

Scientific

A 'MALE' FUTURE?: AN ANALYSIS ON THE GENDERED DISCOURSES REGARDING LETHAL AUTONOMOUS WEAPONS

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ABSTRACT

There is a lacuna on how gender informs the talks concerning the pre-emptive ban on lethal autonomous weapons (LAWs). This study does a critical discourse analysis on texts produced by participants of the Convention on Certain Conventional Weapons (CCW) on LAWs, in an attempt to unearth the gendered language within these debates. Propositions against the ban do a gender stereotyping on LAWs, and also try to imprint a 'male-protector' imagery to the nation willing to use them. Discourses in favour of the ban have merely indirectly critiqued such hyper-masculinised approach. To unpack deeper concerns regarding the usage of LAWs, this piece suggests a direct exposition of the masculinised layers of arguments against the ban.

Keywords: Gender. Robotic Warfare. Lethal Autonomous Weapons.

Introduction

In 1987, leading gender and security scholar Carol Cohn wrote the article "Sex and Death in the Rational World of Defense Intellectuals", where she provided provocative insights on the gendered language around nuclear warfare and deterrence.¹ The article is a result of the author's experience in a summer program about defence technology and arms control. It examines not only how masculinised ideas were embedded in deterrence, but also how the masculinised talks and communication around nuclear technology informed the way of thinking of those involved in the field.²

By virtue of such thought-provoking insights on the lexicon of nuclear warfare and technology, Cohn's article makes one think about how a gendered rhetoric to militarism and security has accompanied novel military technologies. In light of new military developments such as robotic warfare, to what extent is it possible to identify the same patterns of communication in these new military devices, systems and strategies?

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¹ C. Cohn, 'Sex and Death in the Rational World of Defence Intellectuals', *Sign* 1987, pp. 687-718.

² *Idem*, pp. 687-90

This study will attempt to unearth the impact of gendered discourses within the current political debates around robotic warfare. This paper will consider the state-of-the-art exploring robotic warfare through a gender lens, analysing the main arguments elaborated by current scholarship. Research shows that there is a gap in the analysis regarding the ways gender helps to define the talks conducted by actors involved in the discussions related to the pre-emptive ban on lethal autonomous weapons (LAWs). Considering the technological developments on LAWs that seem to be rapidly evolving, as well as the ongoing international debate on the need for a pre-emptive ban on such technology, it is important to also assess how gendered assertions inform and influence this discussion.

Accordingly, this research will first explore what robotic technologies are and how they are used in the military. It will then outline how LAWs situate themselves in this evolving technological process, and the current attempts to define what fully autonomous weapons would look like in the future. From what follows, it will investigate the current assessments by the specialized literature on the inter-relations between gendered verbalizations and robotic warfare technology. Given the lack of more consistent work providing a gendered analysis on the debates regarding the pre-emptive ban on LAWs, this study will proceed to give an overall analysis on the main arguments brought by actors and institutions involved with this debate. For such purpose, this research will make use of a critical discourse analysis methodology to analyse texts such as working papers, general exchange statements, expert contributions and general reports produced within meetings conducted on the topic of LAWs held under the ambit Convention on Certain Conventional Weapons (CCW).

I. Basic Definitions on Robotic Technologies and Their Applications in Military

Before giving an assessment on the current debates around gender and robotic warfare, one must first understand what exactly “robotic technology” is and how it is applied to military contexts. In this regard, the notions of “robot” and “drones”, as explained by military historian Paul J. Springer,³ are particularly useful.

The author delineates that the term “robot” usually invokes the idea of a machine able to sense its surroundings and react accordingly through independent decision-making.⁴ Drones, on the other hand, are machines that carry out pre-programmed tasks, with or without human interaction, and engaging with their surroundings.⁵ Therefore, drones do not make independent decisions, but instead just follow a command or the control of a human operator.⁶

When it comes to the military applications of such devices, the author clarifies that most of them fall within the range between robots and drones – that is, most of them have a limited degree of decision-making ability and interaction with their surroundings, while also being under the effective control of a human.⁷ This hybrid technology is what is usually referred to in the military as “robotic”.

³ P.J. Springer, *Military Robots and Drones: A Reference Handbook*, Santa Barbara: ABC-CLIO 2013, p.1.

⁴ *Ibid.*

⁵ *Idem*, p. 2.

⁶ *Ibid.*

⁷ *Ibid.*

Although the current robotic devices used in the military do not have a fully independent decision-making capability, the author asserts that it is only a matter of time until technology can advance in developing a completely autonomous weapon.⁸ On this subject, both Springer and professor of bioethics Robert Sparrow highlight the alluring element of fully autonomous weapons for states, as they can be understood as a substantial advantage in terms of technology, tactics, probable economical savings and the potential reduction of harm to soldiers' and citizens' lives.⁹ Despite the discussion on the advantages that LAWs might bring for those who might be able to develop them, there is still an ongoing debate on what exactly could be considered as this type of robotic technology.¹⁰

II. 2 Current Debates Regarding a Definition for Lethal Autonomous Weapons

Along with the plethora of names that have been differently used to describe autonomous developments in robotic warfare – such as “autonomous weapons systems”, “killer robots”, “lethal autonomous robotics”, “fully autonomous weapons” –, there has been a difficulty in reaching a shared agreement on the boundaries of such definition, especially among the actors involved in the debates regarding a pre-emptive ban on LAWs.¹¹

The main assessments on “full autonomy” of lethal weapon systems have been framed within the context of human involvement with target engagement. In this sense, the US Department of Defence has defined “autonomous weapon systems” as, ‘once activated, [autonomous weapon systems] can select and engage targets without further intervention by a human operator’.¹² A similar approach is taken by the United Nations Special Rapporteur on extrajudicial, summary or arbitrary executions, who outlines the main element of his definition of “lethal autonomous robotics” on the autonomous “choice” the system has concerning target selection and use of lethal force.¹³

Along the same line, Human Rights Watch (HRW) describes three different levels of autonomy in unmanned combat robots to elaborate their definition of fully autonomous weapons. First, they describe the “human-in-the-loop” category, which refers to robots that can select targets and deliver force only if commanded by a human – and therefore cannot be considered as fully autonomous. The second category is the “human-on-the-loop”, which relates to robotic weapons that can target and deliver force under the oversight of a human operator that is able to

⁸ *Idem*, p.1.

⁹ *Ibid*; R. Sparrow, ‘Killer Robots’, *Journal of Applied Philosophy* 2007-24(1), p. 69.

¹⁰ United Nations Institute for Disarmament Research (UNIDIR), ‘Framing Discussions on the Weaponization of Increasingly Autonomous Technologies’, at: <http://www.unidir.org/files/publications/pdfs/framing-discussions-on-the-weaponization-of-increasingly-autonomous-technologies-en-606.pdf> (accessed on 9 March 2018); See also: B. R. Jacobson, ‘Lethal Autonomous Weapons Systems: Mapping the GGE Debate’ 2017, at: https://www.diplomacy.edu/sites/default/files/Policy_papers_briefs_08_BRJ.pdf (accessed on 9 March 2018).

¹¹ B. R. Jacobson, *supra* note 10, p. 2.

¹² United States Department of Defense, ‘Directive Number 3000.09, November 21, 2012’, at: <https://cryptome.org/dodi/dodd-3000-09.pdf> (accessed on 9 March 2018), p. 13.

¹³ United Nations General Assembly, ‘Report of the Special Rapporteur on extrajudicial, summary or arbitrary executions, Christof Heyns (A/HRC/23/47)’, at: http://www.ohchr.org/Documents/HRBodies/HRCouncil/RegularSession/Session23/A-HRC-23-47_en.pdf (accessed on 9 March 2018), p. 7.

override the robot's actions –and consequently be labelled as autonomous only when such operator has no meaningful override capacity. Lastly, they indicate the “human-out-of-the-loop” category, which relates to robots that are capable of selecting targets and employing force without human input or interaction – and are therefore fully autonomous by nature.¹⁴

However, a point that nuances the discussion on the amount of human involvement in the actions of autonomous weapons is that, regardless of the “autonomy” of the machine, humans still remain on a wider or “higher” loop. That is, humans still program and plan the ultimate goals and missions of the autonomous system, as well as have the ability to activate it.¹⁵ This is highlighted, for example, by roboticist R.C. Arkin, who grounds his definition of lethal autonomous weapons as systems that, although having an independent ability to “pull the trigger” without human initiation nor confirmation, are still pre-programmed by a human.¹⁶ This is particularly important to underscore as, despite the advancement in technology, robots are still not considered to be able to develop “free will” anytime soon.¹⁷

Finally, another issue that brings controversy to the definition is the “lethal” adjective in the LAWS-acronym.¹⁸ This is because one should take into consideration the possibility of some automated devices, not originally built for lethal actions, to turn into lethal weapons by means of their characteristics and usage.¹⁹ In light of this, some have argued for the inclusion of such systems into the definition of LAWS for regulating purposes and to prevent legal loopholes.²⁰ On the other hand, the inclusion of such devices into the definition has been feared by its ability to potentially hamper innovation in civilian technology, as autonomous weapons can potentially have a dual-use – that is, serve both for military and civilian/humanitarian purposes.²¹ From what follows, an outright ban on these technology could hinder the advancement of devices that could broader benefit the lives of civilians.²²

In view of the difficulties regarding a working definition for LAWS, it can be noted that the effort to come up with such a concept has been frequently thwarted by the inherent complications such debate carries for referring to something that does not yet exist.²³ In other words, the main

¹⁴ Human Rights Watch, ‘Losing Humanity: The Case against Killer Robots’, at: <https://www.hrw.org/report/2012/11/19/losing-humanity/case-against-killer-robots> (accessed 9 March 2018).

