

COUNTERING LETHAL AUTONOMOUS WEAPON SYSTEMS:
A FRAME ANALYSIS OF THE CAMPAIGN TO STOP KILLER ROBOTS

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF SOCIAL SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

ALİ MERT SAMEN

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF SCIENCE
IN
THE DEPARTMENT OF INTERNATIONAL RELATIONS

MARCH 2024

Approval of the thesis:

**COUNTERING LETHAL AUTONOMOUS WEAPON SYSTEMS:
A FRAME ANALYSIS OF THE CAMPAIGN TO STOP KILLER ROBOTS**

submitted by **ALİ MERT SAMEN** in partial fulfilment of the requirements for the degree of **Master of Science in International Relations, the Graduate School of Social Sciences of Middle East Technical University** by,

Prof. Dr. Sadettin KİRAZCI
Dean
Graduate School of Social Sciences

Prof. Dr. Özgehan ŞENYUVA
Head of Department
Department of International Relations

Assoc. Prof. Dr. Şerif Onur BAHÇECİK
Supervisor
Department of International Relations

Examining Committee Members:

Assoc. Prof. Dr. Zerrin TORUN (Head of the Examining Committee)
Middle East Technical University
Department of International Relations

Assoc. Prof. Dr. Şerif Onur BAHÇECİK (Supervisor)
Middle East Technical University
Department of International Relations

Assoc. Prof. Dr. Melek SARAL
Social Sciences University of Ankara
Department of General Public Law

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Last Name: Ali Mert Samen

Signature:

ABSTRACT

COUNTERING LETHAL AUTONOMOUS WEAPON SYSTEMS: A FRAME ANALYSIS OF THE CAMPAIGN TO STOP KILLER ROBOTS

SAMEN, Ali Mert

M.A., The Department of International Relations

Supervisor: Assoc. Prof. Dr. Şerif Onur Bahçecik

March 2024, 144 pages

This thesis explores the collective action frames of the Campaign to Stop Killer Robots (CSKR) that shapes the discourse and meaning around Lethal Autonomous Weapons Systems (LAWS). It qualitatively analyses the evolution of CSKR's framing strategies across three consecutive periods: Formative, Active, and Adaptive. The study delves into CSKR's use of diagnostic, prognostic, and motivational framing tasks, demonstrating how activists navigated the challenges posed by their transnational venue CCW and responded to global events by modifying and substantially shifting their frames. The thesis is based on a qualitative content analysis of campaign material which was thematically coded as per a specific frame analytical model. The results identify and unpack the content of various framings including legality, human dignity, international stability and preemptive ban frames, as well as a set of framing components and vocabularies of motive. It reveals CSKR's shift from IHL-oriented legality frames to digital dehumanisation and intersectionality in response to various events and factors. The findings contribute to social movement and advocacy network studies, illustrating how transnational groups shape discourse, cope with structural constraints, and align with broader social trends in a bid to influence power structures.

Keywords: Framing Perspective on Social Movements, Campaign to Stop Killer Robots, Lethal Autonomous Weapon Systems, Transnational Advocacy Network, Artificial Intelligence

ÖZ

ÖLÜMCÜL OTONOM SİLAHLARA KARŞI KATİL ROBOTLARI DURDURMA KAMPANYASININ ÇERÇEVE ANALİZİ

SAMEN, Ali Mert

Yüksek Lisans, Uluslararası İlişkiler Bölümü

Tez Yöneticisi: Doç. Dr. Şerif Onur Bahçecik

Mart 2024, 144 sayfa

Bu tez, Ölümcül Otonom Silah Sistemleri (ÖOSS) üzerine gelişen söylemin şekillenmesine ve kavrama atfedilen anlamların oluşmasına etki eden Katil Robotları Durdurma Kampanyası'nın kolektif eylem çerçevelerinin bir incelemesidir. Kampanyanın çerçeveleme stratejilerinin gelişimi, birbirini izleyen üç döneme ayrılarak niteliksel olarak analiz ve takip edilmiştir. Kampanyanın tanısallık, prognostik ve motivasyonel çerçeveleme işlerini nasıl yerine getirdiği derinlemesine incelenmiş, konunun Birleşmiş Milletler nezdinde tartışıldığı ulus-aşırı mecra olan Konvansiyonel Silahlar Sözleşmesi'nde aktivistlerin karşılaştıkları güçlüklerle nasıl başa çıktıkları ve çerçevelerini önemli ölçüde değiştirmek suretiyle küresel gelişmelere nasıl karşılık verdiklerine ışık tutulmuştur. Tez, belirli bir çerçeve analizi modeline göre tematik olarak kodlanan kampanya materyallerinin nitel içerik analizine dayanmaktadır. Sonuçlar; yasallık, insan onuru, uluslararası istikrar ve önleyici yasaklama çerçeveleri dahil olmak üzere çeşitli kolektif eylem çerçevelerinin içeriğini ve ayrıca bir dizi çerçeve unsuru ile teşvik sözcüklerini ortaya çıkarmakta ve tartışmaktadır. Çeşitli gelişme ve faktörlere cevaben kampanyanın Uluslararası İnsancıl Hukuk odaklı öncül yasal çerçevelerinden, 'dijital insan-dışlaşım' ve kesişimsellik çerçevelerine geçişine

etki eden dinamikler gösterilmiştir. Bulgular, ulus aşırı grupların anlam inşasına nasıl dahil olduğunu, yapısal kısıtlarla nasıl başa çıktığını ve iktidar yapılarına nüfuz etmek amacıyla daha geniş çaplı sosyal trendlerle nasıl uyumlandıklarını göstererek toplumsal hareket ve ulus aşırı savunuculuk ağı çalışmalarına katkıda bulunuyor.

Anahtar Kelimeler: Sosyal Hareketler Üzerine Çerçeveleme Perspektifi, Katil Robotları Durdurma Kampanyası, Ölümcül Otonom Silah Sistemleri, Ulusaşırı Savunuculuk Ağları, Yapay Zeka

To my parents, Özgür and Levent, for their sacrifice and love

ACKNOWLEDGMENTS

I would like to especially thank my supervisor, Şerif Onur Bahçecik, for his invaluable wisdom and unwavering patience with me; without his support and encouragement, I do not presume any progress could have been made. His contribution to my intellectual experience goes beyond academic supervision, as he has also performed as an exemplary lecturer whose insights and guidance significantly shaped my academic perspective.

I would also like to thank the members of my thesis committee, Zerrin Torun and Melek Saral, for their insightful feedback and suggestions that profoundly helped bring this thesis to its completion.

My heartfelt appreciation goes to my beloved mama, who has been a constant source of love and strength from the onset. I would like to cherish the memory of my late papa, whose final wish in our last conversation was the completion of my master's studies. Their combined legacy fundamentally inspires my outlook on life in the face of any challenge and any endeavour.

TABLE OF CONTENTS

PLAGIARISM	iii
ABSTRACT.....	iv
ÖZ	v
DEDICATION	vii
ACKNOWLEDGMENTS	viii
TABLE OF CONTENTS	ix
LIST OF FIGURES	xi
LIST OF ABBREVIATIONS	xii
1. INTRODUCTION	1
1.1. Thesis Objectives and Relevance.....	5
1.2. Thesis Questions	6
1.3. Thesis Structure.....	6
2. THEORETICAL BACKGROUND AND LITERATURE REVIEW	8
2.1. Lethal Autonomous Weapon Systems	8
2.2. Campaign to Stop Killer Robots	19
2.3. Framing Perspective on Social Movements	30
3. METHODOLOGY	36
3.1. Frame Analysis.....	36
3.2. Data Collection.....	38
3.3. Case Study.....	39
4. FINDINGS AND DISCUSSION.....	41
4.1. Formative Framing Period (2013-2016)	42
4.1.1. Diagnostic Frames	42
4.1.2. Prognostic Frames	56
4.1.3. Motivational Frames.....	60
4.1.4. Frame Alignment Processes and Other Strategies.....	63
4.2. Active Framing Period (2017-2019)	65
4.2.1. Diagnostic Frames	65
4.2.2. Prognostic Frames	73
4.2.3. Motivational Frames.....	77
4.2.4. Frame Alignment Processes and Other Strategies.....	81
4.3. Adaptive Framing Period (2020-2023)	83
4.3.1. Diagnostic Frames	85
4.3.2. Prognostic Frames	94

4.3.3. Motivational Frames.....	96
4.3.4. Frame Alignment Processes and Other Strategies.....	99
5. CONCLUSION	102
REFERENCES.....	107
A. TURKISH SUMMARY / TÜRKÇE ÖZET.....	132
B. THESIS PERMISSION FORM / TEZ İZİN FORMU	144

LIST OF FIGURES

Figure 1: Frame-Analytical Model	38
Figure 2: Breakdown of the dataset per target audience	39
Figure 3 Breakdown of Core Framing Tasks per Framing Period.....	41
Figure 4: Diagnostic Frames per Framing Period	42
Figure 5: Prognostic Frames Per Framing Period	57
Figure 6: Motivational Frames per Framing Period.....	61

LIST OF ABBREVIATIONS

ADR	Alternative Dispute Resolution
AI	Artificial Intelligence
CCW	Convention on Certain Conventional Weapons
CSKR	Campaign to Stop Killer Robots
DOD	Department of Defense
GGE	Group of Governmental Experts
HRW	Human Rights Watch
ICRAC	International Committee for Robot Arms Control
ICRC	International Committee of the Red Cross
IHL	International Humanitarian Law
IHRL	International Human Rights Law
LAWS	Lethal Autonomous Weapon Systems
MHC	Meaningful Human Control
UNGA	United Nations General Assembly
US	United States
WILPF	Women's International League for Peace and Freedom

CHAPTER 1

INTRODUCTION

In November 2023, the First Committee of the United Nations General Assembly (UNGA), which is in charge of ‘Disarmament and International Security,’ accepted a draft resolution on lethal autonomous weapon systems (LAWS), emphasising “the urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems.” (First Committee, 2023) The draft resolution, passed by 164 states with five voting against and eight abstaining, was the culmination of discussions among state authorities and experts, preceded by a decade-long campaigning for a pre-emptive ban led by the transnational coalition led by the Campaign to Stop Killer Robot (CSKR). This may constitute the first stage in spawning a new international regulation regime governing LAWS or the military use of artificial intelligence (AI) technology at large, if not result in the imposition of a full-fledged ban as initially advocated.

LAWS is a relatively recent coinage as a more formal and neutral epithet for what has been widely dubbed ‘killer robots’ in the public debate, which has appeared in the official discussions under the auspices of the relevant UN bodies, including the UN Convention on Certain Weapons (CCW), which formed a Governmental Group of Experts (GGE) in 2016 and has since extended its term, with an aim discuss issues “related to emerging technologies in the area of lethal autonomous weapons systems” (CCW, 2016). International community and experts from various fields are yet to reach a standard definition of what constitutes LAWS; however, a widely agreed characteristic is that after its activation, the LAWS should enjoy some degree of autonomy from human control, particularly in critical processes such as target selection and engagement, and perform combat tasks by relying on its AI-infused systems capable of taking decisions on its own (Taddeo & Blanchard, 2022). At present, there are various iterations of weapon systems which enjoy varying degrees

of autonomy from direct human control, including loitering munitions such as Harpy (Israel), Kargu-2 (Turkey); air defence systems such as Iron Dome (Israel), Phalanx (the USA); ground vehicles such as Uran-9 (Russia); and sentry guns such as SGR-A1 (South Korea) (Bode & Huelss, 2022, p. 18); all of which can process information about their targets via sensors and can engage without depending on further human input.

As an attribution of LAWS, autonomy is often interpreted in terms of its degree, complexity, and scope within the debates taking place in the international community and academia. The degree of autonomy refers to the distribution of control between human and weapon systems, whereby weapon systems are classified as fully or semi-autonomous, human-supervised or “human-in/on/out of-the-loop”. Concerning the complexity or sophistication level of the systems they operate on, another distinction is made between automatic, automated, and autonomous weapons, respectively involving increasing levels of sophistication in their systems. Autonomy is otherwise evaluated as a qualitatively relevant issue solely on the basis of its functional aspects, in that it may not be problematic when autonomy is used for, i.e. navigation, whereas it gains problematic status when it functions to select and engage with human targets (Williams & Scharre, 2015). Another critical factor which complicates these distinctions is that, infused with machine learning, LAWS not only possesses but also creates and improves autonomy (Boulain & Verbruggen, 2017). Weapon systems which are able to probe the environment and accordingly build their autonomous response imply that LAWS itself may become a determinant in setting the degree, complexity, and scope while executing their autonomy. Consequently, the discussions and scholarly debate have been slow to produce congruent meanings on autonomy in relation to weapon systems thus far, mainly due to these complexities, as well as differences between LAWS and conventional weapons, whose regulations were characterised by the rationale that “arms control always requires a precise categorisation of the *object* in question, such as a landmine, before any regulative action can be taken” (Sauer, 2020, p.238).

With or without shared definitions of the phenomena, LAWS are arriving fast in the social and political landscape with anticipated legal, ethical, and security implications.

Primarily from a combat perspective, some argue that LAWS will significantly strain International Humanitarian Law (IHL). While one of IHL's primary tenets is to hold the legal persons accountable for their actions in combat, LAWS taking autonomous decisions, either intentionally or by mistake, in engaging in targets, be it civilian or combatant, would blur such legal personhood, thereby causing what has been widely called a "responsibility gap". As such, there is an ongoing debate over whether, in its present state, the IHL suffices to protect civilians in combat against the challenges posed by LAWS, both in the expert and academic circles and policy-makers in international discussions. A widely accepted approach to address this issue revolves around the concept of meaningful human control (MHC), which is proposed to be maintained over the combat actions committed by LAWS; however, this notion as well is contentious and not thoroughly substantiated. When the ethics of LAWS is concerned, another debate revolves around the problematisation of giving machines the discretionary capacity to take human life, drawing on the principle of humanity in the IHL and the infamous Martens Clause. Yet another debate focuses on the possible impact of the anticipated proliferation of LAWS, hinting at its prospects of causing a new arms race and lowering the threshold of war, significantly changing the nature of military engagements, thereby hampering international security and stability.

Campaign to Stop Killer Robots (CSKR) has been at the epicentre of the emerging transnational advocacy network against LAWS. It has been calling for a pre-emptive ban by drawing on various legal and ethical justifications. Prior to the formation of CSKR, the issue of autonomous weapons remained mainly within the confines of an epistemic community of experts working in robotics and AI, whose concerns over autonomous robotics had been initially dismissed as "science fiction" by some officers at the ICRC and HRW, major players and agenda-setters in the transnational disarmament advocacy (Carpenter, 2014, p. 103). After a period of contention over the salience of autonomous robotics as a threat and a frame dispute between various actors on diagnosis and prognosis, CSKR was finally launched in April 2013, adding a new chapter to the global disarmament agenda. As of 2023, the Campaign had grown to be a worldwide alliance involving over 250 non-governmental organisations (NGOs) operating at national, regional, and international levels. Among the 21 NGOs on its

steering committee are some familiar nodes of transnational advocacy networks in disarmament movements, such as HRW, Pax, and Amnesty International.

While many transnational advocacy groups, such as international human rights, environmental, and anti-nuclear movements, arguably had a solid and well-established domestic base before their expansion to transnational venues, CSKR diverged from this usual track due to its peculiar issue area. A common feature of those earlier movements is that their issue areas implicated measurable harms on humanity that were/are more or less experienced in actuality (Hiroshima and Nagasaki, nuclear catastrophe in Chernobyl, global warming, and deforestation) alongside the anticipation of further threats (atomic war, environmental extinction). Even within the earlier disarmament movements in particular, the common feature of their success in achieving to establish an international regulatory framework was that they were almost entirely directed at already existing weapons such as landmines, cluster munitions, and incendiary weapons, the impact of which has been seen in warfare and caused proven human suffering. Since LAWS is instead a developing technology, implications of which have not yet been fully seen, what CSKR aimed to achieve instead is a 'pre-emptive' ban, on a human-machine interaction system rather than a weapon, sanctioned via an international legal instrument against an array of 'possible' threats, which depends thoroughly on a mutual understanding and agreement between states and policymakers over such hazardous potentialities.

In parallel with this rationale, CSKR was formed at the intersection between the epistemic community that heralded the dangerous prospects of LAWS and the established transnational advocacy networks, which developed prior expertise and a habit of partnership from preceding disarmament campaigns (Breen & Eilstrup-Sangiovanni, 2023). One important implication of this is that the campaign's immediate audience and target of mobilisation had to be experts, policymakers, and state authorities rather than the general public, at least at the campaign's onset. This factor seems to influence the complexities pertaining to the framing tasks and strategies applied by the campaign whenever it sought to diffuse its messages across different audiences and rally support.

1.1. Thesis Objectives and Relevance

To put it simply, the primary objective of this thesis is to systematically analyse the "meaning work" carried out by the CSKR through applying the framing perspective on social movements developed by Benford & Snow (2000), which has gathered significant traction in social movement and collective action studies since it was introduced in the late 1980s. The research accordingly reflects a social constructivist understanding of the relations among the agents, meaning, and phenomena, which underpins their framing perspective. It utilises a descriptive lens to demonstrate how the CSKR has delivered a set of collective action frames that ascribe meanings to issues and events to identify problems, propose solutions, and mobilise support in its policy domain within the time frame it has been in operation.

This investigation will illustrate how the CSKR aims to shape the specific narratives, public opinion, and broader discourse underpinning the constitution of LAWS by using frames. I will attempt to construct a frame-analytical model which incorporates different conceptual components selected from various framing approaches and studies to reveal the content of the movement-specific collective action frames utilised by the CSKR. I will qualitatively analyse the campaign content made available on the campaign website, encompassing its official statements, press releases, thematic articles, and campaign tools. By doing so, I hope to reveal how the CSKR undertook diagnostic, prognostic, and motivational framing tasks to shape its collective action frames and thus participate in the 'politics of signification' (Hall, 1982, p. 56) in its transnational advocacy venue. Whenever applicable, I will benefit from the insights from various collective action scholars to elaborate on the findings of my analysis.

A subsequent aim of the thesis is to monitor the trajectory of the frames employed by the CSKR to determine whether there has been a shift in its frames over time. I will again turn to Benford and Snow's corpus on collective action frames to determine whether such a frame shift may be accounted for by the frame alignment strategies such as 'frame amplification, bridging, extension, and transformation' (Snow et al., 1986). I believe an analysis in this respect would yield valuable insights into the way in which the CSKR responds to the evolving social and political dynamics and shifts

its frames in line with its goals and strategies in an interactive and processual manner, as envisaged by the authors. This may, in turn, shed light on how advocacy networks contribute to constructing meanings while new international norms are in the making. The end goal of this thesis is to contribute to the body of literature on framing by focusing on how the CSKR frames LAWS when it participates in the formation of international norms concerning the military use of AI technologies and engages in the meaning acts to push its agenda in its transnational venue by identifying problems, presenting solutions and garnering support. A great deal of the empirical framing literature focuses on social movement organisations in domestic and national contexts; however, I agree Keck & Sikkink (1999) that translating the insights of those studies to the international by studying transnational advocacy campaigns from a framing perspective may lead to a more comprehensive understanding of both the collective action and transnational advocacy areas.

1.2. Thesis Questions

In line with these research objectives, the central thesis question I intend to answer in this study can be formulated as follows:

How does the Campaign to Stop Killer Robots frame the Lethal Autonomous Weapon Systems from the diagnostic, prognostic and motivational perspectives?

Complementary research questions that will inform the answer to the main question are:

- 1) *How did the frames of the Campaign evolve in the face of changing political and social contexts?*
- 2) *What are the movement dynamics behind the shifts in the discursive frames of the Campaign?*

1.3. Thesis Structure

The first chapter of the thesis introduces the concepts and themes discussed in this study. In the second chapter, I will delve into the background of the scholarly debate around LAWS and CSKR to elaborate further on how LAWS are framed from

different perspectives and highlight the main issues of contention. This includes a literature review of autonomous weapons and advocacy efforts against them, which will guide my discussions on frames in the empirical part of the thesis. Additionally, I elaborated on the framing perspective on social movements with a view to explaining the conceptualizations from various scholars from framing scholarship, which specifically informed my research and analysis of the discursive material of the campaign. In the third chapter, I will explain my research methodology and discuss the frame-analytical model I will apply in my analysis in the empirical part. In the fourth chapter, I will identify and describe the collective action frames used by CSKR by analysing the content of its selected campaign material, which I deem representative of the primary and sub-frames of the campaign. The findings are discussed by locating these frames in the broader context and explaining frame shifts and their implications in the same chapter. Finally, in the fifth chapter, I will conclude with a summary of the main findings and discussions, limitations and shortcomings of the research, as well as gaps for further study.

CHAPTER 2

THEORETICAL BACKGROUND AND LITERATURE REVIEW

In this part, I will elaborate further on the key issues concerning LAWS and CSKR with an aim to inform the discussions in the empirical part of the thesis, as the relevant conceptualisations and themes will help understand the collective action frames of CSKR in their due context. In addition, this part will feature a literature review both on LAWS and CSKR to reflect on varied analytical frameworks giving meaning to issues and events relevant to the topic, as well as it will demonstrate frictions in the scholarly debate with a view to situate my study's vantage point in the literature.

2.1. Lethal Autonomous Weapon Systems

In any effort to unravel a concept, providing a definition appears as a natural and intuitive way to begin. An intriguing way of approaching the definition is to highlight its parallels to a frame as understood by Benford and Snow (2000). Considering their characterisation of a frame as denoting “an active, processual phenomenon that implies agency and contention at the level of reality construction” (p. 614), one may readily argue that definitions of LAWS contain each of these elements and thus represent maybe more compact formulations of underlying frames. Framing concepts will be discussed more in detail in Chapter 3; however, at this point, the aim is to show that framing, as a means for deliberative meaning construction, is evident even at the earliest stage of stipulative definitions of LAWS.

Agreeing on a definition has been particularly complex in the context of LAWS since efforts to achieve a standard definition is an ongoing and dynamic process, and also a contentious one in that many definition efforts are in some way or another affected by the deliberative policies and strategic aims of the agents formulating or vying for a particular definition (Klijn et al., 2020; Sauer, 2020; Wyatt, 2021). This is particularly so for the state actors, who may include or exclude certain qualifications in their

definitions of LAWS out of concern to maintain their autonomous weapon programs out of the regulation scope, or others' within, in the international discussions. The due politicisation is no less applicable in the case of transnational advocacy actors who may as well opt for too broad a definition to expand their range of activism. Furthermore, since LAWS appear in academic and diplomatic debates within the ethical or legal frames in which they are presented, the definitions often reflect the normativity inherent in the legal stance or subjective ethical views of the author. The lack of clear demarcation of autonomy and the increasingly blurred distinction between the weapon and agent due to the AI systems used in LAWS becoming more "intelligent" and capable, coupled with the excruciatingly fast pace of technological developments, further complicate the process of reaching a definition. One may argue that a value-free, purely technical definition may not be tenable for LAWS, which depends on the codification of new qualitative norms based on a new diplomatic language specific to address these novel technologies (Klijn et al., 2020; Sauer, 2020), while at the same time, a definition ultimately remains a logical prerequisite for any legal regulation effort for being based on a specific understanding of its subject (Bahcecik, 2023; McFarland, 2020).

Despite these factors, for elucidation, it may be beneficial to go through two widely recognised and cited definitions of LAWS, that of the US Department of Defence (DoD) and the International Committee of the Red Cross (ICRC), as they may be regarded as having a more authoritative status "in that any discussion of [L]AWS which hopes to impact the policy must pay heed to how policymakers and regulatory agencies themselves are envisioning such systems." (Wood, 2023, p.19)

DoD, in its directive 3000.09, defines autonomous weapon systems as:

A weapon system that, once activated, can select and engage targets without further intervention by an operator. This includes, but is not limited to, operator-supervised autonomous weapon systems that are designed to allow operators to override operation of the weapon system, but can select and engage targets without further operator input after activation. (Department of Defence [DoD], 2023, p. 21)

ICRC frames certain tasks of LAWS such as acquiring, tracking, selecting and attacking targets as “critical functions” in an earlier definition (International Committee of the Red Cross [ICRC], 2014), on which it more recently elaborated:

Autonomous weapon systems select and apply force to targets without human intervention. After initial activation or launch by a person, an autonomous weapon system self-initiates or triggers a strike in response to information from the environment received through sensors and on the basis of a generalized “target profile”. This means that the user does not choose, or even know, the specific target(s) and the precise timing and/or location of the resulting application(s) of force. (International Committee of the Red Cross [ICRC], 2021, p. 1)

There is an overlap between the two definitions, mainly that LAWS can select and engage with targets (1) and do so without necessarily depending upon further human involvement in its operational processes following activation (2). Both of these points relate to the concept of autonomy in essence, whereas they do not say much about the degree of autonomy from human control *per se*, the sophistication of the systems involved, and the locus in which autonomy is exerted. As such, as Wood (2023) observed, these definitions would hardly help differentiate between a Phalanx CIWS defence turret already in use in many militaries in the world and a Terminator-like ‘killer robot’ with its own strategy and motivations for action. This versatility of definitions on what constitutes LAWS is adduced to the competing views of autonomy.

Taddeo and Blanchard (2022) carefully examined various definitions of LAWS by state authorities and noted that all definitions of LAWS contain autonomy as a central element. In terms of the degree of autonomy, DoD differentiates between autonomous weapons systems (1), which are fully autonomous once activated, and semi-autonomous weapons systems (2), in which the human operator selects the individual targets or target groups but is not involved in engagement, and lastly operator-supervised autonomous weapon systems (3), which, while being fully autonomous in target selection and engagement, provide a room for the intervention of human operator to terminate engagement (Department of Defence [DoD], 2023). The

foundation of full autonomy, however, “is a capability to identify, target, and attack a person or object without human interface. Although a human operator may retain the ability to take control of the system, it can operate without any control being exercised” (Schmitt, 2012, p. 4). As such, the quality of being autonomous is not the complete absence of human control, but instead a lack of necessity for such control for LAWS to complete the process known as the targeting cycle. A weapon which completes the targeting cycle without human intervention or supervision may be deemed to be an autonomous weapon. (Sauer, 2021)

One particular difficulty underpinning any discussion on LAWS, including its definitions and legal implications, is the “elusive character” of the topic (Bode & Huelss, 2018, p. 404) in the sense that what is understood of LAWS at the moment intermingles with hypothetical and speculative projections on how it may look in future. Concerning the present picture of LAWS in terms of their degree of autonomy, versatility and prospects, Bode and Huelss aptly observe:

Although fully autonomous weapons systems, (...) are not yet operational, their research and development is constantly proceeding. AWS can take many different forms, from singular entities to swarms, and they can operate on land, in air, and at sea. Many existing weapons platforms are arguably only a software update away from increasing autonomy. (Bode & Huelss, 2018, p. 400)

The autonomy at hand is not to stay as it is. What is missing in the DoD definition and only hinted at in the ICRC review is the expanding role of AI in autonomy, which enables weapon systems to interact with their operational environment through machine learning, rendering them more adaptable and even less reliant on human input, while also their process may be unexplainable and unpredictable. Many weapon systems incorporating varying degrees of rule-based automation are increasingly being replaced with more autonomous AI technologies (Bode & Huelss, 2018; Taddeo & Blanchard, 2022). Increasing reliance on AI, along with its challenges on weapon predictability, runs the risk of blurring the qualitative difference between a weapon and an agent:

Self-learning AI that independently develops its understanding of the surrounding environment may limit human control over the system's operation. (...) Programmers are transitioning from maintaining control over the software code, to setting the algorithmic parameters and, depending on the algorithm, the network architecture for the algorithm to operate within. Reinforcement learning algorithms are particularly challenging, as they are designed to learn from their immediate environment. The result of this is that next-generation algorithms no longer operate on pre-determined rules and can change their functionality, meaning humans often cannot understand the calculation made to arrive at the conclusion. (Rademaker et al., 2021, p. 73)

Coupled with the prospect that LAWS increase warfare speed to a level that renders human input redundant, LAWS may not be distinguishable from a new class of combatant in effect (Liu, 2012). Even if human control is retained over crucial functions, it is likely that human control will eventually be more of a symbolic formality without a meaningful impact on the actual operation of LAWS. While some scholars already seem to recognise this newly developing autonomous artificial agency (Floridi, 2021; Purves et al., 2015; Taddeo & Blanchard, 2022), others contest that LAWS should be treated primarily as a weapon (Robillard, 2018; Wood, 2023), at least in its present state, since the actions of LAWS do not possess the element of intention (*mens rea*) to hold them accountable for the course of action they choose (Bode & Huelss, 2022; Seixas-Nunes, 2022). According to this view, the operator and commander, as legal persons, bear the liability for using such weapons systems, and the usual set of norms applied for weapons as prescribed in IHL remains relevant in assessing the legality of LAWS. Despite the lack of predictability in internal algorithmic mechanisms by which LAWS execute a range of actions, this view holds that LAWS are deployed to materialize a pre-determined goal on the battlefield, which constitutes sufficient elements to establish liability on the part of the operator and commander who determine LAWS' input and output. Nevertheless, the agency debate remains crucial for any forward-thinking regulation effort, as well as for activist framing, with respect to LAWS, given that "the moral and legal principles guiding weapons development and deployment are not the same as those governing combatant behaviour" (Wood, 2023, p. 23).

Following the substantive outline of the seminal report of the former UN Special Rapporteur on extrajudicial, summary or arbitrary executions, Christof Heyns (2013), scholars generally understood the impact of LAWS through three broad categorical domains: legality (compliance to IHL, accountability), ethical considerations (human dignity and public conscience), and international stability (Amoroso & Tamburrini, 2020; Bode & Huelss, 2018, 2022; Taddeo & Blanchard, 2022). I will also adhere to the same categorisation in sequence while reviewing the content of these frames in the following.

Much scholarly, diplomatic, and activist attention is paid to legality frames that question the capability of LAWS to comply with the IHL, mainly the *jus in bello* requirements of distinction and proportionality (Bode & Huelss, 2022; Oimann, 2023), as they constitute the bedrock of the IHL. It is widely accepted that, in the absence of specific regulatory norms governing LAWS, the IHL provisions will regulate the rules of engagement regarding the deployment and use of LAWS (Christie et al., 2023). While some countries, including Russia (Christie et al., 2023, p. 7; Chrvalová, 2022, p. 49; Oimann, 2023, p. 3) and Turkey (Turkey, 2017), hold that the IHL is sufficient in governing LAWS, there are some valid observations of concern regarding LAWS' compliance with the IHL. The issue is of particular significance to regulatory efforts since, as Laufer (2017) observes, if LAWS are not able to respond to the complexities of warfare in compliance with the principles of proportionality and distinction, they are inherently unlawful (*i*) and could be banned as such, and if they may become compliant once they are programmed and used in such way, then they would not be inherently unlawful, but their *use* may be unlawful in particular circumstances (*ii*). As such, even if a blanket ban is not imposed on LAWS, a legality test will be relevant in assessing their conduct in warfare.

The principle of distinction necessitates “a determination as to whether the target is lawful and hence not a civilian, civilian object or a person *hors de combat*” (Boulanin & Verbruggen, 2017, p. 73). The distinction issue arises from the concern that LAWS do not possess the technical or moral capacity to distinguish combatants and civilians with precision and do not seem to acquire it in the foreseeable future (Sharkey, 2017). Although the targeting systems in LAWS may become more capable of handling large data sets with greater accuracy when compared to humans, they are not expected to

become sufficiently apt in deliberative reasoning to handle complex situations, i.e. to distinguish an active combatant from a surrendering one or *hors de combat* as required by the principle of distinction (Bode & Huelss, 2022; Sharkey, 2017). In contrast, some commentators contend that LAWS may be more capable than humans in delivering IHL-compliant conduct since they lack sentiments, such as fury and retribution, which impede human compliance with IHL principles (Arkin, 2010; Scharre, 2018). Furthermore, many weapons in use, such as GPS-guided munitions, do not differ significantly from LAWS in their capacity to apply the distinction principle during their targeting cycle since they are remotely controlled by human operators with similarly questionable levels of situational awareness (Ekelhof, 2019). In many practical situations, the principle of distinction effectively relies on the ability to recognise uniforms or other fixed and distinctive signs, and as such “there is no reason to believe human soldiers will always be better at recognising uniforms and fixed and distinctive signs than autonomous weapons. (Heller, 2023, p. 20)” While LAWS and humans may not practically differ in their ability to apply the principle of distinction, this line of argument may not fit well into the debate on proportionality, a second IHL principle with which LAWS are thought to be at odds.

