Altitude UNA–NCA Model United Nations

Background Guide

United Nations Educational, Scientific and Cultural Organization

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Letter from the Under-Secretary-General

Esteemed delegates,

I would like to formally welcome you to Altitude Model UN! We are thrilled to be receiving you in the beautiful New York City. After almost three years since the beginning of the COVID-19 pandemic, we are excited to finally return to presencial MUN activities. Altitude Model UN is a simulation program that exists thanks to an important team of college student organizers from across the globe engaged in a collective effort, all the while inviting the best young delegates of the world to test their diplomatic acumen in an academic environment next to none! Our educational methodology is unique in its form, allowing you to polish your strengths as well as identify areas of opportunity that only show up some years after you begin your MUN careers.

You will be arriving in a simulation, and dare I say, a city that has been changed as have we all due to COVID-19. The importance of principled diplomacy, dialogue, and multilateral solutions has been set too low by our current Heads of State, business leaders, and international organizations. Most urgently, empathy has become a buzzword for various figures calling for change, with widely differing results depending how honest this use was. I mention this because the 'Our Common Agenda' report wants you, the participants, to acquire skills that we believe are key to improving the world we live in. With some of our themes being "making peace with nature… healing geopolitical rifts [and] launching a reset for the 21st century". I do not feel I exaggerate when I say that we must regroup and touch ground to see what is next after the last three years.

This last point is crucial for your resolutions and the debate you will bring with you after extensive policy research to accurately display your assigned country's position. Our background guides have been written by professionals proud of their research capabilities, but I ask that you conduct much more regarding your own delegation's stances. The educational nature of Altitude MUN, even if prizes for delegate performance do exist, will reward you much more for your future simulations, education, and even your professional careers. I still remember the last country I represented as a delegate vividly, as well as its history, its voting record, and the profile that makes it act in a certain way. This enriches not only our MUN, but your paths, wherever they may lead. So learn. Do so avidly. And become your country's advocate with the same passion we have to become your Secretariat.

Yours sincerely,

Diego Zermeño Sánchez
Under-Secretary-General of Middle School Committee.

The Committee

United Nations General Assembly 1: Disarmament and International Security

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Introduction to the Committee:

In 1945 under the founding documents of the United Nations (UN), The Charter of the United Nations the General Assembly (GA) was established. The General assembly is the only organ where all 193 member countries are a part of. Hence, it is a forum of diplomatic excellence with multilateral representation of all members. It is for this reason that the General Assembly is a crucial part of the UN's chief policy making organ including international laws. Located in its headquarters in New York City but also all around the world the GA is a beacon of global equality.

Naturally, such a diverse and encompassing organ would be overwhelmed with all the topics that need to be tackled. For this reason, the GA is divided into six main committees. Each committee discusses solely the topics relevant to their committee thus increasing the efficiency in the work of the United Nations. The decisions made by each committee are presented to the Plenary of the Assembly in the form of a draft resolution. In accordance with the Charter of the United Nations the General Assembly may:

- Assess and concord the United Nations budget and set up financial evaluations of Member States.

- Elect the members of various United Nations organs including the non-permanent members of the Security Council. This may also encompass the selection of the Secretary-General if recommended by the Security Council to do so.

- Analyze and recommend policies for cooperation in an attempt to maintain peace and security. When necessary, the General Assembly can recommend disarmament.

- Debate threats to international peace and security when these threats are not already being tackled by the Security Council. If the threat is already being discussed in the Security Council, the GA may make recommendations.

- Debate and make recommendations on topics and questions of functionality and empowerment within the Charter in relation to other organs of the United Nations.

- Study and recommend initiatives on international cooperation, expanding and codifying international laws, settling

fundamental human rights, and international cooperation in economic, humanitarian, health, social, cultural, and educational aspects.

- Make recommendations on any situation that may challenge the amiable relationship between nations for a peaceful agreement.

- Review and examine any reports from United Nation organs including the Security Council.

Some of the greatest achievements of the General Assembly are the Millennium Declaration from 2000 and the 2005 World Summit Outcome Document. In them the GA showed commitment to the peace and to its member states in the eradication of poverty, protection of human rights, increasement of security for all and much more. Recently, in 2015 the General Assembly in an attempt to once again, provide peace and growth to all nations, the 17 Sustainable Development Goals were established. These are but a few of the massive resolutions passed by the General Assembly.

