Anglo-American University School of International Relations and Diplomacy

Lemai Tutonomous Weapon System	Lethal Autonomous	Weapon	System
--------------------------------	-------------------	--------	--------

Identifying and Analysing the Normative Drives For and Against Within the CCW.

Bachelor's Thesis

January 2019 Veronika Bartáková

Anglo-American University School of International Relations and Diplomacy

Lethal Autonomous Weapon Systems:

Identifying and Analysing the Normative Drives For and Against Within the CCW.

by

Veronika Bartáková

Faculty Advisor: Professor George Hays II

A Thesis to be submitted to Anglo-American University in partial satisfaction of the requirement for the degree of

Bachelor

in

International Relations (TT)

January 2019

Veronika Bartáková

Statement of Originality

I hereby declare that no portion of the work referred to in this thesis has been submitted in
support of an application for another degree, or qualification thereof, or for any other
university or institute of learning.

I declare that this thesis is my independent work. All sources and literature are cited and included.

I also hereby acknowledge that my thesis will be made publicly available pursuant to Section 47b of Act No. 552/2005 Coll. and AAU's internal regulations.

Prague, January, 2019.

Abstract

Lethal Autonomous Weapon Systems:

Identifying and Analysing the Normative Drives For and Against Within the CCW.

by Veronika Bartáková

Already in the early phases of the discussions, states have adopted at times more and at times less clear stances on the issue, pointing out various both the benefits that LAWS might bring and their threats. However, what exactly are the main issue areas that appear in the discourse amongst states, and which states assume which position? What are the similarities and differences in the way states talk about the various elements of LAWS? The purpose of this thesis is to answer the question "What are the normative underpinnings that are a part of the drive for and against Lethal Autonomous Weapons Systems within the CCW Meetings of Experts on LAWS in the years 2014 to 2018?" This thesis will utilize the theory of constructivism to answer the research questions as it allows for the author to identify and map norms and provides us with a powerful tool in the form of focus on discourse and language, and how norms are shaped and expressed. Constructivism will be introduced in relation to other influential theories of IR, broken down to its most basic tenants, and the reader will be familiarised in closer detail with the concepts relevant to this thesis. The methodology selected for this paper is discourse analysis. This methodological approach will allow us to analyse primary documentation published by the studied states and identify their positions in regard to the issue.

Table of Contents

Statement of Originality	ii
Abstract	iii
Chapter I: Introduction	
Chapter II: Theory and Method	4
Theory (general overview)	4
Method	10
Chapter III: Norms Driving LAWS	15
MEANINGFUL HUMAN CONTROL	18
LAWFULNESS	20
DUAL-USE NATURE OF AUTONOMY	21
PRECISION AND EFFICIENCY	22
REDUCING CASUALTIES	24
Chapter IV: Norms Against LAWS	26
HUMANITY	29
LACK OF ACCOUNTABILITY	31
UNLAWFULNESS	32
TRIGGERING AN ARMS RACE	34
LOWERING WAR THRESHOLD	35
Chapter V: Conclusion	
Bibliography	41
Appendix	45

Chapter I: Introduction

The seemingly distant future of autonomous weapons is in fact closer than many may expect. Although the development of fully autonomous weapon systems has faced barriers which have prevented these technologies from 'maturing' for the time being,¹ the potential for their development is there and with the successes that AI technologies have received in the private sphere, with some arguing that a "metaphorical arms race" is happening in the commercial world of autonomous systems.² Yet, according to some sources, 'killer robots'—as they have been labelled by military experts—could be fully developed in the span of the next twenty or thirty years.³ An elaborated working definition can be found in Vincent Boulanin's paper "Mapping the Development of Autonomy in Weapon Systems" (see: Bibliography). In short terms, however, Lethal Autonomous Weapon Systems can be described as weapon mechanisms designed to make decisions whether to trigger an attack of defensive action without the need for a human operator to validify the option.

In recent years, the issue of Lethal Autonomous Weapon Systems (LAWS) has been gaining increasingly more traction. This rise in the interest and in many cases concern for the future of autonomous weapons culminated in 2013 in the establishment of the main organizational platform and the first formal multilateral forum for discussing LAWS is the UN Convention on Certain Conventional Weapons (CCW), holding annual Meetings of Experts on LAWS since 2014. Since 2016, a GGE Group of Governmental Experts has been established that contribute to the meetings from the position of an epistemic community. All major states active in the area of innovation and development in AI are engaged in this

_

¹ Mary L. Cummings, "Artificial Intelligence and the Future of Warfare," *International Security Department and US and the Americas Program* (2017): p. 1

² Cummings, "Artificial Intelligence and the Future of Warfare," p. 9

³ Bonnie Docherty, "Losing Humanity: The Case against Killer Robots," *Human Rights Watch* (2012): p. 1

convention and every year since 2013, many different perspectives and opinions are heard from the states who are members.

Already in the early phases of the discussions, states have adopted at times more and at times less clear stances on the issue, pointing out various both the benefits that LAWS might bring and their threats. However, what exactly are the main issue areas that appear in the discourse amongst states, and which states assume which position? What are the similarities and differences in the way states talk about the various elements of LAWS? The purpose of this thesis is to answer the question "What are the normative underpinnings that are a part of the drive for and against Lethal Autonomous Weapons Systems within the CCW Meetings of Experts on LAWS in the years 2014 to 2018?"

This thesis will utilize the theory of constructivism to answer the research questions as it allows for the author to identify and map norms and provides us with a powerful tool in the form of focus on discourse and language, and how norms are shaped and expressed. Constructivism will be introduced in relation to other influential theories of IR, broken down to its most basic tenants, and the reader will be familiarised in closer detail with the concepts relevant to this thesis. The methodology selected for this paper is discourse analysis. This methodological approach will allow us to analyse primary documentation published by the studied states and identify their positions in regard to the issue.

This thesis will identify five normative drives for autonomous weapons in Chapter 3 in order of frequency of appearance in the discourse. These norms are (1) meaningful human control, (2) lawfulness, (3) dual-use nature of autonomy, (4) precision/efficiency and (5) reducing casualties. These are the five predominant norms appearing most often amongst the discourse of countries that have positioned themselves against a pre-emptive ban, the countries studied in this group are Australia, Israel, South Korea, the Russian Federation and the United States. However, each norm is not used entirely uninformedly and some countries

presents different perspectives and interpretations of the issues at hand while shaping the discussion in a certain way.

The same is done for the normative drives for a pre-emptive ban on LAWS in Chapter 4 of this thesis. The norms identified are (1) humanity, (2) lack of accountability, (3) unlawfulness, (4) triggering an arms race and (5) lowering war threshold. The five countries selected are countries are Austria, Brazil, the Holy See, Pakistan and Sri Lanka, that have, in the last few years, expressed an explicit stance advocating for the ban and caution of LAWS. One may notice that the norms for and against do match up in terms of topic or theme: meaningful human control matches with lack of accountability, lawfulness with unlawfulness, dual-use nature of autonomy and triggering an arms race, precision/efficiency with lowering war threshold and reducing casualties with humanity. This shows that the discussion is cantered around certain themes and countries discourses do meet on these themes.

The following chapter will prepare the reader for the analysis that follows by introducing and breaking down the theoretical and methodological approach that will enable us to answer the research question.

Chapter II: Theory and Method

Theoretical Background

The aim of this thesis is to identify and map norms and as such, a constructivist approach will provide us with the most promising theoretical framework. In contrast to positivist theories of IR that look for causal mechanisms for state behaviour in material realities, interpretivist theories—among which constructivism is situated—offer a contrasting approach to issues of IR anchored in the idea that reality is best studied in the context of social interaction. Alexander Wendt lays out two basic premises of constructivism as follows: "(1) [...] the structures of human association are determined primarily by shared ideas rather than material forces, and (2) that the identities and interests of purposive actors are constructed by these shared ideas rather than given by nature." He thereby rejects the ideas of materialism that are the foundation for positivist theories of IR and instead of a causal relationship between material and social reality, he outlines the idea of a mutually constitutive reality that is the ontological basis for constructivism. From these two basic tenants that lay out the ontology of the theory, all consequent concepts logically follow—the social world is constructed through processes of social interaction, therefore social reality cannot exist independently of humans. People construct social relations, and in turn, social relations construct people. As Emanuel Adler emphasises, one of the major contributions of constructivism is then the acknowledgement of the emergence, evolution and change of social processes.⁵

-

⁴ Alexander Wendt, "Social Theory of International Politics," *Cambridge: Cambridge University Press*, 1999, p.

