Law, Ethics, & Autonomous Weapons Systems

Heather M. Roff Perkins, Ph.D.
Josef Korbel School of International Studies
University of Denver

Research Associate
Eisenhower Center for Space and Defense Studies
United States Air Force Academy
I. The Frame: Just War Theory & International Humanitarian Law

II. The United Nations and the Convention on Conventional Weapons & “Killer Robots”

III. US Policy & Current Weapons Systems

IV. “Autonomous” Weapons or AI?

V. What to Expect: Today, Near-Term and Long-Term Considerations
• Just War Theory
  • *Jus ad Bellum* – The just resort to force
    • Just Cause, Last Resort, Likelihood of Success, Proportionality, Proper Authority
  • *Jus in Bello* – The just use of force
    • Noncombatant immunity; Proportionality; Necessity
International Humanitarian Law

- International Humanitarian Law (IHL):
- Body of customary and treaty laws governing the use of force during hostilities, including international and noninternational armed conflicts.
“Killer Robots” are:

- Unable to uphold the principle of distinction
- Unable to uphold the principle of proportionality
- Unable to accord with the Martens Clause
- Likely to increase the probability of war or escalation
Current Happenings at The United Nations

The UN & The CCW:

<table>
<thead>
<tr>
<th>Event</th>
<th>Room</th>
<th>Type</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCAC</td>
<td>XX</td>
<td>Priv.</td>
<td>10:00 AM</td>
</tr>
<tr>
<td>CCW Meeting of Experts on Lethal Autonomous Weapons</td>
<td>XXII</td>
<td>Public</td>
<td>10:00 AM</td>
</tr>
<tr>
<td>CCW Meeting of Experts on Lethal Autonomous Weapons</td>
<td>XXII</td>
<td>Public</td>
<td>15:00 PM</td>
</tr>
<tr>
<td>Campaign to Stop Killer Robots - Meeting on CCW</td>
<td>XXVIII</td>
<td>Public</td>
<td>10:00 AM</td>
</tr>
<tr>
<td>CCW Meeting of Experts on Lethal Autonomous Weapons</td>
<td>XXII</td>
<td>Public</td>
<td>15:00 PM</td>
</tr>
<tr>
<td>CSTD</td>
<td>XX</td>
<td>Public</td>
<td>13:00 PM</td>
</tr>
<tr>
<td>17th Session</td>
<td>XVIII</td>
<td>Public</td>
<td>10:00 AM</td>
</tr>
<tr>
<td>Division of Administration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global town hall meeting on mobility and career development</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Targeting Difficulties

- “[weapons must be] designed to allow appropriate levels of human judgment over the use of force”

- “autonomous systems” may not select human targets, but may engage nonkinetically, or against materiel, or in time sensitive attacks

- “semi-autonomous weapons” are permitted to apply lethal and kinetic force.
Department of Defense Policy

Problems:

- Definitions of “autonomous vs. semi-autonomous”
- Command Responsibility
- Not a “ban” on autonomous human targeting, easily overridden, built in plausible deniability
The Gateway Drugs
Autonomous Weapons or AI?

OR