '168 children killed in Pakistan drone strikes', SOS Children's Villages' (online), 12 August 2011 <www.soschildrensvillages.org.uk/news/archive/2011/08/168-children-killed-in-pakistan-drone-strikes>.

⁸² Ian S Livingston and Michael O'Hanlon, *Pakistan Index*, 29 December 2011, Brookings, <www.brookings.edu/~media/Files/Programs/FP/pakistan%20index/index.pdf>.

⁸³ Peter Bergen and Katherine Tiedemann, *The Year of the Drone An Analysis of U.S. Drone Strikes in Pakistan, 2004-2010*, 24 February 2010, New America Foundation, <counterterrorism.newamerica.net/sites/newamerica.net/files/policydocs/bergentiedemann2.pdf>.

strikes in Pakistan and Yemen found attempts to kill 41 targeted men resulted in an estimated 1,147 deaths.⁸⁴

States testing new robot weapons technology, exposing unsuspecting local populations to harm in the name of targeting terrorist suspects, are likely to be acting negligently. Awareness of possible risk of harm, or its mitigation through restricted strikes and location, fails to address why people should be exposed to any sort of risk of harm in the first place. Testing and development of robot weapons involves an ongoing obligation under art 36 API to appraise compliance with the principle of proportionality.⁸⁵ Article 51(5)(b) API prohibits:

an attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.

Use of robot weapons with limited or no human control with potential to kill, injure or cause any harm or damage, needs to satisfy principles of humanity and public conscience under the Martens Clause; a fundamental principle of customary international law protecting civilians and combatants in all circumstances not regulated by international law.⁸⁶ In *Legality of the Threat or Use of Nuclear Weapons*, the ICJ recognised that the Martens Clause is ‘an effective means of addressing rapid evolution of military technology’.⁸⁷

We now turn to consider the prospects of success for provisional measures to be ordered for robot weapons in the light of ICJ jurisprudence and case law from the UN Human Rights Committee (‘HRC’) and the European Court of Human Rights (‘ECtHR’).

⁸⁴ Spencer Ackerman, ‘41 men targeted but 1,147 people killed: US drone strikes – the facts on the ground’, *The Guardian* (online), 24 November 2014 <www.theguardian.com/us-news/2014/nov/24/-sp-us-drone-strikes-kill-1147>.

⁸⁵ See Ulgen, above n 19.

⁸⁶ *Additional Protocol I to the Geneva Conventions of 12 August 1949*, opened for signature 8 June 1977, 1125 UNTS 3 (entered into force 7 December 1978), art 1(2); *Hague Convention IV Respecting the Laws and Customs of War on Land*, opened for signature 18 October 1907, 187 CTS 227 (entered into force 26 January 1910), preamble; *Hague Convention II Respecting the Laws and Customs of War on Land* opened for signature 29 July 1899, 32 Stat 1803 (entered into force 4 September 1900), preamble.

⁸⁷ *Legality of the Threat or Use of Nuclear Weapons* [1996] ICJ Rep 226, 257 [78].

V. INTERNATIONAL JURISPRUDENCE ON NEW WEAPONS TECHNOLOGY

In the *Nuclear Test Cases*, the ICJ addressed the harmful impact of new weapons technology on an urgent basis, and was the first case to eventually order provisional measures halting atmospheric nuclear tests. It is instructive to consider whether the inter-state applications were based on a “world community interest”, and how the Court dealt with these. It is also worth considering how individual complaints procedures before the HRC and the ECtHR dealt with requests by individuals and groups to halt nuclear tests and other nuclear weapons-related matters. Since the orders in the *Nuclear Test Cases* several requests have been made by individuals and groups for provisional measures to halt nuclear tests and other nuclear weapons-related matters. HRC jurisprudence reveals unease between recognition of a “world community interest”, and unwillingness to engage with complaints deemed politically sensitive, even if these involve potential human rights violations.