Proportionality is about whether the use of force to gain a military advantage is justified or otherwise excessive when weighed against the risk of harm inflicted on civilians to avoid superfluous injury or unnecessary suffering (Seixas-Nunes, 2022). IHL is notoriously unspecific in measuring these subjective qualifications of conduct, which makes their operationalisation through algorithms a challenging task. As such, the principle of proportionality is more prone to complexities when LAWS are concerned since proportionality assessment is qualitative (Egeland, 2016), context-dependent (Boulanin & Verbruggen, 2017), and hitherto required human judgement (Seixas-Nunes, 2022) often at the command level. While some authors suggest that better algorithms to operationalise proportionality may bridge the lack of objective measures, Seixas-Nunes maintains that until then, the military decisions based on such algorithms would incur risks from a legal standpoint:

Although mathematical formulas can be of great help in straightforward situation assessment, it would be taking a ‘legal risk’ to presume that a system,

however sophisticated its algorithms, was capable of determining proportionality parameters in a complex and fast-changing situation. In short, all is dependent on the future development of technology and its capacity to prove that the long- and well-established principles of IHL would not be at risk from the deployment of [L]AWS. Until that stage of development is achieved, it remains the responsibility of the military commander to take all the precautionary measures necessary to avoid misinterpretations of situations and consequent catastrophes on the battlefield. (Seixas-Nunes, 2022, p. 190)

Concerning moral responsibility and legal accountability, various approaches indicate nuances on who is to be taken responsible for wrongdoing caused by autonomous systems. As stated earlier, the LAWS lack the intention element in their actions, nor do they have the moral agency to assess whether a particular action they commit is right or wrong. As an artificial agency cannot be held accountable for a war crime, LAWS are primarily understood as weapons from a legal standpoint. Using Goetze's (2022) distinctions to unpack the concept, causal responsibility may be attributable to the military personnel deciding to deploy LAWS in a particular combat situation, a view shared by legal scholars (McFarland, 2020; Seixas-Nunes, 2022). In other words, the action of LAWS potentially bears responsibility for those who deploy it inasmuch as it may be argued that the wrongdoing is a direct result of such deployment. Similarly, McFarland argues that putting a computer-based system in charge of a weapon would not weaken the causal link between the actions of the weapon and those who deploy it, "regardless of the complexity of the control system's operation, the foreseeability of its actions, or the ability or inability of a human to intervene in the operation of the weapon after an attack commences" (McFarland, 2020, p. 129). However, this perspective is not without its challengers. Egeland (2016) counters by arguing that while command responsibility occurs in a straightforward manner in situations when the commander *knows* with *certainty* that LAWS will breach IHL, i.e. through testing over a period of deployment, this may not be so straightforward in singular cases when a breach is more of a matter of *possibility* than *certainty*. While the deployment of LAWS that have proven records of breaching IHL on the battlefield would be deemed a criminal act, in the absence of such records, failure to assess the possibility of breach may indicate negligence rather than criminal responsibility.

Concerns over compliance with IHL and responsibility attribution led to the concept of meaningful human control (MHC), which gained wide currency within the discussions of the international community (Bode & Huelss, 2018). Having been first coined in 2013 by Article 36, an NGO based in the UK, it “quickly gained popularity, and by 2014 was taken up by other organisations and states as a key concept to frame debates concerning autonomy in weapon systems” (Kwik, 2022, p. 2). MHC refers to the necessity of maintaining effective human oversight and decision-making over the operation of LAWS to ensure compliance with the principles and standards enshrined in IHL (Brehm, 2017). The degree of human control required to be qualified as meaningful is another issue of contention. Scholars differ on what MHC should entail; however, it can be said that MHC generally requires understandability and predictability at all stages of the lifecycle of LAWS:

A legally mandated standard of meaningful human control over autonomous systems would imply that the human interacting with the system at any stage of development or employment would have an adequate understanding of how the system works, why it produces given outputs, and what it is likely to do next. For instance, if an operator directing a human-in-the-loop autonomous system approves the system’s targeting selections without understanding why it made those selections or how likely it is to strike them accurately, this likely would not count as meaningful or sufficient human control according to most definitions of those terms. (Michel, 2020, p. 13)

While the framing of LAWS from a legality perspective primarily focuses on whether LAWS *would* be capable of IHL-compliant conduct, the ethics perspective focuses on whether the LAWS *should* be given such capacity to carry out actions that might threaten human rights and IHL principles in the first place. Such ethical considerations are already woven into the fabric of IHL, as epitomised in the Martens Clause, which stipulates:

In cases not covered by this Protocol or by other international agreements, civilians and combatants remain under the protection and authority of the principles of international law derived from established custom, from the

principles of humanity and from the dictates of public conscience. (Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (Protocol 1), 1979)

Emphasising the principles of humanity and public conscience, the Martens Clause stands at the intersection between the legality and ethics debates (Asaro, 2016), compelling a deontological consideration for any prospective weapon system, including LAWS, that looks beyond the mere legal permissibility. Ultimately, even if the autonomous systems are developed to the point where they fully comply with the *jus in bello* principles, they will still be used in scenarios where their targets may be humans, whether combatants or civilians. One of the most debated aspects of autonomous technologies is whether to entrust them with life-and-death decisions. Some commentators are of the opinion that LAWS, lacking in “morality and mortality” (Heyns, 2013, p. 17), will not be able to fully appreciate the value of human life and the gravity of its loss (Amoroso et al., 2018; Asaro, 2016; Rosert & Sauer, 2019; Tamburrini, 2016). Autonomy in critical functions would mean allowing algorithms to reduce individuals to an object for killing and subject them to dehumanisation (Sauer, 2020). As such, the natural corollary of these ethical framings is that LAWS should never have such lethal capacities in the first place or should not be deployed in conflict, which is one of the standard frames used by CSKR. This framing is met with a significant resonance within the emerging activist network. It is often presented as the most fundamental reason for a pre-emptive ban on LAWS, arguably more prudent and appropriate than the other frames (Rosert & Sauer, 2019).

A growingly important point of opposition to LAWS concerns the notion that AI-infused, data-driven and machine-learning systems could exacerbate existing social inequalities by discriminating against marginalised groups. As some iterations of weapons systems with autonomous functions do include technologies such as face recognition, such concerns over biased processing of machines have some basis. Gebru critically examined the existing AI technologies and demonstrated systemic biases against marginalised communities. To illustrate, in a study that examines the commercial gender and skin classification used by Microsoft, IBM and Face++, it was revealed that face recognition systems performed best with lighter-skinned men with

error rates close to zero, while showing the worst performance on darker female faces as such error rates range between 20.8% to 34.7% (Buolamwini & Gebru, 2018). As such, their findings indicate the intersectional application of discriminatory practices, which are reflective of various factors such as historical data biases and lack of diversity in AI development teams (Gebru, 2020), which are transferred into the data and human input of machine processes. In order to mitigate these challenges and prevent the perpetuation of inequalities, Gebru proposes a more diverse representation in AI development and ethically conscious application of AI technologies.

Last but not least, the implications of the military use of AI, including LAWS, on international stability and security captured considerable scholarly attention and led to the emergence of consequentialist framings of LAWS. Despite varied epistemic frameworks and analytical approaches, a sizeable scholarly consensus exists on AI's impact on global security (Bahcecik, 2023). These analyses generally point out the possible outcomes of the proliferation and diffusion of AI-infused weapons systems in terms of conflict management, strategic stability and geopolitics. Some consequentialist arguments view LAWS through a more positive lens, capitalising on the prospects of “fewer and less deadly wars”, which may serve world peace (Arandjelović, 2023, p. 20). Nevertheless, the main themes discussed from a consequentialist perspective are generally warier of the military use of AI, arguing that it may spark a new strategic competition and arms race (Altmann & Sauer, 2017; Gill, 2019; Haner & Garcia, 2019; Johnson, 2019; Rossiter, 2023; Tamburrini, 2016; Zeng, 2021), will shift the scales in the geopolitical landscape and balance of power among the major powers including the US, China, Russia (Johnson, 2019; Mori, 2019; Payne, 2018; Rossiter, 2023); may cause quicker conflict escalations due to miscalculation and accidents (Altmann & Sauer, 2017; Goldfarb & Lindsay, 2022; Johnson, 2019; Nadibaidze & Miotto, 2023; Zeng, 2021), and adversely affect strategic stability based on nuclear deterrence (Goldfarb & Lindsay, 2022). In addition to these, another line of argument focuses on the possible risk of the acquisition of AI technologies by authoritarian states and terrorist organizations (Haner & Garcia, 2019; Horowitz, 2016b; Nadibaidze & Miotto, 2023; Thumfart, 2023), which denotes another frame typology diagnosing threats to international and human security.

2.2. Campaign to Stop Killer Robots

Having elaborated on how LAWS are prominently framed within scholarly debates, I will now delve into the relevant literature specifically on the Campaign to Stop Killer Robots (CSKR), with a particular focus on its issue framings, strategies and impact. Before going further into these areas, a brief account which covers the foundation and evolution of the campaign and the broader social movement may help situate and contextualise these aspects. The dynamic historical evolution of the campaign has appropriately constituted a focal point for interdisciplinary interest between the research programmes on epistemic communities, transnational advocacy networks and collective action, highlighting the interplay between knowledge-based groups and transnational activist coalitions in disarmament movements.

Looking at the campaign's roots, some authors invoked the term “epistemic community” (Bahçecik, 2019; Belfield, 2020; Carpenter, 2014; Rosert & Sauer, 2019) to define the scientific circle which pioneered the anti-LAWS social movement and played a crucial role in setting the agenda of a brand new disarmament advocacy network. A common conceptualisation of an epistemic community is found in Haas's seminal work (1992), which defines it as “a network of professionals with recognised expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area. (p.3)” He then specifies key features of an epistemic community as follows.

[...] may consist of professionals from a variety of disciplines and backgrounds, they have (1) a shared set of normative and principled beliefs, which provide a value-based rationale for the social action of community members; (2) shared causal beliefs, which are derived from their analysis of practices leading or contributing to a central set of problems in their domain and which then serve as the basis for elucidating the multiple linkages between possible policy actions and desired outcomes; (3) shared notions of validity that is, intersubjective, internally defined criteria for weighing and validating knowledge in the domain of their expertise; and (4) a common policy enterprise that is, a set of common practices associated with a set of problems to which

their professional competence is directed, presumably out of the conviction that human welfare will be enhanced as a consequence. (Haas, 1992, p. 3)

Reformulating the tenets of this definition in line with the framing perspective of Benford and Snow (2000a), an epistemic community would engage in the following framing tasks: a diagnosis of an issue in a technical domain based on shared causal attributions (1), a prognosis which establishes a common policy enterprise to offer policy actions addressing the causes of the diagnosed issue (2), and value-based motivations to mobilise its audience in fulfilment of a claimed humanitarian utility (3). This framework, then, will help identify the initial frames adopted by the epistemic community that played a crucial role in the formation of CSKR and trace how these initial frames were transformed in its expansion to a transnational advocacy network. Indeed, as shown in the following, these tasks are performed by a scientist-activist nexus at the formation of CSKR, which accordingly incorporated the characteristics of both an epistemic community and a social movement organisation.

There have been several precursors to the notion of scientific experts and academics warning the global community on the technical, ethical and security implications of technological advancements in weapons, as in the case of cruise missiles used in the 1991 Gulf War (Bolton & Mitchell, 2020). In the case of LAWS, one of the first public outreaches against this “dangerous new territory for warfare” came in 2007 through a news article published in the Guardian by Noel Sharkey (2007), a robotics professor at the forefront of this emergent epistemic community. Examining the news article, one may see elements of various types of framings that promulgated the problematisations shaping the debate on LAWS then onwards. Sharkey refers to the “robots that make their own decisions about lethality”, their being “high on the US military agenda”. He vividly depicts a little girl pointing at a robot to share her ice cream, only to be destroyed in an instant as the robot was “tricked into killing civilians”. He calls for creating international legislation and a code of ethics that is “imperative” to tackle “autonomous robots at war before it is too late”. His diagnoses problematised the prospect of autonomous decision-making in robotics and, as a blame-attributive component, hinted at the involvement of military forces in advancing these hazardous technologies, whereby civilian life is threatened. His

prognoses stressed the urgent need to introduce a legal instrument with the underlying motivational rationale for action to protect civilian life.

In the following years, Sharkey continued his outreach efforts to diffuse his message on the dangers of autonomous robotics, voicing his concerns through various means, including popular articles and presentations in media outlets and academic conferences, as well as liaising with the NGO community, albeit receiving little but accumulating interest (Carpenter, 2014). As his efforts fell short of his goal to spur international action, Noel Sharkey joined forces with fellow scientists, namely physicist Juergen Altmann, technology ethicist Robert Sparrow, and technology philosopher Peter Asaro, and together they founded the International Committee for Robot Arms Control (ICRAC) in 2009 (Bolton & Mitchell, 2020). Various frames which can be identified in ICRAC's mission statement (International Committee for Robot Arms Control [ICRAC], 2009) are the diagnostic frames (1), such as the "rapid pace of development of military robotics" and "the pressing dangers that these pose to peace and international security and civilians in war". Regarding prognoses (2), the statement reiterates the need for an international instrument to impose a ban or restriction on various processes during the lifecycle of autonomous weapons from development to use. Concerning motivation (3), it employs a vocabulary that evokes a "sense of urgency" (Benford, 1993, p. 203) and invites the international community to immediate action. It is noticeable that this initial ICRAC framing refrained from a blame-attributive component in its diagnoses, keeping diplomatic and consistent with its goal to mobilise state partners as one of its aimed audiences, which may also be aligned with the prioritisation of security considerations primarily understood as "inter-state security" (Bahçecik, 2019, p. 366) and peace emphasis in its framing.

Another milestone in the formation of CSKR is the expert meeting in Berlin convened by ICRAC in 2010, which culminated in the Berlin Statement. The sessions saw some disagreements among the participants regarding how to proceed, whether to maintain the scholarly disposition of ICRAC's interventions or transform in the direction of transnational activism, whereby ICRAC ultimately opted for the latter (Bolton & Mitchell, 2020). The culminating Berlin Statement (International Committee for Robot Arms Control [ICRAC], 2009) does not add brand-new types of frames. Still, it

extended the content of the earlier international stability frame to involve more specific prognoses and a firmer stance, which gave some momentum to the transnational expansion of the movement, while at the same time, the composition of the core crew was primarily maintained (Bahçecik, 2019). Having interviewed participants of the expert meeting in Berlin, Carpenter (2014) hints at what seems to be a frame dispute between the proponents of a ban on LAWS and those who chose to remain on ethical-scientific grounds, which may be evident in the number of participants who did not sign the statement. Despite the apparent focus on international stability in the published ICRC statements thus far, members of the organisation have expressed varying opinions, which may be indicative of incongruity regarding the aspect on which they would capitalise in their framings of LAWS for further advocacy:

ICRC's concerns ranged from fully autonomous weapons to remotely piloted systems—such as drones that kept a “man in the loop” but raised concerns about conflict prevention and extrajudicial killings—to nuclear arms control, conflict prevention, and limitations on space weapons. In short, ICRC faced a “frame soup”. (Carpenter, 2014, p. 105)

Accordingly, some members of ICRC expressed displeasure with the organisation's adoption of what they regarded as a humanitarian frame that compromised scientific accuracy by relying on deontological binaries in its interpretation of phenomena:

ICRC members framed AWS discursively, producing a specific humanitarian and human rights narrative. As one ICRC member told us, “A lot of our arguments come down to moral, rather than scientific ones.” ICRC members organised the world of robotics, classifying it into “good” (usually civilian) and “bad” (usually military) developments, and singled out AWS as particularly pathological. (Bolton & Mitchell, 2020, p. 39)

Deontological binaries may well be characteristic of activist frames aimed at persuading and stimulating people to take action (Keck & Sikkink, 1999), and their use is indicative of the change ICRC underwent. The debate within ICRC at this point seems more like the inherent effects of its politicization as it pivoted towards the

direction of transnational activism rather than a dispute over contents when setting the frame between humanitarian disarmament and international stability. Haas observes a similar transition of epistemic communities when they engaged with international bureaucracies, which *mutatis mutandis* may as well be the case when scientists engage with transnational activist networks:

Despite the veneer of objectivity and value neutrality achieved by pointing to the input of scientists, policy choices remain highly political in their allocative consequences. Especially in cases in which scientific evidence is ambiguous, and the experts themselves are split into contending factions, issues have tended to be resolved less on their technical merits than on their political ones. That scientists working within the bureaucracy have a common faith in the scientific method does not guarantee their solidarity, nor does it make them immune to pressures from the institutions in which they work or from political temptation. (Haas, 1992, p. 11)

ICRAC's new activist path was not free of challenges. The widespread technodystopian perception surrounding LAWS as a policy domain impeded bringing central players such as ICRC or HRW on board, to whom Carpenter (2014) refers as "gatekeepers" in the humanitarian disarmament advocacy given their ability to set and vet the global activist agenda. The interviewed members of these organisations regarded the issue of autonomous weapons as too much of "science fiction" to be taken up for a humanitarian disarmament cause, a "giggle factor" bereft of gravitas, lacking in "ripeness" to act on at that point in time and "measurability" of its impact in the absence of actual victims (Carpenter, 2014, p. 103). The risk-averse humanitarian campaigners and their donors are generally more eager to invest in actual issues causing real human suffering, which they think would more easily gain traction in the public and media, thereby presenting a greater likelihood of success (Carpenter, 2016).

The authors reviewed in this study highlight various factors that account for the significant transition from what had been an advocacy call with meagre prospects, initiated by a credible yet incongruent epistemic community of experts, to a full-fledged humanitarian disarmament campaign carrying its agenda atop the international

disarmament discussions within a relatively short period. Carpenter (2014) ascribes it to the growing issue-ripeness, achieved through accumulated media attention over the years and ICRC stepping in to supply the issue with the initially missing gravitas across the humanitarian disarmament hub (Carpenter, 2014). This was followed by the pioneering involvement of a minor player, Article 36, which upheld the cause by publicly calling for a ban on LAWS in March 2012, becoming the first NGO to do so (Breen & Eilstrup-Sangiovanni, 2023). Article 36's involvement was an indication that the issue had finally been taken sufficiently serious for transnational disarmament advocacy. Then, a key meeting of like-minded NGOs in New York in November 2012 resulted in favour of taking up the cause, as HRW took the lead along with Article 36 and others followed the bandwagon. Shortly after, HRW published its seminal report *Losing Humanity* (Docherty, 2012), which “instantly became the most-downloaded Human Rights Watch report in history, and the number of media reports on [L]AWS skyrocketed” (Carpenter, 2016, p. 60).

HRW and Article 36's arrival at the scene gravitated the framing of AWS more towards a humanitarian direction (Bahçecik, 2019; Breen & Eilstrup-Sangiovanni, 2023) from the international stability frame of ICRC. *Losing Humanity* (Docherty, 2012) report hardly frames LAWS as an issue of international stability while extensively capitalising on its impact on civilian protection and compliance with IHL. Although deliberately maintained a technical tone in general, the report referred to certain types of autonomous drones in the making that “could usher in an era when death and destruction can be dealt with by machines operating semi-independently” (Docherty, 2012, p. 16). The underlying existential threat frame may have potentially resonated well with a populace that was subjected to the typical media framing of the “killer robots” as an apocalyptic event whereby humanity loses control of AI with the Terminator imagery.

Once the humanitarian framing of LAWS was firmly agreed upon, in April 2013, CSKR was officially founded, bringing together eight organisations in its steering committee: HRW, Article 36, PAX, Mines Advisory Group (MAC), Nobel Women's Initiative, Women's International League for Peace and Freedom (WILPF), Pugwash Conferences on Science and World Affairs, and ICRC (Breen & Eilstrup-

Sangiovanni, 2023, p. 23). Subsequently, LAWS entered into the transnational disarmament agenda from November 2013 onwards, while CCW mandated an informal meeting of experts in May 2014 to specifically discuss LAWS (Bolton & Mitchell, 2020). Official discussions have continued under a formal Governmental Group of Experts (GGE) under CCW from 2017 to the present.

This marks the end of the initial phase of framing that took place prior to the formation of CSKR, which quintessentially represents the premise that in social movements “struggles over meaning and the creation of new frames of meaning occur early in a protest cycle” (Keck & Sikkink, 1999, p. 95). Indeed, hardly there is any indication of a frame dispute taking place in the ranks of CSKR since its launch (Bahçecik, 2019). From here onwards, I will delve into critical literature that highlights various aspects of the campaign-specific frames of CSKR. The authors featured in this literature review examined the CSKR frames from different perspectives and analytical lenses. Some of the authors produced studies which have more rigorous critical appraisal of the campaign content, whose works will be reviewed in the following. Another group of authors, while their research is not specifically on the campaign, levelled criticism at the framings of CSKR for being “alarmist” in their discourse (Klijn et al., 2020, p. 118; Purves et al., 2015, p. 851), forcing a “crude choice” between banning and not banning (Klijn et al., 2020, p. 134); its “proffered philosophical arguments against [L]AWS lacking in substance” (Purves et al., 2015, p. 851); its use of killer robots trope is “limited” in the knowledge of AWS and “overdramatises” the idea of humanoid monster image (Bode & Huelss, 2022, p. 5) or its discourse does “melodramatically oversimplify international humanitarian law” (Schmitt, 2012, p. 8). A group of critique voiced that CSKR fails to “put forward a clear definition of their own or clarify what, precisely, they are advocating should be banned” (Horowitz & Scharre, 2015, p. 3), or CSKR's now-defunct official stance in defining AWS, that is, 'weapons systems that would select and engage targets on the basis of sensor inputs', failed to “appreciate just how many things would count as [L]AWS under that definition” (Wood, 2023, p. 25).

In fact, despite demonstrating generally applicable shortcomings evident in almost any definition of LAWS, and thus would not be of much value vis-à-vis the scholarly

critiques in this line, CSKR's most recent and elaborate definition is articulated by its research team Automated Decision Research in a more recent report that defines LAWS as:

Systems that use machine analysis of information acquired from sensors to automatically select and engage targets, such that a human operator does not determine specifically where, when or against what force is applied, are of particular concern. These are what we mean by 'autonomous weapons systems.' In these systems, once the system is activated, there is a period of time where the weapons system can apply force to a target without additional human approval. (Automated Decision Research [ADR], 2022a, p. 3)

One of the most common critiques directed at CSKR concerning its framing of LAWS is embedded in its name, the very "killer robots" trope, which is said to evoke a sense of techno-dystopian fear epitomized in the image of the Terminator. Having been one of the most famous franchises which "shaped the public perception of AI" and regarded as "enduring significance to American culture", it was selected by the US Library of Congress for entry into the National Film Registry in 2008 (Watts & Bode, 2023, p. 7).

Critiques of CSKR framings that are thematically associated with the imagery of Terminator in the literature are numerous. Some authors stated that the use of popular culture tropes gives rise to "delusional fantasies" (Solovyeva & Hynek, 2023, p. 7), and generates an "unfaithful representation" of the reality of LAWS, and "it is not helpful to envisage that terminators and other technologies may end up turning against their creators and wipe out the entire human race" (Caron, 2020, p. 176), as such uses are directed at "imposing unrealistic, ineffective or dangerous bans based on sci-fi scenarios of killer robots rather than realistic understandings" (Anderson & Waxman, 2013, p. 3), as "the futuristic, science fiction framing" of LAWS in such fashion presents them as a problem yet to be materialized and "maybe never will", and thus fails to recognise the ongoing impact that LAWS "already having on international relations, international security policy, and the international order governing the use of force" (Bode & Huelss, 2022, p. 5). It is undeniable that anchoring the debate on

more realistic grounds has its merits; however, a valid objection to this line of critiques was raised by Carpenter (2016) who understood the use of such tropes as a perceived pragmatic necessity of activism in a peculiar issue domain:

Some NGOs adopted a strategy of avoiding science fiction references altogether. Article36, the first NGO to call for an autonomous weapons ban, did so with a highly technocratic, legalistic frame—the only reference to science fiction was to openly argue against the “science-fictionalization” of the issue (...) HRW insiders gambled that use of the term “killer robots” would mean instant media attention, which they needed, and they were right. (Carpenter, 2016, p. 60)

Such need for instant media attention is ascribed to activists’ aim to compensate for the “absence of documented humanitarian harms” incurred by LAWS (Carpenter, 2014, p. 111). From an activist perspective, one may indeed wonder whether it resonates better with people if the debate is framed around killer robots and Terminator imagery, rather than a technical discussion over how to retain meaningful human control on LAWS (Young & Carpenter, 2018). In any case, Carpenter’s findings reveal that at the time when the activists attained the stage where they were constructing their frames, they had already found themselves in a public and media setting where LAWS were widely understood in science fiction terms. Their decision seems to be whether to go for strategic use of such tropes in nominal ways, primarily to serve as attention grabbers, to draw the audience into the framings that exhibit more technical contours in their documents, thereby aiming to 'de-science-fictionalize' the issue (Carpenter, 2016).

The scholars who studied the campaign content qualitatively identified various frames, strategies and processes. Bahçecik (2019) critically examined and tracked the frames used by CSKR from its launch up to the date of publication, revealing several dynamics and shifts in framing over time. Within the diagnostic domain, the initial frame underlying the discourse of the epistemic community on killer robots derived from concerns over international stability and protecting civilians in armed conflict. CSKR’s formation shifted the frame more towards humanitarian disarmament and IHL

compliance. Once the official discussions at the CCW were initiated in 2016, another frame shift took place, which extended the civilian protection frame to situations beyond the battlefield, as was evident in the campaign's discourse that capitalised on the risk posed by the acquisition of LAWS by terrorist groups. This frame was amplified by the *Slaughterbots* short film that portrayed autonomous drones, which were potentially acquired by terrorists, conducting attacks on innocent civilians in a way to stoke fear among Western audiences. Bahçecik notes that despite generating greater public awareness and salience, “this representation is not in line with the dominant framing of the CSKR, it risks creating confusion” (Bahçecik, 2019, p. 367).

In their studies, Rosert and Sauer (2019, 2021) examine previous disarmament campaigns and juxtapose their processes with the CSKR. They posit that LAWS, as human-machine systems, are categorically different from the weapons which were subject to disarmament campaigns, mainly due to the difficulty of locating weapon autonomy within such hybridity. They discredit the efficacy of the CSKR’s “indiscriminateness frame” that problematises LAWS as being inherently incapable of distinguishing civilians and combatants since it may be resolved by a technological fix and the legality frame fails to address the normative problem of machines killing combatants due to its civilian focus. Instead, they favour a human dignity frame which opposes delegating life and death decisions to LAWS. They also observe that having lacked a champion state to lead the efforts against LAWS, CSKR struggles to alter the venue of international discussions outside of CCW in favour of an independent regulation instrument.

Soloyeva and Hynek (2021; 2023) question the stigmatisation of LAWS by CSKR in terms of its limited effectiveness as a strategy due to the complexities of these systems and their portrayal in popular culture. Unlike earlier disarmament campaigns, they argue that the stigmatisation strategy does not fit LAWS well. Although CSKR has been successful in framing LAWS as unethical and immoral in shaping global perceptions, they also point out this strategy led the campaign to what they term a “paradox of over-securitization”, which describes a situation in which the campaign expands the support base while failing to achieve the aspired goal. They also criticise CSKR for deliberate oversimplification in its understanding of LAWS for the benefit

of public advocacy, which leads to misconceptions and has been counterproductive to the campaign's disarmament efforts. They suggest a more nuanced and epistemically-oriented approach to framing LAWS.

The last aspect of campaign framing that will be examined in this review is the views of scholars concerning the impact of the frames. In the case of the CSKR, the impact may be analysed through two parameters: the number of states rallied to the cause and the frame resonance in shaping public opinion. The opinions are nuanced in both areas and based mainly on qualitative observations. In terms of recruiting states to the cause, scholars generally point out varying degrees of achievement. As of December 2023, 90 states expressed opinion to support an international legal instrument (Campaign to Stop Killer Robots [CSKR], 2023a), and 29 states favour a ban on LAWS, except China, whose stance is more nuanced on a ban (Chrvalová, 2022). The campaign is regarded as "influential" (Alwardt & Schörnig, 2021, p. 302; Bode & Huelss, 2022, p. 5), particularly in terms of attracting international attention to its agenda and its ability to affect CCW discussions:

The campaign has been successful at creating political momentum on the issue of autonomy in weapon systems. It can certainly take credit for the fact that there is now a formal intergovernmental discussion within the CCW framework and that the concept of meaningful human control has been identified as a possible basis for regulation or control of autonomy in weapon systems. The campaign has also been successful at mobilizing an opposition within the expert community, both on the humanities side (lawyers, ethicists and philosophers) and on the engineering side (AI researchers and roboticists). (Boulanin & Verbruggen, 2017, p. 76)

In contrast, other authors who regarded campaign success from a result-based perspective point to the fact that the campaign has not yet achieved a ban or a binding international instrument which includes specific prohibitions after a decade of campaigning (Solovyeva & Hynek, 2023). Some authors show the stagnant CCW discussions as evidence of failure, while "what started out as one of the most dynamic campaigns in the history of humanitarian arms control has come to a grinding halt"

(Alwardt & Schörnig, 2021, p. 114). Others note the campaign's failure to attract a major power to champion its cause in the international discussions (Rosert & Sauer, 2021). Nevertheless, apart from considerations regarding the campaign's framings and strategies, it must be noted that the trends in international affairs may not be conducive for humanitarian disarmament campaigns at this stage:

In addition, geopolitics in general are currently not conducive to achieving new arms control and disarmament breakthroughs. Existing multilateral and bilateral agreements and treaties are eroding, with some already lost – this list includes the terminated Intermediate Range Nuclear Forces Treaty (INF), the faltering Joint Comprehensive Plan of Action (JCPOA) with Iran, the contested Open Skies Treaty and, potentially soon, NewSTART – the only remaining bilateral nuclear arms control treaty between Russia and the United States. Getting a new binding international legal instrument out of the United Nations' CCW would be challenging in a normal, less frosty geopolitical landscape. The current global arms control winter makes it seem almost impossible. (Sauer, 2021, p. 246)

Another perspective in assessing the campaign's impact is to examine public opinion, which is regarded as a vital task for international relations research on LAWS (Horowitz, 2016a). There have been various polls showing significant public opposition against LAWS (McFarland, 2020). Two polls commissioned by CSKR worldwide in 2017 and 2020 indicate an increase in public opposition from 56% to 62%, respectively (Campaign to Stop Killer Robots [CSKR], 2021f). However, authors advise caution in interpreting polls since “there is some reason to believe that their results are contextual, depending on the design of the polls and the manner in which they are conducted” (McFarland, 2020, p. 111). In an earlier study, Horowitz (2016a) argues that high public opposition to LAWS in the US may be contextual, as the opinion shifts when LAWS perceived as necessary to protect US troops.

2.3. Framing Perspective on Social Movements

Originally attributed to sociologist Erving Goffman (1974), a frame is initially

configured as a “schemata of interpretation” (p. 21)—mainly an “anthropological work on human *cognitive* behaviour” (Vicari, 2023, p. 313). The original conceptualization of the term may hint at a purely psychological process, largely taking place in the domain of cognition and behaviour. In its rendition into the collective action domain, however, in the way they developed the concept to describe the discursive acts of social movement organizations, Benford and Snow emphasized that what they understood by framing is not merely a psychological process of signification taking place in cognition, but rather “denotes an active, processual phenomenon that implies agency and contention at the level of reality construction” (Benford & Snow, 2000a, p. 614). To unpack, this refers to a dynamic and evolving process undertaken by movement organizations and activists, which challenges existing meanings around an issue area and supplants them with new ones to bring forth collective action. Their collective action frames are notably action-oriented in the sense that the aspired output is mobilisation, which results from an interactive process of deliberately negotiated and adopted meanings ascribed to situations, events, or policies presented to the public (Vicari, 2023). Accordingly, the framing perspective emerges from the symbolic interactionist and social constructionist theoretical foundations, which adhere to the premise that agents actively and continuously participate in the construction of meanings that engender social phenomena (Snow, 2007).

Benford and Snow (2000a) identify three core framing tasks whereby social movement organizations mobilise collective action, namely diagnostic, prognostic and motivational framing (p. 615). The *diagnostic task* requires the identification of a problem in social life, such as an injustice, and the attribution of causal responsibility or blame to a target, such as an individual, organization or broader structure. It sets the stage for convincing the targets of mobilization that the identified grievance is in need of a solution. The *prognostic task* involves offering solutions to the identified problem, which is often exercised by proposing courses of action, policy changes, or social or structural transformations. The *motivational task* promotes and legitimises ameliorative action and encourages targets of mobilization to participate.

Gamson (1992) introduces three framing components which aptly elucidate some prevalent themes within the framing tasks commonly undertaken by social movement

organizations. The *injustice component* relates to the diagnosis of an unjust situation causing indignity. Gamson understands injustice frames are not the product of an intellectual judgement of inequality but one of “a moral judgment [that is] ultimately related to beliefs about what acts or conditions have caused people to suffer undeserved hardship or loss” (Gamson, 1992, p. 32). This formulation allows for a more comprehensive injustice component that encompasses deontological diagnoses in issues perceived to be affecting human dignity. The *agency component* capitalizes on the empowerment of agents by promoting the idea that a solution is possible through collective action and reinforcing a consciousness that denies the immutability of the identified problem. Lastly, the *identity component* establishes “us” and “them” distinctions whereby an adversary is articulated to take action against. Therefore, it is sometimes called an adversarial component.

Another framing device which will guide this thesis’ understanding of frames is the ‘vocabularies of motive’ as identified by Benford (1993). This conceptualization is of particular importance in identifying motivational frames, as they define certain qualities of discourse to convince the targets of mobilization that collective action in a particular issue area is necessary, obligatory and/or viable. These qualities of framing provide the targets of mobilization with reasons to participate in the collective action. The first vocabulary of motive is *severity* which stresses the grave consequences and potential harm pertaining to the diagnosed problem. The second vocabulary is *urgency*, which encourages mobilization by highlighting the necessity of immediate action or by evoking a sense of immediacy of a threat. The third is *efficacy*, which is closely associated with the agency component. It aims to consolidate the perception that meaningful changes can be achieved by participation in collective action. The last vocabulary of motive is *propriety*, which is directed at evoking a sense of obligation to act, often by stressing that participation in collective action is a moral requirement or claiming that the collective action is normatively justified.