⁵ Emanuel Adler, "Constructivism in International Relations: Sources, Contributions, and Debates," chap. 5 in *Handbook of International Relations*, 2nd ed., ed. Walter Carlsnaes, Thomas Risse, and Beth A. Simmons (London: Sage, 2013): pp. 122

These two basic premises are outlined in Adler's first two points about constructivism in Constructivism in International Relations, where he describes that "the social world is made of intersubjective understandings, subjective knowledge, and material objects" which in turn "acquire meaning for human action through the structure of shared knowledge in which they are embedded." As opposed to post-structuralists, constructivists do not dismiss material reality, they do however focus on the social meaning that is attached and the construction of social "facts". Alexander Wendt exemplifies the ontology at the heart of this idea in the famous example of 500 British nuclear weapons. 8 where, stemming from the mutually constituted assumption that the British and the Americans are friends rather than enemies (as a result of, for example, historical processes), British nuclear weapons are a lesser threat to the U.S. than those belonging to North Korea. Societal facts (i.e. British nuclear weapons offer protection, and North Korean nuclear weapons are to be feared) are therefore facts so long as there is common agreement, as opposed to them being facts inherently.

Friedrich Kratochwil makes a valuable contribution to this premise by further explaining that indeed, the existence of material reality, or a "world that exists independently from our minds" can hardly be contested, however so far as it is independent from our minds it is unobservable, and along the lines of constructivist logic, as soon as it does enter our minds, it is subject to interpretation and the attachment of meaning and values stemming from social practices, or as Adler summarises, "epistemic, normative and ideological understandings, rules and discourses." 10 It is important then to stick to the ontological

⁶ Adler, "Constructivism in International Relations," p. 121.

⁷ Adler, "Constructivism in International Relations," p. 121.

⁸ Alexander Wendt, "Constructing International Politics," *International Security* 20, no. 1 (1995): p. 73.
⁹ Friedrich Kratochwil, "Constructing a New Orthodoxy? Wendt's 'Social Theory of International Politics' and the Constructivist Challenge," Millennium, 29(1), 2000, p. 91.

¹⁰ Adler, "Constructivism in International Relations," p. 121.

premises of interpretivist theories when approaching issues, rather than attempting to bridge what actually distinguishes materialist theories from constructivism. That is, social reality is the subject of study and it is the construction of this social reality that is of interest when undertaking constructivist research.

Presented as the fourth ontological pillar of constructivism by Adler is the constructivist convergence on the mutually constitutive relationship between agents and structures. 11 An agent is anyone participating in this relationship (in the case of this thesis, agents are states, NGOs, IGOs and epistemic communities) and the structure represents social relations (Onuf proposes to call structures social arrangements)¹² which may become institutionalised, but need not be, as in the case of international relations, as Onuf argues, which results in the concept of anarchy in the space 'between' states.¹³ However, contrary to, say, realism, the logic of anarchy is not predetermined and intrinsically hostile. Instead, anarchy can have many forms, even at the same point in time, depending on agent perception and construction of the relationship with another agent. Wendt categorises the various natures that anarchy can have as Hobbesian, Lockean and Kantian, derived from the philosophical approaches of these famous thinkers.¹⁴ Thinking back to Wendt's nuclear weapon scenario, Wendt would identify the anarchy between Britain and the U.S. as Kantian, whereas North Korea and U.S. are situated in a Hobbesian adaptation of anarchy, where self-help is put before collective security interests. By being mutually constitutive, agents and structures interact in a way in which they continuously influence each other, shaping and reshaping each other in the process.

¹¹ Adler, "Constructivism in International Relations," p. 121.

¹² Nicholas Onuf, "Constructivism: A User's Manual," chap. 3 in *International Relations in a Socially Constructed World*, ed. Vendulka Kubálková, Nicholas Onuf, and Paul Kowert (Armonk: M.E. Sharpe, 1998), p. 63

¹³ Onuf, "Constructivism: A User's Manual," p. 62.

¹⁴ Wendt, "Social Theory of International Politics," p. 18.

Having outlined the ontological commitments of constructivism, that is, *the nature* of things, it is important to elaborate on the epistemological commitments, or *how* we know things, implications of which are in the previous paragraphs. Adler emphasises the processes of interpretation as central to constructivism, where the primary focus is uncovering how things became what they are ¹⁵—understanding rather than explaining or predicting.

Conceptualisation

The aim of this paper is to map norms in discourse, therefore namely the concepts of norms, language and discourse as approached by constructivism must be elaborated on. Constructivism provides us with an important tool and that is the emphasis on and study of *language*. Adler explains the role of language as the "the medium for the construction of intersubjective meanings," because it is through language that we formulate, communicate and pass on meaning. In other words, along with practice, language/discourse has a constitutive and normative power—"the world is 'talked into existence' by means of signs, discourse and narratives" to further quote Adler.

It is clear then how language and discourse are key theoretical concepts in constructivism. Milliken elaborates on the theory of discourse by providing three theoretical commitments which this thesis embraces. These include (1) *discourses as systems of signification*. Simply put, this notion outlines the fundamental tenant of discourse analysis that discourse constructs social realities as opposed to there being a material foundation to which meaning is inherent and from which meaning is derived, as already outlined in the theoretical discussion on constructivism in this paper. (2) *Discourse productivity*. This

¹⁵ Adler, "Constructivism in International Relations," p. 121.

¹⁶ Ibid., p. 123

¹⁷ Ibid., p. 122

theoretical claim sheds light on the way discourse paves way to practices, described by Milliken as "[making] intelligible some ways of being in, and acting towards, the world, and of operationalizing a particular 'regime of truth' while excluding other possible modes of identity and action," and forms identities, authority (legitimacy), audience and overall creating rules according to which the social world then operates. (3) *The play of practice*. The third theoretical commitment of discourse as articulated by Milliken concerns the changeable and historically contingent nature of discourse.

Having had explained the constructivist approach to language and discourse, the next important concept for this paper is the constructivist concept of norms. Ruggie and Kratochwil define norms as "standards of behaviour defined in terms of rights and obligations" and present two characteristics of norms that distinguish them from positivist ontology, that is that (1) they are not a part of a causal mechanism and (2) even when norms are "violated", when actors choose not to act accordingly, they are not "invalidated" — distinguishing them from, say, laws as are understood in natural sciences, for example

Newton's laws of physics. Norms influence and guide behaviour and have significant implications for social phenomena, but not according to a causal logic. Instead, they can be explained as for example being a part of the constitutive relationship between agents and structures, where rules become norms that become structures, and mutually constitute each other with agents. Adler speaks of "intersubjectively and collectively meaningful structures and processes" as being the essence of the social world. Processes can be understood as the rules that are produced through social interaction, which can either be followed, changed or

_

¹⁸ Jennifer Milliken, "The Study of Discourse in International Relations: A Critique of Research and Methods," *European Journal of International Relations*, p. 229

¹⁹ Friedrich Kratochwil and John Gerard Ruggie, "International Organization: A State of the Art on an Art of the State," *International Organization*, p. 767.

²⁰ Friedrich Kratochwil and John Gerard Ruggie, "International Organization," p. 767

²¹ Adler, "Constructivism in International Relations," p. 121

broken²² (as implied earlier on in the paragraph) and which, when enough people follow and internalise, become *norms*. Finnemore and Sikkink, whose work focuses on norms in great extent, define norms as "a standard of appropriate behaviour for actors with a given identity"²³ in line with the definition presented by Ruggie and Kratochwil, only presenting 'rights and obligations' as identities.

Identity and culture are then products of norms and explain why states behave in certain ways, especially when it is not in accordance with their material capabilities. Wendt describes identities as role-specific perceptions of oneself, that are always relational,²⁴ that is, that are always constructed in the context of a specific social situation or institution. A person may have identities such a mother, citizen and student, and a state may act in accordance with its own identities based on being, for example, an imperial power, the leader of the free world, an economic superpower, etc.²⁵ Adler exemplifies the role of norms in the example of why powers in 1945 refrained from opting for nuclear weapons, the emergence of the nuclear taboo²⁶ and why perhaps today nine states are in control of nuclear weapons while other states refrain from acquiring them. Weapons and warfare are too social constructs, comprised of norms and formal and informal rules that are subject to change. With the example of autonomous weapons, analysing norms is particularly important, as is expressed in Nakamitzu's, the UN High Representative for Disarmament Affairs, foreword in UNODA's Occasional Papers on Autonomous Weapon Systems: "Although there are no technical barriers to deploying LAWS that could target humans or act in or near civilian areas, there are arguably normative barriers."²⁷ Considering the normative barriers (for example, human

2

²² Onuf, "Constructivism: A User's Manual," [find where this was]

²³ Martha Finnemore and Kathryn Sikkink, "International Norm Dynamics and Political Change," *International Organization vol.* 52, no. 4, 1998, p. 891.

²⁴ Wendt, "Anarchy Is What States Make of It: The Social Construction of Power Politics." p. 397

²⁵ Ibid.