A. *The Nuclear Test Cases*

Despite France’s objection to the ICJ’s jurisdiction, on 22 June 1973 the ICJ issued two provisional measures orders requiring the Governments of Australia, New Zealand, and France to each:

ensure that no action of any kind is taken which might aggravate or extend the dispute submitted to the Court or prejudice the rights of the other Party in respect of the carrying out of whatever decision the Court may render in the case; and, in particular, the French Government should avoid nuclear tests causing the deposit of radio-active fall-out

on Australian territory, and on the territory of New Zealand, the Cook Islands, Niue or the Tokelau Islands.⁸⁸ In the end, the Court focused specifically on irreparable prejudice to Australia’s and New Zealand’s right to territorial sovereignty, which includes no radioactive fall-out entering their territories, airspace, or territorial waters.⁸⁹

Some criticism may be levelled at the order’s insufficiently prohibitory language: ‘avoiding’ rather stopping nuclear tests, and specifically identifying nuclear tests that cause

⁸⁸ *Nuclear Tests Case - Australia* [1973] ICJ Rep 99, 105-106 [35]; *Nuclear Tests Case - New Zealand* [1973] ICJ Rep 135, 142-143 [36].

⁸⁹ *Nuclear Tests Case - Australia* [1973] ICJ Rep 99, 105 [30]; *Nuclear Tests Case - New Zealand* [1973] ICJ Rep 135, 141 [31].

‘the deposit of radio-active fall-out’ leaving it open to continue tests that do not cause radioactive fall-out. Yet the orders also recognise the “world community interest” in preventing aggravation or extension of inter-state disputes; a primary function of provisional measures. The Court chose not to grant an order based on New Zealand’s wider international community claims because ‘the circumstances of the case do not appear to require the indication of interim measures of protection in respect of other rights claimed by New Zealand’.⁹⁰ This does not exclude the possibility of future “world community interest” claims and leaves open to consideration what types of ‘circumstances’ may warrant interim measures. Would there need to be a certain level of worldwide state and public condemnation of the new weapons technology? Emerging *opinio juris* of preventative prohibition states evinces a level of condemnation of robot weapons and, at the very least, the majority of states recognise ethical, legal, and humanitarian implications.

In *Legality of the Threat or Use of Nuclear Weapons*, the Court acknowledged increasing international concern and the undesirability of nuclear weapons. International treaties prohibiting acquisition, manufacture, possession, deployment and testing of nuclear weapons, although not constituting a general prohibition on nuclear weapons, were ‘foreshadowing a future general prohibition.’⁹¹ The majority opined that the threat or use of nuclear weapons would ‘generally be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law’. Ultimately, however, it could not definitively conclude whether nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defence involving a state’s survival.⁹² Strong dissents from Judges Shahabuddeen, Weeramantry and Kormoa relied on a “world community interest” approach to deem nuclear weapons illegal under any circumstances. According to Shahabudden, uniquely destructive qualities of nuclear weapons (eg threatening survival of human species and annihilation of mankind; after effects remaining for future generations) override any concern not to prohibit them in order to protect states’ right of self-defence.⁹³ Weeramantry detailed the harmful effects of nuclear weapons and their

⁹⁰ *Nuclear Tests Case - New Zealand* [1973] ICJ Rep 135, 141 [32].

⁹¹ *Legality of the Threat or Use of Nuclear Weapons* [1996] ICJ Rep 226, 253 [62].

⁹² *Ibid* 265-267 [105].

⁹³ *Ibid* 377, 380, 383, 387, 393-397 (Judge Shahabuddeen).

incompatibility with international law.⁹⁴ Comprehensive and universal limitations on nuclear weapons imposed by treaty make them prohibited, and they would always be contrary to international humanitarian law. Threat or use of nuclear weapons in any circumstance is prohibited under international law.⁹⁵ Koroma opined that the threat or use of nuclear weapons is illegal under any circumstances, including self-defence, and believed there was ample evidence for the Court to reach a decisive conclusion on this point.⁹⁶

The Court's Advisory Opinion recognises a "world community interest" in terms of the harmful effects of nuclear weapons on humanity, generally favouring a prohibition. To this extent, there is a degree of international condemnation. But the Court's focus on the inter-state dimension hampers its ability to take sufficient account of overriding interests of humanity leading to indecision on prohibition and an exception for states. This is a significant shortcoming for the primary judicial organ of the UN responsible for maintaining international peace and security. The dissents support a "world community interest" approach which in recent years has been pursued more clearly by the Court.⁹⁷

Unresolved issues at the inter-state level shifted litigation of the "world community interest" approach to the UN Human Rights Committee ('HRC') and the European Court of Human Rights ('ECtHR'), where individuals and groups claimed human rights violations.