As aforementioned, the General Assembly is divided into six committees. The first committee of the General Assembly is called the Disarmament and International Security Committee (DISEC) also sometimes referred to as the First Committee. It was formed in accordance with article 11 of the UN charter *"...the General Assembly may consider the general principles of cooperation in the maintenance of international peace and security, including the principles governing disarmament and regulation of armaments..."* As the name of the committee suggests, the DISEC's main goal is to tackle issues involvi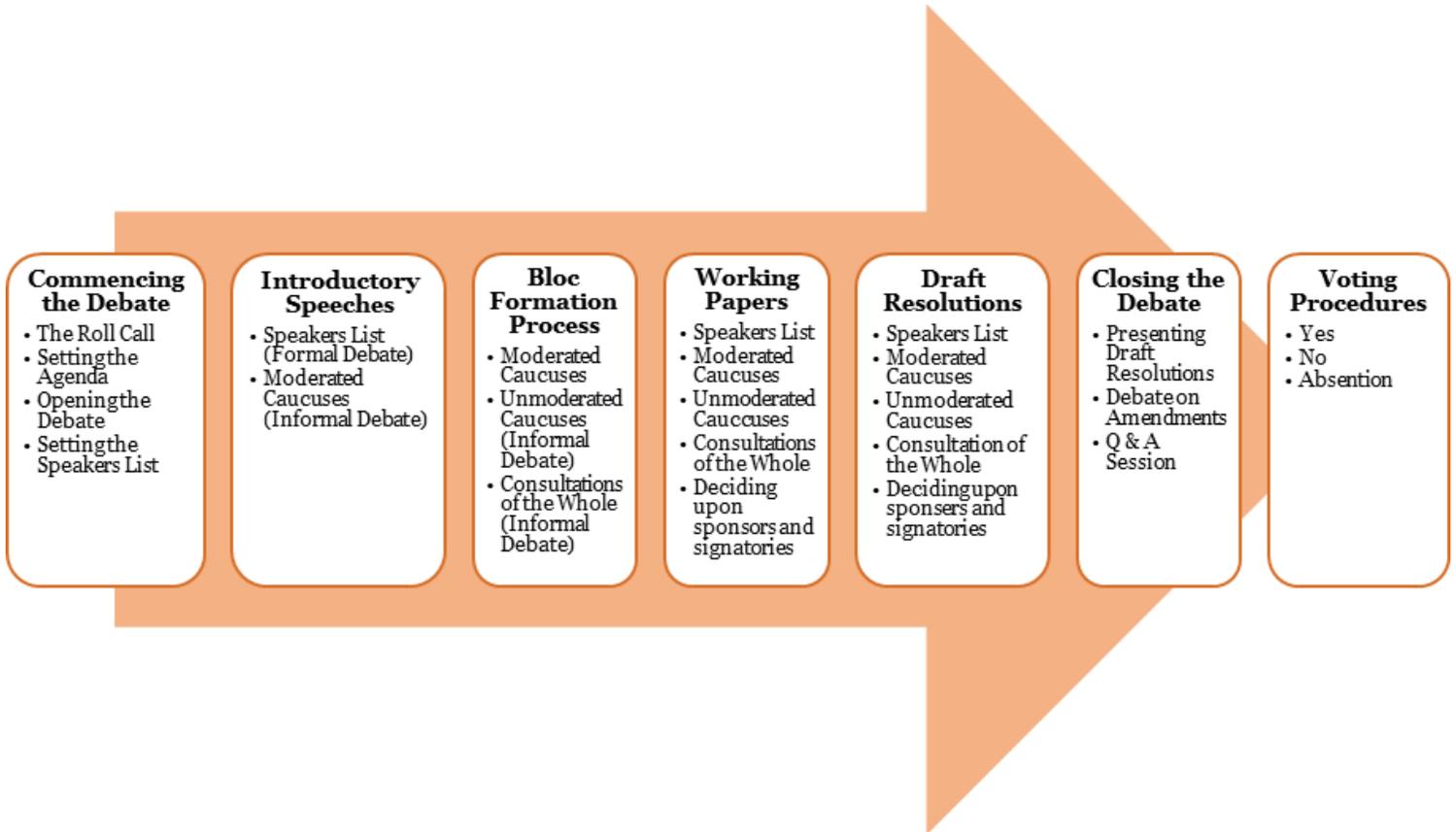ng disarmament. In specific, the committee deals with dangers to international peace and finding solutions for threats to global security. The Disarmament and International Security Committee is the main organ of the UN governing disarmament, weapon regulations and promotion of international collaboration and stability in relation to armaments. In practice this include resolutions on ammunitions, biological weapons, chemical weapons, counter terrorism, military spending, missiles, light weapons, and much more. The DISEC does not work alone however, it works closely with the United Nations Disarmament Commission and the Conference on Disarmament based in Geneva. The sessions of the First Committee happen in a set structure:

1. A General Debate
2. Discussions on a specific theme
3. Actions on drafts

Moreover, in accordance with rule 58 of the rules of procedure of the General Assembly, the First Committee is the only main committee in the General Assembly that is entitled to verbatim records coverage. Meaning that the records of every meeting must be quoted and registered on a word-to-word basis, the words recorded are the exact words spoken in the original meeting. The first ever resolution of the General Assembly, Resolution 1 (I), was passed under the recommendation of the First Committee. Resolution 1 is entitled "Establishment of a Commission to Deal with the Problems Raised by the Discovery of Atomic Energy" and it was passed on the 24th of January 1946 in London. This just goes to show that from the foundation of the General Assembly and of the United Nations itself the Disarmament and International Security Committee was a crucial organ for peace and security.

At a Glance: The Conference

The Flow of Debate

Commencing the Debate	Introductory Speeches	Bloc Formation Process	Working Papers	Draft Resolutions	Closing the Debate	Voting Procedures
• The Roll Call • Setting the Agenda • Opening the Debate • Setting the Speakers List	• Speakers List (Formal Debate) • Moderated Caucuses (Informal Debate)	• Moderated Caucuses • Unmoderated Caucuses (Informal Debate) • Consultations of the Whole (Informal Debate)	• Speakers List • Moderated Caucuses • Unmoderated Cauccuses • Consultations of the Whole • Deciding upon sponsors and signatories	• Speakers List • Moderated Caucuses • Unmoderated Caucuses • Consultation of the Whole • Deciding upon sponsers and signatories	• Presenting Draft Resolutions • Debate on Amendments • Q & A Session	• Yes • No • Absention

Key Terms and Concepts

- **Absolute Majority:** Also known as a two-thirds majority, an absolute majority is ⅔ of the quorum (or 66.7% of the quorum). Assuming a committee quorum is 60, the absolute majority would be two-thirds of 60, which is 40.

- **Decorum:** The constant order and respect expected from all members of the committee throughout the Conference.

- **Draft Resolution:** Once delegates have compiled their ideas through the working paper, delegates must transform them into an official resolution format. This formal document is known as a Draft Resolution. The reason behind it incorporating the word 'draft' is because the resolution is yet to be adopted by the Committee. Moreover, a Committee may have more than one Draft Resolution but it can only have one official resolution at the end.

- **Friendly Amendment:** Amendments are considered **friendly** if all of the sponsors of the original Draft Resolution agree to it.

- **Interruptive Points:** Interruptive points are those that can be put forth at any time during the debate process. However, at Altitude MUN, the interruptive points cannot be used to interrupt a delegate giving a speech.

- **Motion:** Delegates will use motions to move from one part of the debate to another. As such, motions will be the outlet used to decide upon the next course of action throughout the conference.