Lastly, this thesis concentrates on the framing strategies, or frame alignment processes, which refer to the interactive processes that shape the frames of collective action in a way that resonates with new constituencies. These are ways in which social movement organizations establish new linkages for their frames to capture the interests and

objectives of their potential participants. Benford and Snow define these processes as being “deliberative, utilitarian, and goal-directed” efforts that are in line with the very purpose of the framing activity: “to recruit new members, to mobilize adherents, to acquire resources” (Benford & Snow, 2000a, p. 164). Transnational collective actions similarly engage in strategic framing to make their frames “comprehensible to target audiences, to attract attention and encourage action, and to “fit” with favourable institutional venues” (Keck & Sikkink, 1999, p. 90).

Benford and Snow (2000a) identified four of these strategies that aim to establish linkages that render frames intelligible to the audiences. The first strategy is *frame bridging*, which refers to the “linkage of two or more ideologically congruent but structurally unconnected frames regarding a particular issue or problem” (Snow et al., 1986, p. 467). For example, bridging occurs when a humanitarian disarmament campaign establishes linkages between its frames and the global justice movement through a frame which posits that the diffusion of the arms in question would increase inequalities. The second strategy is frame amplification, which occurs through “clarification and invigoration of an interpretive frame that bears on a particular issue, problem or set of events” (Snow et al., 1986, p. 469). This involves value or belief amplification that seeks alignment with the existing values or beliefs of certain constituencies. For instance, the utilization of a frame featuring techno-dystopian beliefs concerning a technological apocalypse that may have existed in a segment of society would be a frame amplification strategy. Third is frame extension, which involves the depiction of a social movement’s interest sought in a frame “as extending beyond its primary interests to include issues and concerns that are presumed to be of importance to potential adherents.” For example, extension occurs when a humanitarian disarmament campaign establishes linkages between its frames and the environment movement through a diagnostic frame which highlights the implications of the production or use of a weapon in question on the environment. In this example, disarmament is framed in a way that its effects extend beyond its issue area. The last framing strategy is frame transformation which denotes “changing old understandings and meanings and/or generating new ones” (Benford & Snow, 2000a, p. 625). This strategy is particularly applied when a movement’s frames no longer “resonate with, and on occasion may even appear antithetical to, conventional lifestyles or rituals and

extant interpretive frames” (Snow et al., 1986, p. 473). An example of this strategy could be seen when a humanitarian disarmament movement changes its previously proposed prognosis when it no longer resonates with the majority of the international community and global constituency. These are rather sweeping changes of position that may also constitute frame shifts.

According to the literature corpus produced by the framing perspective scholars, there are various ways by which social movement organisations undergo frame shifts. As Brulle and Benford (2012) indicate, shifts in discursive frames occur as a result of the development of new or innovative frames, strategic transformations of existing ones, changes resulting from frame disputes within movements, reframings in response to opponents' counter-framing efforts, or frame diffusion from one movement to another. They further argue that these shifts in the discursive frame of a movement can change the characteristics of the movement itself. Once the movement actors redefine the movement's discursive frame, they also redefine its organizational practices and reshape the culture and identity of the movement. Their insights into to dynamics that drive the frame shifts are relevant to the observations of this study, particularly the frame shifts caused by the strategic transformations, innovation and diffusion.

Despite gaining wide traction and popularity in collective action studies, the framing perspective on social movements also received various criticisms from scholars both within and outside the research program. To briefly note some of these criticisms, Johnston (2023) argues that the framing perspective did not remain faithful to the original cognitive-linguistic understanding frames by Goffman (1974), and was gradually used interchangeably with ideology. He asserts that the framing scholars confused frames with ideologies as the former is thought to perform the same function as the latter. Ideologies involve a theory about society and social relationships, make value judgments on right and wrong, and prescribe norms about proper conduct. There is an intellectual history behind these theories and norms underpinning ideologies. Johnston warns that using framing terms to denote ideological content, as in a prognostic frame which prescribes a particular norm, would overlook the much larger ideational framework, history and social interlinkages behind such concepts. As such, he proposes a return to original texts of framing scholarship, where frames are

configured primarily as cognitive constructs that are used by and for individuals to interpret events.

Steinberg (1998) also argues that framing scholarship has not adequately and systematically addressed the relationship between framing and larger ideational frameworks such as ideology and culture. He aptly observes that “while the ideological visions structured by frames are exposed as contested and dynamic, the discourse used in framing is taken to be a generally straight-forward bearer of meaning” (1998, p. 845). As a result, framing scholars tend to see their identified frames as given and unproblematically convey the meaning, which overlooks the discursive processes that produced and reproduced their frames. Furthermore, there is an ambiguity pertaining to the individual-level framing that takes place at the cognitive level and organizational level framing that strategically deploys ideas through framing for the purposes of meso-mobilization. As such, Steinberg argues that it remains unclear whether agents accommodate the frames or ideologies given to them as part of a larger political culture embraced by the organization or whether they creatively employ ideational elements to construct frames to make sense of their personal lives. He proposes an approach that is more grounded in the Bakhtinian discourse theory and sociocultural psychology to augment framing perspective.

CHAPTER 3

METHODOLOGY

The thesis employs a combination of deductive and inductive reasoning based on qualitative content analysis, more specifically, a frame analysis in line with Benford and Snow's framing perspective of social movement organizations. Framing perspective has been a research program of paradigmatic prevalence in the sociological inquiry of collective action since its launch in the late 1980s and was also employed to unravel the discursive content of the transnational activist movements in order to analyse the ways they engage in politics of signification around their issue areas.

Since one of my thesis objectives is to track the themes included within the frames with a view to see if there has been a frame shift over time, the findings may best be presented based on the periodization of themes in a chronological sequence to help identify changes. As per the findings of my research, I have inductively determined three distinct periods where the campaign frames may be thematically grouped and distinguished. First is the formative period between 2013 and 2016, where LAWS was newly included in the international disarmament agenda; however, CSKR enjoyed only a narrow window to affect state opinion on LAWS since the topic was discussed only for a few days a year in CCW gatherings. The second period started in 2017, which marks the time when the CSKR finally found its transnational venue to further its frames with a greater focus before an audience of states as the CCW agreed to establish a GGE with a specific mandate to discuss LAWS. The third period is between 2020-2023 when the campaign was disillusioned by the prospects of discussions at GGE and pursued new framing strategies to expand its base in response to contextual developments.

3.1. Frame Analysis

There is not a universally applied standard prescription for conducting frame analysis.

The most commonly applied methodology in collective action studies is qualitative content analysis (Barranco & Parcerisa, 2023), of which my methodological approach also comes within the scope. Qualitative content analysis is defined as “the intellectual process of categorising qualitative textual data into clusters of similar entities, or conceptual categories, to identify consistent patterns and relationships between variables or themes” (Given, 2008, p. 120). Frame analysis is a specific thematic subset of content analysis that is “preoccupied with how ideas, culture, and ideology are used, interpreted, and spliced together with certain situations or phenomena in order to construct particular ideative patterns through which the world is understood by audiences” (Lindekilde, 2014, p. 199). The framing perspective offers a rich set of conceptualisations to serve as a toolbox to understand various aspects of collective action frames embedded in the textual-discursive resources.

In my research, I adopted a design incorporating several select frame concepts that I deem appropriately capture the framing aspects relevant to my research questions. I undertook a deductive thematic analysis that categorised campaign framings per their relevance to the diagnostic, prognostic and motivational themes as core framing tasks (1), identified injustice, agency and identity elements within those frames as frame components (2), and vocabularies of motive such as a sense of severity, urgency, efficacy and propriety present within the motivational frames (3). In order to understand the dynamics behind the possible frame shifts, I looked for hints that are in line with the frame alignment strategies, including frame bridging, amplification, extension and transformation (4). This culminated in the frame-analytical model in Figure 1 below that is applied in the research.

I qualitatively coded the campaign material in accordance with the designated framing themes with the help of a computer-assisted coding tool named TAMSAlyzer. For each thematic item in the frame analytical model, I deductively searched for and coded the content within the textual campaign material, and then identified certain inductive patterns from the coded data. I compared and contrasted the identified patterns on a framing period basis and discussed the framing dynamics and processes that underscored the discursive undertakings of the campaign.

3.2. Data Collection

For my research, I systematically collected and compiled textual campaign material published by CSKR and its research team, Automated Decision Research (ADR), from its launch in 2013 to the present.

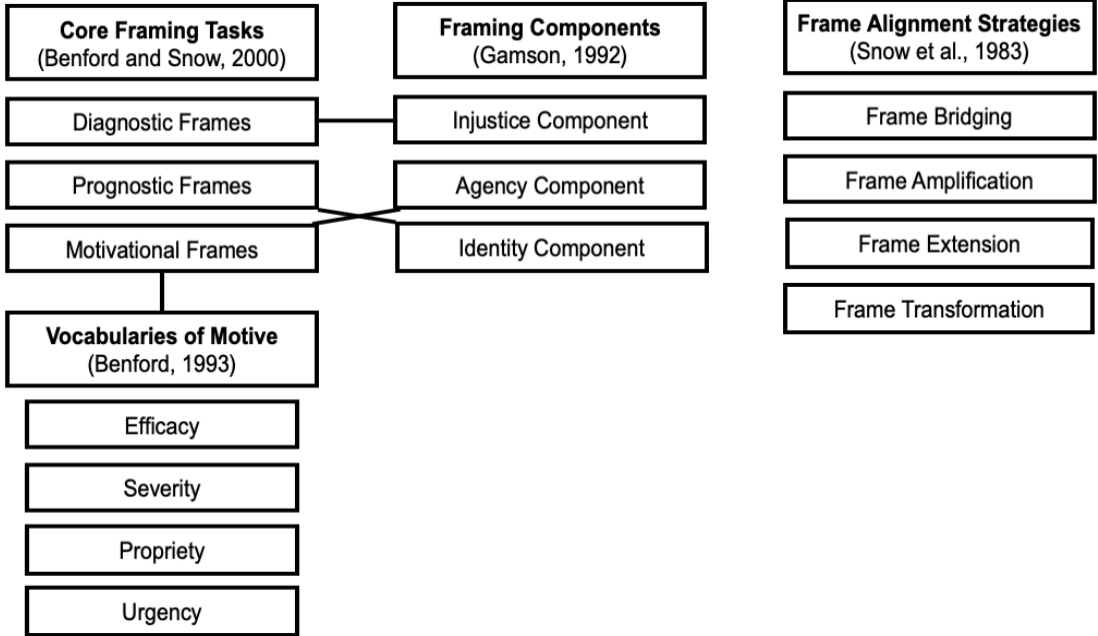


Figure 1: Frame-Analytical Model

I chronologically organised the data as per the year of publication in order to monitor potential shifts in framing and the emergence of new themes over time. The 56 campaign material analysed in this study comprises official statements, press releases, campaigning tools, policy briefs and other discourses made available on CSKR and ADR’s website. The statements given by the campaign directors in UNGA First Committee, CCW and GGE constitute the main bulk of the dataset as these formal conventions are often the most convenient platforms for the furtherance of frames directed at the international community, where transnational advocacy networks generate “global social capital” in reference to “transnational norms, values, concepts, and logic that are the currency of global conferences” (Benford, 2010, p. 78). As such, these official venues where international discussions on LAWS take place are also the places to locate the CSKR framings in its bid to shape the meanings and norms in the

making. Since CSKR is a transnational coalition of multiple NGOs, the material published by its members is accordingly available on its website; however, I excluded those from the dataset as they are not necessarily representative of the campaign’s official stance and are less likely to constitute the shared meanings pursued through framing activities. Nevertheless, whenever I came across a frame shift or a new thematic frame content, I turned to external material to cross-check and verify whether such trends were shared or not shared across coalescing member organisations.

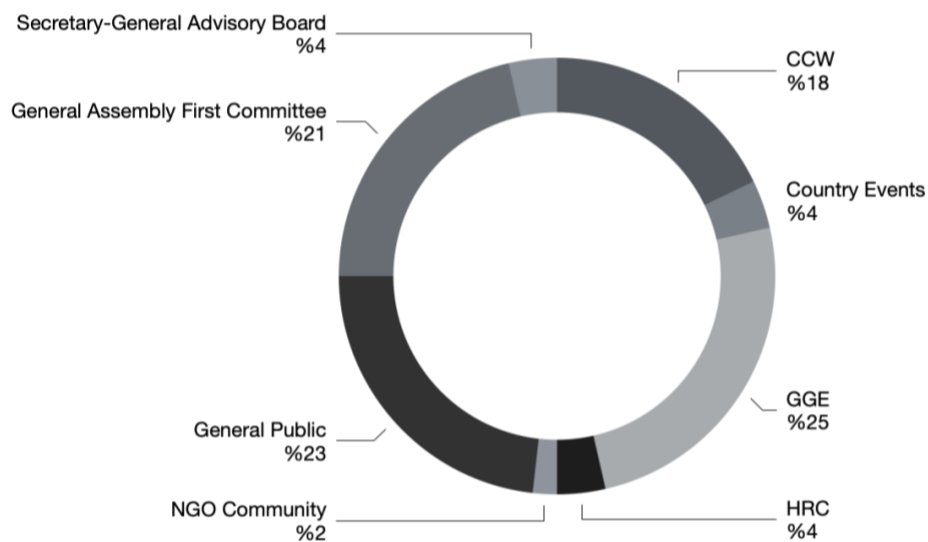


Figure 2: Breakdown of the dataset per target audience

3.3. Case Study

The thesis essentially constitutes a descriptive-interpretive case study. As a widely adopted method in social sciences, a case study is defined as “a research approach in which one or a few instances of a phenomenon are studied in depth” (Given, 2008, p. 68). The aim of the thesis is to identify and unpack the movement-specific collective action frames of the CSKR as a transnational social movement organization by systematically analysing the content of and tracking the changes within its textual material with a view to capture discursive patterns underpinning the social,

organizational and political processes that the movement undertakes during its operation. By analysing their subject matters in-depth, case studies provide invaluable insights that may be utilized for further research and theorization on social behaviour and organizational processes.

CHAPTER 4

FINDINGS AND DISCUSSION

In this chapter, the most common framings employed by CSKR will be presented by showcasing the excerpts from the campaign material that is representative of the frame tasks and components, which will, in turn, be discussed in line with the thesis questions. The table and Figure 3 shown below demonstrate the breakdown of core framing tasks performed by CSKR in three separate framing periods. While there is a stable distribution between the core framing tasks in the Formative and Active periods, there is a surge in diagnostic framing -up to 46%- in the Adaptive period as the campaign introduced various new frames and directed its discursive efforts to push for new problematizations.

	Formative	Active	Adaptive
Diagnostic	42	56	128
Prognostic	59	61	90
Motivational	32	31	60

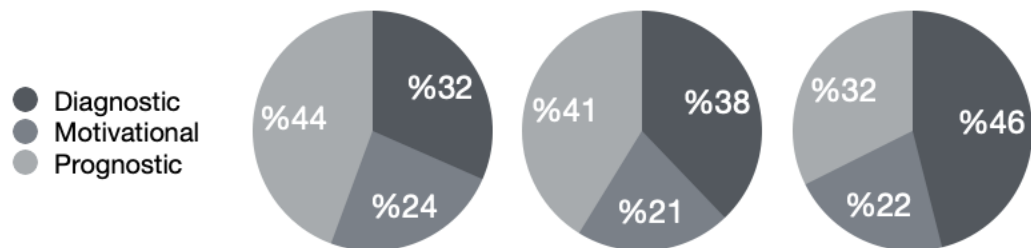


Figure 3 Breakdown of Core Framing Tasks per Framing Period

4.1. Formative Framing Period (2013-2016)

4.1.1. Diagnostic Frames

Diagnoses of the campaign in its formative years generally referenced and followed the problematizations introduced by the seminal report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions, Christof Heyns (Heyns, 2013). As shown in Figure 4, the research indicates that the most commonly featured topic within the diagnostic frames in the formative years was the IHL compliance frames that mainly concentrated on the humanitarian impact of LAWS on civilians on the battlefield. CSKR also dwelled on human dignity themes in its diagnostic frames frequently employed to support the core IHL compliance framings. International stability frames featuring arms race and proliferation themes were also noted, albeit less frequently and comprehensively.

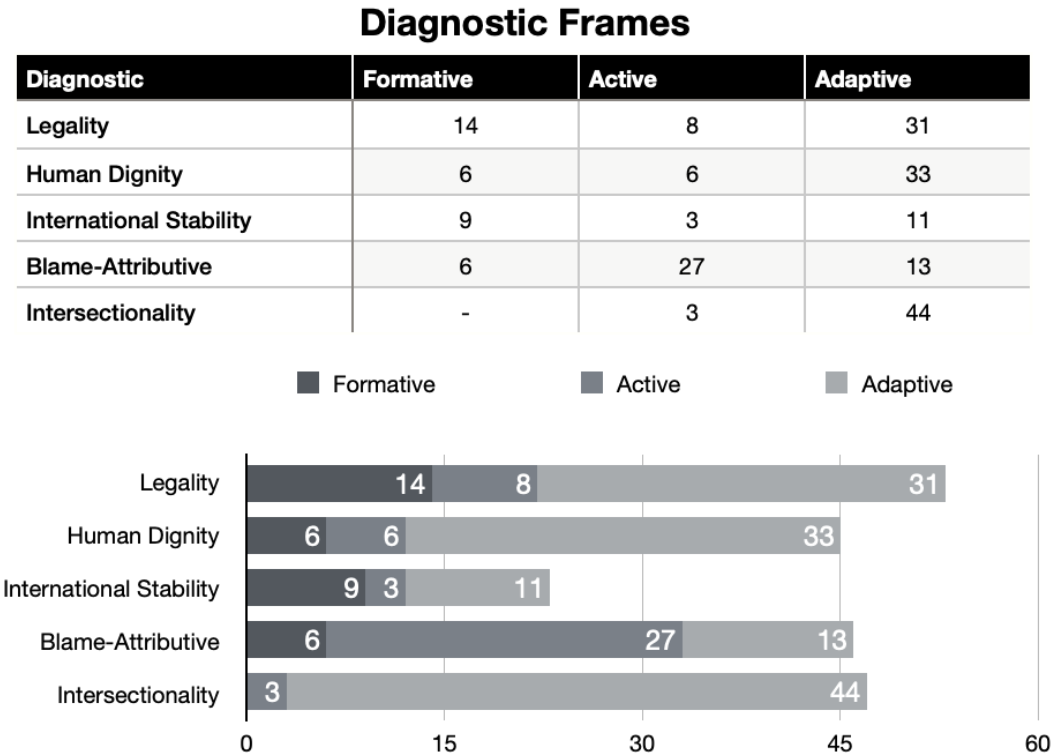


Figure 4: Diagnostic Frames per Framing Period

The reason for such a central emphasis on IHL compliance could be the fact that in its formative period, CSKR sought a transnational venue to express its concerns, and the most likely candidate to take up the issue of LAWS was CCW, whose mandate is thematically humanitarian. The emphasis on the humanitarian impact of LAWS would be more congruent to the states that regarded the LAWS issue primarily from a conventional disarmament perspective. Furthermore, this framing probably resonated well within the transnational coalition led by HRW who had an experience of preceding humanitarian disarmament campaigns. However, the prevalence of IHL compliance frames among the diagnostic frames of CSKR should be regarded as a consequence of CWW as its venue rather than the preference of the movement activists. In fact, CSKR had several reservations regarding CCW in terms of the efficacy of its consensus-based procedures, as well as its focus on IHL compliance which overlooks other concerns such as international stability:

There may be temptation to deliberate over whether existing international humanitarian law is sufficient to address the use of fully autonomous weapons. Yet such an approach risks narrowing consideration and ignores proliferation and other concerns.

(...) A CCW mandate should not mean that other UN bodies and actors cannot also engage on fully autonomous weapons at the same time, such as the Human Rights Council and UN Secretary-General.

(...) The CCW work should be underpinned by a sense of urgency. It does not make sense to waste years debating whether international humanitarian law is sufficient. Technology is advancing faster than diplomacy at present and we need to catch up by establishing a clear framework to prohibit fully autonomous weapons.

(...) The campaign's objective is a total ban regardless of the forum. If it does not prove possible to achieve a prohibition within the CCW, then like-minded states should consider a free-standing process, with the support of UN actors, international organizations, and the campaign. (Campaign to Stop Killer Robots [CSKR], 2013d)

As evident in these excerpts, in many of its framings in the international discussions, CSKR's emphasis is more on the prognostic side of the issue than the diagnostic side;

this is not to discard the salience of the latter. CSKR articulated a set of diagnoses in various ways and delivered them flexibly in accordance with its diverse audience; however, the ultimate prognosis remained the same: a preemptive ban. This section will examine the various ways in which CSKR diagnosed problems and grievances surrounding its issue area to justify such a prognosis, beginning with the legality frames, which comprise IHL compliance and accountability subframes. The very first paragraph of CSKR's launch statement which was published on 23 April 2013 reads as follows:

Urgent action is needed to pre-emptively ban lethal robot weapons that would be able to select and attack targets without any human intervention, said a new campaign launched in London today. The Campaign to Stop Killer Robots is a coordinated international coalition of non-governmental organizations concerned with the implications of fully autonomous weapons, also called "killer robots." (Campaign to Stop Killer Robots [CSKR], 2013e)

Following the precedent of this preliminary framing, problematisation of weapon autonomy as an imminent threat, particularly when critical functions of target selection and engagement are concerned, has been the crucial aspect that underlies all other subsequent diagnostic efforts of CSKR. There are many occasions in the campaign material where IHL compliance and human dignity frames follow upon framing weapon autonomy itself as the fundamental problem. A typical representation of such problematization is exemplified here:

Fully autonomous weapons would be able to fire at targets that they not only detect themselves, but also select on their own, without human intervention being necessary to carry out the attack. The key element is that the machine has the power to choose a target of attack independently. Unlike existing unmanned, remote-controlled weapons systems, such as drones, fully autonomous weapons would launch attacks without the involvement of a human operator. (Campaign to Stop Killer Robots [CSKR], 2013b)

In the formative framing period, the CSKR has been generally careful not to touch

upon drones as an issue area, possibly with an aim not to discourage major state parties from collective disarmament action; however, CSKR nevertheless portrays drones as a processual step in the development of LAWS:

Fully autonomous weapons have, to our knowledge, not yet been deployed, but we are concerned that drones, as well as certain unmanned ground or sea-based vehicles, could potentially be given the capacity to make decisions for themselves as technology develops. Some weapons systems that are currently in use already have the capability to attack in fully autonomous mode, though, so far, States have chosen to keep a person involved in, or at least, on the targeting loop. But military and policy documents of a number of States indicate a clear trend towards increasing autonomy of weapons systems, with large amounts of money being allocated to research and development of this capability. (Campaign to Stop Killer Robots [CSKR], 2013b)

The mention of drones in its inception was probably intended to serve as a more realistic attention-grabber for CSKR in its bid to avoid the Terminator imagery. Weaponized drones with some degree of automatized functions have been in the arsenal of many militaries in the world for some time then; they have become a familiar phenomenon in public perception and a closer weapon category to LAWS than humanoid robots that are yet to be weaponized. As such, drones acted as a suitable medium to bring public perception closer to a more realistic iterations of LAWS than what terminator imagery entailed.

Nevertheless, LAWS are a few steps ahead in terms of the extent of autonomy they possess, which is problematized by CSKR as being a challenge to humanity:

The Campaign to Stop Killer Robots seeks to provide a coordinated civil society response to the multiple challenges that fully autonomous weapons pose to humanity. It is concerned about weapons that operate on their own without human supervision. The campaign seeks to prohibit taking a human out-of-the-loop with respect to targeting and attack decisions on the battlefield. (Campaign to Stop Killer Robots [CSKR], 2013b)

4.1.1.1. Legality Frames: IHL Compliance and Accountability

In its launch statement, CSKR listed four concerns over delegating autonomous weapons systems the responsibility to make such lethal decisions, of which two are concerned with IHL compliance, which will be called legality frames, and two with international stability, which will be called international stability frames. Legality frames are on the top of the list and the first of these is articulated as follows:

Autonomous robots would lack human judgment and the ability to understand context. These human qualities are necessary to make complex legal choices on a dynamic battlefield, to distinguish adequately between soldiers and civilians, and to evaluate the proportionality of an attack. As a result, fully autonomous weapons would not meet the requirements of the laws of war. (Campaign to Stop Killer Robots [CSKR], 2013e)

It should be noted that the CSKR's framing of the LAWS' impact on the application of the principles of distinction and proportionality is articulated through juxtaposing machines and humans in terms of their capability to comply with the laws of war. The audience of the launch statement is the general public as the CSKR took the stage for the first time. Using plain language and avoiding terminology to the best extent, CSKR subtly invokes the identity component here by setting an "us" and "them" distinction between humans and machines, which aims to direct the audience to identify with the human side of the juxtaposition. The human-machine juxtapositions are often featured as an identity component in CSKR diagnostic framings, sometimes in less subtle ways through anthropomorphising machines by referring to them as performing human functions such as "choosing" targets or "deciding" in life-and-death situations in place of humans, in a way to depict LAWS as agents replacing humans in decision-making mechanisms, deliberately taking over human functions. In turn, the distinctive element of the identity component is introduced by evoking a sense of propriety, which stresses that despite taking over human functions machines lack normative human merits and are incapable of making moral decisions, which is a characteristic of "us" as opposed to "them". To illustrate, a prominent campaign member, Jody Williams, framed a preemptive ban as a means "to avoid a future where compassionless robots decide who

to kill on the battlefield” (Campaign to Stop Killer Robots [CSKR], 2014f). Some campaign members such as Article 36 avoided such anthropomorphised framings (Article 36, 2015) by relentlessly adopting a technical language, while others such as more religiously-oriented PAX refer to LAWS with sentimental headings such as “killing without a heart” (PAX, 2014, p. 6) and frame war as a primarily human endeavour:

FAWs [fully-autonomous weapons] are by nature unethical. War is about human suffering, the loss of human lives, and consequences for human beings. Killing with machines is the ultimate demoralization of war. Even in the hell of war we find humanity, and that must remain so. (PAX, 2014, p. 7)

These human-machine juxtapositions and anthropomorphisations function as a way to bridge the gap caused by the lack of victims of LAWS and make the issue more relatable to the targets of mobilization. By dismissing machines as lacking human merits, the activists reaffirm human moral agency and thus validate the need for retaining MHC on LAWS to complement the perceived moral deficit. The diagnostic framings of CSKR construct meanings that generally pave the way for its most prominent teleological prognosis: retaining MHC on the operation of LAWS. A similar example of this type of framing is seen in the below excerpt which features an IHL compliance frame:

Human agency and judgment, appreciation of the context, understanding of the intentions behind people’s actions, and anticipation of the direction in which events are unfolding are necessary for the application of basic rules of international humanitarian law. We are concerned that fully autonomous weapons would lack situational awareness and morality, and that they could not mimic human decision-making processes in a way that would enable them to evaluate the unpredictable circumstances that arise in most operational environments. In addition, whilst removing human soldiers from the battlefield can protect those soldiers’ lives, it would also further shift the burden of armed conflict onto civilians, and accentuate the asymmetry in confrontations between those with high-tech weaponry and those who do not possess such

weapons – features of modern conflict that are already seen to be highly problematic from a humanitarian perspective. (Campaign to Stop Killer Robots [CSKR], 2013b)

The audience of this speech act is the UN Secretary-General’s Advisory Board on Disarmament Matters. Although the frame dwells on a similar juxtaposition between the capability of LAWS vis-à-vis humans in applying the humanitarian norms enshrined in IHL, CSKR switches to a diction that is more legalistic and lacks the identity component in the form of “us and them” distinctions. Instead, CSKR opts for invoking the injustice component by highlighting the risks of the uneven proliferation of LAWS, which would exacerbate the global inequalities and shift the burden onto civilians by making it their responsibility to remain outside the battlefield in order not to be mistaken by LAWS as combatants, when that burden of keeping combat away from civilians should have been on combatting parties as per IHL. Furthermore, CSKR engages in counter-framing against the contesting view that LAWS would lead to less lethal conflicts and a reduction in casualties. It implicitly highlights the predominantly urban nature of modern conflicts, where the deployment of LAWS is likely to cause harm to civilians.

Another type of legality frame focuses on the obstacles LAWS would set on legal accountability and moral responsibility for the potentially unlawful actions committed through LAWS. This is best articulated in the below excerpt from the presentation given by CSKR to the UN Secretary-General’s Advisory Board on Disarmament Matters:

There is also great concern that the use of fully autonomous weapons systems would create an accountability gap. It may be difficult to establish who is responsible for the harm caused in an attack involving a fully autonomous weapons system. Even if a responsible party can be identified, there is no clarity on who would be legally accountable for a robot’s actions: the commander, the programmer, or the manufacturer? Unlike humans, fully autonomous weapons cannot take the blame for wrongful acts. We are very concerned that without clear responsibility and accountability, victims would be left without an effective remedy for the harm they experienced, and parties

to a conflict would enjoy impunity for attacks by fully autonomous weapon systems, and would, hence, have less incentive to behave ethically and in compliance with the law. (Campaign to Stop Killer Robots [CSKR], 2013b)

The framings along these lines are replicated in the subsequent CSKR campaign material. This framing of accountability invites a deliberation more in line with International Human Rights Law than IHL as it is justified through the wording of remedies for the victims rather than the IHL-related command responsibility. This may align with the CSKR's urge to raise awareness of non-humanitarian, beyond-combat aspects of the impact of LAWS such as its uses in law enforcement, which will be covered further in the thesis. The research indicates that accountability was an issue that was only sparsely discussed in two international discussions at CCW in May 2014 and April 2015, and in line with that, although it was sporadically mentioned in the campaign material alongside other issues of IHL compliance, it was not given specific attention in CSKR framings in the due period. Nevertheless, the prominent coalition member HRW published a report specifically on the topic, which sets the contours of CSKR's accountability frames:

Fully autonomous weapons themselves cannot substitute for responsible humans as defendants in any legal proceeding that seeks to achieve deterrence and retribution. Furthermore, a variety of legal obstacles make it likely that humans associated with the use or production of these weapons—notably operators and commanders, programmers and manufacturers—would escape liability for the suffering caused by fully autonomous weapons. Neither criminal law nor civil law guarantees adequate accountability for individuals directly or indirectly involved in the use of fully autonomous weapons. (Docherty, 2015, p. 1)

4.1.1.2. Human Dignity Frame

The third theme in CSKR's diagnostic framings presents LAWS as a threat to human dignity. Human dignity frames serve two functions that come in very handy for CSKR. First, human dignity frames function as a means to stigmatize LAWS as a weapon

category that is inherently immoral. Stigmatization has been a common method that is grafted from the successful disarmament movements in the past, such as those against landmines and nuclear weapons. If the public perceives the use of a weapon as morally repugnant, it is more likely that such views could be leveraged to pressure dissenting and intransigent states. Second, human dignity frames are generally amplified by reference to widely accepted universal values of humanity and dignity, which potentially helps achieve greater frame resonance with a larger audience.

One of the ways CSKR frames LAWS from a human dignity perspective is by establishing a boundary that delineates the threshold of moral permissibility; one that should not be transcended:

We have many concerns with these fully autonomous weapons, but perhaps our most significant concern is with the notion of permitting a machine to take a human life on the battlefield or in law enforcement and other situations. Many agree with us that this is a step too far that crosses a line that should never be crossed as it would be an affront to human dignity. (Campaign to Stop Killer Robots [CSKR], 2014d)

Another example of framing that sets a moral boundary on the use of LAWS in terms of a notion of morality linked to human dignity is present in the excerpt below, which features a quotation by a high-ranking veteran serving as a frame articulator to support the credibility of the frame, asserting that killing of humans by algorithm leads to ultimate form of indignity:

(...) allowing machines to make the decision to kill a human being crosses a fundamental moral line. There is strong international consensus that not all weapons are acceptable, and we believe that giving machines the power to choose who lives and dies on the battlefield is an unacceptable application of technology. As a retired United States Major General recently put it: ‘death by algorithm is the ultimate indignity’. (Campaign to Stop Killer Robots [CSKR], 2013b)

In spite of the fact that human dignity is given essential prominence by CSKR in its frames, it has not been the most prevalent framing in its formative period. Findings indicate that human dignity frames closely followed the legality frames, which constituted the core of CSKR framing, at least within the confines of international discussions. Nevertheless, in these excerpts can be found the aspects of human dignity framing that will be more firmly pronounced and elaborated in the consecutive framing periods, such as the moral stigmatization of killing by the algorithm.

4.1.1.3. International Stability Frame

Another set of diagnostic frames capitalized on the international stability concerns stemming from the prospect of LAWS being deployed on the battlefield, resulting in a proliferation and arms race, which would have an adverse impact on tactical and strategic stability. This was the initial framing which ICRC embraced prior to the formation of CSKR and it continued to voice international stability frames in the multilateral discussions in its own interventions alongside CSKR. Although CSKR maintained the international stability frame in its repertoire and articulated it on several occasions, international stability themes were only sparsely mentioned in the analysed documents. This may again be the implication of its IHL-oriented venue CCW, which CSKR occasionally protested for having a narrow focus that overlooks international stability as well as human rights concerns. However, international stability frames are also not used in the campaign material directed at the public. A diagnostic frame with consequentialist argumentation that aims to raise awareness of LAWS' impact on global peace could potentially have secured some resonance in audiences which are not necessarily informed of IHL and less convinced by the philosophical essence of human dignity frames.

