

Forum:*Disarmament commission*

Issue: *Building a framework to monitor the rapidly evolving artificial intelligence and autonomous weapons*   
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1. **Introduction**

Fully autonomous weapons, also known as "killer robots," would be able to select and engage targets without human intervention. Precursors to these weapons, such as armed drones, are being developed and deployed by nations including China, Israel, South Korea, Russia, the United Kingdom and the United States. It is questionable that fully autonomous weapons would be capable of meeting international humanitarian law standards, including the rules of distinction, proportionality, and military necessity, while they would threaten the fundamental right to life and principle of human dignity. Many arguments have been made for and against autonomous weapons, for example that replacing human soldiers by machines is good by reducing casualties for the owner but bad by thereby lowering the threshold for going to battle. The key question for humanity today is whether to start a global AI arms race or to prevent it from starting. If any major military power pushes ahead with AI weapon development, a global arms race is virtually inevitable, and the endpoint of this technological trajectory is obvious: autonomous weapons will become the Kalashnikovs of tomorrow. Unlike nuclear weapons, they require no costly or hard-to-obtain raw materials, so they will become ubiquitous and cheap for all significant military powers to mass-produce. It will only be a matter of time until they appear on the black market and in the hands of terrorists, dictators wishing to better control their populace, warlords wishing to perpetrate ethnic cleansing, etc. Autonomous weapons are ideal for tasks such as assassinations, destabilizing nations, subduing populations and selectively killing a particular ethnic group. We therefore believe that a military AI arms race would not be beneficial for humanity. There are many ways in which AI can make battlefields safer for humans, especially civilians, without creating new tools for killing people.

1. **Definition of Key Terms**

Autonomous

Denotation: Ones power to make decisions independently

Connotation: Autonomy in weaponry is the technology that allows weapons to activate, engage targets, and deactivate independently. Once this autonomy reaches above the boundaries set by specific programmed constraints and descriptions, the machines reach artificial intelligence, and are able to simulate human intelligence and operate in complete independence.

Cyber-security:

Denotation: Cyber security refers to the body of technologies, processes, and practices designed to protect networks, devices, programs, and data from attack, damage, or unauthorized access. Cyber security may also be referred to as information technology security.

Connotation: A new study has shown that artificial intelligence can be used to hack into and attack different cyber-security platforms in order to gain access into government information and programs.

Algorithmic warfare

Denotation: An algorithm is a process or set of rules to be followed when performing computations or other problem-solving operations, especially by non-human entities, such as a computer. Algorithms may also become the conceptual and technical foundation stone of future warfighting.

Connotation: The arms race in autonomous weapons is slowly leading to an algorithmic warfare.

Arms race

Denotation: A competition between nations for superiority in the development and accumulation of weapons.

Connotation: An artificial intelligence arms race is a competition between two or more states to have its military forces equipped with the best "artificial intelligence" (AI). Since the mid 2010s, many analysts have argued that a such a global arms race for better artificial intelligence has already begun.

1. **General Overview – Background information**

Technological development has become a rat race. In the challenge that prompts the developing innovation race and the advanced fighting battleground, artificial intelligence is quickly turning into the focal point of the worldwide strategic maneuver. As seen over numerous countries, the improvement in autonomous weapons framework is advancing quickly, and this expansion in the arming of man-made reasoning appears to have turned into an exceedingly destabilizing advancement. It brings complex security challenges for not only each nation’s decision makers but also for the future of humanity. The reality nowadays is that artificial intelligence is leading the world towards a new algorithmic warfare battlefield that has no boundaries or borders. May or may not have humans involved and will be impossible to understand and perhaps control across the human ecosystem in cyberspace, geo space, and space. As a result, the very idea of the arming of artificial intelligence, where a weapon system that, once activated across CGS, can select and engage human and non-human targets without further intervention by a human designer or operator, is causing great fear. As artificial intelligence and profound taking in develops further and moves from idea to commercialization, the fast-increasing speed in figuring power, memory, enormous information, and rapid correspondence isn't just making advancement, venture and application free for all but at the same time is strengthening the mission for AI chips. This continuous fast advancement and improvement imply that man-made brainpower is on the way to reforming fighting and that countries are without a doubt going to keep on building up the robotized weapons framework that AI will make conceivable. When nations individually and collectively accelerate their efforts to gain a competitive advantage in science and technology, the further arming of AI is inevitable. Accordingly, there is a need to visualize what would an algorithmic war of tomorrow looks like, because building autonomous weapons systems is one thing but using them in algorithmic warfare with other nations and against other humans is another. As nations, individually and collectively accelerate their efforts to gain a competitive advantage in science and technology, further arming of AI is inevitable. As a result, the positioning of AWS would alter the very meaning to be human and will in no uncertain terms alter the very fundamentals of security and the future of humanity and peace.