- **Non-Interruptive Points:** Unlike interruptive points, non-interruptive points can only be used when a Chairperson explicitly asks if there are any points or motions on the floor.

- **Point:** Contrary to motions, which delegates put forth to decide upon the next course of the debate, points are used for the sole purpose of facilitating the conference's procedure.

- **Present:** Delegates can vote on a resolution with 'yes', 'no', or 'abstention'.

- **Present and Voting:** Delegates have to vote on a resolution with either a 'yes' or 'no'.

- **Roll Call:** The first part of the Conference is known as the roll call. During the roll call, the name of each participating nation will be called aloud in alphabetical order by the Dais. Delegates can either respond with 'present' or 'present and voting'. A roll call will be taken everytime delegates reconvene at the conference setting after postponement of the debate.

- **Sponsors:** The nations that have contributed the most in terms of developing a particular document, particularly the Draft Resolution.

- **Signatories:** Signatories are nations that wish to see a certain document debated. Signatories do not have to be members of the bloc writing the document.

- **Simple Majority:** A simple majority is 50% of the quorum plus '1'. For instance, let us assume that the quorum for a committee is 60. Therefore, the simple majority for this committee would be 31.

- **Quorum:** The total number of nations present at the committee.

- **Unfriendly Amendment:** Amendments are considered **unfriendly** if at least one of the sponsors of the original Draft Resolution disagrees with it.

- **Working Paper:** The first step in the resolution formation process, the working paper is an **informal document** where delegates can begin gathering ideas and forming solutions in point format. It essentially a 'rough draft' of the Draft Resolution that will follow.

- **Yields:** If a delegate finishes their Speakers List speech and still has some speaking time to spare, they must yield their time. Delegates can either yield their time to the Chairperson, to questions, or to another delegate. Delegates should note that they only have the option to yield their time during the formal debate (the Speakers List).

Rules of Debate

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Written Motions

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Instead of voicing them aloud, these motions are written on formal notes and delivered to the Chairperson by way of an Usher.

Format:

From: Delegates should insert the full names of their nations here.
To: Chairperson
Purpose:

- **Appeal to the Chairperson's Decision:** If the delegate wishes to motion for an appeal to the Chairperson's decision, the purpose should look similar to the following:

"The delegate of (insert full name of nation) motions for an appeal to the Chairperson's decision because (insert reasoning behind the appeal)."

- **Right of Reply:** If the delegate wishes to motion for a right of reply, the purpose should look similar to the following:

"The delegate of (insert full name of nation) motions for a right of reply to (insert full name of target nation) because (insert reasoning behind the right of reply)."

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Verbal Motions

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These motions can be verbalized aloud when the Committee Chairperson opens the floor for any points or motions. One significant aspect to take into account is that verbal motions need to be seconded.

The Debate

"The delegate of (insert full name of nation) motions to open the debate to discuss (input the Committee topic)."

- **The Speakers List**

"The delegate of (insert full name of nation) motions to set the Speakers List for a speaker's time of (insert the suggested length of speaking time per delegate)."

To pass, this motion requires a simple majority.

- **Moderated Caucus**

"The delegate of (insert full name of nation) motions to suspend the debate and move into a moderated caucus with a total time of (insert total duration of the caucus) and a speaker's time of (insert the suggested length of speaking time per delegate) to discuss (insert desired topic)."

To pass, this motion requires a simple majority.

- **Unmoderated Caucus**

"The delegate of (insert full name of nation) motions to suspend the debate and move into an unmoderated caucus for a total time of (insert total duration of the caucus) to (insert desired purpose of unmoderated caucus)."

To pass, this motion requires a simple majority.

- **Consultation of the Whole**

"The delegate of (insert full name of nation) motions to suspend the debate and move into a consultation of the whole for a total time of (insert total duration of the caucus) to discuss (insert desired topic of discussion)."

To pass, this motion requires a simple majority.

- **Adjournment and Resumption of Debate**

"The delegate of (insert full name of nation) motions to adjourn the meeting for the purpose of (insert the purpose of adjournment)."

"The delegate of (insert full name of nation) motions to resume the debate."

To pass, this motion requires a simple majority.

- **Closure of Debate**

"The delegate of (insert full name of nation) motions to close the debate and move into the introduction of draft resolutions."

To pass, this motion requires an absolute majority.

- **Debate on Amendments**

"The delegate of (insert full name of nation) motions to close the introduction of draft resolutions and commence the debate on amendments."

To pass, this motion requires an absolute majority.

To pass, each amendment requires a simple majority.

- **Voting on Resolutions**

"The delegate of (insert full name of nation) motions to close the debate on amendments and commence the Resolution voting procedure."

To pass, this motion requires an absolute majority.

In order to pass and become the Committee's official Resolution, the Draft should garner at least a simple majority.

Points

Interruptive Points

- **Point of Personal Privilege:**

This point can be utilized by a delegate whenever they experience a certain personal discomfort that hinders their ability to fully participate in the conference at hand.

- **Point of Order:**

A point of order is brought up when a delegate feels as though the rules of procedure have been broken.

