

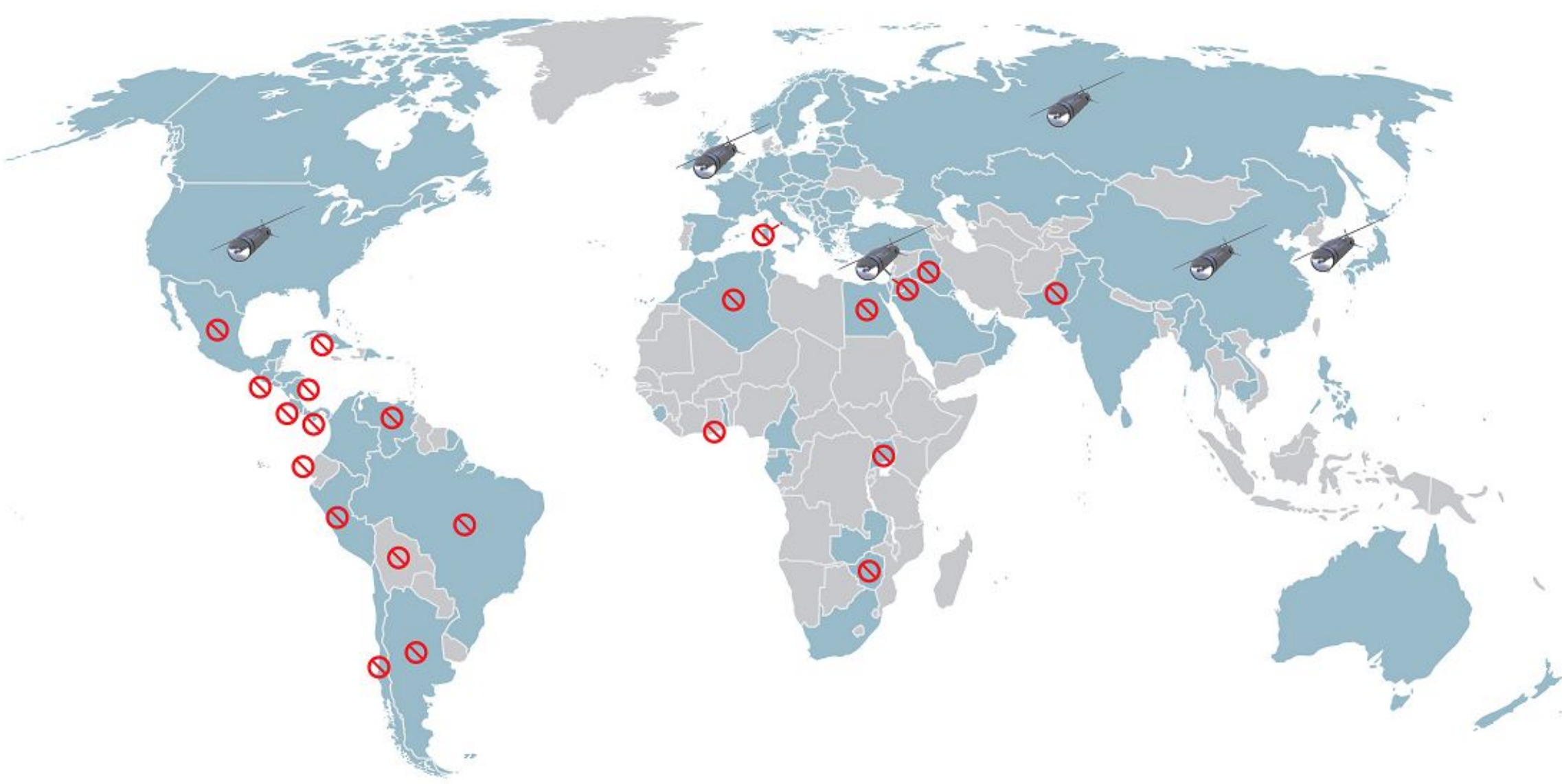
Ethical Regulation of Autonomous Weapons in Warfare

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Background

This research project analyzes the ethics of using autonomous weapons systems (AWS) in warfare.

- An AWS is “a weapon system that, once activated, can select and engage targets without further intervention by a human operator” [1]
- Advancement of predictive technologies has made these systems increasingly accurate
- AWS is cheaper and can replace human soldiers on the front line, decreasing loss of life



Sources: The GGE on lethal autonomous weapons and the Campaign to Stop Killer Robots