¹⁵ UN Special Rapporteur on extrajudicial, summary or arbitrary executions, *supra* note 13, p. 8.

¹⁶ R. C. Arkin, ‘A Robotocist’s perspective on lethal autonomous weapons systems’, In *United Nations Office for Disarmament Affairs Occasional Papers no. 30, November 2017: Perspectives on Lethal Autonomous Weapons Systems*, New York: United Nations Publication, p. 35.

¹⁷ *Ibid*; See also: UN Special Rapporteur on extrajudicial, summary or arbitrary executions, *supra* note 13, p. 8.

¹⁸ B. R. Jacobson 2017, *supra* note 10, pp. 2-3.

¹⁹ *Ibid*.

²⁰ *Idem*, p. 3.

²¹ *Ibid*. See also: United Nations Convention on Prohibition or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects, ‘Advanced Version, Report of the 2016 Informal Meeting of Experts on Lethal Autonomous Weapons Systems (LAWS)’, at: [https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/DDC13B243BA863E6C1257FDB00380A88/\\$file/ReportLAWS_2016_AdvancedVersion.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/DDC13B243BA863E6C1257FDB00380A88/$file/ReportLAWS_2016_AdvancedVersion.pdf) (accessed on 21 May 2018), p. 3-4; V.C. Boulanin & M. Verbruggen, ‘*Mapping the Development of Autonomy in Weapon Systems*’, Solna: Stockholm International Peace Research Institute, p. 78.

²² B. R. Jacobson 2017, *supra* note 10, pp. 2-3.

²³ *Ibid*.

tension lies on the preoccupations of trying to define and pre-emptively regulate a technological development that, although highly likely to unfold, is yet to be materialised.²⁴ Present-future anxieties arise, as many actors involved try to carefully choose the correct words and technicalities. These preoccupations flow specifically from the concern of coming up with a functional definition that will not hamper innovations in the present, nor create legal loopholes that might undermine regulatory goals in the future.²⁵

Nevertheless, it is still important to analyse the work in progress in this area, as LAWs seem to be the next major revolution in military combat technology.²⁶ The analysis of this topic becomes even more relevant when one takes into consideration the importance of examining the ways in which new phenomena in security affairs interact with issues other than technological and military affairs. To understand how this inter-relation occurs, the subsequent sections will provide an account of how the specialised literature has delved into the importance of gendered discourses to current developments of robotic warfare, as well as the ways these two issues interact with one another. This literature review will be crucial to set the scene of the analysis elaborated in the last sections of this study, which delves into the impact of gender on the ongoing debate concerning the need for a pre-emptive ban on autonomous weapons systems.

II. Robotic Warfare and Gender: Current Assessments

The current examination of the inter-relations between gendered discourses and robotic warfare is focused on their ability to mutually shape and influence each other.²⁷ To comprehend such relation between gendered discourses and robotic warfare, there is a need to first understand some key-theoretical concepts from which feminist literature on war and militarism stems, namely the idea of hegemonic masculinity and its interplay with militarisation/militarism.²⁸

To understand hegemonic masculinity, the concept of gender performativity is pivotal. Pursuant to the theoretical prepositions of philosopher and gender theorist Judith Butler,²⁹ gender does not follow from sex or “nature”.³⁰ Rather, it is performatively and socially produced, as well as enforced by ‘the regulatory practices of gender coherence’.³¹ Masculine and feminine attributes

²⁴ *Ibid.*

²⁵ *Ibid.*

²⁶ UN Special Rapporteur on extrajudicial, summary or arbitrary executions, *supra* note 13, p. 5.

²⁷ M. Manjikian, ‘Becoming Unmanned: The Gendering of Lethal Autonomous Warfare Technology’, *International Feminist Journal of Politics* 2014-16(1), pp. 48-65; L. B. de Volo, ‘Unmanned? Gender Recalibrations and the Rise of Drone Warfare’, *Politics & Gender* 2015-12(1), pp. 50-77.

²⁸ S. Tyrberg, ‘Hegemonic Bodies in Robotic Warfare: A Critical Discursive Analysis of Drone Warfare through a Feminist Perspective’ (Unpublished master’s thesis). Swedish Defence University 2017, at: <http://fhs.diva-portal.org/smash/get/diva2:1112357/FULLTEXT01.pdf> (accessed on 9 March 2018), p. 8.

²⁹ J. Butler, *Gender Trouble: Feminism and the Subversion of Identity*, New York: Routledge, Taylor & Francis Group 1999, pp. 10, 33, 177-9.

³⁰ *Idem*, p. 33.

³¹ *Ibid.*

are socially constructed within frames of masculine domination,³² which in turn operate through regulated processes of repetition that consolidate and perpetuate gender hierarchy.³³

Within this context, “hegemonic masculinity” is a constructed and idealised notion of certain attributes socially linked to the male gender, which subordinates and marginalises all other practices that do not conform to such ideal.³⁴ Scholar Frank J. Barrett explains that the current hegemonic ideal of masculinity in Western societies is that of the independent, risk-taking, aggressive, heterosexual and rational man.³⁵ As a result, a hierarchy is created not only between women and men, but also between the men who are coherent with hegemonic masculinity ideals and those who are not.³⁶

In this regard, current hegemonic masculinity language applied to the military can actually demean and criticise robotic warfare. As these novel military technologies require no physical strength, no courage to “be in the battlefield” and no risk for the individual soldier, it alleviates the “dirty work of war”, and therefore can be considered as coward and feminine.³⁷ A very telling example of this is the case of the “Nintendo Medal”, as explained by professor in women and gender studies Lorraine Bayard de Volo.³⁸ In this instance, Leon Panetta, U.S Secretary of Defence in 2013, had proposed the Distinguished Warfare Medal to laud robotic pilots for “extraordinary achievements”.³⁹ However, the medal was met with a huge backlash from the overall military community, as they argued that medals of honour should not be endowed to coward “button-pushers”.⁴⁰

This is particularly interesting when one analyses the role of “sacrifice” to the “formation of the soldier-citizen as an archetype of heroic masculinity”.⁴¹ As explained by gender studies scholar Bianca Baggini, military sacrifice publicises the death, injury and suffering of soldiers that put themselves in harm’s way for the ‘greater good of the national community and subsequently the life of the body politic’.⁴² Soldier’s lives then become gendered, as their value is located in the public sphere – often seen as the ‘male’ realm, in contrast to the private, family and domestic domain associated with feminine roles.⁴³ This does not mean to say that such sacrificial effort is expected only from male-bodied soldiers: this is an overarching gendering of the commitment of soldiers – male and female – to take risks for the national good, which grounds itself in the masculinised domain of the public to validate such endeavour.⁴⁴ Drone war, for its turn, can

³² *Idem*, p. 180.

³³ *Idem*, p. 184.

³⁴ F. J. Barrett, ‘The organizational construction of hegemonic masculinity: The case of the US Navy’, In *The masculinities reader*, edited by S. M. Whitehead and F. J. Barrett, Cambridge: Polity Press 2001, p. 79.

³⁵ *Ibid.*

³⁶ *Ibid.*

³⁷ M. Manjikian 2014, *supra* note 26, p. 52.

³⁸ M. Manjikian 2014, *supra* note 26, pp. 10-1.

³⁹ *Idem*, p. 10.

⁴⁰ *Ibid.*

⁴¹ B. Baggini, ‘Military Privatization and the Gendered Politics of Sacrifice’, In *Gender and Private Security in Global Politics*, M. Eichler (Ed.), Oxford: Oxford University Press 2015, p. 39.