Non-Interruptive Points

- **Point of Parliamentary Inquiry:**

This point can be used whenever a delegate would like to ask the Dais members a question regarding the overall rules of procedure.
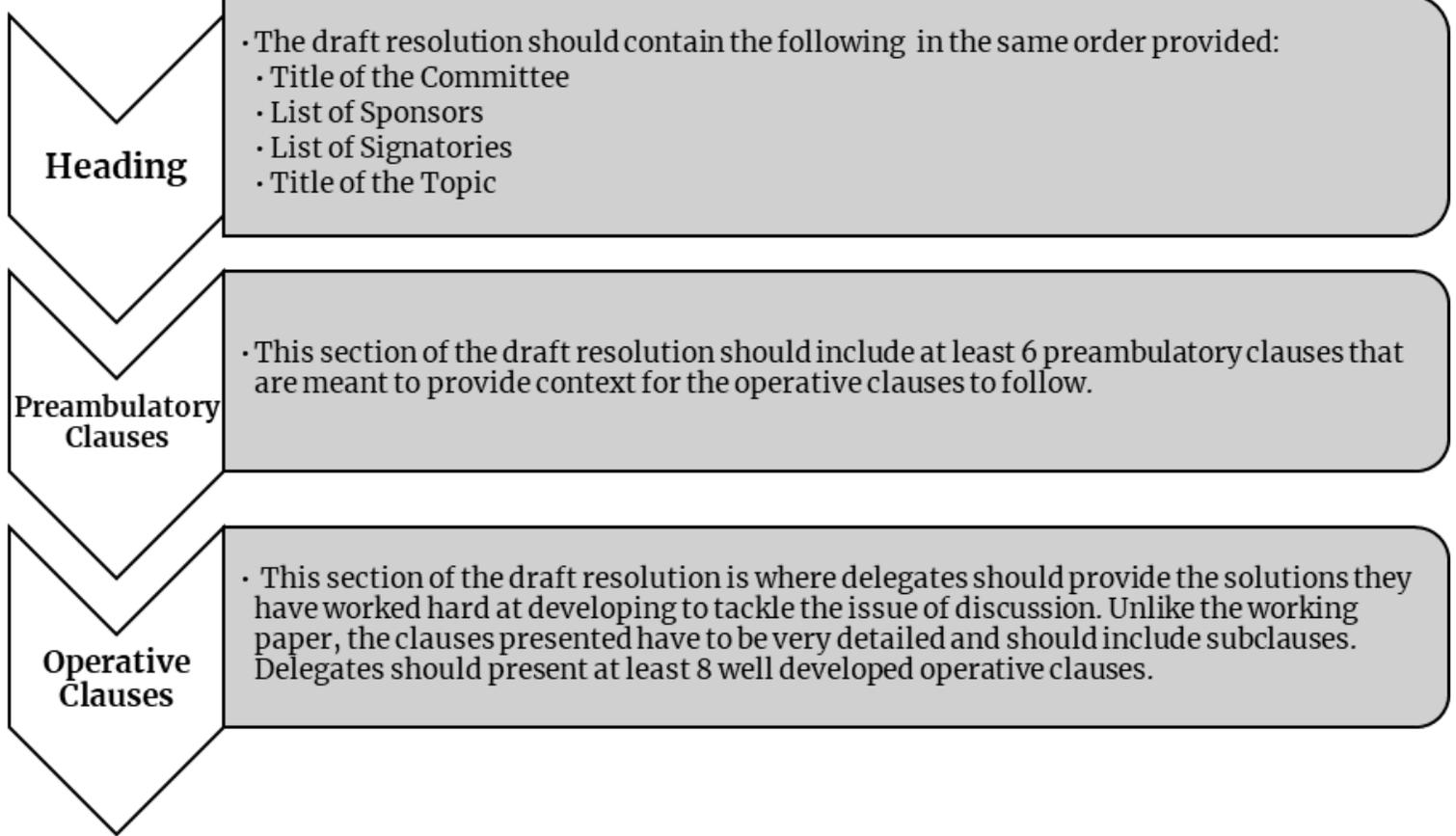
- **Point of Information:**

A point of information, also known as a point of inquiry, can be exercised by delegates whenever they would like to ask a question regarding something they do not understand about the issue at hand.

Resolution Formation Process

Flow and Structure of a Draft Resolution

Heading

- The draft resolution should contain the following in the same order provided:
  - Title of the Committee
  - List of Sponsors
  - List of Signatories
  - Title of the Topic

Preambulatory Clauses

- This section of the draft resolution should include at least 6 preambulatory clauses that are meant to provide context for the operative clauses to follow.

Operative Clauses

- This section of the draft resolution is where delegates should provide the solutions they have worked hard at developing to tackle the issue of discussion. Unlike the working paper, the clauses presented have to be very detailed and should include subclauses. Delegates should present at least 8 well developed operative clauses.

The Topic

'Assessing the Risks of Weaponizing Increasingly Autonomous Technologies'

Topic Overview

We live in a period of constant technological advancements. Concepts that seemed like science fiction to our parents and grandparents are now readily available. One needs only to look inside their pocket and the phone they are using is tens maybe hundreds of times more advanced than the system that took the first humans to the moon. For context the first mobile phone was developed by Motorola in 1973 and could cost up to $4000.

Now almost 50 years later it is estimated that there are approximately 15 billion phones around the world. In less than half a century the technology and availability of said technology grew at an extremely fast rate. Needless to say, this progress in technology is not only seen in mobile phones. In practically every field, technology advancement can be widely seen. It is of no surprise that these advancements have also entered the weapons industry. Security is a core concern of every country, with countries like the United States spending up to 766 billion U.S. dollars in 2020 alone on military advancements. In fact, a lot of technologies that are available now started as military inventions.

The internet is one of the many examples of that. It is these exact evolution of weapon technologies that continue to be a concern to the Disarmament and International Security Committee. In specific a form of technology that has been making headlines in the past years is autonomous technologies.

Autonomous technologies refer to systems that have very little to no human intervention in execution. Some of the most known examples of autonomous systems are self-driving cars or artificial intelligence (AI), both of which are already readily available to the public. For instance, Tesla Motors have been dominant in the field of self-driving cars with ever-increasing newer models. Moreover, there are a multitude of AI-based voice assistants like Siri, Google Assistant, Amazon Alexa, and others. However, these two examples are simply the ones that we see most commonly.

Autonomous devices can learn and develop by observing their surroundings and interacting with it. This means the device will adapt to provide the best solution to each outcome and learn from previous experiences. As scary and human-like as that may sound, it is already happening in a multitude of applications we use every day. YouTube, Netflix, and other streaming applications have been using AI for years to learn what "best" video or series to suggest on your next to watch. Artificial Intelligent algorithms are so common that we rarely notice them. phrase suggestions, advertisements, and content recommendations on social media are some of the ones we interact with everyday without even

noticing. Autonomous technologies are not science fiction or a futuristic concept, it is a reality that we are already living in.