²⁶ Adler, "Constructivism in International Relations," p. 126

²⁷ UNODA Occasional Papers, "Perspectives on Lethal Autonomous Weapon Systems", p. v

rights, human dignity, control), this paper will focus on identifying the normative drives for and against autonomous weapons within the CCW framework and the following section will outline the methodology that will allow us to do so.

Method

Methodological Background

The method of discourse analysis as presented by Jorgensen and Phillips, Beneš and Milliken will be presented in the following section, followed by a section on the specific steps that the thesis will undertake to answer the research question.

As Jorgensen and Phillips highlight, "[in] discourse analysis, *theory* and *method* are intertwined, and researchers must accept the basic philosophical premises in order to use discourse analysis as their method of empirical study." What this means is that discourse analysis is anchored in some fundamental ideas, regarding both ontology and epistemology, based on interpretivist theories such as constructivism. These ideas have been outlined in the theoretical chapter and include presumptions such as a socially constructed social reality, influence of language discourse, etc. In general, therefore, discourse analysis leans on the premise that language is a crucial element of social life and explores the way language (be it spoken or written) is used to construct social reality and assign meaning to various aspects of social life. As Jorgensen and Phillips further denote, although in this sense discourse theory must be viewed as a theoretical and methodological whole, it is equally important to remain flexible in the way this methodology is employed. For this reason, there are a plethora of ways that discourse analysis can be done, resulting in many variants, as different scholars adjust the theory depending on the aim and focus of their research.

_

²⁸ Jørgensen and Phillips, "Discourse Analysis as Theory and Method," Sage, 2001: p. 4.

²⁹ Vit Beneš in Drulák, Petr, "Jak Zkoumat Politiku: Kvalitativní Metodologie v Politologii a Mezinárodních Vztazích," Praha: Portál, 2008: p. 93

The form of discourse analysis that will be utilised in this thesis is Milliken's predicate analysis, focusing "on the language practices of predication — the verbs, adverbs and adjectives that attach to nouns [and] construct the thing(s) named as a particular sort of thing, with particular features and capacities."30 This approach is useful for our analysis because it allows us to look at the way LAWS are constructed within the discourse of the CCW meetings. Benes summarises Milliken's predicate analysis as being interested in "the definitions and descriptions of actors that restrict their behaviours."31 However, actors are not the only necessary subjects of analysis, objects can be analysed in the same way.

In order to make the analysis manageable, the scope of the paper must be narrowed down and clearly identified. The purpose of this paper is to identify and map (1) the norms appearing in discourse between states that drive the development of LAWS and (2) norms that drive a pre-emptive ban on LAWS. The focus will be on norms appearing in discourse among states within the CCW platform. This is the institutional context within the discourse that we are interested in takes place. The United Nations Office at Geneva, who has been hosting the meetings ever since their commencement, has published documents from each meeting on their website, with more documents available from 2016 onwards as the agenda of the CCW grows, as the states receive more time to prepare and participate. As Bode and Huelss denote, large-scale public discourse on the development and use of LAWS is in large lacking.³²

Apart from activities publicised in the last few years from NGOs and activists, including the International Campaign to Stop Killer Robots (ICSKR) and others, LAWS have not been a part of broader discourse amongst politicians and the public. Due to the

 ³⁰ Jennifer Milliken, "The Study of Discourse in International Relations," p. 232.
 ³¹ Benes in Drulak p. 108 translated by author

³² Ingvild Bode and Hendrik Huelss, "Autonomous weapons systems and changing norms in international relations," Review of International Studies, 2018: pp. 393-413.

incremental nature of this specific technological advancement and general lack of understanding among the general public, LAWS do not make it to the forefront of public political discourse. As a result, the element of public opinion in shaping norms is inadequate and discourse is dominated by voices coming from experts, activists and state representatives. Furthermore, the interest of this paper is to identify and analyse the different ways in which different states present and portray the various perspectives. For this reason, the CCW has been chosen to map the discourse on LAWS as opposed to for example mapping discourse in the media or amongst the public. Considering the focus on norms, the methodological framework will consist exclusively of qualitative research and data.

Due to the large number of states and actors engaged in the CCW meetings every year (85 states, 20 NGOs and representatives of other institutions) and the large amount of materials covering the issue, ten states that have to date voiced their views on LAWS will be selected: the United States, the Russian Federation, Australia, South Korea and Israel to map norms driving LAWS³³ and Pakistan, Austria, the Holy See, Brazil and Sri Lanka to map norms driving a pre-emptive ban.³⁴ Other states have expressed a desire for a legally-binding instrument that would lay the ground for prohibitions and restrictions on fully autonomous weapons (the Non-Aligned Movement) or have refrained from taking an explicit stance but these states will be omitted from the analysis to make the analysis of documents manageable.³⁵

Operationalisation

³³ As of 2018, 5 states have been emphasising the benefits of autonomous weapons in their statements: Australia, Israel, Russia, South Korea and the United States.

³⁴ To the group of states advocating for a pre-emptive ban include: Pakistan, Ecuador, Egypt, Holy See, Cuba, Ghana, Bolivia, State of Palestine, Zimbabwe, Algeria, Costa Rica, Mexico, Chile, Nicaragua, Panama, Peru, Argentina, Venezuela, Guatemala, Brazil, Iraq, Uganda, Austria, China, Djibouti, Colombia.

³⁵ Country views on killer robots Campaign to stop killer robots

The exact documents that will be analysed are *opening and closing statements* in the forms of text (these are speeches prepared by the respective delegations and then read during the meetings), all retrieved from the official UNOG website, and *working papers* provided by the given states on various topics that they elaborate on (such as humanitarian issues, legal issues, etc.).

From initial readings of the primary documents analysed in this paper, but also secondary documentation that is not the subject of analysis in this paper (the selection of these norms is also based on the authors preliminary research on the topic, i.e. journal articles, books and reports), norms that seem to be in the forefront of the discourse around the drive for LAWS are: (1) precision, (2) efficiency, (3) lawfulness, (4) meaningful human control and (5) reducing casualties. Similarly, norms that drive the states demanding a preemptive ban on LAWS are pre-selected. Based on preliminary readings, these norms seem to be: (1) humanity, (2) triggering an arms race, (3) unlawfulness, (4) lack of accountability, (5) lowering war threshold. The initial norms presented will be updated if necessary and if new finding are substantive enough to change the methodological specificities.

There are some limitations of this research that the author is aware of. It is important to note that opening and closing statements and working papers from all countries during each of the years (2014 until 2018) are not available, although they likely were a part of the meetings themselves, this makes the analysis of the discourse within the CCW somewhat incomplete, nevertheless hopefully still representative enough. Second, although the ten states have been grouped into two groups (for LAWS and against LAWS), it is not to say that states emphasising benefits of LAWS do not address norms that undermine them and conversely, that the states presented as being pro-caution do not include norms that present LAWS as beneficial. However, this paper focuses on the norms that drive the position on

LAWS of each state and therefore, this method of analysis is justified. Milliken describes the issue of this selection bias relevant to our case study by stating:

In order to address issues of selection bias — and to enable better theorization — one might also more narrowly select texts by whether they take different positions on a relevant issue [...], and so could provide evidence of a discourse as a social background for meaningful disputes among speakers of the discourse.³⁶

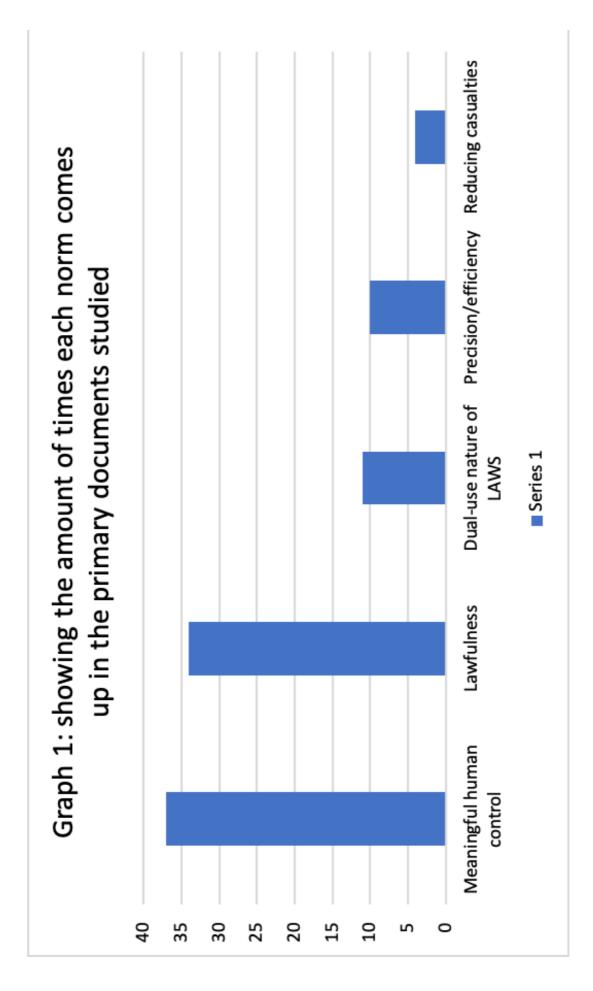
This approach to discourse analysis is utilised in this paper, whereby the prevalence of certain norms is the main evidence for the stances of the various actors.