⁴² *Idem*, p. 40.

⁴³ *Ibid.*

⁴⁴ *Ibid.*

distance the military enterprise from “public sacrifice”, and potentially “emasculate” military heroism.⁴⁵

However, one cannot disregard the utilitarian element that gendered arguments can lead to militarism and war. Given the gender hierarchy socially imposed by hegemonic masculinity, masculinised ideals can also be imported to societal elements and institutions to give them legitimacy and survival.⁴⁶ It is within this scenario that feminist literature propels forward the argument that militarism/militarisation and hegemonic masculinity are made closely intertwined.⁴⁷

Feminist literature explains this interplay with two main points. First, it is argued that gendered arguments help war and militarism to be perceived as legitimate and acceptable social practices.⁴⁸ Secondly, transformations in the way in which warfare is conducted can produce new insights on gender, as masculinity needs to respond to the requirements of the war machine to maintain male dominance.⁴⁹ These new insights on gender allow for the continued acceptability of new methods of warfare by incorporating them as novel outlooks on ideals of hegemonic masculinity. Within this context, international relations scholar Kimberly Hutchings explains how idealised masculine military archetypes vary throughout time and space,⁵⁰ as in the examples of the chivalrous just warrior in the Middle Ages to the technologically skilled nuclear intellectual analysed by Carol Cohn.⁵¹

In order to understand how these war transformations can both use gendered discourses as a tool of legitimacy and have transformative implications on masculinised ideals, it is necessary to comprehend how these war transformations first come about. For the purposes of this study’s focus on robotic warfare, the account brought by defence scholar Mikkel Vedby Rasmussen on its development is particularly useful as the author explains at length how these new technologies serve the needs of the contemporary risk society.⁵²

Specifically within the context of the U.S military, the author analyses how the revolution in military affairs (RMA) and the development of robotic technologies in warfare emerge as a

⁴⁵ *Idem*, p. 50; See also: B. Baggiarini, ‘Drone warfare and the limits of sacrifice’, *Journal of International Political Theory* 2015-11(1), pp. 128-44.

⁴⁶ C. Enloe, *Globalization & Militarism: Feminists make the link*, Lanham and Plymouth: Rowman & Littlefield Publishers 2007; J. Elshtain, *Women and War*, Chicago: University of Chicago Press 1995; C. Enloe, *Maneuvers*, Berkeley: University of California Press 2000; F. J. Barrett 2001, *supra* note 32; K. Hutchings, ‘Making Sense of Masculinity and War’, *Men and Masculinities* 2008-10(4), pp. 390-392.

⁴⁷ M. Manjikian 2014, *supra* note 26; J. Goldstein, *War and Gender*, Cambridge: Cambridge University Press 2001; M. Hawkesworth, ‘Engendering Political Science: An Immodest Proposal’, *Politics & Gender* 2005-1(1), pp. 141-56; V.S. Peterson & A.S. Runyan, *Global Gender Issues*, Boulder: Westview 1999; E. Prugl, ‘Gender and War: Causes, Constructions and Critique’, *Perspectives on Politics* 2003-1(2), pp. 335-42.

⁴⁸ K. Hutchings 2008, *supra* note 44, p. 390-1; A. Scales, ‘Soft on Defense: The Failure to Confront Militarism’, *Berkeley Journal of Gender, Law and Justice* 1989-20(1), pp. 25-6; J. Gardam, ‘A Feminist Analysis of Certain Aspects of International Humanitarian Law’, *Australian Yearbook of International Law* 1988-12, pp. 265-78.

⁴⁹ N. Hartsock, ‘Masculinity, Heroism and the Making of War’, In *Rocking the Ship of State: Towards a Feminist Peace Politics*, edited by A. Harris and Y. King, Boulder: Westview 1989, pp. 133-52; J. Elshtain 1995, *supra* note 44; C. Enloe 2007, *supra* note 44.

⁵⁰ K. Hutchings 2008, *supra* note 44, pp. 391-2.

⁵¹ C. Cohn 1988, *supra* note 1.

⁵² M. V. Rasmussen, *The Risk Society at War*, Cambridge: Cambridge University Press 2006, pp. 43-90.

response to the diminished number of conscripts after Vietnam,⁵³ as well as the increasing concern in minimising risks at war.⁵⁴ Robotic warfare then emerged as an effective, precise and apparent “risk-free” alternative, and the added value of its pre-emptive character and future capacities meets the yearnings of U.S security concerns after 9/11.⁵⁵ Within this context where risk to the lives of citizens is to be avoided at all costs, feminist literature emphasises how gendered assertions are being used and transformed to enhance the acceptability of robotic technologies in military operations. Scholars such as Mary Manjikian and Lorraine B. de Volo, for instance, examine how gendered speech reframes these technological activities as masculine, by associating the idea of the “cyberwarrior” with that of an enhanced super-male: stronger, more efficient and able to operate in offensives for a longer time.⁵⁶ On the other hand, robotic warfare also “recalibrates” gender by inserting new qualities such as ‘technical prowess and manual dexterity’ into the idea of hegemonic masculinity, therefore helping validate robotic usage.⁵⁷ This increased association of drones to a ‘techno-modernised’ version of masculinity then re-asserts and re-establishes masculine authenticity into robotic warfare, with the aim of validating it as a useful response to the new risk-averse mentality in warfare.

At this point, it is interesting to note how the traditional masculinised “protector” role is shifted from the individual soldier to the nation. Rasmussen, for example, investigates how the robotic RMA is construed as a means for the U.S. military to get its soldiers out of danger,⁵⁸ and de Volo underscores how the logic of U.S. acting as a patriarchal masculine protector to both its population and soldiers is strengthened by robotic usage.⁵⁹ However, the discourse of the ‘masculine protector’ used by the country willing to deploy robotic technology in its warfare efforts also has other consequences. As explained by de Volo, ‘one person’s masculine protector is another’s masculine predator’, and the nation willing to employ robotic usage can project itself as a dominant predator weakening the countries it targets.⁶⁰ When a nation cannot protect their own territory against a drone attack, the attacker arises as a global patriarch and its over-powering aggressiveness de-masculinises the country that hosts the offensive.⁶¹ As a result, this creates a gendered divide among nations – the ‘masculine’ predator countries that can use robotic technology in their war efforts, and the ‘feminised’ ones that are “penetrated” by the such robotic military enterprises.⁶²

From the considerations above, it is possible to observe that robotic warfare has been considered to reinforce rather than rewrite gender hierarchies.⁶³ It has been seen to perpetuate the mutually constitutive link between militarisation and masculinity through a continual renewing of notions of hegemonic masculinity. At the same time, it has been regarded to import gendered tropes to enhance the acceptability of a “risk-free” warfare project, by imprinting a protector/predator imagery to the nation willing to use such type of technology.

⁵³ *Idem*, pp. 45-6.

⁵⁴ *Idem*, p. 44.

⁵⁵ *Idem*, pp. 79-80. See also: I.G. R. Shaw, ‘Predator Empire: The Geopolitics of US Drone Warfare’, *Geopolitics* 2013-18(3), p. 548.

⁵⁶ M. Manjikian 2014, *supra* note 26, pp. 57-8; L.B. de Volo 2015, *supra* note 26, p. 10.

⁵⁷ L.B. de Volo 2015, *supra* note 26, p. 12.

⁵⁸ M. V. Rasmussen 2006, *supra* note 50, pp. 82-3.

⁵⁹ L.B. de Volo 2015, *supra* note 26, p. 13.

⁶⁰ *Idem*, pp. 15-6.

⁶¹ *Ibid.*

⁶² *Idem*, pp. 14-6.

⁶³ M. Manjikian 2014, *supra* note 26, pp. 59-60.