A closer examination of the campaign excerpts reveals a number of frames related to international stability. LAWS are framed as leading to a destabilizing robotic arms race; a notion that is, in turn, used to instil a sense of urgency to act before the matter reaches a point of no return:

If fully autonomous weapons are deployed, other nations may feel compelled to abandon policies of restraint, leading to a destabilizing robotic arms race.

Agreement is needed now to establish controls on these weapons before investments, technological momentum, and new military doctrine make it difficult to change course. (Campaign to Stop Killer Robots [CSKR], 2013e)

In another excerpt, a sense of urgency in a similar vein is embedded in the framing by listing the number of countries that have drone technology, implicitly arguing that it would not be long before one of those countries could produce LAWS, and others would feel the urge to follow the course:

Fully autonomous weapons also pose a pressing danger to international peace and security. A robotic arms race, for instance, is a real possibility. It is estimated that more than 70 countries have acquired drone technology, and a handful, including China, Israel, Russia, the United Kingdom, and the United States, have armed drones and other robotics technology. If one or more of these States chose to deploy fully autonomous weapons others may feel compelled to abandon policies of restraint. (Campaign to Stop Killer Robots [CSKR], 2013b)

CSKR also regarded LAWS as a “deadly revolution in weaponry” which will bear an inherent military necessity to spawn an armed race (Campaign to Stop Killer Robots [CSKR], 2015a). Another strain of the international stability themes focused on the notion that LAWS would make errors resulting in unintended outputs that could lead to conflict escalation, this time employing DoD as the frame articulator to reinforce frame credibility:

Such interactions could create unstable and unpredictable behavior, behavior that could initiate or escalate conflicts, or cause unjustifiable harm. A United States Department of Defense Directive on ‘Autonomy in Weapons Systems’ issued in November last year acknowledges the dangers of failures, unintended engagement or loss of control of the system to unauthorized parties. (Campaign to Stop Killer Robots [CSKR], 2013b)

Less frequent themes that are treated within international stability framings involve proliferation risks stemming from the spread of LAWS as a global medium of warfare

and non-state actor acquisition, particularly by terrorist groups. These issues barely received dedicated attention from the CSKR in its formative framings, despite sporadically being stated as a problem without a comprehensive elaboration:

We should also expect fully autonomous weapons technologies to proliferate. Weapons systems with a high degree of autonomy are vulnerable to being appropriated and hacked. They could be intercepted and misused by third parties, and it cannot be excluded that non-state actors could gain access to such technologies. (Campaign to Stop Killer Robots [CSKR], 2013b)

The proliferation and arms race frames are more elaborately articulated by Bonnie Docherty of HRW and the International Human Rights Clinic at Harvard Law School, who communicated these framings in a side event of CSKR at 2016 CCW Review Conference (Researching Critical Will [RCW], 2016). Docherty points at the risks of LAWS' proliferation and the ensuing arms race, arguing that although it may be initially cheaper to produce LAWS than train and maintain a conventional army unit, they will ultimately be more costly in terms of their catastrophic contingencies:

An arms race in fully autonomous weapons technology would carry significant risks. The rapidly growing number of fully autonomous weapons could heighten the possibility of major conflict. If fully autonomous weapons operated collectively, such as in swarms, one weapon's malfunction could trigger a massive military action followed by a response in kind. Moreover, in order to keep up with their enemies, states would have incentive to use substandard fully autonomous weapons with untested or outdated features, increasing the risk of potentially catastrophic errors. While fully autonomous weapons might create an immediate military advantage for some states, they should recognize that it would be short lived once the technology began to proliferate. Ultimately, the financial and human costs of developing such technology would leave each state worse off, and thus they argue for a preemptive ban. (Docherty, 2016, pp. 29–30)

A similar consequentialist argumentation concerning the proliferation of LAWS is present in the below framing of CSKR in a news article with the title of “Prevent

another Hiroshima or Nagasaki” concerning the Association for Aid and Relief of Japan’s renewal of its support for banning fully autonomous weapons:

Forces that use fully autonomous weapons could wage war at lower cost and risk to human soldiers, which could encourage political leaders to start a war with much less hesitation. Lowering the threshold for going to war could bring about an epidemic of wars, creating extreme insecurity and violence for humankind. A weapon that can kill without human judgment would pose indiscriminate and excessive violence in the world. (Campaign to Stop Killer Robots [CSKR], 2015d)

4.1.1.4. Blame-Attributive Diagnostic Frames

Another type of diagnostic framework does not focus on problem identification but rather assigns blame or responsibility for the problems' existence to a specific target; that is, the attributive component of diagnostic frames. The general outlook of diagnostic frames in the formative period indicates that CSKR had initially acted with restraint in blame attribution. The framing perspective originally configured blame attribution for social movements in domestic contexts where a company or a government agency would be blamed as the cause of the identified problem.

This may be easier in democratic settings where actors may face direct political pressure from society as the immediate target of mobilization through diagnostic framing. However, framings of transnational advocacy networks in humanitarian disarmament have to be structurally different from that of social movement organizations in a national setting: they have to act in a specific transnational venue where the cause of the problem is often one or a group of states that impede progress and the activists have to be more strategic and diplomatic as per convention in multilateral discussions, where states need to be persuaded rather than assigned blame by the activists. As such, CSKR was restrained by the diplomatic and technical nature of the framing activities in humanitarian disarmament and was careful not to antagonize state parties early on. Nevertheless, in the initial framing period CSKR

hinted at the causes of the problem by listing countries that develop automation in their militaries:

Several robotic systems with various degrees of autonomy and lethality are currently in use by high-tech militaries including the US, UK, China and Russia and there is concern the trend will result in weapons systems that would give full combat autonomy to machines. Already, South Korea and Israel are deploying armed robot border guards, which retain a human in or on the decision-making loop. (Campaign to Stop Killer Robots [CSKR], 2014e)

On some occasions, CSKR established the causal link between the problem identification and blame attribution implicitly without qualitative explanation but placing these elements in a sequence in the same speech act:

Low-cost sensors and advances in artificial intelligence are making it increasingly possible to design weapons systems that would target and attack without further human intervention. If the trend toward ever-greater autonomy continues, the concern is that humans will start to fade out of the decision-making loop, first retaining only a limited oversight role, and then no role at all. Several nations with high-tech militaries, particularly the United States, China, Israel, South Korea, Russia, and the United Kingdom, are moving toward systems that would give greater combat autonomy to machines. (Campaign to Stop Killer Robots [CSKR], 2016d)

It is not easy to substantially and convincingly attribute blame for a weapon system which is yet to be fully materialized and deployed in conflict. A more intuitive way of attributing blame in CSKR's case is hinting at specific countries or structural processes which impede the progression of multilateral discussions on LAWS. From the inception of multilateral discussions on LAWS, CSKR has been aware of the structural difficulties of reaching an agreement through the mechanisms of CCW, a consensus-based disarmament venue where decisions are made unanimously, and it only takes one dissenting state to hinder the entire progress of discussions. Furthermore, CCW operates on the basis of the lowest common denominator among

state parties to the convention, which further complicates the process of adopting a comprehensive legal instrument. CSKR has stated several times that it welcomed the LAWS taken up by CCW while also calling for discussions on LAWS to take place in other relevant venues, such as the Human Rights Council or through an independent mechanism only involving those states that are willing to legislate a treaty.

From 2015 onwards, CSKR started to lay criticisms against the progress of the discussions, claiming that the campaign was becoming “increasingly concerned that the CCW process is aiming too low and going too slow” (Campaign to Stop Killer Robots [CSKR], 2015b), and that the campaign saw “little ambition from states in picking up the pace of the deliberations, identifying the desired outcome, and setting aside sufficient time for future talks (...) A long, drawn-out process that achieves a weak or no result must be avoided” (Campaign to Stop Killer Robots [CSKR], 2016b). In addition to the diplomatic and strategic restraint, it can be said that CSKR generally did not see a need to incorporate blame-attributive components in its frames in the formative years since the countries participating in the multilateral discussions generally did not speak against the need for regulation in the issue area. One exception to that is Russia:

At a preparatory meeting for the Fifth Review Conference in August, more than thirty states expressed support for creating a Group of Governmental Experts, but Russia cast a shadow over the apparent consensus by describing such a step as “premature.” We understand the concern that moving to the next level could raise expectations of an outcome, but see no harm and many benefits in this modest step forward. (Campaign to Stop Killer Robots [CSKR], 2016b)

4.1.2. Prognostic Frames

In terms of the solutions offered to identified problems in the previous section, CSKR adopted a more single-minded approach that is fixed to leverage all its framing efforts on consolidating MHC, retaining of which appears as the ultimate teleological aim that underpins the entire campaign concept of CSKR. It appears that MHC has been suggested as the fundamental standard against which all other prognoses and

regulatory schemes are evaluated. As a maxim which gained wide traction in multilateral discussions at CCW since 2014, MHC informed internal logic of the prognostic frames addressing a significant portion of the diagnosed problems in IHL-compliance, accountability and human dignity (Human Rights Watch [HRW], 2016). The central position of MHC is evident in the campaign material assessed in the research as it has been the most mentioned prognostic theme alongside the preemptive ban.

If we look at the excerpts from the campaign material that discusses MHC, it is even framed as a way to inform the legal-instrumental prognoses such as preemptive ban, in addition to being suggested as a solution for diagnostic frames of human dignity, legality and international stability:

Prognostic Frames

Prognostic	Formative	Active	Adaptive
MHC	11	16	35
Preemptive Ban	12	21	6
International Treaty Binding Legal Instrument	6	11	30

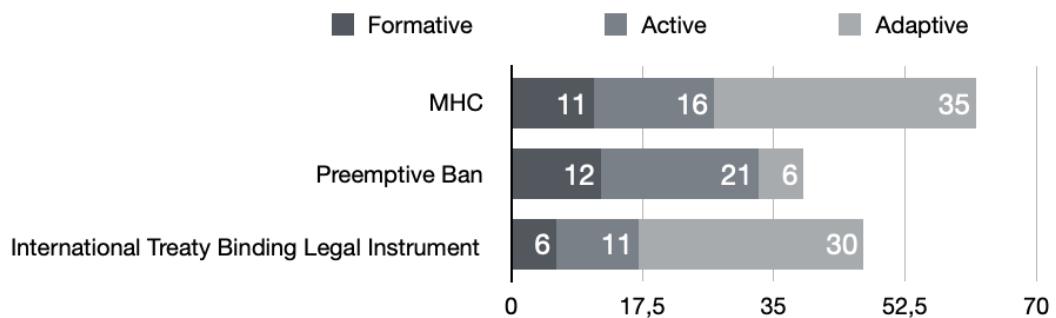


Figure 5: Prognostic Frames Per Framing Period

By retaining meaningful human control over the use of lethal force in each individual attack we can in effect prohibit the use of fully autonomous weapons and thus achieve a preemptive ban.

(...) Mandating meaningful human control over the use of weapons would help protect human dignity in war and is consistent with and promotes compliance with the principles of international humanitarian law, notably distinction and proportionality.

(...) Retaining meaningful human control would avoid the accountability gap that would be created by the use of fully autonomous weapons. It would ensure that someone could be punished for an unlawful act caused by the use of the weapon. With a legal requirement for human control, a commander could be held criminally liable for using any weapon without such control.

(...) Meaningful human control of weapons would help avoid threats to the fundamental moral principles over the decision to use force. (Campaign to Stop Killer Robots [CSKR], 2016b, pp. 3–4)

As evident in the first paragraph in the above excerpt, CSKR regarded MHC as a function that is exercised over lethal force in each individual attack, which would effectively result in a preemptive ban. A similar point concerning maintaining MHC on each individual attack was also made in earlier campaign material:

In our view, meaningful human control of any autonomous weapon system and accountability for their use are essential to ensuring both humanitarian protection and the rule of law. Meaningful human control requires active cognitive participation of a human being in every individual attack and sufficient time for deliberation on the nature and significance of a target, its context and the anticipated effects of an attack. (Campaign to Stop Killer Robots [CSKR], 2013b)

MHC is a term that was originally coined by the CSKR member Article 36, which elaborated on the issue in its separate campaign material (Article 36, 2015). In sight of the continuum of the transnational advocacy network between different disarmament movements, MHC framing involves ideational elements that are grafted from the campaigns against earlier weapons that posed similar risks on human life stemming

from lack of control, along with an agency component implying that conditions are the same as before where collective action successfully produced disarmament results:

Disarmament law has a long history of banning weapons because of concerns about lack of control, and provides direct precedent for banning weapons over which there is no human control. The international bans on biological and chemical weapons resulted in part from concern about the controllability of the weapons. After releasing such weapons, humans cannot control where they go or whom they kill, leading to unintended victims. (Campaign to Stop Killer Robots [CSKR], 2016b)

In order to maintain meaningful human control over the operation of LAWS, CSKR has been calling for a preemptive ban in the form of an international treaty, which has been, alongside MHC, the most prevalent prognostic theme in its framings that are analysed in the research. Almost all introductory statements whereby CSKR made itself known to any audience featured its call for a ban as a signature along these lines:

To ensure there is always human control over targeting and attack decisions the Campaign to Stop Killer Robots calls for a pre-emptive ban on the development, production, and use of fully autonomous weapons, also described at this meeting as 'autonomous weapons systems.' This prohibition should be achieved through an international treaty as well as through national laws and other measures. (Campaign to Stop Killer Robots [CSKR], 2014c)

The campaign also called called countries to develop national laws to regulate LAWS in the initial prognostic framings; however, this seems to be gradually abandoned as the CSKR faced a reality in which it even had to push the countries to articulate a national stance within the multilateral discussions:

All of the states that have spoken have expressed interest and concern at the challenges posed by fully autonomous weapons. None have opposed discussing the topic further. Many of you have suggested urgent international talks to address these weapons. We welcome your statements. Your words matter to us.

We urge all countries to consider and publicly articulate their policy on this new challenge. (Campaign to Stop Killer Robots [CSKR], 2013c)

In the excerpt above, CSKR reinforces its message by employing an identity component by creating a sense of collectivity among states that share the same opinion on LAWS, which is used as an encouragement to address the lack of official positions among the state parties that are needed for convergences of opinion in multilateral discussions. The calls for country stance articulation continued for consecutive years, albeit resulting with slow progress (Campaign to Stop Killer Robots [CSKR], 2014e, 2015b, 2016b).

4.1.3. Motivational Frames

The research indicates that in the formative framing period, the CSKR relied extensively upon vocabularies that were aimed at evoking a sense of urgency and efficacy in the campaign's motivational frames. This was closely followed by the framings that highlighted the severity of the framed situation or event. To a lesser degree, CSKR also employed vocabularies of propriety that aim to make the audience responsible for taking action.

Urgency has been one of the most prevalent vocabularies of motive CSKR used, which is generally expressed by hinting at the fast development of AI and military technologies that are likely to outpace the regulation efforts, or it would be irreversibly late to take action once the proliferation and arms race starts. It can be said that CSKR primarily capitalised on this sense of urgency to motivate its targets of mobilisation, as was evident in the very first sentence, as well as the headline, of CSKR's launch statement: "urgent action is needed to pre-emptively ban lethal robot weapons that would be able to select and attack targets without any human intervention" (Campaign to Stop Killer Robots [CSKR], 2013e).

CSKR reminded the urgency of the situation as a framing tactic to persuade its audiences and encourage collective action while it could still be taken:

As Professor Heyns said in his report, we must reinforce the international legal

framework “against the pressure of the future ... while it is still possible.” Your action is needed now to prevent this method of warfare from ever coming into existence. (Campaign to Stop Killer Robots [CSKR], 2013c)

In another excerpt from the campaign material, CSKR combines agency component with a vocabulary of urgency to persuade participants that an international treaty to ban LAWS is *possible*; however, not through a slow and gradual approach:

Motivational Frames

Vocabularies of Motive	Formative	Active	Adaptive
Urgency	9	13	14
Efficacy	10	3	16
Propriety	5	11	15
Severity	8	4	15

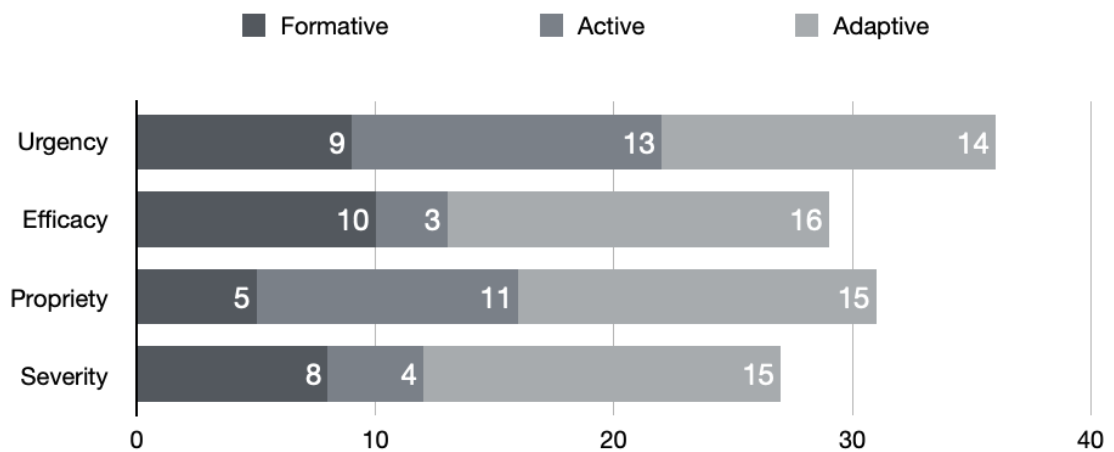


Figure 6: Motivational Frames per Framing Period

We view the CCW mandate as the beginning of a process that can lead to the adoption of a sixth protocol to the CCW. At the United Nations in Geneva we often hear the phrase “step-by-step,” but the proposed CCW mandate should be viewed as the first step on to a ladder. We urge you to climb high and support our call for a ban as the most effective way to ensure the protection of civilians. (Campaign to Stop Killer Robots [CSKR], 2013a)

The following excerpt exemplifies how a sense of urgency is utilised by CSKR by

reference to the notion that “technology outpaces diplomacy” in order to motivate the states to agree on establishing GGE, a new transnational venue under CCW to initiate more formal discussion LAWS:

Don’t let technology overtake the slow diplomatic pace of the CCW. At their annual meeting on November 13, states should agree to establish an open-ended Group of Governmental Experts that formalises the work, gives it an outcome objective, and dedicates more time—three or four weeks of deliberations — over the course of 2016. (Campaign to Stop Killer Robots [CSKR], 2015c)

A second type of vocabulary used by CSKR is severity, which argues that risks or threats incurred by the proliferation of LAWS are salient and should be taken seriously by the state parties. In the following excerpt, CSKR combines vocabularies of efficacy and urgency to convince the states that the work that is undertaken by collective action has a real impact on protecting civilians and is of historical importance:

The CCW provides states with an opportunity to make real progress in global disarmament and have a real impact in protecting civilians from future harm. States at the CCW have never tackled an issue with such potentially far-reaching consequences. (Campaign to Stop Killer Robots [CSKR], 2016b)

The third vocabulary of motive is propriety, which is generally evoked in support of human dignity frames or by the claiming that there is a “moral imperative” to retain MHC on the operation of LAWS (Campaign to Stop Killer Robots [CSKR], 2016c, 2016b). This framing device helps CSKR leverage moral pressure on states by arguing that there is a moral responsibility to participate in collective action. Sometimes, a sense of propriety is evoked by arguing that one cannot refrain from taking action against the “wrong”:

The relentless drumbeat of the “inevitability” of killer robots is meant to have a deadening effect on people who do not support the idea of allowing machines to kill humans on their own. The Campaign to Stop Killer Robots rejects the

inevitability notion. They are only inevitable if the people in all walks of life who believe that unleashing autonomous weapons systems is wrong do nothing to stop them. (Campaign to Stop Killer Robots [CSKR], 2015a)

The final vocabulary of motivation employed by CSKR framings is efficacy, which intends to demonstrate that the objectives of collective action are achievable and aim to strengthen the sense of agency felt by the targets of mobilisation. The concept is that states are more likely to endorse robust causes and realistic objectives. In order to convey this sense of attainability, CSKR often references earlier disarmament movements and claims that regulation of LAWS is ultimately inevitable:

We know from CCW Protocol IV on blinding lasers that a preemptive ban is achievable. We know from the humanitarian disarmament path carved by the Mine Ban Treaty that much can be achieved in a short period of time when nations take responsibility for acting and work in cooperation with the UN, ICRC, and non-governmental organizations. We know that if we follow this way of working and stay focused on our goal, the negotiation of a legally binding instrument that establishes the principle of human control over targeting and attack decisions is not just possible, but inevitable. (Campaign to Stop Killer Robots [CSKR], 2014d)

4.1.4. Frame Alignment Processes and Other Strategies

The research indicates that the CSKR has frequently advocated for the active involvement of women in multilateral discussions during the formative framing period. The group has openly criticised the practice of all-male panels in the CCW meetings, an unwelcome characteristic of multilateral disarmament discussions. One of the members of the CSKR from its inception has been WILPF (Women's International League for Peace and Freedom), a feminist social movement organization that promotes the meaningful participation of women in civil society in peace and security fields and engages in advocacy for feminist solutions that aim to prevent and respond to conflicts and crises from a gender perspective (Women's International League for Peace and Freedom [WILPF], n. d.). CSKR vocally advocated

for women and showcased its interventions in its briefings and reports. They started by diagnosing a lack of gender diversity in the multilateral discussion on LAWS:

The CCW experts meeting, in which 87 governments and many civil society organisations participated, was widely viewed as a success with one glaring exception, namely the lack of any non-male experts among the line-up of 18 presenters. This has been attributed to a lack of input from CCW states to the chair even though many women are publishing and speaking on the topic. Thus this appears to be symptomatic of a broader problem. Governments and UN bodies must actively work to ensure gender diversity in deliberations relating to disarmament, peace, and security discussions by recognizing, engaging, and including non-male experts. (Campaign to Stop Killer Robots [CSKR], 2014a)

CSKR also took action against the practice of all-male panels and actively called for more gender and national diversity in disarmament talks:

On process, we appreciate all the expressions of support for the substantive contributions that civil society is making in the context of the Convention on Conventional Weapons. We urge that further deliberations on autonomous weapons be not just inclusive of non-governmental organizations, but also diverse in hearing the voices of men and women, of various views, and of all nations. (Campaign to Stop Killer Robots [CSKR], 2014b)

Following up with the course, in its 2016 FAQs on multilateral discussions at CCW, the CSKR reports on the success of its earlier intervention as follows:

Female experts comprise 42% of the speakers invited to address the third CCW meeting on lethal autonomous weapons systems. Last year, 10 of the 30 experts presenting at the second CCW meeting were women. This growth reflects the strength of the “no more manpanels” initiative that campaigners started after the first CCW meeting on lethal autonomous weapons systems in May 2014, which featured 18 speakers but all were men. (Campaign to Stop Killer Robots [CSKR], 2016a, pp. 5–6)

Intervening for gender diversity is not necessarily a frame bridging or extension, as CSKR did not substantially include gender perspective within the content of its framings; however, their vocal efforts function as an outreach activity to align ideologically congruent but structurally different mobilisation targets with the disarmament social movement. This should also be regarded as a preparation for the prospective framing strategies which CSKR will employ in the next framing period.

4.2. Active Framing Period (2017-2019)

The formation of the GGE at CCW brought some momentum to the multilateral discussion on LAWS and led to the most productive campaign years of CSKR in terms of engaging in speech acts that intervene in the meaning-construction processes through framing, which is why, by all means, would qualify as being an “active” period.

4.2.1. Diagnostic Frames

CSKR retained many of its diagnostic framings from the formative period to the active period, albeit with some nuances and novel emphases and modifications in response to various factors underpinning the developments at the GGE. Legality and human dignity frames mainly remained along the same lines as initially framed. Interestingly, research indicates a sharp decrease in the prevalence of international stability frames such as arms race and proliferation in the statements given at the multilateral discussions. The same trend is corroborated by other campaign material containing only a few mentions of international stability themes. In addition to the humanitarian focus of CCW, the most likely explanation for this may be the prioritisation of prominent themes under discussion, such as meaningful human control, which received a decent amount of attention in the GGE discussions, and the campaign potentially aimed to avoid distractions.

During the active period, in order to reinforce the sense of urgency built in the previous period, CSKR emphasised the growing pace of autonomous technologies, such as sensors and AI, which were framed as gradually leading to the complete eradication of human control over LAWS:

Rather our concern is that technological advances are making it increasingly possible to design weapons systems that would target and attack without any meaningful human control. (Campaign to Stop Killer Robots [CSKR], 2017a)

The concern is that a variety of available sensors and advances in artificial intelligence are making it increasingly practical to design weapons systems that would target and attack without any meaningful human control. If the trend towards autonomy continues, humans may start to fade out of the decision-making loop for certain military actions, perhaps retaining only a limited oversight role, or simply setting broad mission parameters. (Campaign to Stop Killer Robots [CSKR], 2018a, p. 1)

The CSKR's concern with this acceleration was based on the idea that as autonomous functions in the weapons systems gain higher levels of sophistication, their inner operations would become unexplainable and their output unpredictable, leading to errors which would not be accounted for:

Weapons are not designed to save lives, they are designed to take lives. Fully autonomous weapons would be unpredictable. By reacting with their environment in unexpected ways, they could cause fratricide or harm to friendly troops. Improved precision can be achieved without removing meaningful human control from individual attacks. The Campaign seeks to prohibit the development and a specific application of certain technologies, codify limits on its intended use, and ensure accountability under international law. There are no victims of killer robots yet, and we want to keep it that way. (Campaign to Stop Killer Robots [CSKR], 2019h)

The human dignity frame was preserved from formative to active framing periods without a significant shift in content and prevalence. CSKR often referred to human dignity themes to add stigma to the notion of using LAWS. To illustrate, the human dignity frame was embedded in a rhetorical question with the identity component delineating an implicit moral boundary between “we” who are on the right side and unspecified other:

We don't want to live in a world where machines choose targets and use violent force based only on sensor data and algorithms, without meaningful human control. Do you? (Campaign to Stop Killer Robots [CSKR], 2019a)

Human dignity frames often served as a means to justify the need for a binding legal instrument that prohibits LAWS, which is the overarching prognostic theme of CSKR. In fact, a treaty is framed as a means to remove the threats on human dignity:

(...) To address the far-reaching moral and ethical objections raised over fully autonomous weapons, most notably their lack of judgment and empathy, threat to human dignity, and absence of moral agency. (Campaign to Stop Killer Robots [CSKR], 2019e)

In our campaign's view, any measures less than new international law will not be to be effective, binding, or lasting. States must express their firm determination to avoid dehumanizing the use of force by moving to negotiate new international law now, without further delay. (Campaign to Stop Killer Robots [CSKR], 2018b)

The dehumanising effects of LAWS seen its first feature in 2018 in the above excerpt; however, there was not much of an elaboration of the concept in the active framing period. As a part of the human dignity frame, the dehumanisation theme will constitute a much more substantive content shift in the following framing period.

Another process in diagnostic frames in the active framing period is the CSKR's efforts to expand the usual legality frames to incorporate human rights aspects relevant to situations outside military conflict. Ever since its launch, there has been an interest in the ranks of CSKR to discuss LAWS from an international human rights law (IHRL) perspective. However, this did not come to fruition as IHRL was not considered a priority in multilateral discussions held in CCW. The states involved deemed IHL-oriented CCW a more relevant venue to discuss LAWS than the Human Rights Council. As stated earlier, in the formative period, CSKR often protested that CCW overlooked the human rights aspects. In response to the problem, with the formation

of GGE, CSKR once again pressed to discuss human rights aspects of LAWS in its framings during the active framing period. This is evident in the interventions of CSKR in the discussions at GGE, which highlights the lack of focus on human rights and international stability issues at the GGE:

The Campaign to Stop Killer Robots is concerned that the agenda or programme of work for this first meeting of the GGE is too narrow in some respects and too broad in others. Human rights aspects are missing completely from the agenda and there appears to be insufficient time to consider proliferation and security concerns as well as the human control needed in future weapons systems. (Campaign to Stop Killer Robots [CSKR], 2017e)

There have been numerous interventions by the campaign in its statements where LAWS were framed as taking human life in policing, border control and other circumstances, alongside on the battlefield:

And as you know, our Campaign to Stop Killer Robots fundamentally objects to permitting machines to take a human life on the battlefield or in policing, border control, and other circumstances. For us, this is a moral “red line” that should never be crossed. (Campaign to Stop Killer Robots [CSKR], 2017a)

Also, in 2017, CSKR welcomed and urged governments to heed an open letter initiated by the Future of Life Institute (FLI), an organisation allied with CSKR but not a member, and signed by 126 founders and directors of more than 100 robotics and artificial intelligence companies. The letter, which is featured extensively on the campaign news page (Campaign to Stop Killer Robots [CSKR], 2017d), invites deliberation on the effects of LAWS beyond the battlefield and highlights risks such as acquisition by “despots and terrorists” to be used on innocent civilians:

Lethal autonomous weapons threaten to become the third revolution in warfare. Once developed, they will permit armed conflict to be fought at a scale greater than ever, and at timescales faster than humans can comprehend. These can be weapons of terror, weapons that despots and terrorists use against innocent

populations, and weapons hacked to behave in undesirable ways. We do not have long to act. Once this Pandora's box is opened, it will be hard to close. (Future of Life Institute [FLI], 2017)

Collaboration between CSKR and FLI to expand the frame towards terrorism and threats of harm on civilians outside conflict was also evident in the *Slaughterbots* short film (Future of Life Institute, 2017) released in the same year, which features a threat frame involving terrorist acquisition of LAWS and attacks conducted by swarms of autonomous drones on the US senators and innocent civilians at a university. CSKR screened the short film at a CCW side event:

The campaign screened "Slaughterbots," a 7:47-minute fictional film by artificial intelligence (AI) expert Professor Stuart Russell of the University of California at Berkeley, for CCW delegates on 12 November. The film generated a slew of media coverage around the world and has since been watched more than 2 million times and translated into multiple languages. The Boston-based Future of Life Institute, which funded the film, has created a new website to encourage more actions in support of the call to ban lethal autonomous weapons systems. (Campaign to Stop Killer Robots [CSKR], 2017f)

Interestingly, the research indicates that the CSKR did not pursue terrorist or authoritarian acquisition frames any further in the CCW debates, and these relatively isolated attempts may be only meant to highlight the possible effects of LAWS on urban civilian life in a more general sense to align Western audiences with the usual humanitarian frames of the campaign. The two short videos published by CSKR in 2018 indicate such a motivation. The first video, *No country would be safe from fully autonomous weapons* (Campaign to Stop Killer Robots, 2018a), starts with the statement that LAWS were imminent as six countries had been producing them. The video proceeds with a portrayal of a swarm attack directed at the US Capitol, then makes references to calls from scientists, Nobel Peace laureates and religious organisations for action, and ends with a motivational frame which dramatically combines propriety, urgency and efficacy vocabularies to support collective action for a ban treaty. The second video, *Facing Fully Autonomous Weapons* (Campaign to Stop

Killer Robots, 2018b) portrays a conflict in an urban setting where a father and daughter discuss what is happening outside over the phone while swarms of drones attack high-rise buildings. The father advises the daughter to stay where she is, claiming that the drones are focusing on military targets; however, the daughter says she sees drones attacking a residential building across the street. Father responds that drones make mistakes; she should not panic as her panic might confuse the drones, which are apparently capable of detecting sentiments. As she looks outside, a drone slowly ascends to her floor from below, scanning the viewer, who pants in anxiety while her dog barks at the drone. The video's moral then appears on the screen: "Fully autonomous weapons would lack human judgement." Unlike *Slaughterbots*, both videos of CSKR depicted drones conducting attacks in a military conflict in an urban space where swarms of them, either by mistake or design, attack residential areas, high-rise buildings, and even the US Capitol. This portrayal of LAWS evokes a sense of threat with no escape that is intentionally crafted to stoke the fears of Western audiences.

A striking contrast emerged between the active and formative framing periods when it comes to the blame-attributive component, which was more frequently and directly incorporated in the diagnostic frames. During the formative period, CSKR carefully avoided direct confrontations with state authorities, employing a more subtle and often subtextual critical tone. However, the calls for more flexible regulative frameworks or lighter wordings by some state delegations, coupled with the slow pace of the multilateral discussions and little progress achieved in multilateral discussions in this framing period, led CSKR to adopt a more rigorously critical and adversarial tone in 2019, even implicating some states of deliberately slowing down the progress:

The CCW has been building a shared understanding on this issue – but struggles to agree on credible recommendations for multilateral action due to the objections of a handful of military powers most notably Russia and the United States. Yet again, a few states can abuse a concept of 'consensus' to curb the ambition of a majority of the participating states, preventing a more focused mandate that would produce a more focused conversation. (Campaign to Stop Killer Robots [CSKR], 2019d)

Protesting against the ‘abuse’ of the consensus requirement under the operational mechanism of the CCW, CSKR has effectively established an identity component that draws a line between the majority of states that are reportedly seeking a ban on killer robots and the few military powers that oppose it.