The Duality of Autonomous Systems

Artificial Intelligence and other autonomous systems challenge humanity with a paradox that is always undergoing lengthy discussions. On one hand we have all the benefits and progress AI-machines can bring. Faster more powerful systems that can develop on their own to achieve more in shorter times than a human ever could. On the other hand, we have an issue of trust. A core essence of human nature is trust. We trust friends, we trust colleagues, and we trust family in our relationships. A machine is something beyond our natural understanding and so it is only logical that society would express a sense of untrust towards it. We trust devices to ease our lives and perform what it is said to do. We trust our phone camera will take a good picture, or that our laptops will be able to open the internet. However, an autonomous system does not require any human interaction. Would you trust a car to take you home safely? Would you trust a robot to do your heart surgery?

The dilemma only grows further when we focus on the adaptability of autonomous systems. Due to its ability to learn, artificial intelligence can learn from its mistakes and overtime commit less and less of them. However, in the beginning there is a high possibility that some errors will occur. Much like a human we learn from our mistakes and improve. Many are skeptical of autonomous technologies because of that. When conventional machines make an error, humans actively fix the source of said error. An autonomous device will learn by itself at a rate much faster than any human could teach it, yet the risks still remain.

Another concern is predictability. Devices and machines are predictable. You do not expect your phone to learn how to make toast; you predict it will do exactly what it was designed to do and behave how it was designed to behave. However, due to their ability to learn and interact with surroundings, autonomous technology can behave differently based on their surroundings.

This raises another issue: AI's are not human they do not think like a human. What we call common sense and may seem innate is something the machine must learn, develop and understand in all its complexity and variations.

Autonomous Weapons

As previously mentioned, technological advancements in the weapon industry are also very evident including autonomous technologies. Like what can be seen to the general public, autonomous technologies are commonly used in military transportation modes such as drones, marine transports, air space, waterways, and much more.

However, a main concern is not the usage of such devices but instead the usage and

development of lethal autonomous weapons. Lethal Autonomous Weapons, also known as killer robots or Slaughterbots, are AI-based weapon systems that can identify and kill human targets without human intervention. It is different from unmanned drones in that the decision to take a life is still made by a human even if remotely. Lethal Autonomous Weapons are pre-programmed to eliminate a specific target. The AI of the weapon then searches for that target through sensors, fires and kills said target. Once again, these technologies that may sound like something out of a movie are already being implemented without our realization. In 2021 a report from the UN's Panel of Experts on Libya registered the use of a lethal autonomous weapon system used to hunt down retreating forces. Other reports have quickly surged after that report of other autonomous weapons being used around the world. The time to act is long overdue and many countries and organizations have already shown their concern. The International Committee of the Red Cross (ICRC) is one of the organizations that is tackling the issues of autonomous weapons. Three of the concerns brought up by the ICRC are the risk of harming civilians and combatants, compliance with humanitarian and international law, and also fundamental concerns about humanity and human ethics.

Topic in Depth

A History of Autonomous Technologies

The history of autonomous weapons coincides with the history of autonomous systems. The history of weaponry as a whole is one that starts with the start of humanity as we know. Simple wooden spears were discovered in Germany dating back to 400,000 years ago. Ever since then humans have had a core need for security as weapons just developed more and more.

The need for unmanned devices and artificial intelligence however was a topic of science fiction as early as the 20th century. A famous example of that is the known "heartless" Tin man character of L. Frank Baum's Wizard of Oz published in 1900. The artificially intelligent robot was an image of what was to come in the years that followed, turning science fiction and kids' fantasies into a reality.


In fact, primitive models of autonomous machinery were already being used by 1930. Sailboats used an alto tiller to keep boats in course or a form of autopilot based on gyroscope technology to maintain altitude and speed. By 1950 scientists and mathematicians were already debating the notion of artificial intelligence.

One prominent name in the development of AIs was British polymath Alan Turing. In his paper Computing Machinery and Intelligence published in 1950, Turing discussed a logical framework for how to develop intelligent machines. His thought process was straightforward, if humans use information to solve problems and make decisions why can't machines do the same? Unfortunately, during Turing's time computer technology was far from able to do what an intelligent machine would need. Moreover, the few existing computers were very costly at a lease price of roughly 200,000 dollars a month. The next major step in the development of artificial intelligence came in

1956 in a historic conference known as the Dartmouth Summer Research Project on Artificial Intelligence (DSRPAI). In this conference what is considered by some as the first artificial intelligence program was presented. The program known as Logic Theorist developed by Allen Newell, Cliff Shaw, and Herbert Simon was designed to copy the skills of a human in problem solving. The conference had

its issues, but it achieved a great milestone, it proved that artificial intelligence could be achieved. In the years to follow from 1957 to 1974 artificial intelligence thrived. This was due to the advancements in computers which now were faster, cheaper, could store more data and were more accessible.