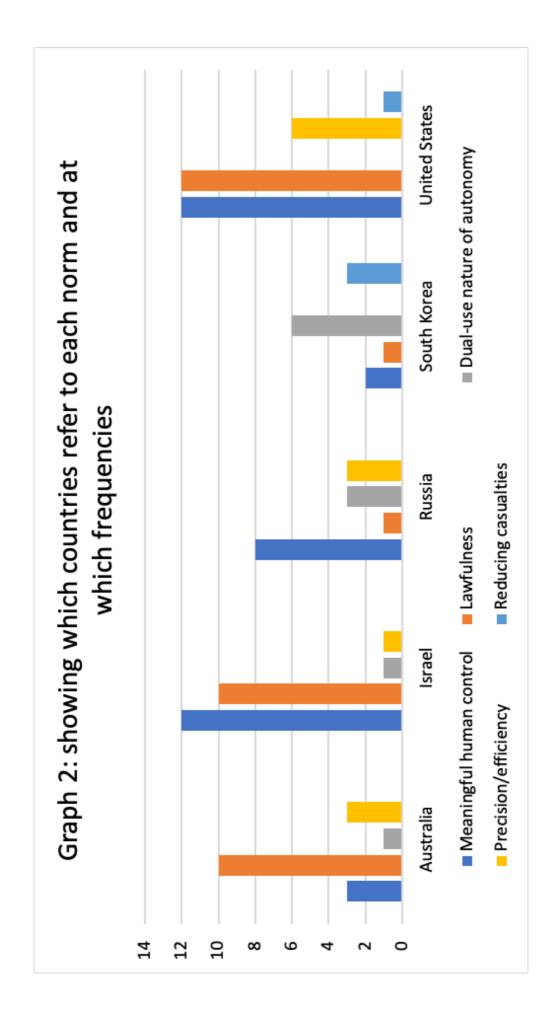
-

³⁶ Jennifer Milliken, "The Study of Discourse in International Relations," p. 233.

Chapter III: Norms in Support of LAWS

The aim of this chapter is to identify and outline the five predominant norms that appear in the discourse within the CCW from the five studied countries that have expressed views against a pre-emptive ban on LAWS—Australia, Israel, the Russian Federation, South Korea and the United States. These norms will be elaborated on in the following sections. Some changes had to be made in the selection of norms and the structure of the paper after further analysis. The methodology section of this paper preliminarily identifies five norms: (1) precision, (2) efficiency, (3) lawfulness, (4) meaningful human control and (5) reducing casualties. However, following initial analysis, certain trends have been found. Norms of precision and efficiency are used together in sentences by all analysed states and are presented as interconnected, as opposed to being separate norms. This will be further elaborated on in the respective section. Therefore, these norms will be presented together in one section. A futher norm was subsequently identigies as 'the dual-use nature of autonomy by the majority of states and therefore, this norm will be presented as the fifth leading norm for LAWS. Lastly, the order of the norms presented will be in order of frequency (as presented in the intro, too), also shown graphically in Graph 1 (see Appendix). Graph 2 below shows the frequencies at which each state refers to each norm, graphically summarising the findings which are elaborated on in the subsequent sections.





MEANINGFUL HUMAN CONTROL

The concept of meaningful human control is a topic persistent in all documents and speeches submitted by all five analysed countries and is the leading norm, appearing altogether 34 times in the primary documentation studied (see Graph 1 in the Appendix).

That is hardly surprising considering that the issue of LAWS is being discussed primarily because of the controversial and revolutionary concept of machine autonomy, or in other words having weapons make decisions by themselves based on pre-programmed criteria, placing their actions and decisions at times outside of human control. For this reason, the extent of human control, and the definition of human control itself is an issue referred to frequently in the discussions. Although the idea that meaningful human control should always be ensured at all stages of LAWS development and deployment is shared by all states, some states decide to refrain from using the term and thus, the concept of meaningful human control is not agreed upon by all states, most notably the United States and Israel.

Australia, Israel, Russia and the United States all share the same type of discourse expressing the idea that LAWS are created and programmed by humans and will only operate in the limitations and constraints that humans allow.³⁷ This, paradoxically, places LAWS back into human control and limits autonomy itself to a great degree. Instead, LAWS are constructed and presented as a potential aid for military personnel, as a means to achieve military goals—reiterating the fact that LAWS will remain to obey the intentions of their operators as opposed to being assigned freedom in decision-making. Emphasising the need for humans to remain 'in the loop' seems counterintuitive to the very essence of LAWS, where autonomy is the central feature that differentiates it from conventional weapons with automated features, meaning that the line between autonomy and automation is blurred.

³⁷ Israel. "Characteristics of LAWS." 2015

Nevertheless, Israel reinforces this position by stating that "humans are always those who decide, and LAWS are decided upon," positioning LAWS as passive machines executing the commands of humans, and humans as the active operators in control.

Israel, agreeing with the US as far as to paraphrase the terms used in the working paper submitted by the US³⁹, states that the aim of LAWS is "[...] to help effectuate the intention of commanders and the operators of weapons systems over the use of force."⁴⁰ This view is shared by Australia⁴¹, and Russia expresses its position in a similar manner, stating that it is the relevant officer that should be held accountable.⁴² Meaningful human control thus also covers the issue of accountability, meaning that responsibility for the consequences of a given LAWS is not ambiguous and the issue of a responsibility gap does not arise. However, the context of human-machine interaction in terms of the extent to which humans can control LAWS is the prevalent context of this norm.

The United States elaborated on the issue of meaningful human control by drafting and submitting a working paper on the topic, where it expresses the view that meaningful human control as a term is subjective, rather than an objective measure upon which states can rely.⁴³ Instead, the term "human judgement over the use of force" is proposed. What this means is that as opposed to pure control in the sense of pressing a button or validating an action, humans are expected to make judgements on the given situation and evaluate whether the use of force is necessary at all. This view is again agreed upon by Israel, who similarly

³⁸ Israel "Statement 6b", 2018

³⁹ United States, "Human-Machine Interaction in the Development, Deployment and Use of Emerging Technologies in the Area of Lethal Autonomous Weapon Systems," 2018

⁴⁰ Israel, "Statement 6d" 2018

⁴¹ Australia, "General Exchange," 2018

 ⁴² Russia "Russia's Approaches to the Elaboration of a Working Definition and Basic Functions of Lethal
 Autonomous Weapons Systems in the Context of the Purposes and Objectives of the Convention," 2018
 ⁴³ US, "Opening Statement," 2016

⁴⁴ United States, "Human-Machine Interaction in the Development, Deployment and Use of Emerging Technologies in the Area of Lethal Autonomous Weapon Systems," 2018

makes the distinction between 'meaningful human control' and 'appropriate levels of iudgement'.45

LAWFULNESS

By all five states studied, the question of lawfulness of autonomous weapons seems to be one of the primary indicators whether or not their development and deployment should be continued. In other words, all states refer to legal concepts as some of the main criteria which should be followed when deciding on a pre-emptive ban. Each country, however, refers to different protocols. Australia, being a signatory of Article 36 of Additional Protocol I of 1977 to the Geneva Conventions of 1949, refers to both IHL and Article 36 throughout the discussions and frequently talks about weapon review as an appropriate and necessary means of evaluating LAWS. 46 This view is shared by Israel and the US, South Korea and Russia elaborate on their weapons review process as the other states and assume the position of lawfulness according to IHL as being one of the most important factors for LAWS.