CSKR also responded to the states that engaged in a counter-framing effort highlighting LAWS’s potential benefits. CSKR called these states “bold in their desire”, which is in line with the stigma it wants to attach to any effort that would lead to a compromise from a preemptive ban:

Indeed, over the time of these talks, we have seen military powers becoming increasingly bold in their desire to consider perceived advantages and benefits that “LAWS” could bring. A look at some of the working papers submitted in these talks helps demonstrate this trend. In March, Russia provided a paper on the “potential opportunities and limitations of military uses” of killer robots, while Australia pitched its “system of control and applications for autonomous weapon systems.” Last year, the US provided a paper elaborating on the “humanitarian benefits” of emerging technologies in the area of LAWS. (Campaign to Stop Killer Robots [CSKR], 2019a)

Reporting these developments at the GGE in its news coverage for the public, CSKR takes a step further to clearly identify the adversaries of the social movement, highlighting the link between the identified problem and those that are the cause for it:

Russia and the United States are continuing their losing fight against the inevitable treaty that’s coming for killer robots.

(...) Russia and United States repeatedly rejected any references in the meeting’s final report on the need for “human control” over the use of force. Both states are investing significant funds to develop weapons systems with decreasing human control over the critical functions of selecting and engaging targets.

During the early morning negotiation of the final report, Russia said it is “premature” to discuss the potential dangers of lethal autonomous weapons

systems “until they’re produced.” It also argued that autonomy is not a characteristic or central feature of lethal autonomous weapons systems. (Campaign to Stop Killer Robots [CSKR], 2019g)

Social movements do not always attribute causes for a problematic situation or issue to specific agents but to larger structures or developments (Benford, 1993; Benford & Snow, 2000a). In the case of CSKR, sometimes the CCW structure itself became the subject of the blame attributive component of the diagnostic framings of CSKR for various issue areas such as the content and efficacy of the discussions. In terms of content, CSKR expressed discontent with the lack of focus on critical concerns relating to the impact of LAWS and ambiguous wording that fails to reflect a comprehensive and ambitious regulatory framework that potentially involves a prohibition:

We’re worried that the CCW is no longer looking at key concerns such as ethics and morality, potential humanitarian impact, and human rights. It is instead prioritizing consideration of traditional national security concerns—be they legal, military, technical—over broader ones affecting all of humanity. (Campaign to Stop Killer Robots [CSKR], 2019b)

The recommendation to focus on “normative and operational frameworks” is unambitious to us because it does not explicitly call for a legally binding instrument. In addition, it is still unclear what such frameworks actually are or what the timeframe should be for their negotiation. Constructive ambiguity may aid diplomacy here at the CCW, but will do little to quell growing public concerns and rising expectations that states will take strong action on this serious challenge. By accepting this vague recommendation, the GGE would embrace ambiguity, postpone decisions about the ultimate goal of this process, and fail to show a clear way forward for dealing with killer robots. (Campaign to Stop Killer Robots [CSKR], 2019c)

Other times, CSKR directly problematised the operating procedures of CCW, mainly the consensus-based decision-making mechanisms and the search for the lowest common denominator as the basis for agreement. In its 2018 activity report (published

in 2020), CSKR diagnosed that this constitutes a fundamental weakness leading to poor diplomatic results in disarmament:

The poor diplomatic outcome shows the fundamental weakness of the Convention on Conventional Weapons (CCW): its mode of consensus-based decision-making. Unambitious lowest-common-denominator decisions result when a single state or small group of states abuses consensus to thwart bolder measures sought by the majority. (Campaign to Stop Killer Robots [CSKR], 2020d)

Due to the reluctance and obstruction of major powers like the US and Russia to agree on a ban, as well as the structural shortcomings in the decision-making processes at CCW, there is a growing sense of disillusionment among campaigners about the prospects of achieving a legally binding instrument or a ban treaty. Furthermore, CSKR has been quite vocal about its dissatisfaction with the progress of the multilateral discussions at CCW:

I will be frank. There is rising concern that these Convention on Conventional Weapons talks on lethal autonomous weapons systems are a way for military powers to try to placate civil society, distract public attention, and manage media expectations rather than seriously address the challenges such weapons pose for humanity.

(...) So the Campaign to Stop Killer Robots will be back in August for the next CCW meeting, but our faith in this forum is rapidly dissipating. Therefore, we will be deepening and expanding our engagement in capitals around the world and also present at the United Nations General Assembly later this year. (Campaign to Stop Killer Robots [CSKR], 2019f)

4.2.2. Prognostic Frames

CSKR preserved the prognostic content of the preemptive ban and MHC framings throughout the active framing period. Nevertheless, the research indicates that over the years, the word "preemptive" has been used much less frequently in campaign

material, while the word “ban” is retained almost exclusively in the form of a “ban treaty”. In line with the terminology used in GGE, new phrases, such as a “legally binding instrument”, are also proposed in the prognostic frames; however, these concepts are generally used interchangeably as there is no indication of what is meant by a legally binding instrument is distinguishable from a ban treaty that CSKR has been calling for. As such, variations in articulation do not constitute a substantial shift in the prognostic frames. Accordingly, CSKR’s signature introductory lines still contained a legal-instrumental prognosis of legislating a ban treaty and the teleological prognosis to retain meaningful human control, which is framed along with the vocabularies of propriety in its 2019 annual report (published in 2020):

Established in 2013, the Campaign to Stop Killer Robots is working to ban fully autonomous weapons, also known as lethal autonomous weapons systems or killer robots. Retaining meaningful human control over the use of force is a humanitarian imperative, legal necessity, and moral obligation. (Campaign to Stop Killer Robots [CSKR], 2020a)

In the active framing period, as evident in its interventions in the multilateral discussions, CSKR strongly emphasised the need for an international treaty that bans LAWS and maintains MHC over the use of force through LAWS. When the countries proposed weaker means of regulations or procedures to be discussed, CSKR persisted in its primary prognosis and discarded such efforts as not being the answer. CSKR also leveraged the notion that there was public opposition to LAWS to exert pressure on the states:

Many of the 90 states participating in this week’s United Nations meeting on these weapons expressed their firm desire to move to negotiate a new treaty to prohibit or restrict these weapons systems. Such a treaty is widely seen as necessary to enshrine the principle that states should maintain meaningful human control over the use of force.

(...) but the calls from some states for guiding principles, declarations, guidelines, codes of conduct, compendiums of military “best practices,”

questionnaires, and more committees are not the answer. Such measures will not satisfy public concerns. (Campaign to Stop Killer Robots [CSKR], 2019f)

CSKR more elaborately articulated the causal links that connect the prognostic frame of a ban treaty with various diagnostic frames concerning autonomy without control, legality, and international stability. CSKR frames that an international legal instrument that constitutes a ban treaty is needed with an aim to ensure bringing the problematic technology of LAWS under regulation, would apply to weapons systems that select and engage targets based on sensor data, prohibit systems lacking in MHC, and constrains other types of autonomous systems through establishing positive obligations:

To ensure such problematic technology does not escape regulation, the Campaign to Stop Killer Robots calls on states to launch negotiations on a treaty to preserve meaningful human control over the use of force. Such a treaty should apply to the range of weapons systems that select and engage targets on the basis of sensor inputs, that is, systems where the object to be attacked is determined by sensors rather than by humans; it should prohibit systems that would not allow meaningful human control; and it should establish positive obligations to ensure that other system are appropriately constrained. (Campaign to Stop Killer Robots [CSKR], 2019e)

CSKR also regards and frames the ban treaty as a means to promote the enactment of national laws that would criminalise the violations of the treaty and thus help bridge the responsibility gap concerning the harms caused by LAWS:

To close the accountability gap raised by fully autonomous weapons. There are currently insurmountable legal and practical obstacles that would, in most cases, prevent holding anyone responsible for unlawful harms caused by fully autonomous weapons. A treaty prohibiting killer robots could lead to national implementation laws criminalizing violations of the treaty, thereby facilitating enforcement. (Campaign to Stop Killer Robots [CSKR], 2019e)

Furthermore, CSKR frames a ban treaty as a means to complement the IHRL and IHL, which, in their current state, are not geared to respond to the operational complexities that LAWS would entail as a novel weapons system based on human-machine interaction:

To enhance and strengthen existing international humanitarian and human rights law. A new treaty would build on those areas of law and eliminate any doubts that fully autonomous weapons are incapable of abiding by the fundamental principles of international humanitarian and human rights law. These weapons fundamentally differ from other weapons and raise unique challenges. A treaty can unambiguously address the application of existing law to these weapons. (Campaign to Stop Killer Robots [CSKR], 2019e)

Finally, CSKR posits that the risks posed by the proliferation of LAWS, as well as its acquisition by authoritarian states and terrorist groups, are mitigated by a treaty that will not only prohibit the use but the development and production of these weapon systems:

To help stop development before it goes too far and thereby avert an arms race and prevent proliferation, including by states with little regard for international humanitarian law or by non-state armed groups. The new treaty should prohibit not only use, but also development and production of fully autonomous weapons. (Campaign to Stop Killer Robots [CSKR], 2019e)

In the active framing period, multilateral discussions at CCW increasingly concentrated on the concept of MHC and ways to operationalise it. CSKR is actively involved in the meaning work over MHC by intervening in the framing of the concept. CSKR expressed its grievance with what it identified as the gradual replacement of MHC with more flexible expressions during the discussions, such as human judgement, element, or responsibility, as proposed by several state parties. CSKR regarded these as attempts directed at weakening the commitments and responsibilities inherent in the concept of MHC. CSKR contends that MHC is semantically clearer, stronger and more encompassing than the proposed alternatives:

Look at how the phrase “human control” is gradually being written out of the CCW lexicon and replaced by weaker wordings of human judgment, human element, human machine interaction, human responsibility, and so on. To us, the concept of human control is stronger and necessary because it is clear and comprehensive, encompassing both judgment and actions. (Campaign to Stop Killer Robots [CSKR], 2019b)

CSKR frames MHC as a principle that needs to be enshrined in international law and implemented through both prohibitions and positive obligations to be observed by the states, suggesting that without MHC, LAWS could fundamentally undermine ethical values:

Enshrining the principle of meaningful human control over the use of force requires both prohibitions and positive obligations to ensure that these weapons systems do not undermine ethical values. (Campaign to Stop Killer Robots [CSKR], 2019b)

Furthermore, CSKR more elaborately outlined the features that qualify for ‘meaningful’ human control: predictability of its output and understandability of its inner operation mechanisms, which inform and make room for timely human judgment and intervention:

Given the development of greater autonomy in weapon systems, states should make it explicit that meaningful human control is required over individual attacks and that weapon systems that operate without meaningful human control should be prohibited. For human control to be meaningful, the technology must be predictable, the user must have relevant information, and there must be the potential for timely human judgement and intervention. (Campaign to Stop Killer Robots [CSKR], 2018f)

4.2.3. Motivational Frames

Concerning the vocabularies of motive utilised within the motivational frames of CSKR during the active framing period, vocabularies that evoke urgency retain the

lead. However, there has been an increase in the prevalence of the vocabularies of propriety since the formative period, which entails calls to action on moral grounds. A likely explanation for this trend is the moralistic tenets on which CSKR framed MHC. As MHC became more central to multilateral discussions, the prognostic and motivational frames allocated more room for deontological explanations for retaining human control. Some examples of motivational content are again the utilisations of boundary frames that delineate between good/right or bad/wrong conduct:

Permitting machines to take a human life on the battlefield or in policing, border control, and other circumstances is a moral line that should never be crossed. (Campaign to Stop Killer Robots [CSKR], 2017b)

It's increasingly obvious that the public strongly objects to allowing machines to select targets and use force without any meaningful human control. Doing so would be abhorrent, immoral, and an affront to the concept of human dignity and principles of humanity. It's high time governments heed the mounting calls for a new international law to prohibit killer robots and start negotiating one. (Campaign to Stop Killer Robots [CSKR], 2018c)

It's clear that a majority of states want to do the right thing, but the calls from some states for guiding principles, declarations, guidelines, codes of conduct, compendiums of military "best practices," questionnaires, and more committees are not the answer. Such measures will not satisfy public concerns. (Campaign to Stop Killer Robots [CSKR], 2019f)

A second group of vocabularies of motive aimed to guide the targets of mobilisation to take action by highlighting the immediacy of the threat of LAWS. Urgency has been the primary vocabulary of motive in the CSKR framings since the formative framing period. CSKR often criticised states for not keeping up with the pace of the impending threat, calling for 'swift' and 'urgent' action before the LAWS are unleashed:

The Campaign calls on countries to urgently address the enormous humanitarian challenges posed by these weapons by endorsing the call for a

ban. It is vital and urgent that all stakeholders work together to secure a new international treaty before these weapons are unleashed. (Campaign to Stop Killer Robots [CSKR], 2017c)

It's abundantly clear there is an urgent need for bold leadership to address this imminent challenge before it is too late. It's time to launch negotiations. We ask: if not now, then when? If not here, then where? If the CCW is really the "appropriate forum" then let's get started. (Campaign to Stop Killer Robots [CSKR], 2018d)

To close, you often hear our Campaign to Stop Killer Robots claim that "momentum is building" towards the goal of prohibiting killer robots. That's clearly not the case in this room, which is moving backwards. But outside of it, we see many expressions of support for launching negotiations. (Campaign to Stop Killer Robots [CSKR], 2019a)

Efficacy has not been a common vocabulary in the motivational frames of CSKR during the active framing period. This may indicate a lack of inclination on the part of CSKR to argue that a treaty was possible or anywhere near within reach through collective action. The more critical tone which the campaign employed during this period rather focused on the lack of will on part of the states, rather than the possibility of mobilization. Nevertheless, the frame excerpt below, which is combined with the identity component, denotes that CSKR grew in strength as new organizations pledged support and became better equipped and placed to support the states despite the conditions of the newly broken out COVID-19 pandemic:

The Campaign grew in strength and numbers during 2019, which means it is now well-equipped to navigate the global pandemic that was unthinkable one year ago. It is now well-placed to support states to ban fully autonomous weapons and retain meaningful human control over the use of force. (Campaign to Stop Killer Robots [CSKR], 2020a, p. 3)

Aiming to graft the processes and methods from successful disarmament campaigns, the CSKR often referenced the legal frameworks that govern various types of weapons,

including the preemptive ban on blinding lasers at CCW. These previous achievements in disarmament were utilised in motivational frames to reinforce the sense of efficacy:

There is, of course, precedent for a ban treaty, including ones negotiated outside of United Nations auspices. In the past, responsible states found it necessary to supplement existing legal frameworks for weapons that by their nature posed significant humanitarian threats, such as biological weapons, chemical weapons, antipersonnel mines, and cluster munitions. There is also precedent for such a preemptive ban in CCW Protocol IV prohibiting laser weapons designed to permanently blind human soldiers. 48 CSKR 2019

An interesting use of the vocabulary of severity has been to liken LAWS to more familiar cognitions of existential threats to humanity such as climate change, which also feeds the sense of urgency that CSKR aims to convey in its motivational frames:

2019 marked the year that the killer robots challenge became widely recognized as a grave, existential threat to humanity that, like climate change, requires urgent multilateral action. (Campaign to Stop Killer Robots [CSKR], 2020a, p. 3)

CSKR effectively incorporated the identity component in its statements given during the multilateral discussions and news releases by benchmarking the state conduct, activities, opinions and stances on critical issues, which in turn used in the discourses to create a sense of “us” comprising the majority that is on track and “them”, the minority who fails to abide by the norm:

Today and yesterday more than 80 country statements have referred to the need to continue deliberations here at the CCW next year on lethal autonomous weapons systems. Not a single state has opposed continuing this work. (Campaign to Stop Killer Robots [CSKR], 2018d)

Yet a minority of states, particularly Israel, Russia, South Korea, and United States, explicitly rejected calls to negotiate new international law. These states

appear willing to keep the multilateral talks going, but only if the process continues to aim low and go slow. (Campaign to Stop Killer Robots [CSKR], 2018e)

4.2.4. Frame Alignment Processes and Other Strategies

A standard method by which CSKR conveyed its messages in its framings was to leverage the support of prominent figures such as technology experts, remarks of the Nobel laureates, military veterans, religious figures and organisations and the UN Secretary-General, sometimes deploying them as frame articulators, to imbue the frames with additional credibility. Benford and Snow hypothesise that “the greater the status and/or perceived expertise of the frame articulator and/or the organisation they represent from the vantage point of potential adherents and constituents, the more plausible and resonant the framings or claims” (Benford & Snow, 2000b, p. 621). Demonstrating that high-profile people recognised the frames of the campaign helped bridge the gap caused by the ambiguity pertaining to LAWS in the shared imagination and the lack of victims to add stigma on the use of weapons, a persistent problem that campaigners faced in advocating against LAWS. An example of these external frame articulators and supporters during the active framing period is as follows:

Over 200 technology companies and organizations, and 2,600 individuals from more than 36 countries signed a Future of Life Institute pledge to “neither participate in nor support the development, manufacture, trade, or use of lethal autonomous weapons” (Campaign to Stop Killer Robots [CSKR], 2020d, p. 5)

CSKR also relied on public opinion polls to measure the campaign's impact and to exert pressure on the country delegations at the multilateral discussions. The notion that the public was firmly against the LAWS helped attach a moral stigma to the use of LAWS and countries' efforts to delay the creation of a legally binding document. The notion of public sentiment was also coupled with vocabularies of motive, such as urgency and severity:

A global Ipsos poll surveying 26 countries found 61% of respondents oppose the use of fully autonomous weapons, with the strongest opposition in

Turkey (78%), South Korea (74%), and Hungary (74%) (Campaign to Stop Killer Robots [CSKR], 2020b, p. 6)

It's increasingly obvious that the public strongly objects to allowing machines to select targets and use force without any meaningful human control. (Campaign to Stop Killer Robots [CSKR], 2018c)

We remind you that public expectations are rising rapidly that states will take serious action to respond to the multiple, serious challenges posed by killer robots. We commend the UN Secretary-General Antonio Guterres for his strong appeal made at the Paris Peace Forum marking 100 years since the end of World War I, where he said, "I call upon States to ban these weapons, which are politically unacceptable and morally repugnant." (Campaign to Stop Killer Robots [CSKR], 2018d)

Regarding frame alignment strategies, CSKR continued frame-bridging efforts by stressing the intersectional aspects of disarmament, mainly directed at women and people from diverse backgrounds and cultures. It may be inferred that normatively, CSKR had been already congruent with the ideas of cultural diversity and gender equity as per the political orientations of its constituents and organisations in its steering committee; however, this only had a limited bearing on the content of its frames in the formative framing period.

As evident in the excerpts below, the themes of cultural diversity, equality and inclusion were more pronounced in LAWS's diagnostic, prognostic and motivational frames, a trend that will turn into a wholesale frame shift in the following framing period.

The Campaign to Stop Killer Robots is committed to building and mainstreaming a race-sensitive, inter-sectional campaign that is diverse, equal, inclusive, and visible to all vulnerable and marginalized groups. The Campaign celebrates and prioritizes diversity, equity and inclusion in its delegations, events and activities. (Campaign to Stop Killer Robots [CSKR], 2020a, p. 22)

African women were particularly worried about the status of discussions within the Group of Governmental Experts on AWS, wondering how can people debate over the best way to dominate or kill while millions of people are dying in some parts of the globe because of extreme poverty and vulnerability? What could be the reason underlying the development of such technology capable of incredible and unpredictable violence? They understand that it is rooted in traditional dynamics of power and domination, about rich countries against poor, and the power that weapons symbolise. (Researching Critical Will [RCW], 2018b, p. 3)

Diversity is not about political correctness. It is the only way we are ever going to see change in the way that we confront issues of peace and security, of weapons and war. Involving the marginalised and the affected is how we ensure that weapons will comply with international law, by changing the norms and behaviour of the humans that use weapons. The answer is not to give weapons autonomy to kill after they have been programmed with the biases of the most dominant culture in the world, but to change the way we think about and confront war and violence as social institutions. (Researching Critical Will [RCW], 2018a, p. 2)

4.3. Adaptive Framing Period (2020-2023)

By the end of the active framing period, it was evident to the CSKR that the multilateral discussions at the CCW were highly unlikely to culminate in a binding legal instrument that imposes prohibitions on LAWS. Both Russia and the United States, along with the heavily militarised others, were not on board with the 30 states calling for a ban that has been mainly from the Global South. The CCW's focus on IHL and lack of dedication stemming from the reluctance of the major powers led CSKR to discern the trajectory of the broader cause and the opportunity costs of the status quo. In the meantime, several sweeping incidents and trends shook the social world across the globe, such as the Black Lives Matter campaign and the COVID-19 pandemic. In a statement submitted to the UNGA First Committee on behalf of 99

organisations, CSKR emphasised the critical significance of these events that shaped the landscape of humanitarian disarmament:

As protests and discussions of racism and anti-blackness swept across the world following the murder of George Floyd last year, the humanitarian disarmament community has had to turn its gaze inwards to question and investigate how we advance peace and security. As tools of colonial and imperial power, weapons that fuel war and conflict disproportionately affect marginalized and vulnerable groups of different races, gender identities, sexual orientations, abilities, socioeconomic status, faiths, and other social identities. Far from being limited to individual beliefs or acts of discrimination happening in some countries, structural racism and systemic oppression manifests in varied forms across all states. As a result, the global community is neither immune to its effects nor absolved of its role in being complicit and upholding current structures of power. (Campaign to Stop Killer Robots [CSKR], 2021b)

CSKR also regarded the pandemic as a means to reinforce the diagnostic framing of LAWS with the vocabulary of severity that denotes an existential threat theme:

The pandemic has also provided time for us to reflect on the importance of being prepared and able to adapt and respond with urgency and unity to existential threats to all of humanity, from our response to the pandemic itself, to combatting climate change and to the prevention of the development of fully autonomous weapons. (Campaign to Stop Killer Robots [CSKR], 2021a)

The culmination of these factors led CSKR to adapt to the new circumstances, resulting in substantial frame shifts that produced brand-new framings alongside existing frames. In this adaptive period, CSKR promulgated several new themes, such as digital dehumanisation, intersectionality and post-colonialism, which assumed a central role in the diagnostic, prognostic and motivational framings and transformed the collective action repertoire. This section will elucidate how these new themes are devised within frames and deployed in the LAWS debate and track changes in the existing frames of CSKR.

4.3.1. Diagnostic Frames

Although CSKR retained the bulk of the diagnostic content from the active to adaptive framing period, there have been some important substantial changes in the frames. The research indicates that none of the themes discussed before and deployed in the campaign material were abandoned entirely during this period. As such, there is no evidence to identify a frame transformation in absolute terms as understood by Benford and Snow (Snow et al., 1986); however, new diagnostic themes such as digital dehumanisation and intersectionality were almost two times more prevalent in the campaign material analysed in this study than the conventional ones such as legality and human dignity frames. As CSKR felt less bound by the constraints of unpromising multilateral discussions at the IHL-oriented CCW, it more freely entertained the room for framing LAWS along the lines of IHRL-focused themes such as its use by law enforcement and for surveillance. In addition, the adaptive framing period has seen a renewed focus on international stability frames, which addresses the issues that CSKR had repeatedly lamented for being overlooked in discussions at the CCW.

A fundamental substantial change in this framing period was marked in the accountability subframe of the diagnostic legality frame. Previously, the accountability frame was articulated on the basis of what was termed as an accountability gap, that is, a need for a clear legal responsibility framework concerning the unlawful acts committed by LAWS. This was explained in the Campaigner's Kit published in 2020 as follows:

Both international humanitarian law and international human rights law require individual accountability for unlawful acts. Such personal accountability helps deter future violations while providing retribution for victims of past harm. Holding a person liable for the unlawful acts of a fully autonomous weapon, however, would be challenging and in most cases, nearly impossible. (Campaign to Stop Killer Robots [CSKR], 2020b, p. 9)

From 2021 onwards, human responsibility for the unlawful actions of LAWS was more pronounced in the CSKR framings, claiming that it is not the weapon systems

but the humans would be held accountable before the IHL, which may be a strategic repositioning by which CSKR underlines liabilities of those who deploy LAWS:

Responsibility for compliance with International Humanitarian Law [IHL] lies with humans and not systems. The law is addressed to humans and it is they that must ensure compliance. A weapon system is not, in itself, capable or incapable of complying with the law. Accountability under IHL primarily arises during the use of a weapon system by a human operator. It is the user who is responsible for its use and who can be held accountable for any violations of the law. (Campaign to Stop Killer Robots [CSKR], 2021d)

In the Campaigner's Kit (Campaign to Stop Killer Robots [CSKR], 2020b), the standard international stability frame is also revisited and elaborated, focusing on the risk of an arms race among superpowers. An important aspect that CSKR emphasises is the possible use of swarm technologies whereby a small number of military personnel will be capable of deploying swarms of LAWS in the form of tanks, ships, or fighter planes. CSKR highlights that new prototypes of autonomous weapons are being tested at supersonic and hypersonic speeds, potentially impeding effective human control. This will have a severe impact on conflict management and will lead to more frequent armed conflicts where civilians will face the risk of harm. Furthermore, CSKR points to a scenario in which energy-efficient LAWS requiring less power through infusion of solar panels for recharging, may be able to patrol post-conflict zones indefinitely, similar to landmines, thereby transforming the parts of the world into a continuous battlefield. Furthermore, framed autonomous weapons as posing a unique threat to political change and civil liberties when deployed in domestic contexts for oppressing populations and quelling peaceful protests.

4.3.1.1. Digital Dehumanisation Frame

Introduced in 2021, digital dehumanisation has become the primary diagnostic frame of CSKR in terms of its prevalence in campaign materials in the adaptive framing period. This is corroborated by the fact that dehumanisation is the first theme that welcomes visitors to the campaign's website as of January 2024 (Campaign to Stop

Killer Robots [CSKR], n.d.). Digital dehumanisation may be regarded as a reframing of human dignity in a way that shifts its lens from the stigmatisation of the notion of autonomous machines taking human life to the more focused problematisation of humans becoming data points to the algorithmic and sensor functions of LAWS, whereby humans are “disempowered, disconnected and dislocated from use of force” (Campaign to Stop Killer Robots [CSKR], 2021e). In fact, the emphasis on sensors had been long present in the CSKR framing of LAWS and machine autonomy as a diagnostic theme; however, those themes are now rebranded and rewired through a more focused conceptualisation.

The point of problematisation in the earlier iteration of the human dignity frame was that the machines make decisions over life and death, a result that occurs as the output of the autonomous processes. This lethality as an output of the critical functions of selection and engagement created the conditions of indignity. Digital dehumanisation shifts the lens from output to input by looking at the processes by which humans are ‘sensed’ by the sensors and rendered into data. This creates the conditions of possibility for other autonomous functions, including selection and engagement. Indignity occurs not only when machines kill humans but also when humans are processed by these types of machines as data for harm in any situation. This shift in focus enables a multitude of new directions for problem identification concerning weapon autonomy, transcending the lethal interactions between humans and weapon systems taking place primarily on the battlefield. The digital dehumanisation frame allows CSKR to more fundamentally oppose what it defines as the reduction of humans to data:

Digital dehumanisation is the process whereby humans are reduced to data, which is then used to make decisions and/or take actions that negatively affect their lives. This process deprives people of dignity, demeans individuals’ humanity, and removes or replaces human involvement or responsibility through the use of automated decision-making in technology. Automated harm occurs when these decisions negatively impact us. The digitisation of information about people, and the use of automated decision-making technology based on such digitised information, is not always problematic.

However, it carries with it an increased risk of being dehumanising and of causing automated harm. (Automated Decision Research [ADR], 2022a, p. 2)

The digital dehumanisation frame exemplifies the type of data acquired from sensors as weight, heat signature, and movement patterns, which are, in turn, processed to decide on inflicting bodily harm without human intervention in the process. In the excerpt below, CSKR likens the data processes of LAWS to the face recognition technologies used by law enforcement and border control forces that arrest persons based on matching biometric data. This example may resonate with the marginalised communities that face police brutality. CSKR then casts doubt concerning the setting of target profiles both from the perspective of the target and the user:

In the same way that police forces and border control forces use facial recognition technology based on biometric data (such as the distance between the eyes and the shape of the face) to decide that you are a specific individual who should be arrested, autonomous weapons use data acquired from sensors (such as weight, heat signature, or movement patterns) and process this data in order to decide whether to use force against you (...) The digital dehumanisation that results from reducing people to data points based on specific characteristics also raises serious questions about how target profiles are created and what pre-existing data these target profiles are based on. It also raises questions about how the user can understand what falls into a weapon's target profile and why the weapons system decided to use force. (Automated Decision Research [ADR], 2022a, p. 2)

The excerpt below epitomises the conceptual map of the digital dehumanisation frame. Having defined digital dehumanisation in a way that is relatable to the tech users that growingly live with algorithms, as well as marginalised communities, CSKR invites its targets of mobilisation to a broader discussion on the effects of 'our' relationship with technology that affects 'all areas of society', that is, beyond the situations of armed conflict, and introduces its expected shift in prognosis:

The use of autonomy in weapons systems concerns our broader relationship with technology and impacts all areas of society. Discussions on this issue involve questions over whether people should be reduced to data points and processed and killed by machines, and to what extent we should have control over the weapons systems we develop. These questions have relevance beyond situations of armed conflict and include potential use of weapons systems in border control and policing. To address these issues, a holistic approach is needed that recognises the importance of ethical considerations as well as international humanitarian law, international human rights law, and international criminal law. (Campaign to Stop Killer Robots [CSKR], 2022a, p. 3)

CSKR also introduced a new definition of LAWS that it calls to be prohibited, in which newly introduced digital dehumanisation themes such as sensor functions recognising proxy indicators and matching pre-set target profiles are pronounced:

Autonomous weapons systems that target people: Sensor-based weapons systems that apply force due to the presence or proximity of a person would use proxy indicators (such as weight, heat-signal shape, ‘object recognition,’ movement or biometrics) as a basis for encoding patterns of sensor data (target profiles) intended to represent humans. We consider these systems unacceptable because they reduce people to objects, and so are dehumanizing to civilian and military victims alike. (Campaign to Stop Killer Robots [CSKR], 2021c)

When the target of mobilisation is the general public, CSKR frames digital dehumanisation in a more blame-attributive tone with a more forceful language using a boundary frame that delineates a moral threshold of permissibility, unequivocally denouncing digitally-dehumanising aspects of LAWS:

We need to draw a line. Our humanity, our complex identities, should not be reduced to physical features or patterns of behaviour, to be analysed and pattern-matched by systems unable to understand concepts of life, human

rights or liberty. People wouldn't be seen by killer robots — they would be processed. This digital dehumanisation would deprive people of dignity, demean individuals' humanity, and remove or replace human involvement or responsibility through autonomous decision-making in technology. We want to build a future that rejects systems that reduce living people to data points, to be automatically profiled, processed and subjected to force. (Campaign to Stop Killer Robots [CSKR], 2021g)

This novel framing has already reverberated in the multilateral discussions at CCW, as CSKR reported that ten countries had adopted and intervened in the discussions based on an understanding of LAWS that is reminiscent of the digital dehumanisation perspective, which is indicative of potential frame resonance:

Of particular importance in discussions on risks and harms in the context of autonomous weapons systems are systems specifically designed or used to target humans. As a group of ten states observed in a joint contribution to the GGE on LAWS, 'these systems boil life-and-death determinations down to data points, thus dehumanising people and violating their right to dignity. (Automated Decision Research [ADR], 2022b, p. 8)

4.3.1.2. Intersectionality Frame

A new identity that characterises the framings of CSKR during the adaptive framing period is built upon the idea of intersectionality. As explained before, prior to the killing of George Floyd, in its 2019 annual report, CSKR had already promulgated its commitment to "building and mainstreaming a race-sensitive, inter-sectional campaign that is diverse, equal, inclusive, and visible to all vulnerable and marginalized groups" (Campaign to Stop Killer Robots [CSKR], 2020a, p. 22). The murder of Floyd and the ensuing Black Lives Matter campaign had a sweeping impact across the globe, with a renewed urge to consider the issues of structural racism and intersectionality. Along with the transnational activist network on humanitarian disarmament, CSKR stood in solidarity with the Black Lives Matter campaign (Armed Conflict and Civilian Protection Initiative, 2020).