1. **Major Parties Involved and Their Views**

United States of America

The U.S. Department of Defense on Feb. 12 released its roadmap for artificial intelligence. The US, along with a few other nations have decided to block the progress on towards the international ban on killer robots and the use of autonomous weapons. the government’s argument is that any regulation would be premature, hindering new developments which would protect civilians. The Pentagon’s current policy is that there should always be a ‘man in the loop’ controlling any lethal system, but the submission from Washington to the recent UN meeting argued otherwise: “Weapons that do what commanders and operators intend can effectuate their intentions to conduct operations in compliance with the law of war and to minimize harm to civilians.”

United Nations

The UN has a clear stance on the future of autonomous weapons. The UN’s SG Antonio Gutteres urged the planning of meetings through the CCW (convention on conventional weapons) to discuss lethal autonomous weapons, and specifically to restrict the development of these lethal weapons. In a message to the Group of Governmental Experts, the UN chief said that “machines with the power and discretion to take lives without human involvement are politically unacceptable, morally repugnant and should be prohibited by international law”. The SG has also stated that no country or armed force is in favor of such “fully autonomous” weapon systems that can take human life, Mr. Guterres insisted, before welcoming the panel’s statement last year that “human responsibility for decisions on the use of weapons systems must be retained, since accountability cannot be transferred to machines”.

China

China states that its call is to ban the use of fully autonomous weapons, but not their development or production. China has expressed its desire to negotiate and conclude a new CCW (Convention on Conventional weapons) protocol to prohibit the use of fully autonomous lethal weapons systems. In response to the campaign’s queries, the delegation of China confirmed its ban call, but stressed that it is limited to use only. But, China has aspirations to become a world leader in the production of AI and autonomous tools and has already been accused of using the technology in espionage.

Africa

African countries as a group expressed their support for a prohibition on fully autonomous weapons. The campaign is asking each country to make a national statement affirming their support for this objective. Roboticists and AI experts have long warned of the dangers of lethal autonomous weapons systems, and of a new global arms race. In several open letters, they have urged the UN to negotiate an international treaty that prohibits their production and use. Nobel laureates and civil society groups around the globe are actively working to promote such a ban. In 2014, Archbishop Emeritus Desmond Tutu and other African faith leaders joined the call for a ban by signing a joint statement issued by more than 160 religious leaders and organizations, saying “robotic warfare is an affront to human dignity and to the sacredness of life”. Although the technology involved in autonomous weapons may be complicated, the question countries now need to take a firm stand on is really quite simple: Should machines be allowed to make life-and-death decisions?

Russia

Progress for a negotiating mandate for the 2019 CCW meetings on reducing and regulating the future of lethal autonomous weapons was blocked by Russia as well as 2 other countries. On the 23rd of November, 2018, all states except for Russia were prepared to accept a proposal for two full weeks of deliberations on killer robots next year. Unfortunately, because the CCW is a consensual convention, Russia had the power to block it. They insisted that one week was more than enough. Their case was that "our delegation cannot agree with the alarmist assessments predicting that fully autonomous weapons systems will inevitably emerge in the coming years." A number of high profile members of the Russian defense establishment have been talking about robotizing the battlefield with a range of autonomous weapons systems. The president of Russia Vladimir Putin and the chief of the general staff of the Russian armed forces, told the military news agency that the use of robots will be one of the main features of future wars. He also said that Russia seeks to completely automate the battlefield.