Israel describes the CCW as an IHL-focused framework.⁴⁷ which is why it comes as the second most cited norm for this country, and perhaps why it comes as the second cited norm overall, should this perception be shared by other states. Given that circumstance, states might tend to adapt their discourse to fit the context and purpose of the CCW. Throughout the convention, LAWS are often equated to and described in the context of other weapons and military and civilian equipment with automated and autonomous functions. This is exemplified in a quote from Australia's general exchange paper:

Much modern military equipment incorporates automated features, as indeed do many modern domestic and industrial devices in everyday use. Artificial intelligence is a

 ⁴⁵ Israel, "Characteristics of LAWS," 2015, p. 1
 ⁴⁶ Australia, "General Exchange," 2016

⁴⁷ As repeated by Israel

rapidly developing field, which we anticipate will have many, as yet unknown, benefits for human development and well-being.⁴⁸

Here, Australia is emphasising that pursuing autonomous technologies is beneficial and essentially that hindering progress in this area would threaten human progress. This, however, dismisses the crucial fact that weapons should not be equated with other forms of technology, because although other forms of technology should also be assessed in terms of safety for humans, weapon are specifically made for killing and thus cannot be evaluated in the same manner. South Korea proceeds with the same argument, stating that "In this regard, we note the advantages of looking into the dual-use characteristics of LAWS technology [...]. The Republic of Korea is determined to enhance the peaceful application of robotic technology in various civilian areas. ⁴⁹ Both countries continue to touch upon this matter during every year of the conference, starting in 2014 and ending in 2018 (the latest data that we currently have). The type of law that tends to be referred to is the law of war (a law regulating the way that war is fought), principles of which form a large part of international law. Contrary to this, as will later be elaborated on, the type of law that is referred to by states that are against LAWS is IHL (international humanitarian law). This is evident in discourse from all analysed countries since 2014 until 2018.

DUAL-USE NATURE OF AUTONOMY

The rise in autonomous functions and innovation in this area of development is not limited to weapons and military technologies only. Increasingly often, we see autonomy being utilised most notably in self-driving autonomous vehicles, with countries vowing to replace conventional cars at least partially in the near future. We also see autonomous technology and features of AI being used in some modern robots, and although there is not a

_

⁴⁸ Australia, "General Debate," 2014

⁴⁹ South Korea, "Opening Statement," 2015

great lot of commercially available autonomous technologies just yet, the past couple of years have shown that this has the potential to change unexpectedly. It is in the interests of some states that the development and utilization of these technologies is not restricted by international law, and so one of the five leading norms in the discussions on LAWS is the dual-use nature of autonomy, and the benefits that autonomous features can bring to civilian and commercial spheres. All analysed states except for the US stress the importance of not threatening progress in autonomy in these spheres by enforcing a pre-emptive ban on autonomous weapons. This norm is particularly high on the agenda of South Korea, a country highly engaged in innovation and development in the fields of AI.

We also need to constantly keep in mind the intrinsic dual use nature of technology during our deliberation on LAWS. We shall not and cannot restrain civilian spheres from accessing and developing certain technologies only because they have potential to be used as a part of LAWS. The Artificial Intelligence based on machine learning is already being used and also can contribute to distributing resources more effectively helping us achieve the 2030 sustainable development goals.⁵⁰

Here, South Korea is referring to the 2030 Sustainable Development Goals assigned by the United Nations which have set goals to its signatories like reducing inequalities, zero hunger or peace, justice and strong institutions by the year 2030, although South Korea does not elaborate on the issue more than this sentence. Russia and Israel similar vocabulary to emphasise that discussions on LAWS must not put constraints and limits on developments in AI technologies in other sectors.

PRECISION AND EFFICIENCY

Terms 'efficiency' and 'precision' are by large used together in sentences by all analysed states and because of this overlap they will be grouped together. Precision is

-

⁵⁰ South Korean, "General Exchange," 2018

emphasised as one of the main positive attributes of autonomous weapons and is linked to efficiency and reduced casualties consistently by all four out of five parties—Australia, Israel, Russia and the United States—from 2016 onwards, where more specific discourse replaces one that has up until then mainly focused on the establishment of definitions and agreement on concepts. The norm seems to emerge in the later years of the CCW meetings, when topics related to finding common definitions of LAWS and related terms become less central and all five given states shift their discourse in the direction of giving LAWS more specific and explicit attributes and formulating them in a certain way, instead of dealing with them as with an abstract concept (it can be seen that most primary documentation that is used in this chapter is dated to 2016 onwards, with fewer documents from 2014 and 2015). Israel mentions predictability as a necessary attribute of LAWS, ⁵¹ which is an important aspect of precision seeing as in order for a weapon to be precise, it must also be predictable.

The US presents LAWS and related technology in relation to the concept of 'smart weapons,' ⁵² claiming that the accumulation of precision and efficiency results in less collateral damage (more on collateral damage in the following section on reducing casualties). Russia refers to 'smart bombs' too. ⁵³ This reference is telling in the way that it suggests that intelligence, more precisely artificial intelligence and its features, is the positive trend towards 'better' and more advanced warfare, offering a superior alternative to conventional weapons.

The defensive purposes of LAWS are especially emphasised by South Korea and Russia, where the former argues that LAWS could raise the threshold of conflicts as a result of deterring offensive moves by states, perhaps as a response to the many claims that LAWS

_

⁵¹ Israel, "Challenges to IHL," 2016, p. 4

⁵² US "Humanitarian benefits of emerging technologies in the area of lethal autonomous weapon systems," 2018

⁵³ Russia, "Russia's Approaches to the Elaboration of a Working Definition and Basic Functions of Lethal Autonomous Weapons Systems in the Context of the Purposes and Objectives of the Convention," 2018

have the potential to lower the war threshold (see Chapter IV). Here, South Korea refers to the 'balance of terror' reminiscent of the Cold War where states put in place the Mutually Assured Destruction (MAD) doctrine. Russia in turn emphasizes defense in relation to national interests and sovereignty.⁵⁴

REDUCING CASUALTIES

The concept of a weapon reducing casualties might seem counterintuitive, but it is stated altogether 4 times by South Korea and the United States. Often cited as the result of precision and efficiency, the ability of LAWS to ultimately reduce casualties is one of the benefits used to counterargue arguments that cover the deadliness and the danger of weapons. Mentioned by Australia, the idea that more precise shootings could reduce unintentional deaths or injuries. Thus, concepts related to reducing casualties are presented following efficiency and precision because it is primarily constructed as a consequence of precision and a part of efficiency (i.e. increased precision results in more intended damage done with less collateral damage), meaning it is very much related to the previous two norms. The paper on the humanitarian benefits of LAWS submitted by the United States elaborates on the mechanisms through which LAWS could reduce casualties, saying that there is "potential for these technologies to save lives in armed conflict" and that autonomous weapons could protect civilians "against the effects of hostilities." As opposed to being the sources of these hostilities, which one could argue is the truth.

Precision is presented as a means to minimize collateral damage, as opposed to for example emphasising precision in the context of targeted killings, by Israel in two identical

_

⁵⁴ Russia, "Examination of various dimensions of emerging technologies in the area of lethal autonomous weapons systems, in the context of the objectives and purposes of the Convention", 2017

⁵⁵ US "Humanitarian benefits of emerging technologies in the area of lethal autonomous weapon systems," 2018 p. 2

p. 2
 US "Humanitarian benefits of emerging technologies in the area of lethal autonomous weapon systems," 2018
 p. 2

expressions in 2016 *and* 2018,⁵⁷ and by Russia who states that "an improved autonomy use could contribute to more accurate guidance of weapons directed against military assets [as opposed to civilians]."⁵⁸ The US further declares that "military efforts to develop more precise and efficient weapons reflect a convergence between military effectiveness and humanitarian protection,"⁵⁹ with both instances showing the overlapping nature of these norms and the reduction of casualties perceived by the US.

-

⁵⁷ Israel 2018 6d and 2016 6d

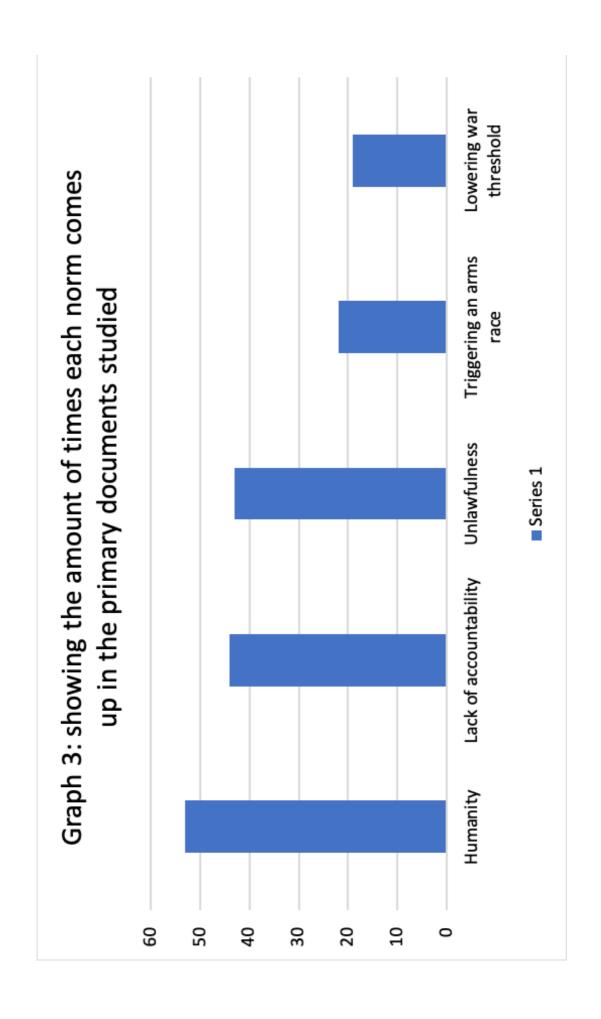
⁵⁸ Russia 2018 approaches to the elaboration of a working def