ARTIFICIAL INTELLIGENCE TIMELINE
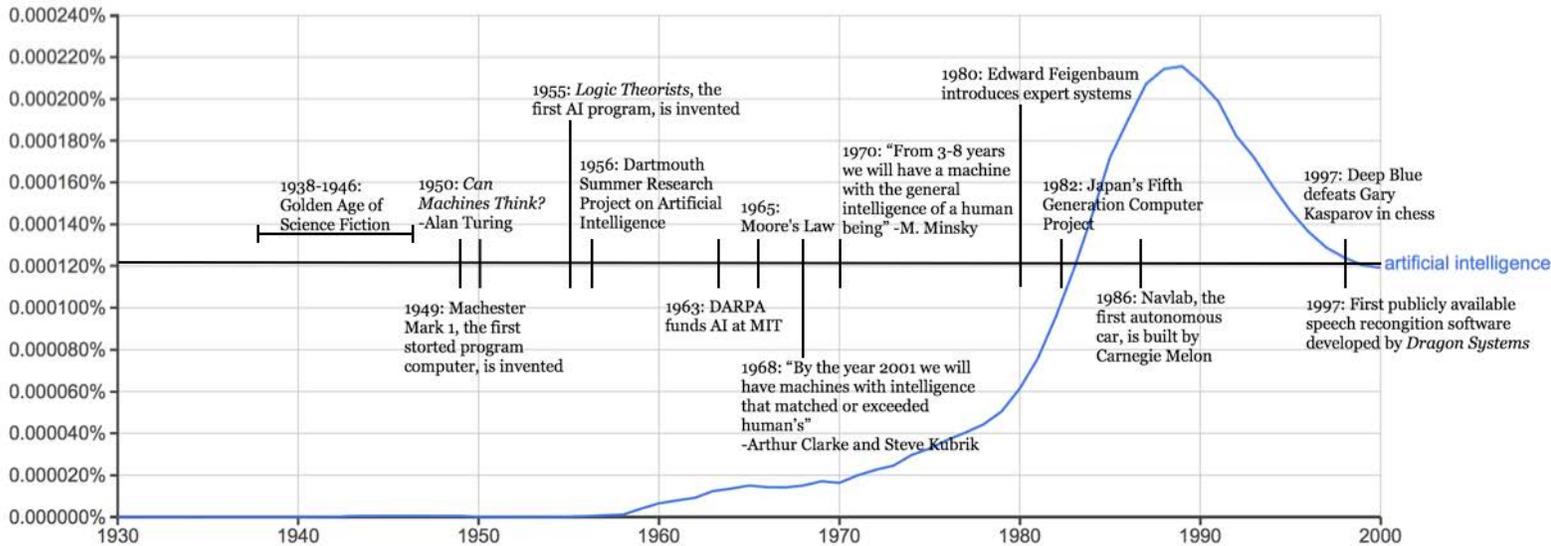
In this time period, governments started taking an interest in artificially intelligent machines. Multiple government branches started funding research related to machine learning. Their interest was mainly in a machine able of transcription of spoken language similar to nowadays text-to-speech technology as well as translation of languages. However, scientists still lacked the computational power to develop such systems. Computers still lacked the ability to store and process the large amount of information that AI systems would require.

In the 1980s AI took a big step. The idea of deep learning was popularized and so computers could now learn using experiences. Moreover, Edward Feigenbaum created expert systems that could copy the decision-making process of humans. Japan was very interested in expert systems and heavily funded research on it. In the years ranging from 1982-1990 Japan had invested up to 400 million dollars in expert systems in the hopes of revolutionizing it. Unfortunately, despite the heavy funding the project was abandoned, and AI once again fell out of the headlines. Nevertheless, it was in this

period away from public hype and government that developments in AI once again thrived.

In 1997 history was made and autonomous machines proved once and for all they were here to stay. Gary Kasparov, the reigning world chess champion at the time, lost in a match against Deep Blue, a computer program developed by IBM to play chess. This was the first time a reigning champion lost to a computer. The publicity of the match was a huge step for decision-making systems. Also, in that same year Windows adapted a software developed by Dragon Systems that was able to recognize speech. Progress in artificial intelligence was not just in decision-making or in spoken language software. Once again, in 1997 development of Kismet began. Kismet was developed by Cynthia Breazeal and was able to both recognize and show emotions. No field was out of reach for artificial intelligence, it seemed that machines could handle everything.

Autonomous Technologies Today

Technologies continued to develop further and further to reach the complex state it is now. One that involves sensors, quantum computational and much more. Interestingly Moore's law remains consistent and applicable throughout all these years. Moore's law which was observed in 1965 states that the speed and memory of computers doubles every year. The fundamental limit of our abilities is not our intelligence, it is our computers. The difference between now and

30 years ago is not that we became smarter, a lot of the things developed were already theorized years prior. It is that 30 years ago we did not have the technology to develop what we do now.

Similarly, right now it is safe to assume we are at the limit of our current computational power. The AI machines being developed now are making full use of our full computational power. We are practically waiting for Moore's law to reach us yet again so that computers improve yet again, so newer more advanced autonomous machines are developed.

Nevertheless, the period in which we are, is perfect for the prosperity of AI and such. Autonomous machines have the crucial ability to learn and grow. We are in the age of "big data" meaning we can gather and store hefty amounts of data, amounts too vast for a human to process. However, this task proves itself trivial for an artificially intelligent machine. We are already applying said technologies in multiple industries like entertainment, banking, marketing, to say a few. This massive amount of data allows AI to learn at an incredibly fast pace and improve more and more. In fact, even if the algorithms do not improve, AI can still improve and learn by brute-forcing the data available.

Practically speaking AI can be found all around us. As briefly mentioned previously our phones are one of the best examples of autonomous technologies. In 2017 only 3% of phones had enhanced AI capabilities, in 2020 this technology could be found in 35% of them. Even if we do not realize it, AI is already heavily integrated into our phones and by extension our daily lives. A few places where you can find AI technology on your phone is in the camera, in voice assistants, in image searches, in augmented reality experiences, in battery life, in facial recognition, and more. As a matter of fact, phones nowadays

have microprocessors solely dedicated to AI related tasks. However, these are just some of the applications we use everyday for autonomous machines or autonomous systems. They can also be found in cars, computers, smart watches, and even home appliances.

Autonomous Weapons Today

It is of no surprise that developments in technology are always associated with developments in weaponry. The first kill done purely by an autonomous weapon occurred in March of 2020 in Libya. There is a lot of contradictory information in what truly happened that day. The UN report on the matter states that a Turkish Kargu-2 drone "hunted down" and killed members of the Libyan National Army autonomously. Turkey denies that the Kargu-2 was used in that manner. However, they do admit to the autonomous capabilities of the drone.

Such capabilities would mean that the Kargu-2 can use machine learning to identify objects and then proceed to autonomously fire-and-forget. For clarification, fire-and-forget refers to missiles or other projectiles able to direct itself without any guidance to the target once it is fired. An autonomous fire-and-forget will even fire on its own accord. The events that took place in Libya made sensationalist headlines in world news. Claims of a "Terminator" like robot that can hunt and kill without being given orders

were spreading across multiple sources. Regardless, this is greatly exaggerated. Though the dangers and risks of this technology remain, a sticky note can confuse a machine into thinking and apple is an IPod.