1. **Timeline of Events**

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| **Date** | **Description of event** |
| 1950 | British mathematician Alan Turing, suggested the question of “I propose to consider a question, ‘Can machines think?’” |
| 1953  1966  May 197 Sdsdsad asdjasjdjsdhsjdj a  1979  2000  2005  September 2006 sadja  2010  2013 kasakaaaaaa  2015 kkkkkkkkkkkk  2016 skdjasa asdkd akdjaksd akdadkasd  2017 | The USS Mississippi test-fires one of the first computer guided missiles.  Shakey the Robot, developed by SRI International, was the first to embody artificial intelligence—it could perceive its surroundings  The US air force uses laser-guided weapons, marking it as the first time a “smart bomb” successfully destroys a major enemy target.  First computer-controlled autonomous vehicle.  First robotic assisted surgery  First autonomous vehicle was produced and named “Stanley”  South Korea launches first AI robot armed with machine guns, that are capable of autonomous tracking and targeting.  Apple introduces Siri, China becomes a top researcher in AI  Advanced humanoid robot designed for various search and rescue tasks  Elon Musk and 3,000 in AI robotics write an open letter to ban the development of autonomous weapons.  Tesla and ford announce timelines for fully autonomous vehicles, The US department of defense increases its investment in AI research and production.  At the United Nations’ Convention on Conventional Weapons, after a discussion of a potential ban on “killer robots,” twenty-two countries call for an outright ban on lethal automated weapons. |

1. UN Involvement, Relevant Resolutions, Treaties and Events:
   * CCW Report, Vol. 6, No. 12: Misuse of consensus strikes again
   * CCW Report, Vol. 6, No. 6: Address killer robot concerns by creating new law
   * CCW Report, Vol. 6, No. 7: A simple premise: programs should not end lives
2. Evaluation of Previous Attempts to Resolve the Issue

*(State what previous attempts has been (what was the action plan of resolutions passed above))*

1. Possible Solutions

*(Come up with 2 of your own solutions to the problem and have them in paragraph format)*

1. Guiding Questions
2. Is your country with or against the use and production of autonomous weapons?
3. How far is your country willing to go to ban the production of these weapons? (If it is against it)
4. Does your country have any past with autonomous weapons and artificial intelligence?
5. Are your country’s allies with or against the use and production of autonomous weapons?
6. What are the disadvantages of autonomous weapons?
7. What are the advantages of autonomous weapons?
8. Are the sanctions and conventions that the UN are enforcing benefiting the future of the prevention of autonomous weapons?
9. Why is your country with the development of autonomous weapons?
10. What is your countries relationship with the countries that are with autonomous weapons? (Israel, Russia and the US)
11. What if the countries that are with autonomous weapons refuse to cooperate on the regulation of these lethal weapons?
12. Appendices and useful links
13. [*http://mil-embedded.com/10002-artificial-intelligence-timeline/*](http://mil-embedded.com/10002-artificial-intelligence-timeline/)
14. [*https://www.theverge.com/2018/8/27/17786080/united-nations-un-autonomous-killer-robots-regulation-conference*](https://www.theverge.com/2018/8/27/17786080/united-nations-un-autonomous-killer-robots-regulation-conference)
15. [*https://www.unog.ch/80256EE600585943/(httpPages)/4F0DEF093B4860B4C1257180004B1B30?OpenDocument*](https://www.unog.ch/80256EE600585943/(httpPages)/4F0DEF093B4860B4C1257180004B1B30?OpenDocument)
16. [*https://foreignpolicy.com/2019/02/13/no-the-pentagon-is-not-working-on-killer-robots-yet/*](https://foreignpolicy.com/2019/02/13/no-the-pentagon-is-not-working-on-killer-robots-yet/)
17. [*https://www.hrw.org/topic/armas/killer-robots*](https://www.hrw.org/topic/armas/killer-robots)
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