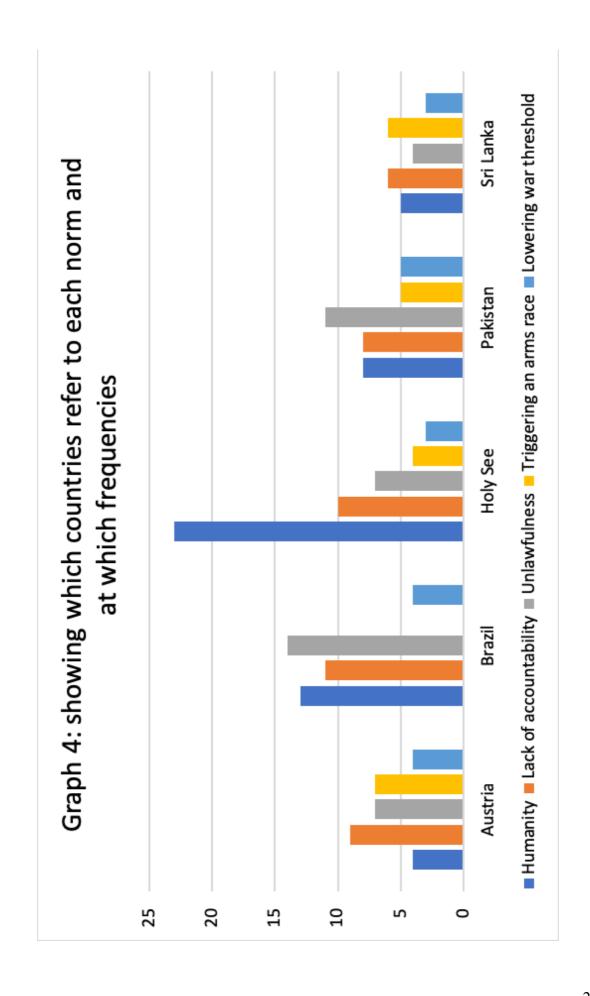
⁵⁹ US "Humanitarian benefits of emerging technologies in the area of lethal autonomous weapon systems," 2018 p. 2

Chapter IV: Norms Against LAWS

This chapter will present the five leading norms apparent in discourse from countries that have assumed the position against autonomous weapons and for a pre-emptive regulative measure or ban. The five norms that come up most frequently are (1) humanity, (2) triggering an arms race, (3) unlawfulness, (4) lack of accountability, (5) lowering war threshold.

Similarly to the previous chapter, the norms will be presented in sections in the order of frequency, the first one being the most frequently appearing norm. There was no need to adjust the group of norms for the countries against LAWS, the preliminary norms were indeed the ones identified upon further analysis. Graph 3 in the Appendix shows the total number of times each norm has appeared in the discourse coming from the five states. Graph 4 below shows the frequencies at which each state refers to each norm, graphically summarising the findings which are elaborated on in the subsequent sections.





HUMANITY

Humanity is the leading norm amongst countries advocating for a pre-emptive ban of LAWS, appearing 53 times across the discussion in the materials available and can most notably be found in the discourse of the Holy See (See Graph 3 in the Appendix). Nevertheless, every state mentions the issue of humanity at some point in the discussion, although in varying contexts which will be explored below.

Most often, humanity is discussed in the context of the Martens Clause, the preamble to the Hague Conventions of the Laws and Customs of War on Land, which offers the protection of IHL in cases where no laws have yet been issued. As opposed to some of the states arguing against a pre-emptive ban, Brazil argues that the CCW is a humanitarian instrument, a platform for the furthering of humanitarian perspectives on issues. The topic of Martens Clause is furthered by Sri Lanka, who emphasizes morality and the Martens Clause, along with its principles of public conscience and humanity, as a basis for the necessary establishment of a legal instrument regulating the development and the deployment of LAWS.⁶⁰ Brazil numerously reiterates "the principle of humanity and the dictates of the public conscience"61 as one of the most important principles to be guided by when it comes to evaluating LAWS.

Effort is made to turn focus away from technological aspects of the issue of LAWS and towards humanitarian and human rights perspectives, such as whether the immense power of ending a person's life should be given to a robot, or whether it is a human right to die with dignity.⁶² Sri Lanka also adds to the human rights perspective the idea that LAWS and other progressive weapons could be passed over to domestic law enforcement agents, moving the threat of international threat to domestic threat intimidating civilian societies and

 ⁶⁰ Sri Lanka, "General Exchange of Views," 2017
 ⁶¹ Brazil, "Area of Converergance, on LAWS," 2018
 ⁶² Brazil, "General Exchange," 2018

posing new challenges for human rights. 63 Similary, as pointed out by the Holy See, autonomy and AI could be used as means of espionage (miniaturized drones, for example) in the domestic and in the international sphere, posing even further challenges to human rights and privacy.64

Pakistan emphasizes the characteristics such as compassion, feelings and intuition, and furthermore morality and judgement, in regard to making decisions about life and death as inherent aspects of humanity which are a necessary part of distinguishing between combatants and non-combatants. These are characteristics that, some experts argue, cannot be taught to AI machines, and the influence on the way war is waged could be significant. In relation to this, the principle of double effect is mentioned by the Holy see on two occasions. Applied to the case of LAWS, the Holy See is arguing that autonomous machines would not be able to distinguish between tasks that have a negative side-effect, because they will not be able to think critically like humans. They would not be able to handle moral dilemmas and for these reasons, they, cannot be trusted to decide on doing the 'right thing'.65

The discussion on humanity is propelled in a more spiritual and philosophical direction by the Holy See, where references to humanity can be found 23 times in various forms and contexts, making it the most cited norm in the entire convention based on available documents. For the first time in the discussions the issue of the psychological impact of LAWS on humans appears, as potentially being elements exacerbating anxiety in the already stressful reality warfare and related hostilities.

 ⁶³ Sri Lanka, "General Exchange of Views," 2018
 ⁶⁴ Holy See, "The Use of Lethal Autonomous Weapons Systems Ethical Questions," 2015

⁶⁵ Holy See, "The Use of Lethal Autonomous Weapons Systems Ethical Questions," 2015

LACK OF ACCOUNTABILITY

The issue of the lack of accountability and of human control is cited by all five states as a central issue concerning LAWS. Most advanced by Brazil (see Graph 4 in the Appendix) and the Holy See, but also Austria and Pakistan, there are various in which the issue of accountability is constructed. As mentioned in the previous chapter, the autonomous feature of LAWS is what truly distinguishes them from conventional weapons that we know today. Therefore, it only makes sense that issues of human control or the lack of would be central to the discussion. The discussion on accountability revolves primarily around three main points. Firstly, there is the fundamental question arises about who is to be held accountable in the case that LAWS break IHL or cause collateral damages, for example.⁶⁶ Without a human operator approving procedures, who is to be held accountable should the weapon make a mistake? As Pakistan points out numerously, similarly as humans are not perfect, machines are prone to "technical malfunctions, degraded communications, software failures, cyberattacks, jamming, spoofing"67 and issues related to human error. Who is to be held responsible in the case that a machine malfunctions on the basis of one of these possibilities?

This leads to the second perspective on accountability proposed primarily by the Holy See, which states that with the creation of an accountability vacuum, the distance between the humans and the battleground increases even more so than it has in the recent years with the development of for example long-range missiles. This dehumanises war and collateral damage can become that much more likely and overlooked.⁶⁸

Thirdly, Austria and Brazil formulate perspectives on accountability not only in terms of an accountability gap in situations with unintended negative consequences, as mentioned previously, but seeing as many states fail to agree on common definitions of LAWS, the Holy

66 Brazil, "GGE LAWS 6b," 2018, Austria, "Statement of Austria," 2016

⁶⁷ Pakistan, "Statement" 2014 68 Holy See, "Country Paper," 2016

See notes that misunderstandings and interpretations could be blamed for breaching certain norms or principles of IHL.⁶⁹ Austria similarly notes that it is questionable whether one or a handful of human operators could maintain control over, say, a swarm of drones without the technologies surpassing their capabilities to exercise meaningful human control. 70 Along those lines, Brazil states:

The discussion on human-machine interaction, for instance, should go beyond schematic models and consider in more depth the qualitative relationship between the operator or supervisor and the automatic or autonomous weapons systems. It is necessary to assess the concrete operational environment, taking into account how the machine can influence the human as well as the human limitations in reacting timely to ultra-fast machine calculations and actions⁷¹.