The intersectionality frame of CSKR emerged in response to this global urge and complemented the largely missing injustice component in the diagnostic framings. There are several precepts on which arguments of the intersectionality frame are based. First of which is the notion that artificial intelligence is biased against gender, race, socioeconomic status, ability, and sexual orientation:

(...) there is also the risk of bias in those software and sensors. If we look at bias in programming algorithms, it's easy to be concerned. Bias in terms of gender, race, socioeconomic status, ability, and sexual orientation can be programmed into machines, including autonomous weapons. Facial recognition software struggles to recognize people of colour; voice recognition struggles to respond to women's voices or non-North American accents; photos of anyone standing in a kitchen are labeled as women; people's bail is denied because a program decided that a woman of colour was more likely to reoffend than a white woman. Imagine this kind of bias being programmed into a weapon system designed to target and fire upon targets without any meaningful human control, without any human judgment to counteract that bias. It's not a pretty picture. (Campaign to Stop Killer Robots [CSKR], 2020b, p. 21)

Another line of argument in the intersectionality frame is devised around algorithmic bias, where human operators tend to accept the data presented by artificial intelligence as accurate uncritically. CSKR posits that algorithmic bias would unevenly affect marginalised communities due to the structural bias of the algorithms that reflect the inequalities in society:

The challenges posed by existing methods of remote war would also be amplified through increased autonomy, with humans becoming further detached from the use of force. Algorithmic bias and the augmentation of existing institutional patterns of discrimination would lead to a disproportionate impact against historically marginalized communities and undermine human dignity. (Campaign to Stop Killer Robots [CSKR], 2021e, p. 7)

4.3.1.3 Blame-Attributive Diagnostic Frame

During the adaptive framing period, CSKR continued to point at countries that rejected proposals for a binding legal instrument against LAWS at the CCW discussions and those producing weapon systems with increasingly sophisticated autonomous functions as culprits of the collective action against LAWS. CSKR dubbed these countries as highly militarised states or military powers in its diagnostic framings:

Yet states have made little progress towards achieving an outcome. Most of the participating states have proposed moving to negotiate a new international treaty to prohibit or regulate lethal autonomous weapons systems yet these proposals have been explicitly rejected by military powers such as Israel, Russia, South Korea, UK, and United States. (Campaign to Stop Killer Robots [CSKR], 2020b, p. 3)

Progress towards a credible CCW outcome, particularly a mandate to negotiate a new legally binding protocol, however, has been blocked by a small number of military powers acting under the CCW's tradition of consensus decision-making. Therefore, it is doubtful that states will produce a new protocol under the auspices of the CCW, let alone one that sets a strong international standard. (Campaign to Stop Killer Robots [CSKR], 2020c, p. 9)

Along with the postcolonial reading of the world affairs that CSKR and the wider transnational disarmament advocacy network embraced (Campaign to Stop Killer Robots [CSKR], 2021b), blame-attribute components of its diagnostic frames shifted more towards highlighting the global injustices, that which LAWS are framed as exacerbating or used as a means to perpetuate hegemony:

Highly militarised nations cannot be allowed to perpetuate hegemony through technology. We will not tolerate the unrestrained development of weapons systems enabled to use computer programming and sensors to identify and select targets, getting closer to machines making decisions over whom to kill. (Campaign to Stop Killer Robots [CSKR], 2020e)

Without internationally agreed legal limits, highly militarised states continue to invest in autonomous weapons systems threatening international peace and security and fuelling the prospect of an arms race. It is imperative that genuine progress is made towards a new legal framework now. (Campaign to Stop Killer Robots [CSKR], 2022a, p. 3)

Another way in which the blame-attributive component is deployed in the frames is by showcasing the weapon systems with autonomous functions that CSKR's research team ADR (2022a, p. 3) regards as "systems of concern" or "systems with various concerning autonomous capabilities". Loitering munitions Turkish Kargu-2 and the Russian KUB-BLA are two such weapons systems that reportedly implemented a degree of autonomous functions in selecting and engaging with targets in the conflict zones in which they have been deployed:

Two examples of systems of concern which are already in use include the STM Kargu-2 and the Kalashnikov Group's KUB-BLA. The Kargu-2 is a loitering munition with autonomous flight capabilities and an automatic target recognition system. In 2021, a UN Panel of Experts reported that the Kargu-2 had been used in Libya, and had been 'programmed to attack targets without requiring data connectivity between the operator and the munition.' The KUB-BLA, which is also a loitering munition, has reportedly been used by Russia in Ukraine. The KUB-BLA loitering munition is said to have 'artificial intelligence visual identification (AIVI) technology for real-time recognition and classification of targets.' (Automated Decision Research [ADR], 2022a, p. 3)

CSKR infers that the militarized states are developing these systems with autonomous functions, and it may be "a matter of time" before they proliferate and be acquired by "anyone", which poses enormous risks and threatens international law, ethical principles and undermines global peace and security:

Militarized states are already investing heavily in such weapons, researching and testing the use of artificial intelligence to conduct warfare. There is evidence of systems with autonomous functions being used in contemporary

conflicts, and it may just be a matter of time before they are available to anyone, anywhere. The risks are enormous and include threats to existing international law and ethical principles and undermining of global peace and security. (Campaign to Stop Killer Robots [CSKR], 2023b)

4.3.2. Prognostic Frames

Unlike diagnostic frames, the research did not observe a substantial frame shift in CSKR's prognostic scheme, which includes the teleological prognosis of maintaining MHC over the use of LAWS, which is proposed to function as a general obligation (Campaign to Stop Killer Robots [CSKR], 2021e, p. 8), and the legal-instrumental prognosis of an international treaty that imposes prohibitions and obligations concerning LAWS. A nominal rather than substantial frameshift occurred as the word "ban" completely disappeared from the lexicon of CSKR as of 2021, replaced by a binding legal instrument which includes prohibitions. Yet again, there is no indication to claim this legal instrument that provides for prohibitions would mean anything less than a ban treaty. As such, this nominal change may be ascribed to the negative connotation of the word 'ban' and the desire to align with the lexicon of the CCW, which is still the only transnational venue where LAWS are discussed. Despite the lack of a significant shift in prognosis, CSKR further elucidated its understanding of both MHC and the binding legal instrument it calls for, and this section will focus on these elaborated prognoses. CSKR (2020c) revised its conceptualisation of MHC by the contours that emerged in the multilateral discussions at CCW and the expert publications. The end result was to understand human control as a spectrum and substantive MHC determined by decision-making, technological, and operational components. Decision-making components require information about the battlespace and the weapon system and the ability to intervene to ensure proportionality and distinction principles are fulfilled. Technological components support decision-making to ensure the predictability and reliability of autonomous functions, which will provide reliable output. Operational components limit machine autonomy vis-à-vis human control by restricting independent actions and operational time and space. Concerning the binding legal instrument, CSKR reiterates that an international treaty

that imposes prohibitions and regulations is the best solution to cope with the challenges posed by LAWS:

The best solution is an international legally binding instrument with a combination of both prohibitions and regulations to ensure meaningful human control over the use of force and to reject the automation of killing. This would provide a durable framework offering the benefit of legal certainty and stability. To achieve this, states must urgently launch negotiations. (Campaign to Stop Killer Robots [CSKR], 2023a)

CSKR's expectations from a binding legal instrument include prohibitions, which cover the content subject to the previous ban frame. Any weapon systems that take humans as their target should be prohibited as they are framed as fundamentally unacceptable. In addition, other weapons systems that fail to be used in such way as to retain MHC should be prohibited. This category includes elements of the newly articulated MHC frame which requires location and duration limitations as well as conditions of explainability and predictability of internal processes of the weapon systems. In addition to the prohibitions, CSKR also proposes that a treaty should involve positive obligations to ensure meaningful human control for systems are not prohibited. (Campaign to Stop Killer Robots [CSKR], 2021e, p. 9)

By proposing a comprehensive framework that contains prohibitions on certain types of LAWS and obligations to retain MHC on others, CSKR seeks a thorough assessment of existing systems with autonomous functions along with the prospective LAWS to prevent those systems that pose legal and ethical concerns from escaping regulation:

The proposed treaty has a broad scope of application encompassing all weapons systems that select and engage targets on the basis of sensor inputs. In other words, it covers systems that rely on sensor processing, not humans, to identify and apply force to objects that match a preprogrammed profile. By necessitating a thorough assessment of all systems that operate in this way, the treaty seeks to ensure that any subset of systems posing legal and ethical

concerns does not escape regulation. (Campaign to Stop Killer Robots [CSKR], 2020c, p. 2)

CSKR frames its binding legal treaty in a way that expands the current scope of the IHL by covering the development and production of LAWS, extends it to situations beyond conflict, such as law enforcement, and thus strengthens IHRL:

The treaty proposed by the Campaign to Stop Killer Robots extends the traditional scope of existing international humanitarian law. It addresses not only use but also production and development. In addition, it covers the use of technology in law enforcement operations as well as situations of armed conflict. While international human rights law applies to law enforcement operations, that body of law would also be strengthened by a treaty dedicated to fully autonomous weapons. A new legally binding instrument would go beyond the “normative and operational framework” proposed by the states parties to the Convention on Conventional Weapons (CCW). A treaty would set international standards for dealing with the complexities of fully autonomous weapons. It would bind states parties and influence states not party and non-state actors. Working toward a “normative and operational framework,” an intentionally ambiguous goal, distracts states from the priority of developing an effective response to the challenges posed by fully autonomous weapons. (Campaign to Stop Killer Robots [CSKR], 2020c, p. 2)

4.3.3. Motivational Frames

Unlike the previous framing periods, the four vocabularies of motive, namely urgency, efficacy, severity and propriety, were evenly prevalent in the campaign material throughout the adaptive framing period. This demonstrates a more encompassing discursive strategy that requires diverse ways of reasoning to act. This section will unpack some campaign excerpts containing motivational frames of the adaptive period that reflect the nature of the CSKR’s calls for action.

CSKR has been more focused on establishing the identity component of the campaign in the adaptive framing period. This was often achieved through developing discourse around the “us” that strives to achieve good entities such as peace and respect for humanity. In the below excerpt that contains a strongly articulated motivational frame, CSKR applies the vocabulary of propriety to act by highlighting our responsibilities for the realisation of such entities:

We are all individually and collectively responsible for developing and shaping the technologies that frame the interactions between us. We must work to ensure that future technologies are developed and used to promote peace and respect for each other’s inherent dignity. The United Nations was founded for humanity to pursue non-violent solutions to problems, in the spirit of solidarity and cooperation. We must now forge a path forward together to safeguard the values which we stand for, and ensure that the technologies that we create are kept within our own control and used for the benefit of humanity. (Campaign to Stop Killer Robots [CSKR], 2020f)

Research indicates that CSKR utilised identity component often with the vocabulary of propriety, which is indicative of a pattern where identity formation around the cause of the campaign is constructed by moral affirmation of participants that are part of the “us”, as in the following example in which CSKR expresses its vision:

We are working for a world in which we respect each other’s inherent dignity, in which technology is developed and used to promote peace, justice, human rights, and equality. We recognize how our choices regarding technology change the relationships between us and believe that developments in artificial intelligence should be used to build better societies and overcome inequalities and systems of oppression. (Campaign to Stop Killer Robots [CSKR], 2022b)

The excerpt below is another example where CSKR encourages states to participate in urgent and proper action guided by moral merits that are collectively stood for, which implies a larger collectivity that constitutes “us”:

The need for regulation over autonomous weapon systems is urgent. States must forge a path forward together to safeguard the values and fundamental rights which we collectively stand for and ensure that the technologies that we create are kept within our own control and used for the benefit of humanity. (Campaign to Stop Killer Robots [CSKR], 2021c)

A more focused call for action is presented in the excerpt below, where CSKR again hints at the same collectivity that includes states and the public, but this time, the frame contains an agency component with the use of a vocabulary of efficacy with an aim to reinforce the sense that the goals can be achieved by participating in the collective action:

There is growing recognition by the international community that weapons systems lacking meaningful human control cross a critical threshold and must be prohibited, and public opposition to fully autonomous weapons remains strong. So we are not alone. Our campaigners are working to build support for a treaty by engaging with concerned states, supporting efforts to convene “digital diplomacy” meetings, and prioritizing political outreach and incredibly innovative national campaigning amidst the realities of a pandemic. And we want you to join them. (Campaign to Stop Killer Robots [CSKR], 2021g)

Another focused call to action, CSKR frames LAWS as the ultimate manifestation of digital dehumanisation that needs to be prevented in order to stop human suffering as was caused by earlier indiscriminate weapons and put an end to the increasing autonomy that would replace humans from decision-making:

So let’s make the most of the opportunity we have to prevent the ultimate manifestation of digital dehumanisation. Let’s take advantage of this opportunity to prevent the loss of life and limb we have seen from the use of other indiscriminate weapons. Let’s work together to ensure we don’t allow creeping automation to replace human decision-making where it should be most present. (Campaign to Stop Killer Robots [CSKR], 2021g)

4.3.4. Frame Alignment Processes and Other Strategies

In the Campaigners' Kit published in 2020, the construction of collectivity of states that support the campaign's cause, which generally constitutes the identity component ("us"), is explained as a method whereby a "core group" of like-minded states would be built, which, in turn, helps diffuse campaign's framed meanings across the targets of mobilisation:

Not only will successful lobbying help get more states calling for a ban on autonomous weapons but lobbying can also help to build a "core group" of like-minded states who will take on a leadership role on the issue. A core group is going to be very important moving towards negotiations so it's important to start building relationships with the diplomats from supportive states. Even if a state is not very supportive of a ban on autonomous weapons right now, building relationships with their diplomats will be helpful. Make sure they know that you are resource and can provide information; also feel free to share some of the campaign materials like bumper stickers, pens or other giveaways to help people feel excited about this work. Diplomats do rotate out of their positions so try to build relationships with more than one member of any country delegation. (Campaign to Stop Killer Robots [CSKR], 2020b, p. 37)

In the adaptive framing period, CSKR again leveraged the support of prominent figures such as the Secretary-General of the UN and the Pope (Campaign to Stop Killer Robots [CSKR], 2021a, p. 13); leading robotics companies such as Boston Dynamics, Agility Robotics, ANYbotics, Clearpath Robotics, Open Robotics, and Unitree Robotics (Campaign to Stop Killer Robots [CSKR], 2022b) and religious organisations including Pax Cristi NC, and Soka Gakkai International and World Council of Churches that launched an interfaith statement on LAWS (Campaign to Stop Killer Robots [CSKR], 2021a, p. 9). Furthermore, the campaign also leveraged the IPSOS polls in 2019 and 2020, which indicated more than three in every five people opposed the development of weapons systems that would select and attack targets without human intervention (Campaign to Stop Killer Robots [CSKR], 2021e, p. 11) These supplied campaign framings with elements of credibility and salience in

line with the CSKR's strategy to leverage support of the public, scientific community, celebrities and others with an aim to pressure policy-makers.

As per the campaigner's kit (Campaign to Stop Killer Robots [CSKR], 2020b), the scientific community's support for the cause is crucial in the LAWS debate since their understanding of the technology and its implications is unmatched. Agents like the media, social media, religious leaders, celebrities, NGOs, and business leaders are also influential. Additionally, the support from the serving and retired military personnel is vital for outreach in the military community. The external support from these actors helped CSKR expand its audience base and reinforce the credibility of the campaign's cause, which was frequently deployed in the framings within the LAWS debate to persuade and pressure state parties.

In line with the CSKR's new diagnostic frames, such as intersectionality and digital dehumanisation in the adaptive period, the activists engaged in frame bridging with the people of colour, women, marginalised communities and the Global South. CSKR framed humanitarian disarmament against LAWS as connected with racism and white supremacy, gender and patriarchy, colonialism and imperialism. The campaign's objectives or activities were related to the values or interests of potential participants from marginalised communities and those whom the local and global injustices have disadvantaged. This frame bridging helped CSKR framings to be supported by more tangible injustice and identity components, which had been mostly missing in the earlier framing period. CSKR connects the new humanitarian disarmament approach with the concept of racism as follows:

Racism, intersected with other systems of oppression, is upheld by structures of imperialist, colonialist, patriarchal, and white supremacist power. It is, in a manner of speaking, its own weapon of destruction. It poses a direct threat to the core values enshrined in international law: human rights, equality, peace, security, and human dignity. These values are strengthened by the humanitarian disarmament approach that centres freedom from want, freedom from fear, and freedom from indignity as the pillars of human security. (Campaign to Stop Killer Robots [CSKR], 2021b)

In its 2020 annual report, CSKR pledged support for racial equality, acknowledged the failures of civil society in addressing systemic racism and white supremacy within its structures and expressed its commitment to overcome these injustices within its ranks:

We support those striving, searching, working for racial equality. We support our fellow campaigners of colour who live and work with the realities of racism. We recognise that we and civil society have failed to address systemic racism and the role of white supremacy in our structures and movements. We have a lot of work to do in dismantling structures of oppression, and racial and social injustice. We have started this work and it will continue. We promise more than words, we promise action. (Campaign to Stop Killer Robots [CSKR], 2021a, p. 14)

CSKR notes the importance of a gender perspective in examining LAWS, framing the issue as perpetuating harmful gender norms or being used in gender-based violence and underlining the need for MHC:

Looking at weapons through a gender lens is not just an academic exercise. It can help inform disarmament and armament policy. To bring us back to the question at hand—what does gender have to do with killer robots—we can see that understanding the gendered context and implications of certain weapons helps us understand the best way to prevent humanitarian harm. Autonomous weapons, also known as fully autonomous weapons, may perpetuate negative gender norms, or be used to commit acts of gender-based violence. These possibilities are useful for demonstrating the need for meaningful human control over weapon systems and prohibiting weapons that operate without such control. 51 CSKR 2020 (Campaign to Stop Killer Robots [CSKR], 2020b, p. 19).

CHAPTER 5

CONCLUSION

This thesis examined how CSKR, as the newest iteration of an existing transnational disarmament advocacy network, participates in the construction of meanings and cognitions surrounding LAWS as a novel type of weapon system embedded with sensors and algorithms based on AI. Although its prospective impact on political and social life is still beyond precise calculation, there is little doubt that LAWS will constitute a fundamental change in the use of force, either in domestic or international contexts. While multilateral discussions continue, the meanings that have emerged in the LAWS debate slowly accumulate and shape how LAWS is to be understood and how human-machine interaction in warfare and beyond is to be governed. The main objective of this thesis has been to unravel how CSKR takes part in this ‘meaning work’ and brings about collective action. By extensively deploying the analytical toolbox of the framing perspective on social movements, the campaign material was thematically coded and analysed to identify and discuss the ideational content of frames in accordance with the diagnostic, prognostic and motivational framing tasks in three distinct periods of the ten years of CSKR advocacy.

Despite the relatively swift entry of LAWS in the UN disarmament agenda shortly after the launch of CSKR, in the formative framing period (2013-2016), the activists faced several difficulties in encouraging progress in the informal multilateral discussions at CCW. From early on, the CSKR had understood LAWS from a broader perspective than the countries were willing to treat it in the heavily IHL-oriented transnational venue. Bound by the slow procedures and a narrow focus in CCW, under the guidance of HRW at the forefront, the campaign had to leverage all its efforts to capitalise on legality frames involving the IHL compliance and accountability themes in the formative years. The central IHL compliance frame was supported by human dignity and international stability frames on the diagnostic side of the deal, which were

less frequently but consistently observed in the campaign material. Another setback was experienced due to the techno-dystopian appeal of the issue area that has been so far shaped by widely spread Terminator imagery in the public perception. Having lacked victims or tangible harm of weapon autonomy, CSKR had to frame LAWS as a more realistic and imminent danger to bridge the gap in perception. As such, CSKR opted to develop a complex conceptualization of LAWS that is sufficiently technical to be discussed at the multilateral discussions, while still relatable to the wider public. This was achieved through the anthropomorphisation of certain qualities of LAWS and human-machine juxtaposition that involves an adversarial identity component that posits humans as “us” and machines as “them”, with a clear moralistic affirmation of the humans vis-à-vis machines which are capable of morally repugnant acts. CSKR switched between these technical and dramatic modalities, as well as emphasised different framing tasks in accordance with the level of its audience. On the prognostic side, CSKR has single-mindedly proposed a preemptive ban on LAWS as its legal-instrumental prognosis, which is based on a teleological prognosis to retain MHC on the use of LAWS. Largely supported by the propriety themes of the human dignity frame, MHC emerges in CSKR’s framing as the fundamental principle which is to be observed in the entire prognostic conceptual map from then on. Regarding the motivational themes, CSKR capitalised heavily on the idea that the danger was imminent and that collective action to impose a preemptive ban through multilateral discussions was urgently needed.

As CCW agreed to form a GGE to more formally discuss LAWS, from 2017 onwards, CSKR transitioned to the active framing period (2017-2019) which saw several advances and elaborations of the formative framing content and greater emphasis on certain prognostic themes. As the focus of the discussions at the GGE predominantly fixed on the MHC and how to operationalise it, some diagnostic themes, such as international stability frames growingly fell out of interest of CSKR during this period. Particularly through the use of visual content, such as short films, that gained traction across a large number of viewers, CSKR pushed the military-oriented IHL frame to extend to encompass IHRL-related issues that may affect the daily life of civilians such as the use of LAWS in law enforcement, border control, as well as in urban warfare, as well as the scenarios involving the acquisition of such weapons by terrorist

groups to stoke fear in the Western audiences. These frame expansions had the general public as its target of mobilisation and had little bearing on the multilateral discussions at CCW. As the discussions dragged on, CSKR started to deploy more direct and confrontational blame-attributive components in its diagnostic frames, implicating certain states of blocking progress, and problematising the procedures and regulations of CCW as the campaign's unrewarding transnational venue. On the prognostic account, CSKR gradually dropped the word 'preemptive' off its lexicon while retaining the word 'ban' in the form of a 'ban treaty' as a prognosis to regulate LAWS, along with the new framing of the same content, such as 'binding legal instrument'. This nominal change is not an indication of a substantial shift in the legal-instrumental prognosis, as what CSKR called for has still been a ban on LAWS, but it appears the prognosis was more flexibly articulated in various ways to align with the terminology that emerged in the GGE. Furthermore, CSKR elaborated on the idea of operationalizing MHC over the use of LAWS through a treaty that imposes prohibitions and positive obligations, as well as through applying conditions on the predictability and explainability of its autonomous processes. As MHC has been at the center of the discussions, CSKR increasingly used motivational frames that employs propriety vocabularies to frame MHC as a moral responsibility. Despite this trend, urgency has been the overarching sentiment which CSKR aimed to evoke in its targets of mobilization.

By the end of the active framing period, CSKR lost hope with the multilateral discussions at CCW to culminate in an international treaty that imposes a ban on LAWS. Furthermore, the murder of George Floyd and the ensuing Black Lives Matter campaign, as well as the breakout of the COVID-19 pandemic, had a sweeping impact on the social landscape along with the humanitarian disarmament community in which CSKR took part. In such a transformative milieu, CSKR renewed many of its frames, rebranding or elucidating some of them, and reconfiguring the ideational and conceptual foundations of others. Since this was not a dismissal of the former frames in favour of new ones, I did not describe this change formally as a frame transformation as understood in the framing perspective; however, what CSKR undertook has been a significant frame shift in terms of content, as well as prevalence, since the new frames are almost double times more prevalent in the campaign material than the existing

frames. On the diagnostic side, CSKR introduced the digital dehumanisation frame, which shifts the focus of the human dignity problem from the killing of humans by machines, at the output side of the autonomy, to reduction of humans to data through sensors and algorithms of the machines, at the input side of the autonomy. This expands the application of the usual diagnostic frames to brand-new situations. This new problematization is a move that allows discussing LAWS beyond its humanitarian impact on civilians in armed conflict and invites consideration from the IHRL perspective, such as the use of LAWS by law enforcement and border control, as well as for surveillance and other less-than-lethal situations. Another new frame is what I call intersectionality frame, which constitutes a frame bridging as a frame alignment strategy that extends the effective scope of the identified problem and benefits from the prognoses to the marginalised communities. Although CSKR had already pledged to implement greater diversity and inclusivity in its ranks at the end of the active framing period, this had limited bearing on the content of campaign's frames. In the adaptive period, CSKR growingly discusses LAWS from the perspective of race and gender, highlighting the risk that LAWS would exacerbate social inequalities. Furthermore, it switches to a reading of disarmament and LAWS debate from a more postcolonial perspective by framing it as a means by which the hegemony of the highly militarised states will be reinforced. On the prognostic side, the 'ban' word completely disappears from the CSKR lexicon and is completely replaced by a more elaborate prognosis of a binding legal instrument that includes prohibitions on LAWS that select and engage humans as its targets, and positive obligations to apply MHC on the use of other systems with autonomous functions. CSKR also further elaborated on the standards in applying MHC by including time and space limitations on the use of LAWS, along with the explainability and predictability requirements.

I am of the opinion that the analysis of CSKR from the framing perspective contributed to the social movement and transnational advocacy network studies by focusing on the discursive practices and dynamics of framing in multilateral discussions. The findings indicate the limits imposed on transnational advocacy networks by their venue and ways by which activists cope with these limits, constantly developing their frames in response to global and political events, finding and leveraging credible figures as frame articulators, demonstrating public support behind their cause, as well as through

alignment strategies to expand their audience to exert pressure on the structures of power. In the present case, although it has been willing to frame LAWS from a broader perspective, CSKR found itself bound by the CCW's consensus-based decision-making procedures and IHL-oriented structures. Until the end of the active framing period, CSKR remained largely within the ideational confines of the multilateral discussions at CCW and shaped its frames accordingly, while its impact on the direction of CCW procedures has been limited and unpromising, despite managing to form a 'core group' of 29 states. Evolving with the new dynamics that emerged after the global events and other social movements, in the adaptive period, CSKR introduced a whole new set of frames that is more aligned with the broader perspective it initially wanted to embrace, and these new framings helped bridge the campaign's cause with new audiences. Although it is too early to discuss the results of this frame shift, it surely reinvigorated the campaign and kept it relevant until the next cycle of discussions.

At any rate, LAWS will be fundamentally different from any weapon system that the world hitherto encountered, not only in terms of its functions of concern but also in the manner by which it will be regulated, controlled and campaigned against. As a very complex technology in development, it will certainly spark discussions concerning its legality and ethics, as well as its impact on social life and global politics. The meanings-in-making surrounding LAWS will almost certainly shape its possible development, or avoidance thereof, in certain directions. In this thesis, my effort has been to give a humble glimpse of what is to come by looking at the meanings that emerge in an early phase. Nevertheless, understanding frames by which meanings that signify LAWS are constructed through active, collective and interactive processes among the agents, including the disarmament community, is crucial to making sense of what weapon autonomy potentially will look like.

REFERENCES

- Altmann, J., & Sauer, F. (2017). Autonomous Weapon Systems and Strategic Stability. *Survival*, 59(5), 117–142. <https://doi.org/10.1080/00396338.2017.1375263>
- Alwardt, C., & Schörnig, N. (2021). A necessary step back?: Recovering the security perspective in the debate on lethal autonomy. *Zeitschrift Für Friedens- Und Konfliktforschung*, 10(2), 295–317. <https://doi.org/10.1007/s42597-021-00067-z>
- Amoroso, D., Sauer, F., Sharkey, N., Suchman, L., & Tamburrini, G. (2018). *Autonomy in Weapon Systems: The Military Application of Artificial Intelligence as a Litmus Test for Germany's New Foreign and Security Policy* (Volume 49 of the Publication Series on Democracy). Heinrich Böll Stiftung. https://www.boell.de/sites/default/files/boell_autonomy-in-weapon-systems_v04_kommentierbar_1.pdf
- Amoroso, D., & Tamburrini, G. (2020). Autonomous Weapons Systems and Meaningful Human Control: Ethical and Legal Issues. *Current Robotics Reports*, 1(4), 187–194. <https://doi.org/10.1007/s43154-020-00024-3>
- Anderson, K., & Waxman, M. C. (2013). Law and Ethics for Autonomous Weapon Systems: Why a Ban Won't Work and How the Laws of War Can. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2250126>
- Arandjelović, O. (2023). A case for “killer robots”: Why in the long run martial AI may be good for peace. *Journal of Ethics in Entrepreneurship and Technology*, 3(1), 20–32. <https://doi.org/10.1108/JEET-01-2023-0003>

Arkin, R. C. (2010). The Case for Ethical Autonomy in Unmanned Systems. *Journal of Military Ethics*, 9(4), 332–341.
<https://doi.org/10.1080/15027570.2010.536402>

Armed Conflict and Civilian Protection Initiative. (2020, June 9). *Humanitarian Disarmament Community Stands in Solidarity with #BlackLivesMatters*. Humanitarian Disarmament.
<https://humanitariandisarmament.org/2020/06/09/humanitarian-disarmament-community-stands-in-solidarity-with-blacklivesmatters/>

Article 36. (2015). *Killing By Machine: Key Issues for Meaningful Human Control*.
https://article36.org/wp-content/uploads/2013/06/KILLING_BY_MACHINE_6.4.15.pdf

Asaro, P. (2016). Jus nascendi, robotic weapons and the Martens Clause. In *Robot Law* (pp. 367–386). Edward Elgar Publishing.
<https://www.elgaronline.com/edcollchap/edcoll/9781783476725/9781783476725.00024.xml>

Automated Decision Research [ADR]. (2022a). *Autonomous weapons and digital dehumanisation*. Automated Decision Research.
<https://automatedresearch.org/news/report/autonomous-weapons-and-digital-dehumanisation-a-short-explainer-paper/>

Automated Decision Research [ADR]. (2022b, September). *Artificial intelligence and automated decisions: Shared challenges in the civil and military spheres*. Automated Decision Research.
<https://automatedresearch.org/news/report/artificial-intelligence-and-automated-decisions-shared-challenges-in-the-civil-and-military-spheres/>

- Bahçecik, Ş. O. (2019). Civil Society Responds to the AWS: Growing Activist Networks and Shifting Frames. *Global Policy*, 10(3), 365–369. <https://doi.org/10.1111/1758-5899.12671>
- Bahcecik, S. O. (2023). I TRENDS Security Politics and Artificial Intelligence: Key Trends and Debates. *International Political Science Abstracts*, 73(3), 329–338. <https://doi.org/10.1177/00208345231182638>
- Barranco, O., & Parcerisa, L. (2023). Three decades of the framing perspective on social movements: Changing trends and continuities. *Discourse Studies*, 25(2), 179–194. <https://doi.org/10.1177/14614456231165826>
- Belfield, H. (2020). Activism by the AI Community: Analysing Recent Achievements and Future Prospects. *Proceedings of the AAAI/ACM Conference on AI, Ethics, and Society*, 15–21. <https://doi.org/10.1145/3375627.3375814>
- Benford, R. D. (1993). “You Could be the Hundredth Monkey”: Collective Action Frames and Vocabularies of Motive Within the Nuclear Disarmament Movement. *The Sociological Quarterly*, 34(2), 195–216. <https://doi.org/10.1111/j.1533-8525.1993.tb00387.x>
- Benford, R. D. (2010). Framing global governance from below: Discursive opportunities and challenges in the transnational social movement arena. In *Arguing Global Governance*. Routledge.
- Benford, R. D., & Snow, D. A. (2000a). Framing Processes and Social Movements: An Overview and Assessment. *Annual Review of Sociology*, 26(1), 611–639. <https://doi.org/10.1146/annurev.soc.26.1.611>
- Benford, R. D., & Snow, D. A. (2000b). Framing Processes and Social Movements: An Overview and Assessment. *Annual Review of Sociology*, 26(1), 611–639. <https://doi.org/10.1146/annurev.soc.26.1.611>

- Bode, I., & Huelss, H. (2018). Autonomous weapons systems and changing norms in international relations. *Review of International Studies*, 44(3), 393–413. <https://doi.org/10.1017/S0260210517000614>
- Bode, I., & Huelss, H. (2022). *Autonomous Weapons Systems and International Norms*. McGill-Queen's Press - MQUP.
- Bolton, M. B., & Mitchell, C. C. (2020). When Scientists Become Activists: The International Committee for Robot Arms Control and the Politics of Killer Robots. In M. B. Bolton, S. Njeri, & T. Benjamin-Britton (Eds.), *Global Activism and Humanitarian Disarmament* (pp. 27–58). Springer International Publishing. https://doi.org/10.1007/978-3-030-27611-9_2
- Boulanin, V., & Verbruggen, M. (2017). *Mapping the Development of Autonomy in Weapon Systems*. SIPRI. <https://www.sipri.org/publications/2017/policy-reports/mapping-development-autonomy-weapon-systems>
- Breen, L., & Eilstrup-Sangiovanni, M. (2023). Issue-adoption and campaign structure in transnational advocacy campaigns: A longitudinal network analysis. *European Journal of International Relations*, 13540661231158553. <https://doi.org/10.1177/13540661231158553>
- Brehm, M. (2017). *Defending the Boundary: Constraints and Requirements on the Use of Autonomous Weapon Systems Under International Humanitarian and Human Rights Law* (SSRN Scholarly Paper 2972071). <https://doi.org/10.2139/ssrn.2972071>
- Brulle, R. J., & Benford, R. D. (2012). From Game Protection to Wildlife Management: Frame Shifts, Organizational Development, and Field Practices. *Rural Sociology*, 77(1), 62–88. <https://doi.org/10.1111/j.1549-0831.2011.00067.x>

- Buolamwini, J., & Gebru, T. (2018). Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification. *Proceedings of the 1st Conference on Fairness, Accountability and Transparency*, 77–91. <https://proceedings.mlr.press/v81/buolamwini18a.html>
- Campaign to Stop Killer Robots (Director). (2018a, April 5). *No country would be safe from fully autonomous weapons*. <https://www.youtube.com/watch?v=qiJTq11kqdw>
- Campaign to Stop Killer Robots (Director). (2018b, October 19). *Facing Fully Autonomous Weapons*. <https://www.youtube.com/watch?v=oTtoPCjBgxQ>
- Campaign to Stop Killer Robots [CSKR]. (n.d.). *Stop Killer Robots*. Stop Killer Robots. Retrieved 9 January 2024, from <https://www.stopkillerrobots.org/>
- Campaign to Stop Killer Robots [CSKR]. (2013a). *Campaign to Stop Killer Robots statement by Mary Wareham, HRW to the Convention on Conventional Weapons Annual Meeting of States Parties (General Exchange of Views)*. https://www.stopkillerrobots.org/wp-content/uploads/2013/03/KRC_Statement_CCW_14Nov2013.pdf
- Campaign to Stop Killer Robots [CSKR]. (2013b). *Presentation to the UN Secretary-General’s Advisory Board on Disarmament Matters (Agenda Item ‘Disarmament and Security Implications of Emerging Technologies’)*. https://www.stopkillerrobots.org/wp-content/uploads/2013/03/KRC_PresentationUNSGAdBoard_4July2014_DeliveredLtr.pdf
- Campaign to Stop Killer Robots [CSKR]. (2013c). *Statement to the UN General Assembly First Committee on Disarmament and International Security*.

https://www.stopkillerrobots.org/wp-content/uploads/2013/10/KRC_StatementUNGA1_29Oct2013_delivered.pdf