III. The Need to Insert Lethal Autonomous Weapons in the Gendered Analysis Concerning Robotic Warfare

Deriving from the foregoing literature review, the analysis on gendered speech and its impacts on robotic warfare is currently focused on military operations, actions and policies. Consequently, it can be noted that most of the scholarship actually gives a gendered reading on drones (*i.e.* Unmanned Combat Aerial Vehicles), as they are the technology most sufficiently developed for military operations and have been expansively used in contemporary military operations.⁶⁴ Although Manjikian does explore other types of technologies, her article is still strongly focused on drones as well.⁶⁵

However, it is important to note that robotic warfare is a part of the continuous process of the RMA, and it is not solely restricted to drones.⁶⁶ Rather, it also includes other types of devices and seems to be rapidly converging towards the development of fully autonomous weapons due to their purported tactical advantage.⁶⁷ In view of this, LAWs have gained increased attention by the international community, particularly due to the large campaign for the outright ban on them before the technology could even be completely materialised.⁶⁸

In this context, LAWs were also the subject of the Fifth Review Conference of the High Contracting Parties to the CCW, which decided '[t]o establish an open-ended Group of Governmental Experts (GGE) related to emerging technologies in the area of lethal autonomous weapons systems (LAWS) in the context of the objectives and purposes of the Convention'.⁶⁹ The GGE has just recently convened in Geneva, and included not only delegations from countries, but also experts and representatives from international organisations, non-governmental organisations and entities.⁷⁰ The discussions dealt with a variety of topics, namely: the need to promote a common understanding of concepts relevant to LAWS; the different legal regimes that could be applicable to them; the current shortcomings in international law concerning the topic; the relevance of future regulations, such as a Code of Conduct; and, last but not least, the importance of integrating gender perspectives into future debates.⁷¹ The preoccupation of adding a gender lens to the discussion has also been reiterated

⁶⁴ C.L. Barry & E. Zimet, 'UCAVs-Technological, Policy and Operational Challenges', *Defense Horizons* 2001-3(1), pp. 1-8. See also: R. Sparrow 2007, *supra* note 9.

⁶⁵ M. Manjikian 2014, *supra* note 26.

⁶⁶ M. V. Rasmussen 2006, *supra* note 50. See also: P. J. Springer 2013, *supra* note 3.

⁶⁷ *Idem*, pp. 1-2. Also: R. Sparrow 2007, *supra* note 9, p. 69.

⁶⁸ Future of Life, 'Open Letter on Autonomous Weapons', at: <https://futureoflife.org/open-letter-autonomous-weapons/> (accessed on 9 March 2018).

⁶⁹ United Nations Convention on Prohibition or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects, 'Final Document of the Fifth Review Conference, 23 December 2016 (CCW/CONF.V/10)', at: <http://undocs.org/CCW/CONF.V/10> (accessed on 9 March 2018), p. 9.

⁷⁰ United Nations Convention on Prohibition or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects, 'Report of the 2017 Group of Governmental Experts on Lethal Autonomous Weapons Systems (LAWS) - Advanced Version, 20 November 2017 (CCW/GGE.1/2017/CRP.1)', at: [https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/B5B99A4D2F8BADF4C12581DF0048E7D0/\\$file/2017_CCW_GGE.1_2017_CRP.1_Advanced_+corrected.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/B5B99A4D2F8BADF4C12581DF0048E7D0/$file/2017_CCW_GGE.1_2017_CRP.1_Advanced_+corrected.pdf) (accessed on 9 March 2018), p. 2.

⁷¹ *Idem*, pp. 4-9. See also: Reaching Critical Will, 'Discussions on deadly weapons: report from the 2014 CCW meeting of high contracting parties', at: <http://reachingcriticalwill.org/disarmament-fora/ccw/2014/meetings-states-parties/report> (accessed on 18 May 2018).

in the 2018 Meeting of the GGE.⁷² In this last meeting, some delegations have expressed concerns as to the inclusion of gender biases into autonomous systems, given the fact that the field is currently male-dominated – including within the delegations participating at the GGE as well.⁷³

It is within this context of growing civil institutional discussions, meetings and preoccupations with the development of LAWs that it is possible to raise the question of how gendered rhetoric have impacted the debates concerning the need for a pre-emptive ban on lethal autonomous weapons. Have notions of hegemonic masculinity played a role in the discourses of actors involved within the debate (for example, by being incorporated in arguments and speeches to increase or diminish the acceptability of a certain stand on the topic)? If so, how?

IV.1 The Lifecycle of Norms in the International Sphere and the Importance of a Gendered Analysis on the Possible Emergence of a Pre-emptive Ban on LAWs

Pursuant to the work of international relations academics Martha Finnemore and Kathryn Sikkink, it is pertinent to have a comprehensive approach regarding the processes through which norms emerge and are consolidated in society.⁷⁴ This is useful to shed light on the different social processes and logics of action involved in this phenomenon, and how such dynamics shape and influence the behaviour of the relevant actors this consolidation development.⁷⁵ The authors denominate these processes as the “life cycle” of norms, which comprises three-stages: norm emergence, norm cascade and internationalisation.⁷⁶

The first one, norm emergence, concerns the processes and interactions regarding the persuasive work exerted by “norm entrepreneurs” in convincing the relevant actors (referred to by the authors as “norm leaders”) to embrace new norms.⁷⁷ The second phase – norm cascade – is characterised by a “dynamic of imitation”, through which norm leaders engage in a series of practices that consolidate shared understandings that the new norm emerged should be followed.⁷⁸ It then refers to a phase ‘in-between’ emergence and consolidation: the norm is already being accepted and followed by a certain number of norm leaders, but not yet to a point

⁷² B. R. Jacobson, ‘Searching for meaningful human control: The April 2018 meeting on Lethal Autonomous Weapons Systems’, *DiploFoundation Policy Papers and Briefs*, 2018-10, p. 2.

⁷³ *Ibid.*

⁷⁴ M. Finnemore & K. Sikkink, ‘International Norm Dynamics and Political Change’, *International Organization*, 1998-52(4), p. 895.

⁷⁵ *Ibid.*

⁷⁶ *Ibid.*

⁷⁷ *Ibid.* In the words of Finnemore and Sikkink, “norm leaders” would refer to ‘a critical mass of states’. Although we do agree that international norms still are largely addressed towards states, we disagree that they are the only relevant actors in the process, and therefore cannot be considered as the sole relevant “norm leaders”. On this topic, see generally: J. Pauwelyn, R. A. Wessel & J. Wouters, *Informal International Lawmaking*, Oxford: Oxford University Press 2012.

⁷⁸ M. Finnemore & K. Sikkink 1998, *supra* note 72, p. 895. Brunnée & Toope have a similar approach in analysing the consolidation of *legal* norms in the international scenario, where they contend that legal norms are consolidated and made obligatory through shared understandings and repetitive practices that endorse a certain norm as a legal one. This phenomenon follows from a constructivist view of legal obligations, that departs from the premise that those are constructed through the practices of their addressees, coined by the authors as ‘practices of legality’. (J. Brunnée & S. J. Toope, *Legitimacy and legality in international law: an interactional account*. Cambridge: Cambridge University Press 2010, p. 12-3).

it can be considered as “generally” embraced.⁷⁹ The last phase concerns the internalisation of the norm, or its consolidation in the international sphere.⁸⁰ This stage is reached when a norm is broadly accepted as a standard, and no longer an subject of wide public debate.⁸¹

The stage that will be relevant for a gendered analysis on the current debate regarding the ban on LAWs is “norm emergence”. The ban is still in a phase of open discussion, with sides both in favour and against it, making an effort to persuade norm leaders to embrace one side or the other. As delineated by Finnemore and Sikkink, this “emergent” phase of a norm is rife with “cognitive frames” used by the norm entrepreneurs involved in the debate about the ban on LAWs to push forward their position. These “cognitive frames” refer to the linguistic structures that ‘name, interpret and dramatise’ issues in an effort to resonate norm entrepreneurs’ opinions and make them accepted by the broader public.⁸²

It is within the context of these linguistic structures that this study will attempt to analyse gendered assumptions as important “cognitive frames” used by norm entrepreneurs in the discussions concerning the pre-emptive ban on LAWs. As already explored, masculinised speech has played an important role in the debates regarding drones, however, its impact has been understudied in the topic aimed to be addressed in this research. For this reason, the following sections will examine the influence of gender in arguments on both stands referring to the issue, and how gendered assumptions have been employed in attempts to persuade and to broaden the acceptance of a certain standpoint on the pre-emptive ban on LAWs.

IV. Discourse Analysis of the Gendered Cognitive Frames Concerning Arguments in Favour and Against a Pre-emptive ban on LAWs

Before delving deeper into the substantive analysis of the gendered dimensions in the argumentations related to the pre-emptive ban on LAWs, it is first necessary to explain the methodology chosen for such purpose: critical discourse analysis (CDA). According to linguistics discourse analysis specialist Teun A. van Dijk, CDA refers to ‘a type of discourse analysis research that primarily studies the way social power abuse, dominance, and inequality are enacted, reproduced, and resisted by text and talk in social and political contexts’.⁸³ In view of this, CDA was considered as a fitting tool to pursue the focus of this study - which is to unearth how ideas of power relations may have played a role in debates regarding the ban on LAWs.

To do so, the first step was to select the texts that were going to be examined. In order to avoid the common criticism against CDA - through which it is argued that texts are “cherry picked” in a manner the reader cannot trace, nor understand how the data has been collected, selected and downsized -,⁸⁴ this section will attempt to indicate, as transparently as possible, the methods and decisions adopted in order to choose the textual data analysed.

