Symposium on the Ethics of Autonomous Weapon Systems- Hosted by Merlin CCC
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By Hunter Cantrell- Instructor of Philosophy, United States Military Academy

**Just War Tradition**

**Jus ad Bellum**

Traditional Criteria- St. Thomas Aquinas- Secunda Secundae (Second Part of the Second Part).  
**Question 40: Of War- “Whether It Is Always Sinful to Wage War?”**  
Source:  
https://www.gutenberg.org/cache/epub/18755/pg18755-images.html

**Just Cause**

“a just cause is required, namely that those who are attacked, should be attacked because they deserve it on account of some fault.”

**Proper Authority**

“the authority of the sovereign by whose command the war is to be waged. For it is not the business of a private individual to declare war, because he can seek for redress of his rights from the tribunal of his superior.”

**Right Intention**

“it is necessary that the belligerents should have a rightful intention, so that they intend the advancement of good, or the avoidance of evil.”

“Modern” Additions- definitions from *The Morality of War*, by Brian Orend

**Last Resort**

“It seems much more plausible to contend not that war be literal last resort—after all other imaginable means have been totally exhausted—but, rather, that states ought not to be hasty in their resort to force” (60).

**Proportionality**

“It mandates that a state considering a just war must weigh the expected universal (not just selfish national) benefits of doing so against the expected universal costs. Only if the projected benefits, in terms of securing the just cause, are at least equal to, and preferably greater than, such costs as casualties may the war action proceed” (62).

**Jus in Bello**

Definitions from *Just and Unjust Wars* by Michael Walzer

**Proportionality**

“… we are to weigh the “mischief done,” which presumably means not only the immediate harm to individuals but also any injury to the permanent interests of mankind, against the contribution that mischief makes to the end of victory” (129).

**Military Necessity/ Utility**

Quoting Sidgwick “In the conduct of hostilities, it is not permissible to do “any mischief which does not tend materially to the end [of victory], nor any mischief of which the conduciveness to the end is slight in comparison with the amount of the mischief” (129).

**Discrimination/Distinction/Noncombatant -Immunity**

“… to set certain classes of people outside the permissible range of warfare, so that killing any of their members is not a legitimate act of war but a crime” (42).

**Jus Post Bellum** (various sources)

**Reconstruction**

The general requirement of the victor to reconstruct, to some extent, the defeated nation

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to override operation of the weapon system but can select and engage targets without further human input after activation (DODD 3000.09, 2012).

- **Semi-AWS**: Semi-autonomous weapon systems that employ autonomy for engagement-related functions including, but not limited to, acquiring, tracking, and identifying potential targets; cueing potential targets to human operators; prioritizing selected targets; timing of when to fire; or providing terminal guidance to home in on selected targets, provided that human control is retained over the decision to select individual targets and specific target groups for engagement (DODD 3000.09, 2012).


**Common Ethical Concerns of AWS**

- Loss of Human agency at the point of kill
  - “Kill Chain”
  - Mercy and the ability to do otherwise
    - See: “What’s So Bad about Killer Robots” by Alex Leveringhaus

- The “Responsibility Gap”
  - Designer/Programmer
  - Robot itself
  - Commander
    - See: “Killer Robots” by Robert Sparrow

- Loss of Defensive Harm claims
  - Increased probability of unnecessary wars
    - See: "Lethal Autonomous Weapons and Jus ad Bellum Proportionality” by Heather Roff

- Potential Violation of both jus ad bellum and jus in bello proportionality calculations
  - See: "Lethal Autonomous Weapons and Jus Ad Bellum Proportionality” by Heather Roff
  - See: “How Just Could a Robot War Be?” by Peter Asaro

**Possible Ethical Upshots of AWS**

- Ability to refuse immoral or illegal orders
  - Ethical Disobedience
    - How might a programmed AWS respond to a manifestly illegal order?
      - See: “Framework for Mercy Killing on the Battlefield” by Jean-François Caron

- Auditable decision-making processes
  - See: Governing Lethal Behavior in Autonomous Robots by Ronald Arkin

- Defense of Rights of Non-Combatants
  - See: “Autonomous Weapon Systems and the Claim-Rights of Innocents on the Battlefield” by Hunter Cantrell

- Increased defensive capabilities of smaller states to deter the aggression of larger states.
  - See (contra): "Lethal Autonomous Weapons and
Jus ad Bellum
Proportionality” by Heather Roff

- Significance of death by human and death by machine?
  o See also: *Army of None: Autonomous Weapons and the Future of Warfare* by Paul Scharre.

**Consolidated Resources**

*Just War Theory*
- Summa Theologica, Secunda Secundae by St Thomas Aquinas https://www.gutenberg.org/cache/epub/18755/pg18755-images.html
- *The Morality of War*, by Brian Orend
- *Just and Unjust Wars* by Michael Walzer
- *Killing in War* by Jeff McMahan
- “*Jus Post Bellum* and Political Reconciliation” by Colleen Murphy and Linda Radzik
- “*Jus Post Belum: The Perspective of a Just-War Theorist*” by Brian Orend
- “*Two Doctrines of Jus Ex Bello*” by Darrel Mollendorf
- “Skepticism about Jus Post Bellum” by Seth Lazar

- “From Jus ad Bellum to Jus ad Vim: Recalibrating Our Understanding of the Moral Use of Force”- By Daniel Brunstetter and Megan Braun

**Autonomous Weapon Systems**
- “What’s So Bad about Killer Robots” by Alex Leveringhaus
- “Killer Robots” by Robert Sparrow
- "*Lethal Autonomous Weapons and Jus ad Bellum Proportionality*” by Heather Roff
- “How Just Could a Robot War Be?” by Peter Asaro
- “Framework for Mercy Killing on the Battlefield” by Jean-François Caron
- *Governing Lethal Behavior in Autonomous Robots* by Ronald Arkin
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