For now, autonomous weapons are still used only on a relatively small scale in military operations. After the use of autonomous anti-personnel mines in the American Civil war, they were banned by the Ottawa Convention. However, sea mines and anti-vehicle mines are still used, which are also autonomous and only require a sensor to be triggered. Other autonomous weapons still used today are loitering munitions also sometimes called suicide/kamikaze drones. These blur the lines of a missile and a drone as they may hover the battlefield and strike targets when needed. Another commonly used autonomous weapon system are active defense systems such as the U.S.' Phalanx close-in weapon system or Israel's Iron Dome. Yet another known example is the SGR A-1 gun turret that is placed along the demilitarized border between South and North Korea. According to reports, the SGR A-1 gun turret has a fully autonomous mode. These weapons are however just the beginning, and they require end of the line technology. As our resources and available technologies develop, newer more capable weapons will surely develop alongside it.

The Inevitable Future of Autonomous Weapons

All world powers have already recognized that the future of military technology lies in AI and autonomous weapons. Countries like the United States, China and Russia have all already shown great interest in autonomous weapons. All three are already in the process of developing aircrafts that can be both manned and autonomous. In the United States' National Security Commission

on AI, it was concluded that "properly designed, tested, and utilized AI-enabled and autonomous weapon systems will bring substantial military and even humanitarian benefit." Moreover, Russian president Vladimir Putin stated that whenever the world finally gets an AI leader, said leader "will become the ruler of the world."

New research and new prototypes are constantly being made in autonomous weapons as they become more and more sophisticated. In fact, both China and the United States have run virtual dogfights between their fighter jets and an artificial intelligent jet. In all rounds the AI came out victorious for both the Chinese and the American tests.

The rise of autonomous weapons is closely associated with the growth in unmanned platforms. Pilots and militaries tire out and may be overworked. Moreover, machines that need human interaction can be jammed and the signal of communication between pilot and drone can be interfered. An autonomous weapon will need little to no human interaction and therefore will execute its orders with less signals and with no direct involvement of a human. This greatly reduces the strain on the staff of such operations. Another prominent future for autonomous weaponry is in the deployment of swarms for combat. Countries like Israel have already deployed drone swarms in combat, but they are far from the only country carrying tests

on them. The swarm of small drones were equipped with sensors and weapons. India tested a swarm consisting of 75 drones and South Africa one with 41 long-range drones traveling at speeds over 100 miles per hour. Another state studying drone swarms is Russia. Their swarm is being designed to be used in anti-submarine warfare.

Pertinent Features

The Fear Factor

In 1937, two years before World War II, Archbishop Canterbury asked an almost prophetic question in his Christmas address: "Who can think without horror of what another widespread war would mean, waged as it would be with all the new weapons of mass destruction?" Years later, we now know the millions of lives that were taken during the war that followed in 1939. Nevertheless, the question raised by the archbishop is one that remains until today.

Autonomous weapons are a brand-new technology that can cause fear amidst many. The root of every arms control debate is **fear**. Fear of what may happen if their enemies are capable of developing weapons while they themselves cannot. These fears are natural and span from a simple chatter between friends to a meeting of

the General Assembly in the UN headquarters. However, with autonomous weapons a new level of fear arises, one we are yet to fully tackle.

What if a civilian is misidentified with a soldier and the weapons kill the civilian instead? What if autonomous weapons give a state a higher edge above the other? Who is to blame for fatal errors done by an autonomous weapon? Autonomous weapons only respond to stimuli from their surroundings. A landmine for example cannot tell if the one triggering it is a child or a tank. Despite the advances in technology and the improvement of autonomous weapons, machine errors will always be a constant. Color difference, tree branches, fogs, and many more can disorient the weapon's ability to perform. Nevertheless, the large numbers of drones involved in swarms raise the uncontrollability factor exponentially. When a soul may be at the cost of an error, or when someone's life depends on lines of code, it is only logical that a multitude of people show major concerns with the technology.

Ethics of Autonomous Weapons

As previously mentioned, having someone's life be based on lines of code is a fear many people have. Algorithms cannot comprehend the value of a life. To many, this is the exact reason why they should not be able to claim one. The Secretary General to the United Nations, António Guterres, has expressed support for this idea. He stated: "machines with the power and discretion to take lives without human involvement are politically unacceptable, morally repugnant and should be prohibited by international law." This thought seems even more terrifying when one pictures a thousand Slaughterbots flying above a city without any human interaction selectively choosing who gets to live. India is already working on a swarm of 1,000 drones and some

models have been able to simulate even up to a million drones.

Threat to Security

Autonomous weapons rely solely on algorithmic decision-making. This means they are cheaper, faster, and can attack at much greater scales by simply following a set trajectory. This raises multiple risks to national and international security.

- **Unpredictability:** The behavior of lethal weapons can be dangerously unpredictable. Autonomous weapons are even designed to be unpredictable to always stay one step ahead of opposing forces.

- **Proliferation:** Slaughterbots can be quite cheap to mass-produce. Their raw materials are relatively common and readily available. Once military powers begin investing in the production of them more and more manufactures will follow suit and they will quickly proliferate. Soon the technology will be available in black markets and in terrorist hands.

- **Escalation:** Autonomous weapons can quickly escalate conflicts and completely

change the tides to be favorable towards a specific state.

- **Selective Targeting of Groups:** The algorithm and sensors of autonomous weapons will be the one that decides who to kill. This is usually done through facial recognition or using other biometric information. This greatly increases the risk of selective targeting of a group of people based on their gender, color, or religious dress. A distinction the weapon may not even be doing intentionally. Moreover, at the hands of the wrong group, this technology can easily lead to ethnic cleansing and genocide.

At the same time however, many militaries will argue that autonomous weapons will actually lead to an increase in security. On average a human takes 250 milliseconds to react. A machine on the other hand can respond much faster with some being able to act in less than one millisecond. This reaction time may be the difference between survival and defeat. It is this exact reasoning that claims giving up autonomous weapons in an arms control would be foolish.