B. HRC Cases with Potential "World Community Interest"

HRC General Comments of the 1980s made some headway on the status of nuclear weapons. *General Comment No.6* recognises that art 6 ICCPR (right to life) 'should not be interpreted narrowly', and states have a 'supreme duty' to prevent wars, acts of genocide and other acts of mass violence causing arbitrary loss of life. Averting war, 'especially thermonuclear war', and trying to strengthen international peace and security constitutes 'the

⁹⁴ Ibid 450-475, 553 (Judge Weeramantry).

⁹⁵ Ibid 433, 435, 553 (Judge Weeramantry).

⁹⁶ Ibid 556 (Judge Koroma).

⁹⁷ See, eg, *Ahmadou Sadio Diallo* [2010] ICJ Rep 639, (Judge Trindade); *Certain Activities by Nicaragua - Judgment* [2015] ICJ Rep 665, 1 (Judge Trindade).

most important condition and guarantee for the safeguarding of the right to life.’⁹⁸ *General Comment No.14* goes further in recognising a “world community interest”. It identifies threats to life from use of new weapons technology, and the need to stop nuclear weapons development. It recognises that ‘the designing, testing, manufacture, possession and deployment of nuclear weapons are among the greatest threats to the right to life which confront mankind today’, and this threat is compounded by ‘the danger that the actual use of such weapons may be brought about, not only in the event of war, but even through human or mechanical error or failure.’ It requires ‘the production, testing, possession, deployment and use of nuclear weapons should be prohibited and recognized as crimes against humanity’, and ‘in the interest of mankind, calls upon all States, whether Parties to the Covenant or not, to take urgent steps, unilaterally and by agreement, to rid the world of this menace.’⁹⁹

Yet when it comes to application of art 6 and *General Comments No.6* and *No.14*, the HRC appears to retreat. In *Aalbersberg and others v The Netherlands*, 2,084 Dutch citizens alleged violation of art 6 due to the Dutch government’s official position on use of nuclear weapons and its failure to provide ‘any active measures of protection against the actual use of nuclear weapons’.¹⁰⁰ The complaint was deemed inadmissible because the petitioners could not demonstrate ‘an existing or imminent violation of their right to life’. In *E.W. et. al. v The Netherlands*, 6,588 Dutch citizens alleged violation of art 6 due to the Dutch government agreeing to deploy cruise missiles fitted with nuclear warheads on Dutch territory. While repeating its earlier position in *General Comment No.14* (that nuclear weapons are ‘among the greatest threats to the right to life’), the HRC noted the complaints procedure ‘was not designed for conducting public debate over matters of public policy, such as support for disarmament and issues concerning nuclear and other weapons of mass destruction.’¹⁰¹ The complaint was deemed inadmissible because ‘preparations for deployment of cruise missiles between 1 June 1984 and 8 December 1987 and the continuing deployment of other nuclear

⁹⁸ *Human Rights Committee, General Comment No 6: Article 6 (Right to life)*, 16th sess, (30 April 1982) [1]-[2].

⁹⁹ *Human Rights Committee, General Comment No 14: Article 6 (Nuclear weapons and the right to life)*, 23rd sess, UN Doc HRI/GEN/1/Rev.9 (Vol. I) (9 November 1984) [4], [6]-[7].

¹⁰⁰ *Human Rights Committee, Views: Communication No 1440/2005*, UN Doc CCPR/C/87/D/1440/2005 (12 July 2006) (*Aalbersberg and others v The Netherlands*).

