When Russia invaded Ukraine in 2022, ordinary people had to use everything from cars and trucks to mops and brooms to defend themselves against the trained and better-equipped Russian soldiers. Two years later, the conflict continues. With more funding and technology, Ukrainian forces are developing a new type of weapon, AI-driven drones. This style of weapon is known as a lethal autonomous weapon or LAW. Reuters of July 18, 2024, furthers lethal autonomous weapons systems can identify, select, and apply lethal force without any human input. Foreign Policy of May 11, 2022, reveals so far, at least Israel, Russia, South Korea, and Turkey have used these systems, and Britain, China, and the US have begun investing heavily into weapons that control themselves. With the help of companies like Sword Defense Systems and Ghost Robotics, these weapons have emerged as a highly sought-after global commodity. In fact, The Guardian of July 14th, 2024, reveals 1.8 billion dollars have been spent on these weapons last year alone. But the rise of L.A.W.S has left generals and world leaders grappling with the reality of potentially saving their own soldiers while sacrificing their control. And considering the Department of Defense announced in August 2023 it's in the process of buying its first of three rounds of autonomous weapons, it's time to learn the L.A.W.S by pinpointing what they are, how they're used, before finally launching into some implications *for a technology that could rewrite the rules of war with just a few lines of code*.

These weapons can look as simple or as complicated as you can imagine, meaning technically stabby the Rumba with a knife is an L.A.W. Sounds ridiculous, but NewScientist of Oct 14, 2021, reveals, the US was looking into purchasing a robotic dog with an automatic sniper on its back. So let's dive a little deeper into what they are and how they work.

First, lethal autonomous weapons bypass human control. The conversation of November 15, 2023, explains, while traditional drones, like the Predator drone, are remote-controlled and require constant human input, LAWs are fully self-sufficient. Third way of Feb 28, 2024, explains the most common LAW is a drone that can lock onto targets and fire, but more sophisticated weapons can range from self-driving tanks and robotic soldiers that engage in combat to automated gunning stations and nuclear warhead launchers. Retired United States Marine Corps General John Allen describes this introduction of LAWs as the gateway to "hyperwar," where AI dictates the terms of conflict, stripping humans of the ability to make critical life-and-death decisions.

Next, The Modern War Institute of January 16th, 2024, explains LAWs rely on a combination of sensors and algorithms. First, the weapon uses advanced sensors, like cameras, sound radars, or heat detectors, to scan the environment and identify potential targets. It then runs the data through a pre-programmed algorithm, so it can differentiate between hostile and non-hostile actors. Nature Journal of April 23rd, 2024, furthers, once a target is identified, the weapon is able to predict the target's movement and find the optimal firing angle. For example, an autonomous ground robot could scan a battlefield and identify a moving vehicle based on its heat signature. Then by tracking the vehicle's path, the LAW decides where to intercept it, locks onto the target, and fires within milliseconds with absolutely no intervention.

UN Secretary-General António Guterres has gone on record calling LAWs "unacceptable and morally repugnant", and while he leads one of the world's most influential coalitions, we are far from consensus. So let's consider how widespread use of LAWS will affect war through human casualties and technical vulnerabilities.

First, LAWs could prevent the loss of human life. The aforementioned Nature Journal explains, “AI-assisted weapons could be more accurate than human-guided ones,” which means fewer soldiers might be killed or injured. The Congressional Research Service of Feb 14, 2023, furthers, countries like Australia, India, and the UK believe that the advantages of autonomous drones, especially those that can operate without constant communication and work together in large swarms, outweigh the risks. Ultimately, the idea is that AI can make faster, unbiased decisions, avoiding the mistakes humans might make in the heat of battle.

Next, LAWs can be vulnerable to hacking and malfunctions. Just Security, a think tank at NYU Law, explains on October 3, 2023, like any sophisticated technology, these systems rely heavily on software and network connectivity, making them prime targets for cyberattacks. A successful hack could result in the weapon being reprogrammed to target the wrong people, potentially using it against friendly forces or even civilians. The Brookings Institution of May 6, 2022, furthers technical malfunctions, such as faulty sensors or corrupted algorithms, could cause the weapon to misfire or execute commands inappropriately. The risk of manipulation and malfunction undermines the reliability and safety of deploying AI weapons in warfare.

Isaac Asimov's "Three Laws of Robotics" laid the groundwork for thinking about the ethical responsibilities of machines, particularly those with autonomy. His vision prompts us to consider how we manage the balance between technological power and ethical constraints. Starting with two implications: Morality and Legal Culpability

First, Morality is a uniquely human trait that AI simply can’t replicate. The MIT Science Policy Review of August 29, 2022, explains, while AI can process data, follow instructions, and make

decisions based on programmed rules, it lacks the ability to truly understand ethical dilemmas or make value-based judgments. Human morality is shaped by empathy, cultural values, and a deep understanding of the consequences of actions. All of those are characteristics AI doesn't have. The Journal of Communications in Computer Science argues on November 29, 2023, no matter how advanced the AI is, it cannot grasp the moral weight of deciding who lives and who dies. However, countries also have a moral obligation to protect their citizens, so as long as someone is developing this technology, any specific country has the obligation to develop countermeasures, which may include their own LAW's

Second, AI isn't culpable for its actions, and apparently, no one else is either. The Oxford Journal of Legal Studies explains on May 7, 2024, harmful decisions made by an AI acting as a utility agent can't be attributed to the humans involved in its development or deployment if the consequences were unintended. As AI becomes more autonomous, it becomes harder for humans to predict its actions, making it unlikely that any specific criminal behavior can be tied to the recklessness or negligence of its users. And as it stands, AI itself doesn't meet the legal standard for criminal liability. Both of these realities create a terrifying accountability vacuum. When we hand over life-and-death decisions to machines, we strip away the guardrails of humanity. The result is innocent lives lost with no recourse, no closure, and no one to answer for the devastation.

War has always been a race for technological advantage, but it has also remained a human endeavor. But after exploring what lethal autonomous weapon systems are, examining the debate, and detailing the implications, this technology already exists, so *we're simply left to wonder if AI will fight the battles while we watch from the sidelines.*