Campaign to Stop Killer Robots [CSKR]. (2013d). *The Convention on Conventional Weapons and Fully Autonomous Weapons* (Agenda Item ‘Disarmament and Security Implications of Emerging Technologies’) [Background Paper by the Campaign to Stop Killer Robots]. https://www.stopkillerrobots.org/wp-content/uploads/2013/09/KRC_BackgrounderCCW_26Sep2013.pdf

Campaign to Stop Killer Robots [CSKR]. (2013e). *Urgent Action Needed to Ban Fully Autonomous Weapons*. https://www.stopkillerrobots.org/wp-content/uploads/2013/04/KRC_LaunchStatement_23Apr2013.pdf

Campaign to Stop Killer Robots [CSKR]. (2014a). *Fully autonomous weapons (“killer robots”)—Campaign to Stop Killer Robots*. <https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com14/briefingbook/killerrobots.pdf>

Campaign to Stop Killer Robots [CSKR]. (2014b). *Report on Activities 2014*. https://www.stopkillerrobots.org/wp-content/uploads/2013/03/KRC_ReportCCW2014_22Dec2014.pdf

Campaign to Stop Killer Robots [CSKR]. (2014c). *Statement to the Human Rights Council*. https://www.stopkillerrobots.org/wp-content/uploads/2013/03/13June_KRC-HRC-statement.pdf

Campaign to Stop Killer Robots [CSKR]. (2014d). *Statement to the UN General Assembly First Committee on Disarmament and International Security*. https://www.stopkillerrobots.org/wp-content/uploads/2014/10/KRC_StatementUNGA1_28Oct2014.pdf

- Campaign to Stop Killer Robots [CSKR]. (2014e). *Substantive Talks on Killer Robots Must Continue—Convention on Conventional Weapons decision due on 14 November*. https://www.stopkillerrobots.org/wp-content/uploads/2013/03/KRC_PR_CCW_13Nov2014fnl.pdf
- Campaign to Stop Killer Robots [CSKR]. (2014f). *Time for international action on killer robots (Convention on Conventional Weapons Experts Meet on May 13-16)*. https://www.stopkillerrobots.org/wp-content/uploads/2014/05/KRC_PR_CCW_12May2014rev.pdf
- Campaign to Stop Killer Robots [CSKR]. (2015a). *Statement by Jody Williams, Nobel Peace Prize Laureate, Co-founder of the Campaign to Stop Killer Robots*. https://www.stopkillerrobots.org/wp-content/uploads/2013/03/Statement-for-10-20-2015_PRINT.pdf
- Campaign to Stop Killer Robots [CSKR]. (2015b). *Statement to the UN General Assembly First Committee on Disarmament and International Security*. https://www.stopkillerrobots.org/wp-content/uploads/2015/10/KRC_StatementUNGA1_16Oct2015.pdf
- Campaign to Stop Killer Robots [CSKR]. (2016a). *Frequently Asked Questions (FAQs)—Third Convention on Conventional Weapons meeting on lethal autonomous weapons systems UN Geneva 11-15 April 2016 (Convention on Conventional Weapons Annual Meeting of High Contracting Parties United Nations Geneva 13-14 November 2014)*. https://www.stopkillerrobots.org/wp-content/uploads/2016/04/KRC_FAQ_CCW2016_Apr5.pdf
- Campaign to Stop Killer Robots [CSKR]. (2016b). *Presentation to PIR Center Conference on Emerging Technologies*. https://www.stopkillerrobots.org/wp-content/uploads/2013/03/KRC_Moscow_29Sept2016.pdf

Campaign to Stop Killer Robots [CSKR]. (2016c). *Statement to the UN General Assembly First Committee on Disarmament and International Security.*

https://www.stopkillerrobots.org/wp-content/uploads/2013/03/KRC_StatementUNGA71_12Oct2016_MAC_delivered.pdf

Campaign to Stop Killer Robots [CSKR]. (2017a). *Statement to the Convention on Conventional Weapons Group of Governmental Experts on Lethal Autonomous Weapons Systems.* https://www.stopkillerrobots.org/wp-content/uploads/2013/03/KRC_Statement_CCW_15Nov2017_Posted.pdf

Campaign to Stop Killer Robots [CSKR]. (2017b). *Statement to the UN General Assembly First Committee on Disarmament and International Security.* https://www.stopkillerrobots.org/wp-content/uploads/2017/10/KRC_StatementUNGA72_Oct2017_delivered.pdf

Campaign to Stop Killer Robots [CSKR]. (2018a). *Retaining human control of weapons systems* [Briefing Note for the Convention on Conventional Weapons Group of Governmental Experts meeting on lethal autonomous weapons systems United Nations Geneva 9-13 April 2018]. https://www.stopkillerrobots.org/wp-content/uploads/2018/03/KRC_Briefing_CCWApr2018.pdf

Campaign to Stop Killer Robots [CSKR]. (2018b). *Statement to the Convention on Conventional Weapons Group of Governmental Experts on lethal autonomous weapons systems (I).* https://www.stopkillerrobots.org/wp-content/uploads/2018/04/KRC_StatementCCWGGE_9Apr2018.pdf

Campaign to Stop Killer Robots [CSKR]. (2018c). *Statement to the Convention on Conventional Weapons Group of Governmental Experts on lethal autonomous*

weapons systems (II). https://www.stopkillerrobots.org/wp-content/uploads/2021/09/KRC_Statement_29Aug2018_DELIVERED.pdf

Campaign to Stop Killer Robots [CSKR]. (2018d). *Statement to the Convention on Conventional Weapons Meeting of High Contracting Parties*. https://www.stopkillerrobots.org/wp-content/uploads/2021/09/KRC_StmtCCW_21Nov2018_AS-DELIVERED.pdf

Campaign to Stop Killer Robots [CSKR]. (2018e). *Statement to the UN General Assembly First Committee on Disarmament and International Security*. https://www.stopkillerrobots.org/wp-content/uploads/2018/10/KRC_StmtUNGA73_17Oct2018.pdf

Campaign to Stop Killer Robots [CSKR]. (2019a). *Intervention by the Campaign to Stop Killer Robots (I)* [Informal consultation of the Convention on Conventional Weapons (CCW) Group of Governmental Experts (GGE) on lethal autonomous weapons systems (LAWS)]. https://www.stopkillerrobots.org/wp-content/uploads/2021/09/KRC_StatementCCW_28June2019_Delivered.pdf

Campaign to Stop Killer Robots [CSKR]. (2019b). *Intervention by the Campaign to Stop Killer Robots (II)* [Multi-stakeholder consultation by the chair of the Convention on Conventional Weapons (CCW) Group of Governmental Experts on lethal autonomous weapons systems]. https://www.stopkillerrobots.org/wp-content/uploads/2021/09/KRC_StatementCCW_15Aug2019_DELIVERED.pdf

Campaign to Stop Killer Robots [CSKR]. (2019c). *Intervention by the Campaign to Stop Killer Robots (III)* [Convention on Conventional Weapons (CCW) Group of Governmental Experts meeting on lethal autonomous weapons systems]. https://www.stopkillerrobots.org/wp-content/uploads/2021/09/KRC_StatementCCW_15Aug2019_DELIVERED.pdf

Campaign to Stop Killer Robots [CSKR]. (2019d). *Statement to the Convention on Conventional Weapons annual meeting*. https://www.stopkillerrobots.org/wp-content/uploads/2021/09/KRC_StmtCCWUN_14Nov2019_delivered1.pdf

Campaign to Stop Killer Robots [CSKR]. (2019e). *Statement to the Convention on Conventional Weapons Group of Governmental Experts on lethal autonomous weapons systems (I)*. https://www.stopkillerrobots.org/wp-content/uploads/2019/03/KRC_StmtCCW_27Mar2019_TODELIVER.pdf

Campaign to Stop Killer Robots [CSKR]. (2019f). *Statement to the Convention on Conventional Weapons Group of Governmental Experts on lethal autonomous weapons systems (II)*. https://www.stopkillerrobots.org/wp-content/uploads/2019/04/KRC_Statement_29March_DELIVERED.pdf

Campaign to Stop Killer Robots [CSKR]. (2020a). *Annual Report 2019*. https://www.stopkillerrobots.org/wp-content/uploads/2020/04/StopKillerRobots_2019AnnualReport_FINAL_WEB-1-compressed.pdf

Campaign to Stop Killer Robots [CSKR]. (2020b). *Campaigner's Kit*. https://www.stopkillerrobots.org/wp-content/uploads/2020/02/2020_Campaigners-Kit_FINAL.pdf

Campaign to Stop Killer Robots [CSKR]. (2020c). *FAQ - Key Elements of a Treaty on Fully Autonomous Weapons.*

<https://www.stopkillerrobots.org/resource/faq-key-elements-of-a-treaty-on-fully-autonomous-weapons/>

Campaign to Stop Killer Robots [CSKR]. (2020d). *Report on Activities 2018.*

https://www.stopkillerrobots.org/wp-content/uploads/2021/09/Stop-Killer-Robots-2018-Activity-Report-FINAL_WEB.pdf

Campaign to Stop Killer Robots [CSKR]. (2020e). *Statement by Campaign Coordinator Mary Wareham, Human Rights Watch.*

https://www.stopkillerrobots.org/wp-content/uploads/2021/09/KRC_Statement_2Nov2020.docx.pdf

Campaign to Stop Killer Robots [CSKR]. (2020f). *Statement to the UN General Assembly First Committee on Disarmament and International Security.*

https://www.stopkillerrobots.org/wp-content/uploads/2021/09/UNGA_13.10.2020_Statement.pdf

Campaign to Stop Killer Robots [CSKR]. (2021a). *Annual Report 2020.*

<https://www.stopkillerrobots.org/wp-content/uploads/2022/03/SKR0300-2020-Annual-Report-FINAL-for-web.pdf>

Campaign to Stop Killer Robots [CSKR]. (2021b). *Civil Society Statement on Race and Intersectionality in Humanitarian Disarmament.* UN General Assembly

First Committee on Disarmament and International Security.

<https://www.stopkillerrobots.org/wp-content/uploads/2021/10/HD-statement-UNGA-08.10.2021-for-sign-on-1.pdf>

Campaign to Stop Killer Robots [CSKR]. (2021c). *Recommendations on the Normative and Operational Framework for Autonomous Weapon Systems.*

<https://www.stopkillerrobots.org/resource/recommendations-on-the-normative-and-operational-framework-for-autonomous-weapon-systems/>

Campaign to Stop Killer Robots [CSKR]. (2021d). *Response to GGE Chair's Guiding Questions*. https://www.stopkillerrobots.org/wp-content/uploads/2021/09/CSKR_Response-to-GGE-Chairs-Guiding-Questions.pdf

Campaign to Stop Killer Robots [CSKR]. (2021e). *Stopping Killer Robots: A Guide for Policy Makers*. <https://www.stopkillerrobots.org/wp-content/uploads/2021/11/211123-A-Guide-for-Policy-Makers-WEB.pdf>

Campaign to Stop Killer Robots [CSKR]. (2022a). *Negotiating a Treaty on Autonomous Weapons Systems—The Way Forward*. <https://www.stopkillerrobots.org/resource/the-way-forward/>

Campaign to Stop Killer Robots [CSKR]. (2022b). *Statement by Stop Killer Robots to the 77th UNGA First Committee on Disarmament and International Security*. <https://www.stopkillerrobots.org/resource/statement-by-stop-killer-robots-to-the-77th-unga-first-committee-on-disarmament-and-international-security/>

Campaign to Stop Killer Robots [CSKR]. (2023a). *FAQs on UNGA Resolution on Autonomous Weapons Systems*. <https://www.stopkillerrobots.org/resource/faqs-on-unga-resolution/>

Campaign to Stop Killer Robots [CSKR]. (2023b). *Statement by Stop Killer Robots—78th session of the United Nations General Assembly, First Committee 11October2023*. https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com23/statements/11OCT_AWS.pdf

- Campaign to Stop Killer Robots [CSKR]. (2015c, April 17). *Recognizing the need for human control.* Stop Killer Robots. <https://www.stopkillerrobots.org/news/humancontrol/>
- Campaign to Stop Killer Robots [CSKR]. (2015d, August 5). *Prevent another Hiroshima or Nagasaki.* Stop Killer Robots. <https://www.stopkillerrobots.org/news/hiroshima70/>
- Campaign to Stop Killer Robots [CSKR]. (2016d, April 11). *PRESS RELEASE: Focus on Meaningful Human Control of Weapons Systems - Third United Nations meeting on killer robots opens in Geneva.* Stop Killer Robots. <https://www.stopkillerrobots.org/news/press-release-focus-on-meaningful-human-control-of-weapons-systems-third-united-nations-meeting-on-killer-robots-opens-in-geneva/>
- Campaign to Stop Killer Robots [CSKR]. (2017c, May 30). *Diplomatic Efforts Falter.* Stop Killer Robots. <https://www.stopkillerrobots.org/news/diplomatsfalter/>
- Campaign to Stop Killer Robots [CSKR]. (2017d, August 20). *Company founders demand UN action on killer robots.* Stop Killer Robots. <https://www.stopkillerrobots.org/news/company-founders/>
- Campaign to Stop Killer Robots [CSKR]. (2017e, November 8). *States convene to discuss killer robots.* Stop Killer Robots. <https://www.stopkillerrobots.org/news/ccwun-2/>
- Campaign to Stop Killer Robots [CSKR]. (2017f, December 22). *2017: A lost year for diplomacy.* Stop Killer Robots. <https://www.stopkillerrobots.org/news/lostyear/>

- Campaign to Stop Killer Robots [CSKR]. (2018f, March 18). *Five years of campaigning, CCW continues*. Stop Killer Robots. <https://www.stopkillerrobots.org/news/fiveyears/>
- Campaign to Stop Killer Robots [CSKR]. (2019g, August 22). *Russia, United States attempt to legitimize killer robots*. Stop Killer Robots. <https://www.stopkillerrobots.org/news/russia-united-states-attempt-to-legitimize-killer-robots/>
- Campaign to Stop Killer Robots [CSKR]. (2019h, October 29). *The Power of a Question in Silicon Valley*. Stop Killer Robots. <https://www.stopkillerrobots.org/news/the-power-of-a-question-in-silicon-valley/>
- Campaign to Stop Killer Robots [CSKR]. (2021f, January 28). *Opposition to killer robots remains strong—Poll*. Stop Killer Robots. <https://www.stopkillerrobots.org/news/poll-opposition-to-killer-robots-strong/>
- Campaign to Stop Killer Robots [CSKR]. (2021g, May 14). *Digital Dehumanisation—When machines decide, not people*. Stop Killer Robots. <https://www.stopkillerrobots.org/news/digital-dehumanisation-when-machines-decide-not-people/>
- Caron, J.-F. (2020). Defining semi-autonomous, automated and autonomous weapon systems in order to understand their ethical challenges. *Digital War*, 1(1–3), 173–177. <https://doi.org/10.1057/s42984-020-00028-5>
- Carpenter, C. (2014). *Lost causes: Agenda vetting in global issue networks and the shaping of human security*. Cornell University Press.

- Carpenter, C. (2016). Rethinking the Political / -Science- / Fiction Nexus: Global Policy Making and the Campaign to Stop Killer Robots. *Perspectives on Politics*, 14(1), 53–69. <https://doi.org/10.1017/S1537592715003229>
- Christie, E. H., Ertan, A., Adomaitis, L., & Klaus, M. (2023). Regulating lethal autonomous weapon systems: Exploring the challenges of explainability and traceability. *AI and Ethics*. <https://doi.org/10.1007/s43681-023-00261-0>
- Chrvalová, L. (2022). LETHAL AUTONOMOUS WEAPONS SYSTEMS. *Obrana a Strategie (Defence and Strategy)*, 22(1), 035–054. <https://doi.org/10.3849/1802-7199.22.2022.01.035-054>
- Department of Defence [DoD]. (2023). *Autonomy in Weapon Systems* (DOD Directive 3000.9). <https://media.defense.gov/2023/Jan/25/2003149928/-1/-1/0/DOD-DIRECTIVE-3000.09-AUTONOMY-IN-WEAPON-SYSTEMS.PDF>
- Docherty, B. (2012). Losing Humanity. *Human Rights Watch*. <https://www.hrw.org/report/2012/11/19/losing-humanity/case-against-killer-robots>
- Docherty, B. (2015). Mind the Gap. *Human Rights Watch*. <https://www.hrw.org/report/2015/04/09/mind-gap/lack-accountability-killer-robots>
- Docherty, B. (2016). Making the Case. *Human Rights Watch*. <https://www.hrw.org/report/2016/12/09/making-case/dangers-killer-robots-and-need-preemptive-ban>
- Egeland, K. (2016). Lethal Autonomous Weapon Systems under International Humanitarian Law. *Nordic Journal of International Law*, 85(2), 89–118. <https://doi.org/10.1163/15718107-08502001>

- Ekelhof, M. (2019). Moving Beyond Semantics on Autonomous Weapons: Meaningful Human Control in Operation. *Global Policy*, 10(3), 343–348. <https://doi.org/10.1111/1758-5899.12665>
- Final Document of the Fifth Review Conference* (UN Document CCW/CONF.V/10). (2016). CCW. <https://daccess-ods.un.org/access.nsf/Get?OpenAgent&DS=CCW/CONF.V/10&Lang=E>
- Floridi, L. (Ed.). (2021). *Ethics, Governance, and Policies in Artificial Intelligence* (Vol. 144). Springer International Publishing. <https://doi.org/10.1007/978-3-030-81907-1>
- Future of Life Institute (Director). (2017, November 14). *Slaughterbots*. https://www.youtube.com/watch?v=HipTO_7mUOw
- Future of Life Institute [FLI]. (2017, August 20). *An Open Letter to the United Nations Convention on Certain Conventional Weapons*. <https://futureoflife.org/open-letter/autonomous-weapons-open-letter-2017/>
- Gamson, W. A. (1992). *Talking politics*. Cambridge University Press.
- Geburu, T. (2020). Race and Gender. In M. D. Dubber, F. Pasquale, & S. Das (Eds.), *The Oxford Handbook of Ethics of AI* (p. 0). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780190067397.013.16>
- Gill, A. S. (2019). Artificial Intelligence and International Security: The Long View. *Ethics & International Affairs*, 33(02), 169–179. <https://doi.org/10.1017/S0892679419000145>
- Given, L. M. (2008). *The Sage encyclopedia of qualitative research methods*. Sage.
- Goetze, T. S. (2022). Mind the Gap: Autonomous Systems, the Responsibility Gap, and Moral Entanglement. *Proceedings of the 2022 ACM Conference on*

Fairness, Accountability, and Transparency, 390–400.

<https://doi.org/10.1145/3531146.3533106>

Goffman, E. (1974). *Frame analysis: An essay on the organization of experience* (pp. ix, 586). Harvard University Press.

Goldfarb, A., & Lindsay, J. R. (2022). Prediction and Judgment: Why Artificial Intelligence Increases the Importance of Humans in War. *International Security*, 46(3), 7–50. https://doi.org/10.1162/isec_a_00425

Haas, P. M. (1992). Introduction: Epistemic Communities and International Policy Coordination. *International Organization*, 46(1), 1–35.

Hall, S. (1982). The rediscovery of ‘ideology’; return of the repressed in media studies. In *Culture, Society and the Media*. Routledge.

Haner, J., & Garcia, D. (2019). The Artificial Intelligence Arms Race: Trends and World Leaders in Autonomous Weapons Development. *Global Policy*, 10(3), 331–337. <https://doi.org/10.1111/1758-5899.12713>

Heller, K. J. (2023). *The Concept of ‘The Human’ in the Critique of Autonomous Weapons* (SSRN Scholarly Paper 4342529). <https://doi.org/10.2139/ssrn.4342529>

Heyns, C. (2013). *Report of the Special Rapporteur on extrajudicial, summary or arbitrary executions, Christof Heyns (A/HRC/23/47)*.

Horowitz, M. C. (2016a). Public opinion and the politics of the killer robots debate. *Research & Politics*, 3(1), 2053168015627183. <https://doi.org/10.1177/2053168015627183>

Horowitz, M. C. (2016b, July 29). Who’ll want artificially intelligent weapons? ISIS, democracies, or autocracies? *Bulletin of the Atomic Scientists*.

<https://thebulletin.org/2016/07/wholl-want-artificially-intelligent-weapons-isis-democracies-or-autocracies/>

Horowitz, M. C., & Scharre, P. (2015). *An Introduction to Autonomy in Weapon Systems* (Project on Ethical Autonomy) [Working paper]. Center for a New American Security [CNAS]. <https://www.cnas.org/publications/reports/an-introduction-to-autonomy-in-weapon-systems>

Human Rights Watch [HRW]. (2016, April 11). *Killer Robots and the Concept of Meaningful Human Control* / Human Rights Watch. <https://www.hrw.org/news/2016/04/11/killer-robots-and-concept-meaningful-human-control>

Hynek, N., & Solovyeva, A. (2021). Operations of power in autonomous weapon systems: Ethical conditions and socio-political prospects. *AI & SOCIETY*, 36(1), 79–99. <https://doi.org/10.1007/s00146-020-01048-1>

International Committee for Robot Arms Control [ICRAC]. (2009, September). *Mission Statement*. <https://www.icrac.net/statements/>

International Committee of the Red Cross [ICRC]. (2014). *Report of the ICRC Expert Meeting on 'Autonomous weapon systems: Technical, military, legal and humanitarian aspects', 26-28 March 2014, Geneva* [Expert Meeting Report]. <https://www.icrc.org/en/document/report-icrc-meeting-autonomous-weapon-systems-26-28-march-2014>

International Committee of the Red Cross [ICRC]. (2021). *ICRC Position on Autonomous Weapon Systems* (4550/1/002). https://www.icrc.org/en/download/file/166330/icrc_position_on_aws_and_background_paper.pdf

- Johnson, J. (2019). Artificial intelligence & future warfare: Implications for international security. *Defense & Security Analysis*, 35(2), 147–169. <https://doi.org/10.1080/14751798.2019.1600800>
- Johnston, H. (2023). What's in a frame, what's in a name? *Discourse Studies*, 25(2), 259–272. <https://doi.org/10.1177/14614456231154732>
- Keck, M. E., & Sikkink, K. (1999). Transnational advocacy networks in international and regional politics. *International Social Science Journal*, 51(159), 89–101. <https://doi.org/10.1111/1468-2451.00179>
- Klijn, H., Okano-Heijmans, M., & Torossian, B. (2020). *Managing RAS: The Need for New Norms and Arms Control*. Hague Centre for Strategic Studies. <https://www.jstor.org/stable/resrep24198>
- Kwik, J. (2022). A Practicable Operationalisation of Meaningful Human Control. *Laws*, 11(3), 43. <https://doi.org/10.3390/laws11030043>
- Laufer, H. M. (2017). War, weapons and watchdogs: An assessment of the legality of new weapons under international human rights law. *Cambridge International Law Journal*, 6(1), 62–74. <https://doi.org/10.4337/cilj.2017.01.04>
- Lindekilde, L. (2014). Discourse and Frame Analysis: In-Depth Analysis of Qualitative Data in Social Movement Research. In D. della Porta (Ed.), *Methodological Practices in Social Movement Research* (p. 0). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780198719571.003.0009>
- Liu, H.-Y. (2012). Categorization and legality of autonomous and remote weapons systems. *International Review of the Red Cross*, 94(886), 627–652. <https://doi.org/10.1017/S181638311300012X>

- McFarland, T. (2020). *Autonomous Weapon Systems and the Law of Armed Conflict: Compatibility with International Humanitarian Law*. Cambridge University Press. <https://doi.org/10.1017/9781108584654>
- Michel, A. H. (2020). 'The Black Box, Unlocked: Predictability and Understandability in Military AI'. <https://unidir.org/publication/the-black-box-unlocked/>
- Mori, S. (2019). US Technological Competition with China: The Military, Industrial and Digital Network Dimensions. *Asia-Pacific Review*, 26(1), 77–120. <https://doi.org/10.1080/13439006.2019.1622871>
- Nadibaidze, A., & Miotto, N. (2023). The Impact of AI on Strategic Stability is What States Make of It: Comparing US and Russian Discourses. *Journal for Peace and Nuclear Disarmament*, 6(1), 47–67. <https://doi.org/10.1080/25751654.2023.2205552>
- Oimann, A.-K. (2023). The Responsibility Gap and LAWS: A Critical Mapping of the Debate. *Philosophy & Technology*, 36(1), 3. <https://doi.org/10.1007/s13347-022-00602-7>
- PAX. (2014). *Deadly Decisions—8 objections to killer robots*. <https://paxforpeace.nl/wp-content/uploads/import/import/deadlydecisionsweb.pdf>
- Payne, K. (2018). Artificial Intelligence: A Revolution in Strategic Affairs? *Survival*, 60(5), 7–32. <https://doi.org/10.1080/00396338.2018.1518374>
- Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol 1), (1979). <https://www.ohchr.org/en/instruments-mechanisms/instruments/protocol-additional-geneva-conventions-12-august-1949-and>

- Purves, D., Jenkins, R., & Strawser, B. J. (2015). Autonomous Machines, Moral Judgment, and Acting for the Right Reasons. *Ethical Theory and Moral Practice*, 18(4), 851–872. <https://doi.org/10.1007/s10677-015-9563-y>
- Rademaker, M., Arkhipov-Goyal, A., Atalla, S., Bekkers, F., Bolder, P., Chavannes, E., Hristov, A., Klijn, H., Klonowska, K., Okana-Heijmans, M., Roelen, M., Sweijs, T., & Torossian, B. (2021). *Capstone Report: Robotic and Autonomous Systems in a Military Context*. Hague Centre for Strategic Studies. <https://www.jstor.org/stable/resrep29554>
- Researching Critical Will [RCW]. (2016). *CCW REPORT - Civil society perspectives on the Fifth Review Conference of the Convention on Certain Conventional Weapons (CCW) 12–16 December 2016*. <https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/ccw/2016/RevCon/reports/CCWR4.4.pdf>
- Researching Critical Will [RCW]. (2018a). *CCW REPORT - Civil society perspectives on the CCW Group of Governmental Experts on lethal autonomous weapon systems 27–31 August 2018 (I) (Vol. 6, No. 10)*. <https://reachingcriticalwill.org/images/documents/Disarmament-fora/ccw/2018/gge/reports/CCWR6.10.pdf>
- Researching Critical Will [RCW]. (2018b). *CCW REPORT - Civil society perspectives on the CCW Group of Governmental Experts on lethal autonomous weapon systems 27–31 August 2018 (II) (Vol. 6, No. 11)*. <https://reachingcriticalwill.org/images/documents/Disarmament-fora/ccw/2018/gge/reports/CCWR6.11.pdf>
- Robillard, M. (2018). No Such Thing as Killer Robots. *Journal of Applied Philosophy*, 35(4), 705–717. <https://doi.org/10.1111/japp.12274>

- Rosert, E., & Sauer, F. (2019). Prohibiting Autonomous Weapons: Put Human Dignity First. *Global Policy*, 10(3), 370–375. <https://doi.org/10.1111/1758-5899.12691>
- Rosert, E., & Sauer, F. (2021). How (not) to stop the killer robots: A comparative analysis of humanitarian disarmament campaign strategies. *Contemporary Security Policy*, 42(1), 4–29. <https://doi.org/10.1080/13523260.2020.1771508>
- Rossiter, A. (2023). AI-enabled remote warfare: Sustaining the western Warfare paradigm? *International Politics*, 60(4), 818–833. <https://doi.org/10.1057/s41311-021-00337-w>
- Sauer, F. (2020). Stepping back from the brink: Why multilateral regulation of autonomy in weapons systems is difficult, yet imperative and feasible. *International Review of the Red Cross*, 102(913), 235–259. <https://doi.org/10.1017/S1816383120000466>
- Sauer, F. (2021). Lethal autonomous weapons systems. In *The Routledge Social Science Handbook of AI*. Routledge.
- Scharre, P. (2018). *Army of None: Autonomous Weapons and the Future of War*. W. W. Norton & Company.
- Schmitt, M. N. (2012). Autonomous Weapon Systems and International Humanitarian Law: A Reply to the Critics. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2184826>
- Seixas-Nunes, A. (2022). *The Legality and Accountability of Autonomous Weapon Systems: A Humanitarian Law Perspective* (1st ed.). Cambridge University Press. <https://doi.org/10.1017/9781009090001>

- Sharkey, N. (2017). Why robots should not be delegated with the decision to kill. *Connection Science*, 29(2), 177–186. <https://doi.org/10.1080/09540091.2017.1310183>
- Sharkey, N. (2007, August 17). Robot wars are a reality. *The Guardian*. <https://www.theguardian.com/commentisfree/2007/aug/18/comment.military>
- Snow, D. A. (2007). Framing Processes, Ideology, and Discursive Fields. In D. A. Snow, S. A. Soule, & H. Kriesi (Eds.), *The Blackwell Companion to Social Movements* (pp. 380–412). Blackwell Publishing Ltd. <https://doi.org/10.1002/9780470999103.ch17>
- Snow, D. A., Rochford, E. B., Worden, S. K., & Benford, R. D. (1986). Frame Alignment Processes, Micromobilization, and Movement Participation. *American Sociological Review*, 51(4), 464. <https://doi.org/10.2307/2095581>
- Solovyeva, A., & Hynek, N. (2023). When stigmatization does not work: Over-securitization in efforts of the Campaign to Stop Killer Robots. *AI & SOCIETY*. <https://doi.org/10.1007/s00146-022-01613-w>
- Steinberg, M. W. (1998). Tilting the Frame: Considerations on Collective Action Framing from a Discursive Turn. *Theory and Society*, 27(6), 845–872.
- Taddeo, M., & Blanchard, A. (2022). A Comparative Analysis of the Definitions of Autonomous Weapons Systems. *Science and Engineering Ethics*, 28(5), 37. <https://doi.org/10.1007/s11948-022-00392-3>
- Tamburrini, G. (2016). On banning autonomous weapons systems: From deontological to wide consequentialist reasons. In C. Kreß, H.-Y. Liu, N. Bhuta, R. Geiß, & S. Beck (Eds.), *Autonomous Weapons Systems: Law, Ethics, Policy* (pp. 122–142). Cambridge University Press. <https://doi.org/10.1017/CBO9781316597873.006>

- Thumfart, J. (2023). The democratic offset: Contestation, deliberation, and participation regarding military applications of AI. *AI and Ethics*. <https://doi.org/10.1007/s43681-023-00288-3>
- Turkey. (2017). *Statement by Turkey* (Group Of Governmental Experts Meeting On Lethal Autonomous Weapons Systems). United Nations Convention on Certain Conventional Weapons. [https://docs-library.unoda.org/Convention_on_Certain_Conventional_Weapons_-_Group_of_Governmental_Experts_\(2017\)/2017_GGE%2BLAWS_Statement_Turkey.pdf](https://docs-library.unoda.org/Convention_on_Certain_Conventional_Weapons_-_Group_of_Governmental_Experts_(2017)/2017_GGE%2BLAWS_Statement_Turkey.pdf)
- Vicari, S. (2023). Frame semantic grammars: Where frame analysis meets linguistics to study collective action frames. *Discourse Studies*, 25(2), 309–318. <https://doi.org/10.1177/14614456231154737>
- Watts, T. F., & Bode, I. (2023). Machine guardians: The Terminator, AI narratives and US regulatory discourse on lethal autonomous weapons systems. *Cooperation and Conflict*, 00108367231198155. <https://doi.org/10.1177/00108367231198155>
- Williams, A. P., & Scharre, P. D. (2015). *Autonomous Systems: Issues for Defence Policymakers*. NATO. <https://apps.dtic.mil/sti/citations/AD1010077>
- Women’s International League for Peace and Freedom [WILPF]. (no date). Women, Peace and Security. *Justice Advocacy*. <https://www.wilpf.org/our-work/women-peace-and-security/>
- Wood, N. G. (2023). Autonomous Weapon Systems: A Clarification. *Journal of Military Ethics*, 22(1), 18–32. <https://doi.org/10.1080/15027570.2023.2214402>

- Wyatt, A. (2021). *The Disruptive Impact of Lethal Autonomous Weapons Systems Diffusion: Modern Melians and the Dawn of Robotic Warriors* (1st ed.). Routledge. <https://doi.org/10.4324/9781003172987>
- Zeng, J. (2021). Securitization of Artificial Intelligence in China. *The Chinese Journal of International Politics*, 14(3), 417–445. <https://doi.org/10.1093/cjip/poab005>

C. TURKISH SUMMARY / TÜRKÇE ÖZET

Bu tez, Ölümcül Otonom Silah Sistemleri üzerine gelişen söylemin şekillenmesine ve kavrama atfedilen anlamların oluşmasına etki eden Katil Robotları Durdurma Kampanyası'nın kolektif eylem çerçevelerinin bir incelemesidir. Son yıllarda yapay zeka teknolojisi ve algoritmaların giderek günlük yaşamın her alanında otomasyonu artırmasıyla birlikte, bu teknolojilerin otonom silah sistemlerinin geliştirilmesi ve kullanımının uluslararası hukuk, etik ve güvenlik veçhesinden doğuracağı sonuçlar, gerek uluslararası toplum, gerekse akademi nezdinde tartışma konusu olmuştur. Ölümcül otonom silah sistemleri, 2013'ten itibaren BM nezdinde Konvansiyonel Silah Sözleşmesi bünyesinde gündeme alınmış, 2017'den itibaren bu silah sistemlerinin düzenlenmesi için bu sözleşmenin çatısı altında Hükümetler-Arası Uzmanlar Grubu kurulmuş ve müzakereler günümüze değin sürmüştür. Katil Robotları Durdurma Kampanyası, konunun BM'de gündeme gelmesinden kısa bir süre önce Human Rights Watch öncülüğünde silahsızlanma alanında çalışan çok sayıda sivil toplum kuruluşunu bir araya getiren bir ulus-aşırı koalisyon olarak kurulmuş ve 2013'ten beri faaliyetlerini sürdürmüştür.