¹⁰¹ *Human Rights Committee, Views: Communication No 429/1990*, UN Doc CCPR/C/47/D/429/1990 (8 April 1993) [6.2] (*E W et al v The Netherlands*).

weapons in the Netherlands did not, at the relevant period of time, place the authors in the position to claim to be victims whose right to life was then violated or under imminent prospect of violation.’¹⁰²

In *Bordes and Temeharo v France*, French citizens were refused provisional measures to stop French underground nuclear tests in French Polynesia, which they alleged violated art 6, and their right not to be subjected to interference to their privacy under art 17.¹⁰³ They argued that radioactive material from underground nuclear tests escaping into the atmosphere and environment constituted an unlawful interference with the right to privacy under art 17, because it posed a real risk to family life in terms of death from cancer, leukaemia, or ciguatera.¹⁰⁴ The HRC did not comment on this aspect of the case and *General Comment No. 16* does not refer to radioactive material release as constituting a form of unlawful interference in family life. However, the Committee’s interpretation of ‘arbitrary interference’ requires that any lawful interference ‘should be in accordance with the provisions, aims and objectives of the Covenant and should be, in any event, reasonable in the particular circumstances.’¹⁰⁵ Thus, any interference caused by testing nuclear weapons must be proportionate and reasonable if it is not to breach art 17. Although the Committee deemed the overall claim inadmissible because the petitioners did not satisfy the victim requirement, it reasserted its position under *General Comment No. 14*.¹⁰⁶

These cases suggest a disconnect between interpretation and application of the law. On the one hand, the Committee expounds a “world community interest” on the undesirability and harmful effects of nuclear weapons. On the other, the strict evidentiary standard of direct and immediate irreparable harm excludes many claims without consideration of long-term harmful effects and ‘unendurable situations’.

¹⁰² Ibid [6.4].

¹⁰³ Human Rights Committee, *Views: Communication No 645/1995*, UN Doc CCPR/C/57/D/645/1995 (22 July 1996) (*Bordes and Temeharo v France*).

¹⁰⁴ Ibid [4.8].

¹⁰⁵ Human Rights Committee, *General Comment No 16: Article 17 (The right to respect of privacy, family, home and correspondence, and protection of honour and reputation)*, 32nd sess, UN Doc HRI/GEN/1/Rev.9 (Vol. I) (8 April 1988) [4].

¹⁰⁶ *Bordes and Temeharo v France*, above n 103, [5.9].

C. ECtHR Cases on Nuclear Weapons

Prior to the HRC's decision in *Bordes*, the same petitioners filed a complaint with the European Commission on Human Rights alleging breaches of ECHR arts 2 (right to life), 3 (prohibition of torture, inhuman or degrading treatment), 8 (right to privacy), and 1 of Protocol 1 (peaceful enjoyment of possessions). The Commission noted that 'merely invoking risks inherent in the use of nuclear power ... is insufficient to enable the applicants to claim to be victims of a violation of the Convention, as many human activities generate risks.'¹⁰⁷ Petitioners must show that:

owing to the authorities' failure to take adequate precautions, the degree of probability that damage will occur is such that it may be deemed to be a violation, on condition that the consequences of the act complained of are not too remote.¹⁰⁸

The complaint was inadmissible because they 'failed to substantiate their claim that the French authorities failed to take all necessary measures to prevent an accident which could have occurred at any time.'¹⁰⁹ By focusing on the causal link and remoteness of state action and individual harm, the Commission implicitly rejected a "world community interest" basis for dealing with such complaints.

In *Athanassoglou and others v Switzerland*, the ECtHR denied provisional measures to prevent a nuclear power plant operating pending judgment on ECHR violations. The petitioners, 12 Swiss nationals living near the plant, alleged violation of art 6 (right to fair trial) because the government granted an extension of the operating licence and its decision could not be challenged by judicial review.¹¹⁰ By 12 votes to five, the majority judges held that art 6 was not applicable because Swiss law allowed public objections during the licensing process but did not confer any further rights once a licence was granted. The decision to extend the licence was not determinative of rights to life, physical integrity, and property. Further, 'how best to regulate the use of nuclear power is a policy decision for each Contracting State to take according to its democratic processes. Article 6 § 1 cannot be read

¹⁰⁷ *Tauira et al v France* (1995) 83-B Eur Comm HR 112, 131 ('*Tauira et al*').