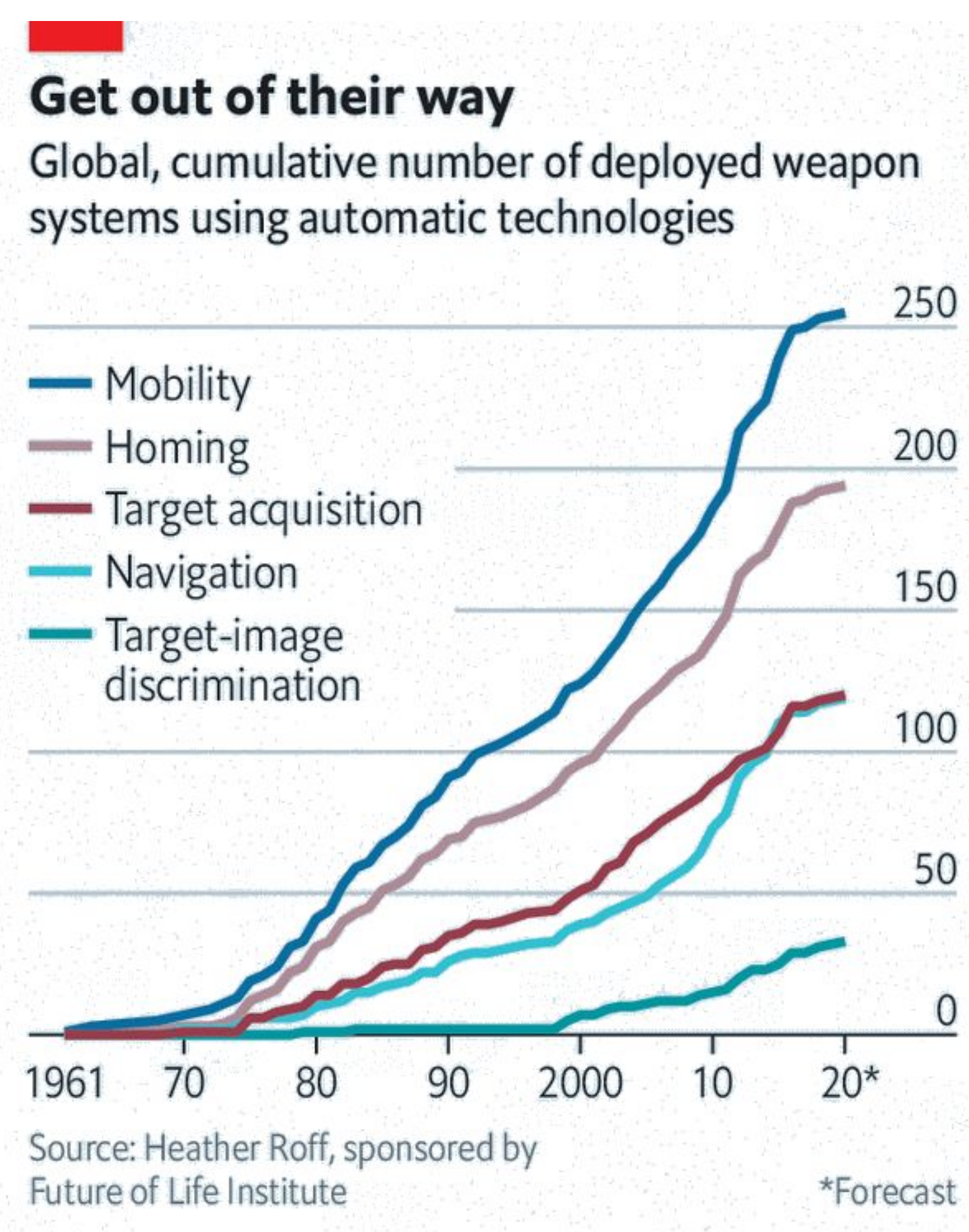
22 states want to ban lethal autonomous weapons [5]

Problem

- Assuming we are in the context of a just war, is it ethical to use AWS?
- Concerns about AWS:
 - International human law is centered around the preservation of human dignity
 - Allowing a machine to decide to take a human life without any human control violates human dignity [2]
- Our research solely focuses on AWS that make decisions without humans

Our Viewpoint

- The use of AWS is ethical given that:
 - Their use is strictly non-lethal
 - Any responsibility for the machine's actions are assigned before deployment



The Economist

Use of Autonomous Technology is increasing [6]

Justification

- Autonomous weapons being used lethally would violate human dignity
- Human lives should not be in the hands of machines
- Humans have the right not to be killed inhumanely [4]
- Responsibility attribution is important in the case error
- Assigning responsibility beforehand ensures impartiality

Other Viewpoints

Anti-AWS as a whole:

- Some may argue that there is no way to reliably make AWS nonlethal
- Slippery slope-may lead to wars where only people in harm's way are civilians [3]

Pro-lethal AWS:

- Limiting the use of autonomous weapons means encouraging the use of people in warfare
- Use of autonomous weapons would lower emotional turmoil [3]
- Lethal conflict is inevitable; autonomous weapons would lower casualties as a whole

Next steps

- Develop nonlethal autonomous weapons
- Develop standardized method to distribute responsibility in case of error
 - Who takes responsibility when?
 - What should consequences be?
 - Precedent with war crimes
- Pushback from policy makers

Works Cited

- [1] Canellas, M., & Haga, R. (2015). Toward meaningful human control of autonomous weapons systems through function allocation. In 2015 IEEE International Symposium on Technology and Society (ISTAS) (Vol. 2016-, pp. 1–7). IEEE.
- [2] Lethal Autonomous Weapon Systems: Issues for Congress (R44466). (2016, April).
- [3] Umbrello, S., Torres, P., & De Bellis, A. (2019). The future of war: could lethal autonomous weapons make conflict more ethical?
- [4] Lin, Patrick. (2015, April). Do killer robots violate human rights?. The Atlantic.
- [5] [https://www.diis.dk/en/research/four-reasons-why-denmark-should-speak-up-about-lethal-autonomous-weapons\(image\)](https://www.diis.dk/en/research/four-reasons-why-denmark-should-speak-up-about-lethal-autonomous-weapons(image))
- [6] [https://www.economist.com/briefing/2019/01/17/autonomous-weapons-and-the-new-laws-of-war \(image\)](https://www.economist.com/briefing/2019/01/17/autonomous-weapons-and-the-new-laws-of-war (image))