Tezin ikinci bölümünde gerek otonom silah sistemlerinin gerekse Kampanya'nın kuruluşu öncesinde bu silahların düzenlenmesi konusundaki savunuculuk faaliyetlerinin tarihsel arka planına yer verilmiş, buna dair akademik literatür detaylı bir şekilde incelenmiştir. Ayrıca tezin metodolojisi konusunda belirleyici olan, sosyal hareketler ve kolektif eylem çalışmalarında sıkça kullanılan çerçeveleme perspektifi üzerine de literatür taraması yapılmış, Kampanya'nın kolektif eylem çerçevelerinin içerik analizini en kapsamlı şekilde yapabilmeye imkan veren, Kampanya'nın söylemsel ve stratejik süreçlerini izaha en uygun olan tematik çerçeve kavramları izah edilerek özenle seçilmiştir. Sosyal hareketler teorisi içinde ele alınan kolektif eylem çerçevesi, bir sosyal harekete mensup olan aktörlerin, belli bir konuda kamuoyunu mobilize etmeyi hedefleyen, konunun nasıl ele alınacağı konusunda anlam inşasına müdahil olan ve konu etrafındaki anlam dünyasını interaktif biçimde kendi tayin ettiği yön doğrultusunda kurmaya çalışan stratejik biçimde kurgulanmış söylemler biçimde

tanımlanabilir. Çerçeve analizinde en çok başvurulan metot itibarıyla kolektif eylem çerçevelerinin nitel içerik analizidir. Çerçeveler, anlam inşasının yanı sıra, bireylerin veya grupların belirli bir sorun veya durum karşısında nasıl bir araya geldiğini, ortak bir kimlik oluşturduğunu ve kolektif eylemde bulunma motivasyonunu nasıl kazandığını incelemeye yarar. Kolektif eylem çerçevesi, sosyal hareketlerin nasıl oluştuğunu, geliştiğini ve toplumsal değişime nasıl katkıda bulunduğunu anlamak için kritik bir araçtır. Bu çerçeve aynı zamanda sosyal hareketlerin toplumla, destekçilerle, izleyicilerle, karşıtlarla interaktif bir şekilde nasıl iletişim kurduğunu, destek topladığını ve kamuoyu nezdinde meşruiyet kazandığını da açıklar.

Bu tez, Katil Robotları Durdurma Kampanyası'nın kolektif eylem çerçevelerini derinlemesine inceleyen bir nitel içerik analizine dayanır. Kampanya'nın web sitesinde yer alan, Kampanya üyelerinin BM'de verdiği resmi demeçler, kamuoyuna dönük bilgi notları, broşürler, kampanya kılavuzları gibi 56 adet yazılı kampanya materyali; tanısal, prognostik ve motivasyonel çerçeve temalarına göre kodlanmıştır. Sonrasında, bu çerçevelerin içeriğinde yer alan anlamlar ve başvurulan temalar arasındaki örüntüler incelenmiştir. Özellikle de Kampanya'nın söylem değişikliklerini gözleyebilmek amacıyla Kampanya'nın çerçeveleri biçimlendirici, aktif ve uyumsal adı verilen üç çerçeveleme dönemi kapsamında incelenmiş ve çerçeveler birbiriyle karşılaştırmalı biçimde analiz edilmiştir.

Bu çalışmada Kampanya'nın kurulduğu 2013'ten BM nezdinde "informal" ölçekte tartışıldığı 2016'ya kadar olan dönem, aktivistlerin kampanyanın temel kolektif eylem çerçevelerini inşa ettiği "biçimlendirici çerçeveleme dönemi" biçimde tanımlanmıştır. Bu öncül dönem zarfında Kampanya'nın ölümcül otonom silah sistemlerini tasvir eden tanısal çerçeveleri büyük ölçüde bu sistemlerin uluslararası insancıl hukuka uyumluluğunu konusuna odaklanmış ve buna ilişkin temalar, mevcut çalışmada "yasallık çerçevesi" olarak adlandırılmıştır. Yasallık çerçevesi; bilhassa otonom silah sistemlerinin savaş alanında siviller için oluşturduğu riskleri konu almış ve bu sistemlerin, uluslararası insancıl hukukun çatışmalarda sivillerin korunması perspektifinin temelini oluşturan ayırım, orantılılık ve hesap verebilirlik prensiplerine uygun olmadığı fikrini işlemiştir.

Kampanya, ölümcül otonom silah sistemlerinin savaşı ve sivil unsurları ayırt etmek için gerekli olan kabiliyete sahip olmadığını, herhangi bir saldırıda karşı tarafa verilecek zararın askeri hedeflere ulaşmak için orantılı olup olmadığını tartamayacağını ve bir "sorumluluk açığı" yaratacağını öne sürmüştür. Kampanya, tam otonom silah sistemlerinin gerçekleştirebileceği ihlaller için sorumluluk atfetmenin güçlüğüne, operatörleri, komutanları ve üreticileri bu silahlarla gerçekleştirilen yasa dışı eylemlerden yasal olarak sorumlu tutma çabalarını karmaşıklığına dikkat çekmiştir. Bu tanısal çerçeve, ölümcül otonom silah sistemlerinin ihlal niteliğindeki eylemleri sonucu oluşacak mağduriyetlerin telafi yolların bulmasını ve çatışmanın taraflarının yasaya uymaya teşvik edilmesini sağlayacak açık yasal çerçevelerin gerekliliğinin altını çizdi.

Biçimlendirici dönemde kampanyanın öne çıkan tanısal çerçevelerinden bir diğeri de insan onurunu konu almaktadır. İnsan onuru çerçevesi, ölümcül otonom silah sistemlerinin savaş alanında kullanılmaya başlanmasıyla, makinelerin insan yaşamı üzerinde karar verici bir pozisyona erişme olasılığını sorunsallaştırmış ve bunun insan onurunu çığneyen bir ahlaki bir ihlal teşkil edeceğini savunarak, bu silah sistemlerinin geliştirilmesine ve uygulanmasına karşıt bir söylem oluşturmuştur.

Kampanya, her ne kadar baştan itibaren uluslararası insancıl hukukun savaş alanı ve silah sistemlerinin askeri amaçlar için kullanımıyla kısıtlı kalan yetki alanının ötesine geçen -örneğin otonom silahların kolluk kuvvetleri ve sınır güvenliği alanlarında kullanımını da kapsayan- bütüncül bir karşıtlık tasavvur etse de, BM nezdindeki müzakerelerde ülkelerin bu sorunu Konvansiyonel Silahlar Sözleşmesi'nde ele almaya yönelmesiyle birlikte, meselenin uluslararası insancıl hukuk yönü, Kampanyanın ilk döneminde en çok eğildiği husus olmuştur. Buna paralel olarak da yasallık çerçeveleri bu dönemde Kampanya'nın söyleminde öne çıkmıştır. Bununla birlikte Kampanya baştan itibaren bu kısıtlılığın, meselenin insan onuruna ilişkin etik veçhesi ve uluslararası istikrarı etkileyen yönlerini göz ardı ettiği eleştirisini dile getirmiştir.

Yasallık ve insan onurunun yanı sıra Kampanya'nın bir diğeri tanısal çerçevesi, ölümcül otonom silah sistemlerinin uluslararası istikrar üzerindeki etkilerini ele almış ve otonom silah sistemlerinin yaygınlık kazanmasıyla küresel ölçekte taktik ve

stratejik istikrarı baltalayabilecek bir silahlanma yarışı potansiyelini vurgulamıştır. Ayrıca otonom silah sistemlerinin, savaşlardaki insan maliyetini azaltmak suretiyle ülkeler için savaş eşliğini aşağı çekerek ve çatışmaları daha önce görülmemiş, kontrolü zor bir hıza çıkararak daha fazla savaşa ve kayba kapı aralayabileceği öngörülmüştür. Bununla birlikte uluslararası istikrar çerçevesi, yasallık ve insan onuru çerçevelerine kıyasla Kampanya'nın gerek kamuoyuna yönelik açıklamalarında gerekse resmi müzakerelerdeki beyanlarında nispeten seyrek biçimde ele alınmıştır.

Kampanya, biçimlendirici dönemde tanısız çerçevelemenin unsurlarından biri olan suç atfetme işlevini yerine getirmekte sakınlı bir tavır sergilemiştir. İlk aşamada daha ziyade sorun tanımlarının anlam içeriği ve söylemsel geçerliliğini sağlamaya yönelik çaba harcanmış, belli aktörleri sorunun kaynağı biçiminde gösterip onlara suç atfederek ülkelere doğrudan cephe almaktan kaçınılmıştır. Kampanya bu dönemde söyleminde nispeten daha diplomatik ve teknik bir ton tutturmuş ve kampanyanın hedeflediği önleyici yasak konusundaki uluslararası müzakerede söz sahibi olacak aktörleri düşmanca bir tutumla erken bir safhada karşı cepheye itmeyi önclemiştir. Kampanya bu dönemde yalnızca silahlı kuvvetleri bünyesinde otonom sistemler geliştirilmesine öncülük edebilecek bir grup ülkeyi listelemekle yetinmiş, tanıdığı sorun ve müsebbip aktörler arasında doğrudan bir ilgi bağı kurmaktan kaçınmıştır. Bununla birlikte, yine düşük tonda olsa da zaman zaman uluslararası müzakerelerin otonom silahları yasaklayacak bir anlaşmayı hayata geçirme konusunda prosedürel ve yapısal kısıtlara dikkat çekilmiştir.

Kampanya, prognostik çerçevelerinde otonom silahların kullanılmasına ilişkin etik, yasal ve insani kaygıların bütününe cevap vereceği düşünülen Anlamlı İnsan Kontrolü kavramına odaklanmıştır. Otonom silah sistemlerinin çatışma esnasında bilhassa hedef seçimi ve angajman gibi kritik işlevleri üzerinde daima anlamlı ölçüde bir insan kontrolü sağlanmasını öngören bu kavram, böylelikle bu silahların kullanılması üzerinde insan gözetimi ve sorumluluğunu şart koşmaktadır. Bir prognostik çerçeve olarak da kampanyanın yasallık ve insan onuruna dair tanımlarına çözüm sunmuş, genel ölçekte kampanyanın kolektif eylem çerçeveleri arasında bağıntılar kurarak bir bütünlük sağlamıştır. Kampanya, anlamlı insan kontrolünün, otonom silah sistemlerince gerçekleştirilen her tekil saldırı üzerinde insanın aktif bilişsel dahil

olmasını şart koşarak, çatışmada hedeflerin kimliği ve ehemmiyeti, saldırının gerçekleştiği bağlam ve olası etkileri üzerinde düşünmek için karar vericilere yeterli zaman ve imkânı sağladığını savunmuştur. Bu çerçeveye kampanya, anlamlı insan kontrolü kavramını, tam otonom silah sistemlerinin geliştirilmesi ve kullanılmasını önlemek üzere işleme konması hedeflenen yasağı uygulamanın tamamlayıcı bir yolu biçiminde sunmuştur.

Araştırmanın bulguları, anlamlı insan kontrolünü hayata geçirmek üzere Kampanya'nın bu dönemde ölümcül otonom silah sistemlerine yönelik önleyici yasağın çağrısını sıklıkla tekrar ettiğini göstermiştir. Bu yasağın bir uluslararası anlaşma yoluyla yürürlüğe konması umulsa da, zaman zaman ulusal yasalar ve diğer bir dizi önlemlerle de desteklenmesi öngörülmüştür. Bilhassa biçimlendirici çerçeveleme döneminde önleyici yasağın, Kampanya'nın en sık başvurduğu prognostik çerçeve olarak yaygın başvurulan, Kampanya'nın varlık amacını oluşturan esas söylemsel temalardan biridir.

Biçimlendirici çerçeveleme döneminde, Kampaya bilhassa aciliyet ve etkinlik hissiyatı uyandıran motivasyon temaları üzerine odaklanmıştır. Kampanya otonom silah teknolojisindeki hızlı gelişmeleri ve bu sistemleri düzenleyen yasal çerçeve olmadan savaş alanlarında ve diğer bağlamlarda konuşlandırılma ihtimalini vurgulamış, bu husustaki uluslararası müzakerelerin teknolojinin hızına yetişememesi dolayısıyla meselenin aciliyetini konu edinmiştir. Bu çerçeve, uluslararası topluma, ölümcül otonom silah sistemlerinin yayılmasını önlemek ve bunların kullanımını düzenleyen uluslararası normlar oluşturmak için zamanında harekete geçmenin kritik önemini vurgulamayı amaçlamıştır. Bunların yanında, Kampanya eyleme geçildiği takdirde olumsuz gidişatı önlemenin mümkün olduğunu ve aktörlerin bu hususta etkin özneler olduklarını ifade eden motivasyonel çerçevelere başvurmuştur.

Bunlara ek olarak Kampanya, müzakereler esnasında yaptığı müdahalelerde BM nezdindeki silahsızlanma görüşmelerinde kadın temsiline yetersizliğine vurgu yapmış, kadınların silahsızlanma, barış ve güvenlik hususundaki öneri ve katkılarının dikkate alınmasının elzem olduğuna dikkat çekmiştir. Örneğin Konvansiyonel Silahlar Sözleşmesi bünyesinde 2014'te gerçekleşen uzman panelindeki 18 konuşmacının

tamamının erkeklerden oluştuğu, bu nedenle Kampanya'nın bundan sonra konuşmacılarını yalnızca erkeklerin oluşturduğu panelleri protesto edeceği duyurmuştur. Kampanya sonraki sene yayınladığı aktivite raporunda bu girişimin başarılı netice verdiğini ve Konvansiyonel Silahlar Sözleşmesi'nin bir sonraki sene gerçekleşen oturumunda kadın katılımcıların %42 oranına ulaştığını rapor etmiştir. Biçimlendirici dönemde Kampanya her ne kadar kolektif eylem çerçevelerinin içeriği itibarıyla henüz feminist perspektife yer vermese de, güvenlik ve silahsızlanma konularında kadın katılımını artırmaya yönelik bu girişimler, Kampanya'nın çerçevelerini feminist harekete doğru genişletmeyi hedefleyen, öncül bir çerçeve stratejisi biçiminde düşünülebilir.

Dört yıl süren uluslararası müzakere sürecinin ilk dönemin ardından 2017'de Konvansiyonel Silahlar Sözleşmesi bünyesinde toplanacak Hükümetler-arası Uzmanlar Grubunun kurulması kararlaştırılarak otonom silah sistemleri konusunda resmi görüşme sürecine geçildi. Kampanya bu aşamadan itibaren aktif çerçevelene dönemine intikal ederek, önceki döneme ait çerçevelerini esas itibarıyla büyük ölçüde korumuş, fakat bu çerçevelerin içeriğini bir ölçüde detaylandırarak ve yeni vurgular katarak derinleştirmiştir.

Yasallık ve insan onuru çerçeveleri esas itibarıyla önceki dönemdeki anlam ve söylem yapısını korumuştur. Bununla birlikte, araştırmanın bulguları kampanyanın uluslararası müzakerelerde verdiği demeçlerde aktif çerçevelene döneminde uluslararası istikrar çerçevelerinin kullanım sıklığının keskin bir düşüşe uğradığını göstermiştir. Aynı eğilim, uluslararası istikrar temalarına yalnızca birkaç kez değinilen diğer kampanya materyallerinde de izlenmiştir. Kampanya bu dönemde Konvansiyonel Silahlar Sözleşmesi'nin uluslararası insancıl hukuk odaklı işleyişine çerçeve bazında uyumlanmayı tercih etmiş; sınırlı etki gücünü, ülkeler arası müzakerelerde geçerlik kazanan anlamlı insan kontrolü perspektifini desteklemeye ayırmıştır.

Kampanya; aktif dönem süresince, önceki dönemde inşa edilen aciliyet hissini güçlendirmek amacıyla, sensörler ve yapay zeka gibi otonom silah teknolojilerin giderek artan hızını vurgulamış ve bunların kademeli olarak otonom silah sistemleri

üzerindeki insan kontrolünün tamamen ortadan kaldırılmasına, neticede insanların karar mekanizmasından dışlanmasına yol açacağı belirtilmiştir. Kampanya giderek hızlanan ve karmaşıklaşan algoritmalarla donanan otonom sistemleri, iç operasyonlarının açıklanamaz hale geleceği ve çıktılarının tahmin edilemez hale geleceği ve bunun da hesaba katılmayan hatalara yol açacağı riskine işaret etmiştir.

Aktif çerçeveleme dönemindeki tanısal çerçevelerinde görülen bir diğer eğilim, Kampanya'nın olağan yasallık çerçevelerini askeri çatışma dışındaki insan hakları boyutlarını içerecek şekilde genişletme çabasıdır. Bu eğilim, kampanyanın uluslararası müzakerelerde savunduğu çerçevelerden ziyade, Kampanya'nın konuya kamuoyunun dikkatini çekmek üzere yayınladığı kısa filmlerde görülmüştür. Bu filmlerde Kampanya, otonom silah sistemlerinin meskun mahallerde gerçekleşen çatışmalarda, terör saldırılarında veya otoriter rejimlerce muhaliflere ve protestoculara karşı kullanıldığı durumları ele almıştır. Bu sistemlerin savaş hukukuna ilişkin teşkil ettiği teknik sorunların ötesinde, bunların yayılmasıyla şehirlerde yaşayan sıradan insanların günlük hayatında karşılaşılabileceği türden risklere vurgu yapmıştır.

Tanısal çerçeveler bakımından Kampanya'nın biçimlendirici ve aktif çerçeveleme dönemleri arasındaki en belirgin fark, suç atfedici çerçevelerinin yoğunluğunda izlenmiştir. Biçimlendirici dönemde dikkatli ve diplomatik bir strateji izleyen Kampanya, Hükümetler-arası Uzmanlar Grubunda giderek sürüncemeye düşen müzakerelere karşı daha eleştirel bir tona geçiş yapmış, bazı ülkeleri açıktan müzakereleri sekteye uğratmakla suçlamış, sorun ve müsebbip aktörler arasındaki nedensellik bağını güçlü bir şekilde kuran bir çerçeve benimsemiştir. Bununla birlikte suç atfı yalnızca belirli bir soruna neden olan aktörlere yönelik değil, bu sorunu oluşturan, devamlılığını sağlayan veya yeniden üreten yapısal faktörlere ve çeşitli gelişmelere yönelik olarak da yöneltiler. Bu bakımdan Kampanya, Konvansiyonel Silahlar Sözleşmesi'nin işleyiş yapısını belirleyen oy birliği esası ile en küçük ortak payda üzerinden şekillenen müzakere etme pratiğini kıyasıya eleştirmiş ve tanısal çerçevenin belirlediği sorunlar içine dahil etmiştir.

Prognostik çerçeveleme cephesinde aktif dönemde Kampanya anlamlı insan kontrolü ve önleyici yasak çerçevelerinin içeriğini büyük ölçüde korumuştur. Bununla birlikte

araştırmanın bulguları “önleyici” sözcüğünün giderek Kampanya’nın lügatinden düştüğünü, yasak sözcüğünün ise “yasaklayıcı anlaşma” tabiri içinde kullanıldığını ortaya çıkarmıştır. Hükümetler-arası Uzmanlar Grubu’nun terminolojisiyle daha uyumlu olacak biçimde Kampanya, bir çözüm önerisi olarak “hukuken bağlayıcı yasal enstrüman” tabirini de prognostik çerçevesi içine dahil etmiştir. Bununla birlikte, bahsi geçen hukuken bağlayıcılığı olan anlaşma bahsiyle Kampanya’nın, halihazırda hayata geçirmek istediği otonom silah sistemlerine yönelik yasaktan başka bir şeyi kast ettiğine dair bir bulgu yoktur. Dolayısıyla aynı çözüme işaret eden farklı ifadelerin Kampanya’nın prognostik çerçevesinde anlamlı bir değişiklik teşkil etmediğini, Kampanya’nın otonom silah sistemlerine yönelik yasal-araçsal çözümü olan uluslararası yasaklayıcı anlaşma ile ereksel çözümü olan anlamlı insan kontrolünüden oluşan prognostik çerçevesi aktif dönemde korunmuştur.

Aktif dönemdeki motivasyonel çerçevelere bakıldığında da Kampanya’nın söyleminde meselenin *aciliyetine* dikkat çeken motivasyon dilinin liderliği göğüslediği görülmüştür. Bununla birlikte biçimlendirici dönemle kıyaslandığında, muhatabına kolektif eyleme katılmanın ahlaki bir gereklilik olduğunu ifaden eden *uygunluk* dilinin söylemde daha çok yer aldığı gözlenmiştir. Kampanya’nın uluslararası müzakerelerden otonom silahlara dönük bir yasaklayıcı bir anlaşma çıkması olasılığından ümidini kesmesiyle birlikte, muhatabını kolektif eylemle sonuç almanın mümkün olduğuna ikna etmeye dönük *imkanlılık* dilinin kullanımında da ciddi bir azalma gözlenmiştir. Kampanya ayrıca söyleminde kimlik kazandıran unsurları da kullanmış, yasaktan yana olan ülkeleri “biz”, yasağa karşı çıkan ülkeleri “onlar” diye tanımlamıştır.

Diğer çerçeveleme stratejilerine bakıldığında da Kampanya’nın askeri uzmanlar, Nobel ödüllü isimler, din önderleri, BM genel sekreteri gibi önde gelen aktörlerin konuyla ilgili beyanlarına başvurduğu, bu aktörlerin açıklamalarından kendi çerçevelerinin inandırıcılığını ve önemini artıracak vasıtalar olarak yararlandığı görülmüştür. Aynı şekilde, Kampanya farklı tarihlerde kamuoyu yoklamaları ve anketler yaptırarak, kamuoyunun otonom silah sistemlerine karşı olduğu görüşüne geçerlilik kazandırmak istemiştir. Bunun yanında, Kampanya aktif dönemde ilk defa otonom silahlar konusunun kesişimsel yönüne dikkat çekerek otonom silah sistemlerin

kullanımının kadınlara ve ötekilere dönük etkilerine vurgu yapmıştır. Kampanya'nın söyleminde kültürel çeşitlilik, eşitlik, kapsayıcılık gibi temaların belirginleştiği görülmüştür. Bu adımlar, bir sonraki çerçeveleme döneminde ortaya çıkan esas çerçeve değişikliğinin öncüleri olarak nitelenebilir.

Bu çalışmada Kampanya'nın küresel gelişmelerle uyumlu olarak çerçeve değişikliğine gittiği son dönem, uyumsal çerçeveleme dönemi olarak adlandırılmıştır. Uluslararası müzakerelerde Rusya ve ABD gibi askeri yönüyle güçlü aktörlerin otonom silah sistemlerinin yasaklanmasına karşı çıkması neticesinde Kampanya'nın murat ettiği hedefe ulaşma beklentisi azalmıştır. Kampanya böylelikle savunusunun genel gidişatını yeniden ele alma yoluna gitmiştir. Bu esnada 2020 itibarıyla ABD'de Geoge Floyd'un öldürülmesiyle başlayan Black Lives Matter kampanyası ve COVID-19 pandemisi gibi küresel gelişmeler, Kampanya'nın otonom silah sistemleri meselesine yeni bir perspektifle bakmasına olanak tanımıştır. Bu yeni perspektifler, bilhassa insancıl silahsızlanma savunuculuğu yapan sivil toplumun; kolonyal eşitsizlikler, ırk ve cinsiyet kimlikleri, cinsel yönelimler, engellilik, sosyoekonomik statü ve inanç gibi konularda ayrımcılığa uğrayan kesimlerin silahlanmaya ilişkin sorunlardan daha çok etkilendiğine yönelik tespitiyle uyumlu bir şekilde gelişmiştir.

Bu gelişmeler ışığında kampanya bilhassa tanısız çerçevelerinde önemli değişikliklere gitmiş, kolektif eylem çerçeveleri bu yöne doğru genişletilmiştir. Burada dikkat çekilmesi gereken husus, Kampanya'nın bu dönemde yeni çerçeveler sunmakla birlikte daha önceki dönemlerde savunularına konu olan yasallık, insan onuru ve uluslararası istikrar çerçevelerini korumuş olmasıdır. Ne var ki araştırma, yeni çerçevelerin sıklığının eski çerçeveleri neredeyse ikiye katladığını ortaya koymuştur. Dolayısıyla yeni çerçevelerle birlikte meselenin bütüncül çerçeve muhteviyatında ciddi ölçüde değişiklikler görülse de, hiçbir eski çerçeveden vazgeçilmemesi nedeniyle mutlak surette bir çerçeve dönüşümünden söz etmek mümkün değildir.

Kampanya'nın yeni çerçeveleri arasında birincisi dijital insan-dışlaştırma çerçevesidir. Temelde insan onuru çerçevesinin bir modifikasyonu olan bu çerçeveyi doğru tahlil edebilmek için insan onuru çerçevesiyle karşılaştırmalı ele alınması yerinde olacaktır. Dijital insan-dışlaştırma, insanların sensörler ve algoritmalar

yoluyla otonom süreçler tarafından işlenecek verilere indirgenmesi biçimde tanımlanabilir. Kampanya, burada sorunsal olan hususun insanları veri kabul eden her sürece yönelik olmadığını, bilhassa verilerin insanları negatif yönde etkileyecek, insan onurunu ihlal edecek, insaniyetin dışına itecek otonom işlemleri kapsadığını belirtmiştir. Önceki insan onuru çerçevesi, daha ziyade otonom silah sistemlerinin insanların hayatı üzerinde karar verici pozisyona erişmesini sorunsallaştırmıştır. Bahsi geçen ölüm/kalım kararı, otonom sürecin sonucunda ortaya çıkan bir çıktıdır. Dijital insan-dışılaştırma çerçevesiyle birlikte Kampanya, otonom süreçlerde insan onurunu ihlal eden hususun yalnızca çıktı aşamasında verilen bir ölüm kalım kararından ibaret olmadığını, girdi ve işlem aşamasında insanın veriye indirgenmesinin başlı başına insan onurunu ihlal ettiğini savunmuştur. Bu değerlendirme aracılığıyla, Kampanya otonom silah sistemlerince ortaya konacak, ölümcül olmayan, savaş alanında gerçekleşmeyen işlemleri de kapsayan, bu bakımdan savunusunun sınırlarını Uluslararası İnsancıl Hukuk'un ötesine doğru genişleten, daha bütüncül bir şekilde otonom silahların temel insan haklarına etkisine odaklanan bir çerçeveye geçiş yapmıştır.

Uyumsal döneme damgasını vuran bir diğer tanısal çerçeve de kesişimsellik çerçevesidir. Kampanya bu çerçevesiyle otonom süreçleri yöneten yapay zekanın bilhassa kadınlar, farklı ırklara mensup kişiler ve ötekileştirilen kesimlere dönük önyargılı ve yanılı pratiklerine vurgu yapmış, otonom silah sistemlerinin küresel eşitsizlikleri ve yapısal ırkçılığı besleyeceği fikrini ele almıştır. Bu çerçeve, tanısal içeriği belirleyen önemli bir söylemsel gelişme olmasının yanında, Kampanya'nın destek alanını ötekileştirilen kesimlere doğru genişleten bir çerçeve stratejisi biçiminde de okunmalıdır. Kampanya bu dönemde çok daha güçlü bir şekilde çoğulluk ve çeşitlilik amaçladığını, siyahların, kadınların ve diğer ötekileştirilenlerin harekete dahil olmasını önemseydiğini, bu gruplarla ilişkili olan sosyal hareketlerin hedefleriyle uyumlandığını ortaya koymuştur.

Suç atıflı tanısal çerçeveler cephesinde de Kampanya, "çok askerileşmiş devletler" kategorisinde ele aldığı otonom silah sistemi üretmeye yaklaşmış olan bir grup devleti belirgin bir şekilde hedefine koymuştur. Bu devletlerin uluslararası müzakereleri baltalayarak otonom silah sistemlerinin düzenlenmesine engel olduğunu savunmuştur.

Uyumsal dönemin prognostik çerçeveleri; önceki dönemlerde sunulan çözümlerin üzerine inşa olan, hukuki olarak bağlayıcı bir uluslararası anlaşma ve anlamlı insan kontrolü çerçevelerini bir araya getiren iki ayaklı çözüm perspektifini daha da detaylandırmıştır. Araştırma Kampanya'nın lansmanından itibaren öne çıkan önleyici yasak talebinde söylemsel bir değişikliğe gittiğini, yasak (ban) sözcüğünün neredeyse bütünüyle Kampanya'nın lügatinden düştüğünü gözlemlemiştir. Bunun yerine Kampanya, pratikte farkı olmasa da anlam itibarıyla daha yumuşak olan "prohibition" sözcüğünü kullanmaya başlamıştır. Bu, Kampanya'yı otonom silah sistemlerini yeterli biçimde kavramadan yasakçı bir anlayış benimsemekle suçlayan eleştirilere cevaben Kampanya'nın daha hukuki çağrışımlı bir söylemselliğe geçiş yapması biçimde okunabilir. Nitekim Kampanya, özellikle insanları hedef alan otonom silah sistemlerinin yasaklanmasını, diğer silahların da anlamlı insan kontrolü prensibi doğrultusunda düzenlenmesi gerektiğini savunarak, yasaklama hedefinden vazgeçmekten ziyade, farklı bir tabir ve biçimde ifade etmek suretiyle yasak çözümünü sisteme oturtma yoluna gitmiştir. Kampanya aynı zamanda anlamlı insan kontrolü kavramını içeriği yönüyle zenginleştirecek şekilde detaylandırmıştır. Yeni çerçevelenmeye göre otonom silah sistemlerince yürütülen işlemler üzerinde anlamlı ölçüde insan kontrolü bulunması için karar mekanizmasına dair, teknolojik ve operasyonel unsurlar ortaya konmuştur. Karar mekanizması unsuru, otonom silah sistemlerinin kullanımı için savaş alanı ve silahın işleyişi hakkında bilgisi sahibi olma ve ayırım ve orantılılık ilkelerinin yerine getirilip getirilemeyeceğine karar verebilecek durumda olma şartına işaret eder. Teknolojik unsur, otonom silah sistemlerinin alacağı kararların öngörülebilir ve güvenilir olması gerekliliğinden söz eder. Operasyonel unsur ise makinelerin otonomi kapsamını insan kontrolü karşısında sınırlayarak otonom işlemlerin kullanılabilmesi durumlarına, süre ve mekanlara kısıtlamalar getirir.

Uyumsal dönemde motivasyonel çerçeveler bakımından Kampanya'nın her bir motivasyon sözcüğü kategorisine eşit derecede ağırlık verdiği gözlenmiştir. Araştırma genellikle kolektif eyleme katılmanın ahlaki gereklilik olduğuna işaret eden *uygunluk* dilinin çerçevenin kimlik unsurunu tamamlamak üzere kullanıldığını ortaya çıkarmıştır. Genel itibarıyla Kampanya kendi savunusunun ahlaki üstünlüğünü biz-ve-onlar ayırımına sıkça başvurarak ifade etmiş, böylece otonom silah sistemlerini

düzenleyecek bir uluslararası anlaşmaya yanaşmayan aktörleri ahlaki zafiyet içinde gösteren bir stigmatizasyon stratejisi izlenmiştir.

D. THESIS PERMISSION FORM / TEZ İZİN FORMU

(Please fill out this form on computer. Double click on the boxes to fill them)

ENSTİTÜ / INSTITUTE

- Fen Bilimleri Enstitüsü / Graduate School of Natural and Applied Sciences
- Sosyal Bilimler Enstitüsü / Graduate School of Social Sciences
- Uygulamalı Matematik Enstitüsü / Graduate School of Applied Mathematics
- Enformatik Enstitüsü / Graduate School of Informatics
- Deniz Bilimleri Enstitüsü / Graduate School of Marine Sciences

YAZARIN / AUTHOR

Soyadı / Surname : Samen
Adı / Name : Ali Mert
Bölümü / Department : Uluslararası İlişkiler / International Relations

TEZİN ADI / TITLE OF THE THESIS (İngilizce / English): Countering Lethal Autonomous Weapon Systems: A Frame Analysis of the Campaign to Stop Killer Robots

TEZİN TÜRÜ / DEGREE: Yüksek Lisans / Master Doktora / PhD

1. Tezin tamamı dünya çapında erişime açılacaktır. / Release the entire work immediately for access worldwide.
2. Tez iki yıl süreyle erişime kapalı olacaktır. / Secure the entire work for patent and/or proprietary purposes for a period of two years. *
3. Tez altı ay süreyle erişime kapalı olacaktır. / Secure the entire work for period of six months. *

* Enstitü Yönetim Kurulu kararının basılı kopyası tezle birlikte kütüphaneye teslim edilecektir. / A copy of the decision of the Institute Administrative Committee will be delivered to the library together with the printed thesis.

Yazarın imzası / Signature

Tarih / Date

(Kütüphaneye teslim ettiğiniz tarih. Elle doldurulacaktır.)
(Library submission date. Please fill out by hand.)

Tezin son sayfasıdır. / This is the last page of the thesis/dissertation.