

Name: Rishab Ramanathan
NetID: rr566
Email ID: rishab.ramanathan@yale.edu

Article: "Can We Trust Autonomous Weapons?" by Keith Kirkpatrick (Dec 2016)

- a) At a superficial level, I was aware of the rapid developments taking place in the field of autonomous vehicles. Google has been working on self-driving cars for the past few years, and Uber has recently even launched a beta version of their self-driving cars. With regard to autonomous weapons, modern warfare films involving the US military have utilized UAVs and drones as tools of destruction and espionage. Other things such as heat-seeking missiles are also semiautonomous weapons that have become part of peoples' general knowledge. To this extent, I was previously aware that autonomous weaponry is playing an increasingly important role in global military efforts.
- b) The article touches upon the humanitarian safety and moral concerns pertaining to the increasingly widespread use of autonomous weaponry. I learned about the Lockheed Martin Long-Range Anti-Ship Missile (LRASM) system, which is an advanced target identification missile system. The article also discusses Samsung's SGR-A1 border sentry robot, made to be deployed at the border between North Korea and South Korea. This robot is equipped with a light machine gun and tear gas dispenser, among other features. The article discusses that while both these technologies are still semiautonomous (which means that humans still make the final call on deciding which targets to strike/kill), this is an increasingly unlikely future. As military competition between major countries around the world grows

stiffer and tensions grow larger, militaries will be more and more likely to employ fully autonomous weaponry with the capacity to make decisions to kill humans completely algorithmically. Human rights group such as 'The Human Rights Watch' believe that this is tremendously dangerous and violates a very basic moral code, and are therefore lobbying to prevent the use of autonomous weaponry through campaigns such as 'Stop Killer Robots'. What is troubling, that the article mentions, is that currently there are no treaties or laws in the international community that prevent or even regulate the usage of autonomous weaponry. Some argue that regulations will simply bury the entire industry underground, making transparency even more difficult and dangerous.

- c) I am curious about what the US military's official position on autonomous weaponry is. Are there any regulations for private weapons manufacturers? If they sell to their own government, whose military interests will always be destructive, then is there any hope for restricting the use and growth of autonomous weaponry? How much is artificial intelligence technology such as IBM's 'Watson' incorporated into autonomous, 'intelligent' weaponry? Are the consequences of autonomous weaponry as disastrous as nuclear war? Or will they bring in a new age of safety and security for the connected, global world?