Most striking is the concept, along the lines of that of Austria and the Holy See, of machine performance surpassing the capabilities of human operators in such a way that the operator might not be able to exercise effective control over the weapon, not necessarily because it would be programmed autonomously to block the intervention of a human operator, but because some of the processes would be so fast and swift that the human operator would not have enough time to intervene and exercise meaningful control over the machine. In other words, it could be summed that a large part of the discourse is concerned with the possibility that LAWS could move beyond the scope of human control not necessarily intentionally. **UNLAWFULNESS**

Whereas states emphasizing the benefits of LAWS portray IHL as a means of validating and indicating appropriateness of continuing the development and deployment of LAWS, all five states against LAWS portray IHL as an insufficient measure for assessing LAWS. Austria states that "legal norms are created by and based on humans, not devices."⁷² The same discourse is shared by Brazil, who states that "only humans and States are subjects

 ⁶⁹ Holy See, "Elements Supporting the Prohibition of Lethal Autonomous Weapons Systems," 2016
 ⁷⁰ Austria, "Statement," 2015

⁷¹ Brazil, "General Exchange," 2018

⁷² Austria, "Statement 6d," 2018

of law and can comply with it and be accountable for."73 Pakistan and Sri Lanka both further question whether autonomously functioning machines can be programmed to comply with IHL, noting that this the respective legal principles have been designed to regulate human behaviour as opposed to the behaviour of robots. In regard to laws put in place for the purpose of regulating and overseeing weapons and weapon development, Austria points the discussion in the direction that Article 36, although applicable, does not provide clear enough guidelines for the regulation of LAWS.⁷⁴

A significant amount of discourse also revolves around the idea that not only is IHL not sufficient enough of a legal framework for LAWS, LAWS are inherently downright incompatible with it, namely the principles of distinction, proportionality and precaution.⁷⁵ Pakistan bases this claim in the belief that these principles require higher levels of decision making than we can entrust in LAWS and that human judgement is an necessary component of adhering to this principles. Again, here it is clear that the discourse is rooted in the idea that LAWS are an entirely revolutionary means of warfare predominantly because of the potential that humans will pull themselves 'out of the loop'. 76

For these two main reasons (that conventional legal frameworks have been designed to be applied to human behaviour, not to that of autonomous machines, and that LAWS are inherently incompatible with the principles of IHL) all five states agree on the necessity to create a customised legally binding instrument that would serve as the basis for regulation and supervision of LAWS, alternatively for a complete ban should the development of LAWS prove to be threatening enough. As mentioned earlier, the states emphasising the benefits of LAWS focus their IHL perspective on the law of war and jus ad bellum as opposed to IHL which is emphasised by the states against LAWS.

⁷³ Brazil, "GGE LAWS 6b," 2018

⁷⁴ Austria, "General Exchange," 2018

Pakistan, "Opening Statement," 2014
 Pakistan, "Opening Statement," 2015

TRIGGERING AN ARMS RACE

The discourse among the four states who address the arms race (Austria, Holy See, Pakistan and Sri Lanka) presents this norm as a threat to international peace and stability and a major setback in the efforts of global disarmament and non-proliferation.⁷⁷ As with any weapon technology, the threat of other states obtaining more lethal and more powerful means of warfare can incite other states to acquire them too. As stated by Austria, "it is our fundamental conviction that the incessant build-up of military resources is not a sustainable solution for the challenges to international security."⁷⁸ This is of course applicable only to the states that have the capacity to obtain these technologies, therefore the imminent threat of further increasing inequalities between states is bound to arise and is also a significant part of the discourse ⁷⁹

Weapon proliferation into the hands of non-state armed groups or irresponsible users is a concern of the majority of the states including Austria, Pakistan, the Holy See and Brazil, and does indeed pose a serious risk in the case of weapons with potential for so much power and damage. 80 This is especially the case with the proliferation of low-cost autonomous weapon that cannot be trusted and are easier to manufacture, transport or obtain.⁸¹ This theme is also covered in the norm of lowering war threshold, because the more parties have the weapon available to them, the more likely it is that war breaks out.

Similarly to some of the other norms that we studied in the previous sections, some norms overlap in the sense that phrases and sentences can be approached through various angles with emphasis on various things. As mentioned by Pakistan in 2014, efforts for disarmament and weapon non-proliferation can be threatened.

⁷⁷ Pakistan, "Opening Statement," 2014, Pakistan "closing statement," 2015, Pakistan "General Exchange of Views," 2018

⁷⁸ Austria. "LAWS MX." 2015

⁷⁹ Ibid.

⁸⁰ Austria, "LAWS MX," 2014⁸¹ Austria, "General Exchange," 2016

LOWERING WAR THRESHOLD

The last most often cited norm is formulated at least once by all studied states, and it is formulated as the inclination for autonomous weapons to lower the threshold of various triggers of war, making war more frequent, easier to escalate and ultimately making the world a more hostile and unstable place.

The issue of lowering war threshold can be divided into three main themes: lowering the likelihood of humans initiating offensive moves (whereas having soldiers fighting in war, people might be more likely to start a war against robots because of feeling less empathy) Casualties are more likely to occur and human lives are in danger.⁸²

Countries such as Sri Lanka talk about weapon proliferation to terrorist organizations and rogue states (third category), whereby any leaked technology (especially low cost weapons or smaller autonomous weapons) could be utilised and war outbursts and terrorist attacks could become more frequent and deadly. The two first categories are both emphasised in Pakistan's Opening Statement from 2014,83 "[s]ince the developing countries are not going to carry the burden of non-proliferation, an unchecked robotic arms race could ensue. Besides, LAWS could also proliferate to non-state actors with disastrous consequences."84 Pakistan is very adamant about standing behind its statement from 2015 and 2018 about their deadly effect for efforts to work towards reducing violence and result issues and disputes through diplomacy as opposed to by strength and aggression.

It is clear why it is precisely smaller countries that are the ones most emphasising the dangers of lowering war thresholds—it is these countries that suffer the most in the conditions of war. The interests of states are reflected in the norms that they emphasise on many more occasions, most notably the Holy See (emphasising humanity the most), and Sri

⁸² Pakistan, "Closing Statement," 2015
⁸³ Sri Lanka, 2015: p. 2
⁸⁴ Pakistan, "Opening Statement," 2015

Lanka joining Pakistan and Austria in navigating the conversation about lowering law threshold to disarmament and non-proliferation.

Chapter V: Conclusion

The purpose of this paper was to answer the research question: "what are the normative underpinnings that are a part of the drive for and against Lethal Autonomous Weapons Systems within the CCW Meetings of Experts on LAWS in the years 2014 to 2018?" The previous two chapters have identified and analysed altogether ten prevailing norms in the discussion on LAWS within the CCW framework. In order to present an idea of what the discussion is about, how LAWS and surrounded issues are constructed by states and which norms are currently leading the discussion around LAWS, ten states states active in the convention were selected and their speeches and working papers, which, along with recorded speeches which could not be analysed due to the limitations of this paper, constitute the discourse within the CCW. The speeches and documents were read, and the author presented her narrative on the discussion, analysing which states emphasise which norms, and whether norms are presented and interpreted the same by the various states.

Crucial elements of this paper are the theoretical and methodological paths the author has chosen to use to answer the research question. Constructivism as the theory of choice constructivism seeks to understand social relations. More specifically, it studies the way social relations are formed, how they are maintained and conversely, how they change over time. Looking through the lens of constructivism, this paper was able to deconstruct the discourse, identify and analyse norms and find out what the main themes, norms and ideas that are present in the discourse, and to compare the variables against each other and seek out patterns and observations.

Altogether, findings were very interesting, certain patterns have been found and further recommendations for research can be made. The group of states advocating for autonomous weapons focused on the legal and practical aspect of LAWS, such as the issue of meaningful human control (questioning and debating autonomy). Compliance with IHL and the law of

war are norms shared by both states for and against, however all countries belonging to the category against LAWS emphasise aspects of international humanitarian law in terms of humanitarian perspectives such as humanity and lack of accountability.

Norms can be matched up in terms of meaning, thus it can be argued that certain themes to prevail significantly over others. The issue of lawfulness/IHL arises on many occasions because it the CCW is a convention built around issues of IHL and lawfulness, it is a conference focusing on producing legal documents that bind its signatories to refraining from certain activities. Thus, it is logical why it is a perspective shared by both groups of states.