¹⁰⁸ *Ibid* 132.

¹⁰⁹ *Ibid*.

¹¹⁰ *Athanassoglou and others v Switzerland* [2000] IV Eur Court HR 173 ('*Athanassoglou and others*').

as dictating any one scheme rather than another.¹¹¹ But the dissenting judges countered that these sorts of decisions should be subject to judicial review because of ‘the dangers presented to the environment and the population by such installations.’¹¹²

Although provisional measures were not ordered by the HRC or ECtHR, these cases indicate a strict approach to imminence of irreparable harm; one not well-suited to capturing the long-term harm posed by nuclear radiation. Long-term harm from exposure to nuclear radiation strikes at the heart of human survival and ‘conceptually would be situated more towards the common core than towards the outer limits of the concept [of irreparable harm].’¹¹³ Such problems may not arise in cases involving the use of robot weapons where there is immediacy of lethal harm and destructive capability.

VI. CONCLUSION

Robot weapons with varying degrees of autonomy are a “world community interest” because they have the potential to aggravate or extend disputes, and violate human rights and international humanitarian law. States possessing such weapons technology can use violence against individuals/groups within other states without due process. Targeted individuals/groups are killed, and local populations may suffer collateral physical and psychological harm. This constitutes ‘irreparable injury’; a traditional circumstance for provisional measures. In addition, the use of robot weapons has ongoing harmful effects in forcing people and states to live in a constant state of fear and anxiety (eg not knowing when, where or who a UAV will strike and kill), with potential for territorial sovereignty to be violated at any time. This constitutes an ‘unendurable situation’, which comes under the primary function of provisional measures to prevent aggravation or extension of disputes.

The *Nuclear Test Cases* set a precedent for the ICJ to consider urgent cases relating to use of new weapons technology as a “world community interest” warranting indication of provisional measures. The potential harmful effects from atmospheric nuclear tests posed a risk of irreparable prejudice to the rights of Australia and New Zealand, including aggravation or extension of the dispute. Although the Court chose not to grant an order based

¹¹¹ Ibid [54].

¹¹² Ibid 204.

¹¹³ Rieter, above n 67, 540.

on New Zealand's "world community interest" claim, there is a possibility for such claims to be made in the future especially with a Court that is more cognisant of global interest issues impacting on humanity. The Court's Advisory Opinion, *Legality of the Threat or Use of Nuclear Weapons*, recognised a "world community interest" in terms of the harmful effects of nuclear weapons on humanity, yet shied away for a decisive determination of illegality. Dissenting opinions were willing to act in the interest of humanity and go behind the inter-state dimension to call for a clear determination that nuclear weapons are illegal. In recent years, the Court has also focused more on the interest of humanity which makes it more receptive to "world community interest" claims.

Provisional measures to halt nuclear tests and other nuclear weapons-related matters under the HRC and ECtHR individual complaints procedures have proved more difficult. These bodies are reluctant to recognise complaints with a "world community interest" aspect, even those involving potential human rights violations. A strict approach to imminence of irreparable harm is ill-suited to capturing long-term harmful effects from nuclear radiation, and excludes consideration of 'unendurable situations'. Still, such problems may not arise in cases involving the use of robot weapons where there is immediacy of lethal harm and destructive capability.

All states should have standing to bring a claim before the ICJ on the basis that the continued use of robot weapons constitutes an 'unendurable situation', although it is more likely to be made from a state directly affected by 'irreparable injury'. Pakistan, among several states subjected to UAV strikes, is the only one with a reasonable prospect of establishing prima facie jurisdiction for the ICJ to exercise incidental jurisdiction and indicate provisional measures. Pakistan would have to institute proceedings against the US alleging UAV strikes violate customary international law and treaty law on territorial sovereignty, prohibition on the use of force, right to life, and right to due process. It would then have to simultaneously request a provisional measures order obliging the US to halt any further UAV strikes until such time that the Court delivers final judgment on their legality. This would resolve the inter-state dispute and, in the interest of humanity, place a type of robot weapon under closer judicial scrutiny.