Moreover, human error due to fatigue and exhaustion can create as many mistakes, if not more, as any machine would. Many advocates for AI technology even argue that overtime said mistakes will only decrease in an autonomous system as they learn and adapt from their surroundings. Finally, artificial intelligence can improve aim, reduce collateral damage, as well as keep soldiers safe away from the warzone. Israel has already reported that an AI assisted machine gun was crucial in the assassination of an Iranian nuclear scientist without hitting his wife only a few centimeters away.

Global Efforts

The global community has not remained silent in the growth of autonomous weapons. As aforementioned even the secretary general of the United Nations has personally already expressed his concerns towards this issue. Amidst the number of organizations that are working towards ensuring global security, the International Committee of the Red Cross (ICRC) is one of the most prominent agents for change.

The ICRC Position

The ICRC has formally released a document on its position concerning autonomous weapons. In this article released on the 12th of May 2021 the ICRC explicitly stated why autonomous weapons should be a concern. The three main points brought up are:

- Risks of harming both civilians and combatants. Moreover, there is a risk that autonomous weapons may greatly escalate conflicts.

- International law is not adept for autonomous weapons, hence there are loopholes that may be exploited by autonomous weapons. This applies also for International Humanitarian Laws.

- Autonomous weapons raise a core ethical concern of machines deciding life and death for a human.

Thankfully, the International Committee of the Red Cross did not only raise the problems brought by autonomous weapons. Since 2015 the ICRC has been suggesting that states limit the usage and formulate international laws on autonomous weapons. These recommendations lie on three core pillars.

1. No human targets: Slaughterbots should not be allowed to take the life of a human. Hence, maintaining international humanitarian laws and protecting both civilians and combatants.

2. Restrict unpredictability: Autonomous weapons that are highly unpredictable should be ruled out. Any systems that are not fully understood or predicted must be prohibited.

3. Human control: The type of autonomous weapons should be thoroughly regulated and even include human-machine interactions. Some of the regulations should include limits on the types of targets, on the duration, and on situations of use for autonomous weapons.

Finally, the ICRC offered its full cooperation with any state, government, armed forces, and all of those who are willing to implement their recommendations.

The United Nations' Convention on Certain Conventional Weapons (UN CCW)

In 2019 the UN CCW adopted 11 non-binding guiding principles for lethal autonomous weapons systems (LAWS). The 11 guiding principles were decided upon by a group of global experts. The idea was that these would establish a framework in which states could consult and take into consideration their decisions on LAWS. If states come to an agreement with the CCW principles it is possible to make them binding to all the UN member states.

United Nations' Our Common Agenda

The world is still recovering from the Covid-19 pandemic that brought devastation for many. Therefore, the UN took this as a wake-up call for action and released it in 2021 at the General Assembly meeting Our Common Agenda. Our common agenda is the future of the United Nations, their plan of action for the next 25 years. It spans across 4 broad areas and hopes to accelerate other previous agreements such as the 2030 Agenda. One of the areas that Our Common Agenda encompasses is the area of autonomous weapons. This means that LAWS have always been a concern and will continue to be an issue that the United Nations seek to resolve. The report concerning Autonomous weapons states that "establishing internationally agreed limits on lethal autonomous weapons systems" is crucial for a peaceful successful future of all humankind.

Human Rights Watch

The Human Rights Watch is yet another organization whose goal is to protect and care against abuses all over the world. It is of no surprise that autonomous weapons are of major concern for them. As previously mentioned

Slaughterbots can be seen as a direct ethical violation of humanity. For this reason, in 2013 the Campaign to Stop Killer Robots was launched by the Human Rights Watch. Ever since then, the campaign has only grown and now multiple legislators, private and international companies have agreed to outright ban completely autonomous weapons. Moreover, the report of the Human Rights Watch included the stance of 97 countries in relation to autonomous weapons. The recommendations done by the Human Rights Watch are:

- Collaboration between concerned states to establish a new international agreement that maintains meaningful human control over weapons.

- Develop national laws that seek to maintain meaningful human-machine interaction as well as prohibiting the production and development of completely autonomous weapons.

Learning Outcomes

- Delegates will gain an understanding of autonomous weapons systems alongside their benefits and dangers.

- Delegates will assess if the long-term progress brought by advances in technology is fair in comparison to the short-term dangers.

- Delegates will experience the importance of the United Nations' decision-making when it comes to protecting world peace and security.

Recommendations

- Delegates must be aware of the quick development of autonomous weapons and other autonomous systems.

- Delegates should understand the benefits that are brought by autonomous systems.

- Delegates should understand the risks brought by autonomous systems.

- Delegates should know the position of their country in the implementation of autonomous weapons.

- Delegates are encouraged to read the positions of allied countries and of key organizations on the matter.

- Delegates should always keep in mind that the DISEC works in cooperation with other UN Committees.

Key Questions

- Does your country have laws dealing with autonomous weapons?

- Does your country produce autonomous weapons?

- Has your country signed any international treaty on autonomous weapons?

- Does your country invest heavily on military advances?

- How technologically advanced is your country?

- What is your nation's stance on militarization of artificial intelligence and autonomous weapons?

Annexes

Relevant Institutions

- United Nations General Assembly (GA)
- International Committee of the Red Cross (ICRC)
- Human Rights Watch (HRW)
- United Nations Disarmament Commission (UNDC)
- United Nations Office for Disarmament Affairs (UNODA)
- United Nations Institute for Disarmament Research (UNIDIR)

Relevant Legal Treaties, Frameworks, and Conventions

- ICRC Position on Autonomous Weapon Systems (ICRC)
- Campaign to Stop Killer Robots (Human Rights Watch)
- 11 Guiding Principles on LAWS (CCW)

Relevant Conferences

- The Ottawa Convention
- Convention on Certain Conventional Weapons (CCW)
- Vienna Conference on Safeguarding Human Control over Autonomous Weapons Systems.

Further References

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- https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and

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