The norms can be matched up into five pairs, showing that discourse does meet on certain themes and ideas, i.e. the countries are discussing similar themes. Each country does however talk about each theme differently, so there is evident a construction of meaning by the states. The pairs can be viewed below:

- Meaningful human control and lack of accountability
- Lawfulness and unlawfulness
- Dual-use nature of technologies and triggering an arms race
- Precision/efficiency and lowering war threshold
- Reducing casualties and humanity

Keeping in mind that this is just the perception of the author and as constructivism states, the context and knowledge of the author's background is crucial in understanding the discourse that he represents. However, is has been specified in the analysis part of the paper and how can be visually seen in the 4 graphs included in this paper, these themes are not represented equally. Some are more common than others, and some are constructed or understood in slightly different ways.

The Holy See advocates for humanitarian perspectives on regulating LAWS significantly more than any other country—issues of humanity, touching upon questions such as 'how ethical is it letting human life be taken from a person by a robot'? Is it ethical to leave such an important decision to a person. These are the main findings for this paper, answering the research question: "what are the normative underpinnings that are a part of the drive for and against Lethal Autonomous Weapons Systems within the CCW Meetings of Experts on LAWS in the years 2014 to 2018?" The discussion concerns several themes, some that are repeated more than others, and there are countries that view different things important.

Constructivism allowed us to look at the discussion from a critical lens, deconstructing the discussion into sentences and themes and analysis the way the thoughts present in the discussions are formed. Countries (the actors), especially when in a position of authority have the power to push the discussion in a certain direction, validating certain information and reinforcing other. This is how norms and are established, that create certain paths in which states can go. This is how groups sharing different positions form, as is in our case, the group against and group for LAWS. These concepts are closely knit with the logic of appropriateness which forms the behaviour of humans—we do what we believe is appropriate in accordance with our ideologies, values and norms, all of which can shift over time. Discourse analysis was the most logical method to utilise in answering of the question, because it was precisely the speeches and documents available from the meetings are the discourse. The documents were retrieved from the United Nations Office at Geneva website, therefore primary documents formed the majority of the basis for the research of this paper, so the sources were a reliable basis for this research paper.

Some recommendations for future research include utilising the methodology and theoretical outlooks to map and analyse the rest of the discourse within the CCW, or perhaps

to map the discourse occurring outside of a formal institution. Retrieving newspaper articles and mapping the way the media paints the discourse could be indicative of the perception of the public rather than the states themselves, which is an equally important element.

Bibliography

- Adler, Emmanuel. "Constructivism in International Relations: Sources, Contributions, and Debates." Chap. 5 in Handbook of International Relations, 2nd ed., edited by Walter Carlsnaes, Thomas Risse, and Beth A. Simmons. London: Sage, 2013.
- Bode, I., & Huelss, H. "Autonomous weapons systems and changing norms in international relations." Review of International Studies, 44(3) (2018): 393-413.
- Boulanin, Vincent. "Mapping the Debate on Laws at the CCW: Taking Stock and Moving Forward." Non-Proliferation Papers No. 49. EU Non-Proliferation Consortium, 2016.
- Cummings, Mary L. "Artificial Intelligence and the Future of Warfare." *International Security Department and US and the Americas Program* (2017).
- Docherty, Bonnie. "Losing Humanity: The Case against Killer Robots." Human Rights Watch, (2012).
- Drulák, Petr. Jak Zkoumat Politiku: Kvalitativní Metodologie v Politologii a Mezinárodních Vztazích. Praha: Portál, 2008.
- "Majority Call To Negotiate A New Treaty". 2018. Stopkillerrobots.Org. https://www.stopkillerrobots.org/2018/08/sixthmeeting/.
- Jørgensen, Marianne, and Louise Phillips. Discourse Analysis as Theory and Method. Los Angeles, CA: Sage, 2011.
- Kratochwil, Friedrich, and John Gerard Ruggie. "International Organization: A State of the Art on an Art of the State." International Organization 40, no. 4 (1986): 753-75.
- Milliken, Jennifer. "The Study of Discourse in International Relations:: A Critique of Research and Methods." European Journal of International Relations 5, no. 2 (June 1999): 225–54.
- Onuf, Nicholas. "Constructivism: A User's Manual." Chap. 3 in International Relations in a Socially Constructed World, edited by Vendulka Kubálková, Nicholas Onuf, and Paul Kowert. Armonk: M.E. Sharpe, 1998.
- Pax. "Keeping Control: European Positions on Lethal Autonomous Weapon Systems." Retrieved from: https://www.paxforpeace.nl/publications/all-publications/keeping-control
- Finnemore, M., & Sikkink, K. "International Norm Dynamics and Political Change." International Organization, 52(4) (1998), 887-917.

- Wendt, Alexander. "The Agent-Structure Problem in International Relations Theory." International Organization 41, no. 3 (1987): 335–370.
- Wendt, Alexander. "Anarchy Is What States Make of It: The Social Construction of Power Politics." International Security 46, no. 2 (1992): 391–425.
- Wendt, Alexander. "Collective Identity Formation and the International State." *The American Political Science Review* 88, no. 2 (1994): 384–396. Wendt, Alexander. "Constructing International Politics." *International Security* 20, no. 1 (1995): 71–81.
- Wendt, Alexander. *Social Theory of International Politics*. Cambridge: Cambridge University Press, 1999.

Primary Documents

- Austria, "LAWS MX," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2014. (Retrieved: 15th October 2018)
- Austria, "General Exchange," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2016. (Retrieved: 15th October 2018)
- Austria, "LAWS MX," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2015. (Retrieved: 15th October 2018)
- Austria, "Statement," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2015. (Retrieved: 15th October 2018)
- Austria, "Statement 6d," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2018. (Retrieved: 16th October 2018)
- Austria, "General Exchange," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2018. (Retrieved: 13th October 2018)
- Austria, "General Debate," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2014. (Retrieved: 14th October 2018)
- Pakistan, "Opening Statement," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2015. (Retrieved: 15th October 2018)
- Pakistan, "Statement," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2014. (Retrieved: 15th October 2018)

- Brazil, "GGE LAWS 6b," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2018, (Retrieved: 11th October 2018)
- Brazil, "Area of Converergance, on LAWS," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2018, (Retrieved: 11th October 2018)
- Brazil, "GGE LAWS 6b," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2018. (Retrieved: 15th October 2018)
- Brazil, "General Exchange," 2018, (Retrieved: 15th October 2018)
- Israel, "Challenges to IHL," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2016. (Retrieved: 15th October 2018)
- Israel, "Characteristics of LAWS," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2015. (Retrieved: 15th October 2018)
- Israel, "Characteristics of LAWS," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2015. (Retrieved: 15th October 2018)
- Israel "Statement 6b", *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2018. (Retrieved: 15th October 2018)
- Israel, "Statement 6d" *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2018. (Retrieved: 15th October 2018)
- Russia, "Examination of various dimensions of emerging technologies in the area of lethal autonomous weapons systems, in the context of the objectives and purposes of the Convention", *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2017. (Retrieved: 14th October 2018)
- Russia, "Russia's Approaches to the Elaboration of a Working Definition and Basic Functions of Lethal Autonomous Weapons Systems in the Context of the Purposes and Objectives of the Convention," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2018. (Retrieved: 14^h October 2018)
- Russia, "Russia's Approaches to the Elaboration of a Working Definition and Basic Functions of Lethal Autonomous Weapons Systems in the Context of the Purposes and Objectives of the Convention," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2018. (Retrieved: 15th October 2018)

- Holy See, "Elements Supporting the Prohibition of Lethal Autonomous Weapons Systems," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2016. (Retrieved: 15th October 2018)
- Holy See, "Country Paper," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2016. (Retrieved: 15th October 2018)
- Holy See, "The Use of Lethal Autonomous Weapons Systems Ethical Questions," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2015.

 (Retrieved: 15th October 2018)

Sri Lanka, "General Exchange of Views," 2018 Sri Lanka, "General Exchange of Views," 2017

- US "Humanitarian benefits of emerging technologies in the area of lethal autonomous weapon systems," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2018. (Retrieved: 15th October 2018)
- US, "Opening Statement," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2016. (Retrieved: 15th October 2018)
- United States, "Human-Machine Interaction in the Development, Deployment and Use of Emerging Technologies in the Area of Lethal Autonomous Weapon Systems," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2018. (Retrieved: 15th October 2018)
- South Korea, "General Exchange," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2018. (Retrieved: 15th October 2018)
- South Korea, "Opening Statement," *UN Office at Geneva*, Discussions on Emerging Technologies in the Area of LAWS, 2015. (Retrieved: 14th October 2018)

Appendix