First, the collection of the potential sources to be studied was done in a broad manner, with a view of covering the main “speakers” regarding the norm emergence phase of the pre-emptive

⁷⁹ M. Finnemore & K. Sikkink 1998, *supra* note 72, p. 895.

⁸⁰ *Ibid.*

⁸¹ *Ibid.*

⁸² *Idem*, p. 897.

⁸³ T. van Dijk, ‘Critical discourse analysis’, In *The handbook of discourse analysis*, D. Schiffrin, D. Tannen, & H. E. Hamilton (eds). Oxford: Blackwell 2003, p. 352.

⁸⁴ R. Wodak, & M. Meyer, *Methods of critical discourse analysis*, London: Sage 2009, p. 11.

ban on LAWs. Given that norm entrepreneurs are the relevant actors in this stage, there was an effort to identify who were the most crucial ones in the discussion here researched. The considerations brought in the already cited work of Finnemore and Sikkink guided the selection, through which it is elucidated that these agents are characterized by: (1) their pertinence to an “organizational platform”, which allows them to speak and promote their views; (2) their persuasive endeavours to convince “norm leaders” in adopting a certain norm.

In the context of the pre-emptive ban on LAWs, the most relevant “organizational platform” would be the CCW and its institutional initiatives aimed at discussing the implications on the development and subsequent usage of LAWs in warfare. The particular relevance of such Convention lies on its purpose to ban or restrict specific types of weapons, which makes the meetings conducted under its auspices a special hub for norm entrepreneurs to convince High Contracting Parties to forbid or limit the employment of a certain weapon. Moreover, the CCW has devoted special attention to the issue of LAWs, as already explained above. It has held two Meetings of Experts (in 2014 and 2015) to allow specialists, NGOs and States Parties to discuss their considerations on the topic. Furthermore, it has established a Group of Governmental Experts on LAWs to advance the debates, where a wide array of actors has participated – including States, representatives of international organizations, non-governmental organizations, military, academia, industry, and civil society. Finally, side-events organised by NGOs were also held on the occasion of the CCW meetings, which gathered specialists, states and the civil society sector.⁸⁵

From the considerations above, it was possible to select 3 main groups of norm entrepreneurs concerning the meetings conducted by the CCW: (1) States; (2) specialists from academia, international organizations, military and industry; and (3) NGOs. It is interesting to note that, because of the structure of the meetings, States were able to play a dual role on the debate regarding the pre-ban on LAWs. First, they were agents attempting to convince (or “norm entrepreneurs”), through their participation on general exchanges and thematic panels. Second and simultaneously, they were actors to be convinced (or “norm leaders”), given that they are the ones that decide the adoption of a prohibition or restriction of a certain weapon system.

With the list of norm entrepreneurs defined, it was possible to then demarcate the sample of textual production for analysis. In CCW’s website, the following types of texts produced by such actors are listed: (1) “food-for-thought” and working papers submitted to subsidise the discussions; (2) general exchange statements by States, international organizations and NGOs; (3) thematic presentations by specialists; and (4) general reports of the meetings. Moreover, side-events organised by NGOs were also held on the occasion of the CCW meetings, which also produced texts and presentations from their participants.

However valuable it would be to combine and examine all these documents, this effort would most definitely exceed the limited timeframe available for this research. With this in mind, it was necessary to downsize the data to allow the feasibility of this study. The main downsizing decision was to exclude texts revolving around the definition of LAWs and those related to ‘general exchange’ statements among States and invited representatives. It is possible to argue,

⁸⁵The dynamic of side-events can be explained by the following report: Campaign Stop Killer Robots, ‘Report on Activities: Convention on Conventional Weapons Informal Meeting of Experts on Lethal Autonomous Weapons Systems’, 16 September 2014, at: https://www.stopkillerrobots.org/wp-content/uploads/2013/03/KRC_CCWreport_16Sep2014.pdf (accessed on 9 March 2018), pp. 25-6.

however, that they could present crucial arguments brought by States, specialists and NGOs as to the necessity for a pre-emptive ban on LAWs. However, the exclusion of these two groups of documents was maintained due to several reasons. Concerning the texts addressing the different possible definitions for LAWs, it was thought that they could lead to materials too descriptive in nature, which would not necessarily have a significant argumentative or “persuasive” reasoning regarding the necessities for a ban.

Furthermore, regarding the exclusion of general exchange statements, this was done primarily because they were too numerous and perhaps too broad in scope leading to introductory or formal speeches that would not necessarily contribute to this analysis. Moreover, the main concerns and arguments brought by States and NGOs in such texts were expected to be indicated in the general reports of the meetings. For this reason, it was decided to rule them out from the sample, as the aforementioned reports could summarize the leading assertions used in the debates. The only exception to this rule were the general exchanges brought by the Women’s International League for Peace and Freedom (WILPF). Given the historical role of the organisation in adding a gender perspective into disarmament,⁸⁶ their statements remained in the selected texts given their potential value in underscoring the need for a gender lens to the debate.

Another problem encountered in the selection of the data was how documents produced in side-events are organised in a dispersed manner, given that such gatherings are promoted by several different initiatives led by specialists, international organisations or NGOs. In view of this, it would not be possible to systematise and review all the aforementioned textual production within the time restrictions of this research. Within the timeframe limitations, it was possible to find, however, one document produced and circulated in the context of side-events that was deemed to be useful for the analysis, namely the publication and subsequent report by the NGO PAX, titled ‘Deadly Decisions, 8 objections to killer robots’.⁸⁷ The report caught particular attention for two reasons. First, because it was elaborated by an organization remarkably active and influential in relation to the debates on LAWs. PAX is a co-founder of the campaign “Stop Killer Robots” and coordinates its Dutch branch. It has also been present in all CCW meetings on the topic since 2014. The second reason lies on how the aforementioned report summarizes different stands on the topic and serve as sort of a “compendium” of common arguments regarding the ban on LAWs. Just as in the case with the general reports of the CCW meetings, this document was considered to hold specific value in promising to provide a succinct and comprehensive overview of the most used claims in the discussions.

After the downsizing and selection of the data, the research then proceeded to analyse whether patterns of “hegemonic masculinity” language could be identified in the different expressions of ideas, perspectives and opinions on the necessity for a ban on LAWs. The analysis of the arguments was divided into two main sections, which will be developed below: one that

⁸⁶ For an overall history of the organization, see: M. K. Meyers, ‘The Women’s International League for Peace and Freedom: Organizing Women for Peace in the War System’, In *Gender Politics in Global Governance*, M. K. Meyer & E. Prugl (Eds.), Lanham: Rowman & Littlefield Publishers 1999, pp. 107-21.

⁸⁷ M. Struyk, ‘Side event Killer Robots at CCW, May 15 2014’, at: <https://www.paxvoorvrede.nl/media/files/side-event-killer-robots-at-ccw15-may-2014.pdf> (accessed 9 March 2018); M. Ekelhof & M. Struyk, ‘Deadly Decisions: 8 Objections to Killer Robots’, 2014, at: <http://www.paxvoorvrede.nl/media/files/deadlydecisionsweb.pdf> (accessed 9 March 2018).

explored gendered assumptions imprinted into the machines themselves, and the other that used these premises in signifying the role of the nation willing to use LAWs.

V.1 Between Iron Man and Terminator

In an interview covering the development of autonomous weapons by the U.S., journalists Rosenberg and Markoff have outlined that “[t]he weapons, in the Pentagon’s vision, would be less like the Terminator and more like the comic-book superhero Iron Man”.⁸⁸ Going beyond the quiriness of linking new combat technologies with popular cultural references, this statement can effectively summarise the argumentative dynamics that arise in the analysis of these type of weapons *per se*. What seems to be the case concerning the discussion on LAWs is that often the debates revolve around two sides of the “autonomous machine” spectrum: either that of a strong, powerful, efficient and heroically, or that of a cold, aggressive and terrorising foe.

