Regulating autonomy in weapon systems

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What are we talking about? (I)

• ICRC: “an autonomous weapon system is one that has autonomy in its ‘critical functions’, meaning a weapon that can select (i.e. search for or detect, identify, track) and attack (i.e. intercept, use force against, neutralise, damage or destroy) targets without human intervention.”

• Fundamental **disagreement on the definition**

• **NOT: Replacing humans with robots, Terminators or Robot Uprisings**

• Increasing **automation** in software and hardware
• **Redistribution of tasks** humans and machines
• Prediction: Missiles, munitions, unmanned systems, defensive systems
What are we talking about? (II)

• Algorithms in weapons that can (i.a.)
  • Select targets
  • Recognize targets
  • Identify targets
  • Classify targets
  • Track targets
  • Detect whether objects/events are threats
  • Recommend whether to engage targets
  • Engage targets
What are we talking about? (III)

- Definitional disputes:
  - Only offensive or also defensive weapon systems?
  - Difference autonomy and automation?
  - Future or existing weapon systems?
  - Which functions are problematic?
  - A category of weapon systems or a function of their use?
Problems with LAWS (I): Law

- Can they ever comply with International Law?

- Fundamental Principles:
  - Distinction
  - Proportion
  - Precaution

- Accountability

- Or is legality dependent on context of use?
Problems with LAWS (II): Ethics

• Use of LAWS is ethical:
  • No emotion: prevent bloodlust and sexual violence
  • Better compliance with IHL, fewer civilian casualties
  • Protect soldiers from harm

• Use of LAWS is unethical:
  • Loss of human dignity in death
  • Removal of human agency
  • Loss of moral responsibility
  • Loss of martial virtue
  • Warcrimes are often tactical/strategic
Problems with LAWS (III): Peace and Security

- Risks:
  - **Distance** and depersonalization
  - **Assymetry**
  - Lower **threshold** of going to war
  - **Conflict escalation**
  - **Arms Race**

Whoever Predicts the Future Will Win the AI Arms Race

China will be the AI superpower

*The US is sleepwalking into defeat*

Commentary: Are China, Russia winning the AI arms race?

**The AI Cold War that Threatens Us All**

*Our Artificial Intelligence ‘Sputnik Moment’ Is Now: Eric Schmidt & Bob Work*
The discussions on LAWS (I)

- Since 2012: Campaign to Stop Killer Robots

- Options:
  - Legally binding ban on LAWS
  - Obligation to maintain Meaningful Human Control
  - Political declaration
  - Legal reviews of new weapons
The discussions on LAWS (II)

• Political obstacles:
  • Disagreement on **definitions**
    • **Defining** LAWS
    • **Delineating** LAWS
    • When is control **meaningful**?
  • Practical obstacles
    • **Fast** technological developments
    • **Verification** of compliance
    • **Civilian proliferation** of technology
  • Uncertainty about **future capabilities**
  • Own **strategic** interests
  • Lack of **capacity and resources** by states
  • **Financial position** of the CCW
Recommendations

• Push for a more substantive debate at the UN CCW
• Promote discussion
  • Finding consensus
  • Increase understanding
• Lead by example
  • Unpack “LAWS”
  • Transparency