At the “Iron Man” end, the robotic system is anthropomorphised and inscribed with gendered signals to demonstrate “heroic supermale” attributes and consequently a *voilà* ban-free development of LAWs. For instance, in an occasional paper elaborated to subsidise the discussions of the first meeting of the GGE, roboticist Ronald Arkin argues for several military and “ethical” advantages of a lethal autonomous robot. Framing it within a narrative of an enhanced, rational and ideal soldier, Arkin highlights the robot’s ability to “multiply force” and aid its fellow soldiers in the battlespace.⁸⁹ Moreover, the author’s discourse against the preemptive ban on such technology makes use of gallant and “superhero-like” tropes to describe its advantages.⁹⁰ Terms such as “self-sacrificing” are used to indicate, for example, the possibility of using the robot in an auto-destructive manner,⁹¹ invoking an image of a risk-taking, protective and altruistic soldier able to sacrifice himself in his mission whenever needed to reduce risk for his fellow soldiers. The ultimate rationality of the robot is also emphasized, through which Arkin highlights the robot’s “absence of emotion” as an advantage over humans, as those can ‘cloud human judgment or result in anger and frustration with ongoing battlefield events’.⁹² Similar arguments were brought forward by Colonel Wolfgang Richter in his presentation to the CCW Informal Meeting of Experts on LAWs in 2015, where he described the lesser relevance of human emotions to a robot as a military rationale in favour of autonomous functions in weapons systems.⁹³

The gendered anthropomorphising of LAWs is particularly interesting taking into consideration the relevance of gender stereotyping of machines to the way humans cognize these systems. Pursuant to the work of communication and human-computer interaction specialists Clifford Nass, Youngme Moon and Nancy Green, gender stereotyping of machines influences how humans perceive and accept these devices, as well as it triggers a gender-schematic judgment of

⁸⁸ M. Rosenberg & J Markoff, ‘The Pentagon’s ‘Terminator Conundrum’: Robots That Could Kill on Their Own’, 2015, at: <https://www.nytimes.com/2016/10/26/us/pentagon-artificial-intelligence-terminator.html> (accessed on 9 March 2018).

⁸⁹ R. Arkin 2017, *supra* note 16, pp. 36-9.

⁹⁰ *Ibid.*

⁹¹ R. Arkin 2017, *supra* note 16, p. 39.

⁹² *Ibid.*

⁹³ Richter, W. ‘Technical Issues: Military rationale for autonomous functions in weapons systems (AWS) – Presentation at the 2015 CCW Informal Meeting of Experts on LAWs, at: [https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/16C9D6BFA43D95B3C1257E5900452E5E/\\$file/2015_LAWS_Richter-PP-corr.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/16C9D6BFA43D95B3C1257E5900452E5E/$file/2015_LAWS_Richter-PP-corr.pdf), (accessed 9 March 2018), p. 14.

them.⁹⁴ This is echoed by the study carried out by psychology and cognitive interaction technology scholars Friederike Eyssel and Frank Hegel, where the authors study gender stereotypical visual cues used in robots as factors that influence human cognitive responses to them.⁹⁵ For example, “male” characteristics imprinted onto machines can help them become more accepted in “masculine”, agentic-oriented roles, whereas “female” machines are better accepted to perform feminine, domestic-focused tasks.⁹⁶

The same happens with LAWs. Masculinised traits are exported to the lethal autonomous system in order to enhance its acceptability as the “ideal superhero” soldier of the future, with a focus on its enhanced strength and rationality. Moreover, the special attention given to LAWs’ ability to “self-sacrifice” for the greater good is also an important one in the gendered framing of this type of weapon. Just as the logic behind the legitimization of the war effort through the framing of the injury and killing of soldiers within the public (coded as male) domain, the anthropomorphising narrative onto LAWs validates the robotic military effort through the idea of its “robot soldiers” being able to sacrifice for the “communal benefit”. As a result, the anthropomorphisation of LAWs and its bridging with the sacrificial act to protect the nation and other soldiers borders on an attempt – involuntary or not – to re-harmonize military heroism and masculinity in the age of a risk-averse society.

However, the gendered description and cognition of LAWs are not limited to the “heroic super-male” role. Debates on LAWs are frequently abound with “Terminator” references,⁹⁷ through which features from these types of weapons that allude to a “hyper-masculinisation” serve as basis for critiques towards them and the advancement of stands pro-ban.

For instance, the NGO PAX has delved into these characteristics in the side event “Killer Robots” at the CCW in 2014 and studied them further in their report ‘Deadly Decisions, 8 objections to killer robots’.⁹⁸ In PAX’s report, experts Ekelhof and Struyk present several arguments in favour of a pre-emptive ban on LAWs, among them: (i) the inherent unethicity of “killer robots”; and (ii) the terrorising psychological effect these technologies may cause on civilian communities if extensively employed in the future.⁹⁹

When arguing for the inherent unethicity of killer robots, PAX’s representatives emphasise that the lack of a “human element” in the process of selecting and targeting an individual contributes to the dehumanising of human suffering and diminishes the impact of killing for humans.¹⁰⁰ Here, the “absence of emotions” – used as an advantage by the advocates against the ban on LAWs – is used as a negative trait: it removes emotive and instinctive barriers that refrain cruelty and civilian casualties.¹⁰¹

⁹⁴ C. Nass, Y. Moon, & N. Green, ‘Are machines gender neutral? Gender-stereotypic responses to computers with voices’, *Journal of Applied Social Psychology* 1997-27, pp. 864–76.

⁹⁵ F. Eyssel, F. Hegel, ‘(S)he’s Got the Look: Gender Stereotyping of Robots’, *Journal of Applied Social Psychology* 2012-42(9), pp. 2213-2230.

⁹⁶ *Idem*, p. 2230. The authors delineate that “stereotypically male traits” such as: ‘authoritative, speaks his mind, assertive, determined, aggressive, cold, organized, confident, hard-hearted, dominant, tough, has leadership skills’ are often associated with “action-oriented” (“agentic”) tasks.

⁹⁷ M. Rosenberg & J. Markoff 2015, *supra* note 86.

⁹⁸ M. Struyk 2014, *supra* note 85; M. Ekelhof & M. Struyk 2014, *supra* note 85.

⁹⁹ M. Ekelhof & M. Struyk 2014, *supra* note 85, pp. 6-8; 11-4; 14-6; 21-2.

¹⁰⁰ *Idem*, pp. 6-7.

¹⁰¹ *Idem*, p. 7.

In a resembling note, Christof Heyns, United Nations Special Rapporteur on extrajudicial, summary or arbitrary executions also dwells on the consequences of such “cold-heartedness” of LAWs to the dignity of those targeted.¹⁰² In his contribution regarding the overarching issues on the use of LAWs in the 2015 CCW Meeting of Experts, the expert highlights how the automatized way of making life or death decisions strips off potential “hope” or “mercy” in the action, as well as undignifies the life being taken, as ‘[m]achines cannot fathom the importance of life, and the significance of the threshold that is crossed when a life is taken’.¹⁰³ A similar pattern of argumentation was used by several other panellists, which underscored the inability of LAWs to have emotions and empathise to the value of human life.¹⁰⁴

When it comes to the potential terrorising impact the deployment of LAWs could cause to the civilian population, the construction of this argument is particularly interesting as it connects the development and possible usage of LAWs with displays of aggressive dominance and predatory character in military actions. To illustrate the situation, the PAX report builds on historical examples of methods and means of warfare aimed at causing a psychological effect on opponents, and how the possible deployment of “killer robots” might as well be a future addition to this list.¹⁰⁵ Throughout their argumentation, PAX draws special attention to the already current psychological effects caused by robotic usage in warfare through drones, and how this can be maximised with the deployment of LAWs.¹⁰⁶

For instance, a study carried out by the Stanford Law School on the US drone practices in Pakistan highlights the perpetual sense of fear, anticipatory anxiety and post-traumatic stress disorders in Pakistani individuals “living under drones”, which have triggered several mental disturbances and physical symptoms among the civilian population.¹⁰⁷ Taking into consideration that these impacts are induced by “mere” unmanned vehicles, PAX’s report then stresses how maximised and more powerful LAWs will be in comparison, concluding that they would cause even greater fear and psychological damage to civilian communities. In their own words, ‘if this is the emotional impact of remotely piloted vehicles, then try to imagine the impact of fully autonomous killer robots (...). [W]hereas drones are mostly remotely piloted aerial vehicles, killer robots will likely take any form (...) making them capable of emerging from any and all

¹⁰² C. Heyns, ‘Informal Meeting of Experts on Lethal Autonomous Weapons: Convention on Conventional Weapons - Geneva 16 April 2016 - Panel on Human Rights and Lethal Autonomous Weapons Systems (LAWS)’, at: [https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/1869331AFF45728BC1257E2D0050EFE0/\\$file/2015_LAWS_MX_Heyns_Transcript.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/1869331AFF45728BC1257E2D0050EFE0/$file/2015_LAWS_MX_Heyns_Transcript.pdf) (accessed on 19 May 2018), p. 5.

¹⁰³ *Idem*, pp. 5-6.

¹⁰⁴ B. Docherty, ‘CCW Meeting of Experts on Lethal Autonomous Weapons Systems - Experts Panel on Overarching Issues - “Human Rights Implications of Fully Autonomous Weapons”’, at: [https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/7F992211B66F608C1257E6E004BEDA1/\\$file/2015_LAWS_MX_Docherty_Ethics.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/7F992211B66F608C1257E6E004BEDA1/$file/2015_LAWS_MX_Docherty_Ethics.pdf) (accessed on 19 May 2018), p. 5. See also: Permanent Mission of the Holy See to the United Nations and Other International Organizations in Geneva, ‘The Use of Lethal Autonomous Weapons Systems - Ethical Questions’, at: [https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/4D28AF2B8BBBECEDC1257E290046B73F/\\$file/2015_LAWS_MX_Holy+See.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/4D28AF2B8BBBECEDC1257E290046B73F/$file/2015_LAWS_MX_Holy+See.pdf) (accessed on 19 May 2018), p. 4.

¹⁰⁵ M. Ekelhof & M. Struyk 2014, *supra* note 85, pp. 22-3.

¹⁰⁶ *Ibid.*

¹⁰⁷ International Human Rights and Conflict Resolution Clinic at Stanford Law School and Global Justice Clinic at NYU School of Law, ‘Living Under Drones: Death, Injury and Trauma to Civilians from US Drone Practices in Pakistan’, 2012, at: <https://www-cdn.law.stanford.edu/wp-content/uploads/2015/07/Stanford-NYU-Living-Under-Drones.pdf>, (accessed 9 March 2018), especially pp. 82-3.

directions'.¹⁰⁸ A similar concern was shared by the Holy See in its statement on the overarching issues of LAWs in the 2015 CCW Meeting of Experts, through which it ascertained that '[b]eing flown over by planes susceptible of bombarding us is already a traumatizing experience, but the fact of being flown over in permanence by roboticized machines susceptible of choosing and neutralizing targets at unexpected moments can be even more stressful'.¹⁰⁹

Although indirectly, it is possible to observe that the arguments at the "Terminator" end also communicate with a gendered reading on LAWs. The premises examined above explore common 'masculine' tropes attributed to this type of weapons – such as their lack of emotion – to call the attention for the implications and consequences of their possible employment. It also unravels the masculinised predatory and aggressive imagery they can project, which can imprint a notion of a super-strong, overpowering, cold-hearted, aggressive and dominant predator hovering around and controlling the life and death of those it can possibly target. As a result, instead of following the common logic of hegemonic masculinity values abetting for the acceptance of certain phenomena, here the narrative actually critiques LAWs due to their possibility to represent a hyper-masculinisation with dangerous consequences.

Despite advocates for the ban denouncing the dangers of LAWs' "lack of emotions" or their "predatorism" aura, it cannot be stressed enough that they commonly do so without directly exposing that such traits are linked to gendered hierarchies and masculine notions of power. Within the data analysed for this study, the only texts that frankly recognised the gendered prisms of LAWs were the statements done by WILPF's disarmament programme "Reaching Critical Will" in the 2015 CCW Meeting of High Contracting Parties and in the 2016 CCW Meetings of Experts on LAWs.¹¹⁰ In both instances, the organisation pointed out that autonomous weapons have several gendered dimensions, which can have gendered implications as well.¹¹¹ The organisation highlighted the link between rationality, lack of emotions and violent masculinities.¹¹² Moreover, it underscored how such hegemonic masculinity values can lead to the perpetuation of problematic assumptions that "women are weak and in need of protection", which in turn can prompt gendered targeted killings as seen in the case of drones.¹¹³

More than a mere rhetoric exercise, if the arguments in favour of the ban unearthed such masculinised layers of LAWs, they could be able to unpack deeper concerns with the use of such devices. For instance, such gender lens would allow for a more in-depth account on how the perpetuation of gendered biases within the mind-sets of those who develop and employ LAWs could have spill-overs on the way they are employed and affect the targeted population. This analysis has, for example, been carried out in the case of drones, through which studies have underscored that the gendered ambiance of drone warfare has led to gendered targeting

¹⁰⁸ M. Ekelhof & M. Struyk 2014, *supra* note 85, p. 23.

¹⁰⁹ Permanent Mission of the Holy See to the United Nations and Other International Organizations in Geneva 2015, *supra* note 101, pp. 4-5.

¹¹⁰ Women's International League for Peace and Freedom, 'Statement to the CCW Meeting of High Contracting Parties', at: <http://www.reachingcriticalwill.org/images/documents/statements/CCW2015.pdf> (accessed 19 May 2018); Women's International League for Peace and Freedom, 'Statement to the 2016 CCW meeting of experts on lethal autonomous weapon systems, 11 April 2016', at: [https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/F5C8520239F50D11C1257F9A004441E8/\\$file/2016_LAWS+MX_GeneralExchange_Statements_WILPF.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/F5C8520239F50D11C1257F9A004441E8/$file/2016_LAWS+MX_GeneralExchange_Statements_WILPF.pdf) (accessed on 18 April 2018).

¹¹¹ *Ibid.*

¹¹² Women's International League for Peace and Freedom 2016, *supra* note 111.

¹¹³ *Ibid.*

in such operations.¹¹⁴ Drone strikes follow a distinctive pattern of targeting military-aged men, an assumption that follows from the gendered notion that men are fighters, while women are the weak individuals in need of protection.¹¹⁵ It largely disregards that women can also be fighters and supporters of terrorist insurgencies and organizations, and not merely defenceless victims.¹¹⁶ In view of the consideration that LAWs would certainly maximise the effects seen with drones, a more direct gender perspective would be crucial to call the attention for the greater impact they could have on the ways individuals experience warfare.

V.2 Between Cowardliness and a Protector Nation

Another way in which gendered speech was apparent in the textual data analysed was regarding the specific image constructed around the nation willing to develop it further and employ it in warfare. Similar to the case of drones, this happens both ways: LAWs are either disavowed for purportedly being the “weapon of the coward” or supported for their capacity to reduce risks for human combatants. On one side of the discussion, the same arguments that link drone strikes with unmanliness are also applied in the case with LAWs. As delineated in PAX’s report, these robotic technologies can be seen as devices used by “cowardly”, non-courageous parties to alleviate the risks and the “dirty work of war”.¹¹⁷ However, these arguments also highlight an interesting side of the minimisation of risks: how the lack of peril can actually boost the aggressiveness of a party that uses such technology.

In this regard, for example, Costa Rica’s delegation to the 2016 CCW Meeting of Experts highlights that one of the main constraints for military commanders is the mortal danger the battlefield presents for soldiers.¹¹⁸ Since LAWs exclude that danger from the military reasoning formula, parties would be more willing to use force and engage in armed conflicts.¹¹⁹ LAWs are then constructed in this discourse as creating a sort of “aggressiveness-cowardliness” paradox: their ability to eliminate risks both attracts “cowards” and increases the courage for direct confrontation and willingness to go to war. The same line of argumentation was brought by four out of the nine specialists discussing these security concerns of LAWs in the 2016 CCW Meeting of Experts, through which they link the promise of significantly reduced military casualties brought by LAWs to a possible increase in the likelihood of parties to resort to armed force.¹²⁰ In a

¹¹⁴L.B. de Volo 2015, *supra* note 26, pp. 19-23; L. Wilcox, ‘Embodying algorithmic War: Gender, Race and the Posthuman in Drone Warfare’, *Security Dialogue* 2017-48(1), pp. 11-48. See also: Reaching Critical Will & Article 36, ‘Sex and Drone Strikes: Gender and identity in targeting and casualty analysis’, at: <http://www.reachingcriticalwill.org/images/documents/Publications/sex-and-drone-strikes.pdf> (accessed on 19 May 2018).

¹¹⁵*Ibid.*

¹¹⁶See, for instance: D. Chatterjee, ‘Gendering ISIS and Mapping the Role of Women’, *Review of the Middle East* 2016-3(2), pp. 201-218.

¹¹⁷M. Struyk 2014, *supra* note 85, p. 3; M. Ekelhof & M. Struyk 2014, *supra* note 85, p. 23.

¹¹⁸Delegation of Costa Rica, ‘Convención de Ciertas Armas Convencionales, Reunión de Expertos sobre Armas Autónomas Letales, Segmento Derechos Humanos y cuestiones éticas, 14 de abril de 2016, Intervención de la Delegación de Costa Rica’, at: [https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/CC4712113BA981C7C1257F9B002CF165/\\$file/2016_LAWS+MX_HREthicalIssues_Statements_CostaRica.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/CC4712113BA981C7C1257F9B002CF165/$file/2016_LAWS+MX_HREthicalIssues_Statements_CostaRica.pdf) (accessed 9 March 2018), p.1

¹¹⁹*Ibid.*

¹²⁰See: J. Dhanapala, ‘The security impacts of lethal autonomous weapons systems’, Note Speech at the CCW Third Informal Meeting of Experts on Lethal Autonomous Weapons Systems (Geneva, 14 April

similar note, Cuba's considerations on the overarching issues of LAWs in the 2015 CCW Meeting of Experts points out how the further development and future employment of LAWs could unprecedentedly encourage the use of force – thus 'lowering the threshold to the use of force – and significantly boost an arms race.'¹²¹ General reports of the 2016 and 2017 CCW Meetings also indicate that this was the concern of several delegations present.¹²² Moreover, in its contribution to the discussion over the overarching issues of LAWs held in the 2015 CCW Meeting of Experts, the Holy See has called the attention as to how the development of LAWs might be grounded not merely on 'military usefulness, but especially on 'dreams of power' bolstered 'by the sole will to realise a pure demonstration of force'.¹²³

This consideration is particularly interesting when one considers the shift of the protector's role from the "individual soldier" to the "nation" – as already discussed in the literature review regarding the employment of unmanned aerial vehicles. The risk society pushes for the nation to protect not only its citizens, but also its soldiers – which requires the continuous effort and development of new technologies aimed at safeguarding those individuals from danger. These developments cannot be detached from the "menaces" they seek to counter. Rather, the need for these technologies is framed within a narrative that is constituted and reinforced by the power and dangerousness posed by contemporary threats. Issues such as terrorism, for example, are frequently considered to have "expanded the modern battlefield" both in time and space; it is a phenomenon that is viewed to constantly call for matching counter-techniques.¹²⁴ With this in mind, advocates for the progressing development of LAWs speak of their capability to "expand the battle space" and "extend the soldier's reach" – all the while also

2016), at: [https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/5F53E22F52D4593DC1257F9B0051EC39/\\$file/2016_LAWS+MX_presentations_security_dhanapalanotes.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/5F53E22F52D4593DC1257F9B0051EC39/$file/2016_LAWS+MX_presentations_security_dhanapalanotes.pdf) (accessed 9 March 2018), pp. 1-3; D. Garcia, 'The Lethal Artificial Intelligence Problem', at: [https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/C271FFAE12323025C1257F9A004AA384/\\$file/2016_LAWS+MX+Presentations_SecurityIssues_Denise+Garcia+note.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/C271FFAE12323025C1257F9A004AA384/$file/2016_LAWS+MX+Presentations_SecurityIssues_Denise+Garcia+note.pdf) (accessed 9 March 2018), p. 3; V. Kozyulin, 'International and Regional Threats Posed by the LAWS: Russian Perspective', at: [https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/77058244E836364EC1257F9A0049F24A/\\$file/2016_LAWS+MX+Presentations_SecurityIssues_Vadim+Kozyulin.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/77058244E836364EC1257F9A0049F24A/$file/2016_LAWS+MX+Presentations_SecurityIssues_Vadim+Kozyulin.pdf) (accessed 9 March 2018); J. Galliot, Note Speech at the 2016 CCW Meeting of Experts on Laws, at: [https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/7CC8CF712FD16B34C1257F9A0047DDC4/\\$file/2016_LAWS+MX+Presentations_SecurityIssues_Jai+Galliot+note.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/7CC8CF712FD16B34C1257F9A0047DDC4/$file/2016_LAWS+MX+Presentations_SecurityIssues_Jai+Galliot+note.pdf) (accessed 9 March 2018).

¹²¹ Misión Permanente de la República de Cuba ante la Oficina de las Naciones Unidas en Ginebra y otros Organismos internacionales con sede en Suiza, 'Declaración de Claudia Pérez Alvarez, Consejera de la Misión Permanente de la República de Cuba en Ginebra. Reunión de expertos sobre Sistemas de armas autónomas letales. 16 de abril 2015, Ginebra, Suiza', in Spanish at: [https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/279C1B39EF295B2DC1257E2900466CBA/\\$file/2015_LAWS_MX_Cuba_Ethics.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/279C1B39EF295B2DC1257E2900466CBA/$file/2015_LAWS_MX_Cuba_Ethics.pdf) (accessed 19 May 2018), p. 2.

¹²² United Nations Convention on Prohibition or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects 2016, *supra* note 21, pp. 8-11; United Nations Convention on Prohibition or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects 2017, *supra* note 68, p. 3.

¹²³ Permanent Mission of the Holy See to the United Nations and Other International Organizations in Geneva, 2015 *supra* note 101, p. 6.

¹²⁴ In this regard, Amoore gives a thought-provoking contribution to how the discourses of the far-reaching and omnipresent character of terrorism contributed to the development of algorithmic securitization techniques that allow for 'war on terror' policies to be applicable anywhere, at any time. (L. Amoore, 'Algorithmic War: Everyday Geographies of the War on Terror', *Antipode* 2009- 41(1).

removing soldiers from ‘the most dangerous and life-threatening missions’.¹²⁵ The apparent “cowardliness” of removing human soldiers from the risks of the battlefield is then counter-weighted by the imagery of a patriarch protector nation making use of a mighty technology to combat an equally powerful threat.

Moreover, the ‘protector’ representation of the nation also holds a ‘predatory masculinity’ notion at the end of the spectrum.¹²⁶ As explained before, robotic warfare can signal a demonstration of force, power and aggressiveness by the nations willing to develop and employ them.¹²⁷ In view of this, the arguments that link LAWs to the possible increase on the aggressiveness by parties hint at how these technologies may reinforce and re-assure the role of global patriarch predators by the nations willing to use such devices.¹²⁸ Furthermore, and as the example of drones can show, the predatory imagery that comes attached with robotic warfare usage also has impacts on the ways the nation is perceived by the population of the attacked area. The terrorising presence of drones, combined with frequent follow-up attacks targeting those attempting to rescue the injured from the initial strikes, can signal “powerful yet abusive masculin[ity]” of the nation using drones, which can in turn spur grievance among the local civilians and lead them to support a masculinised and violent response to the situation as well.¹²⁹

Once again, the critiques around this predatory aura – not only of the weapon itself, but also of the nation-state employing it – is done in an indirect manner. Due to this, it misses the opportunity of exposing how LAWs may incite a further masculinised hierarchical divide among nations. Additionally, it loses the chance of exploring more substantively how they might fuel a cycle of violence spurred by demonstrations of masculinised power and violent masculinity.

IV. Conclusions and Suggestions for Further Research

This study sketched an overview of the relevance of giving a gender analysis on the linguistic structures that shape, influence and consolidate current perceptions around robotic combat technologies and their increased usage in the military. It gave a literature review on how gender is perceived to both influence and be affected by robotic warfare. However, as the current specialised literature gives greater attention to drones because of their current employment in military operations, this study chose to focus on the debate concerning a possible pre-emptive ban on LAWs, as they are frequently quoted as the next landmark RMA.

Over the course of the analysis, this study highlighted how the arguments in favour and against the ban communicate differently with hegemonic masculinity values embedded in the further development and employment of LAWs in warfare. Propositions for a ban usually anthropomorphise and import masculinised traits to LAWs to allow their unimpeded development, or imprint a ‘protector’ value to the nation willing to use them. On the other hand, discourses defending the ban have criticised such hyper-masculine approaches, although in an indirect manner. Despite advocates for the ban denouncing the dangers of considerably hyper-masculine traits associated with LAWs – such as “lack of emotions” and potential “predatorism” aura – the analysis showed that they commonly do so without directly exposing

¹²⁵ R. Arkin 2017, *supra* note 16, pp. 35-6

¹²⁶ L.B. de Volo 2015, *supra* note 26, pp. 15-6.

¹²⁷ *Ibid.*

¹²⁸ *Ibid.*

¹²⁹ *Idem*, p. 16.

that such characteristics are inextricably linked to gendered hierarchies and masculine notions of power. This piece then indicated that, if the arguments in favour of the pre-emptive prohibition on LAWs could unearth such masculinised layers of such technologies more directly, they could be able to unpack deeper concerns with the use of such devices – such as the perpetuation of gendered biases in LAWs’ targeted killings or the exacerbation of violent, masculinised power unbalances among states.

However, given the limited timeframe available for this research, suggestions for further improvement and expansion would most definitely include a broader and more systematic analysis of the entire documentation produced in the CCW Meetings on LAWs. This would specifically include the expansion of the research to analyse with further scrutiny all the general exchange statements of the participants in abovementioned conferences. Moreover, the possibility of expanding the analysis to other organizational platforms could also be explored, such as the broader media or other international *fora* related to the topic of disarmament.