


Human control in the targeting process

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Focus and aims

- **Focus:** how human control is or could be exercised at the stage of deployment and use of AWS, with a particular focus on the *targeting process*.
- **Aims:**
 - Offer one way of looking at MHC and the use of AWS
 - Offer some context about weapons use in general.

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The targeting process

- 'Targeting' is often associated with the actual use of force, lethal attack, kinetic action.
- But the targeting process is more than that.

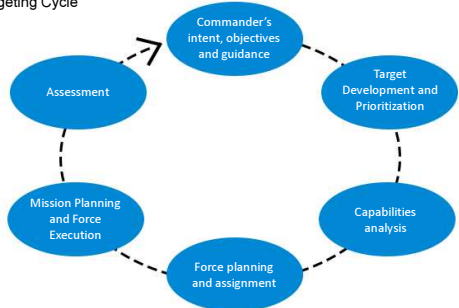
"The process of selecting and prioritizing targets and matching the appropriate response to them, considering operational requirements and capabilities to create desired effects that achieve stated objectives."
US Doctrine

- Formalized in NATO doctrine (AJP-3.9 Joint Targeting) but also in national military doctrines.

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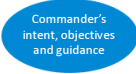
Joint Targeting Cycle



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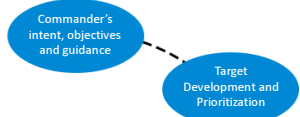
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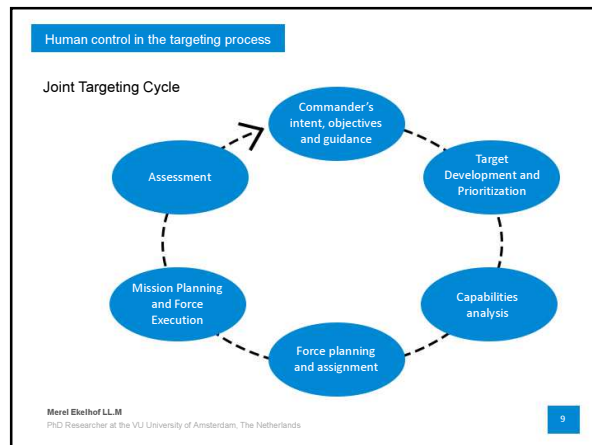
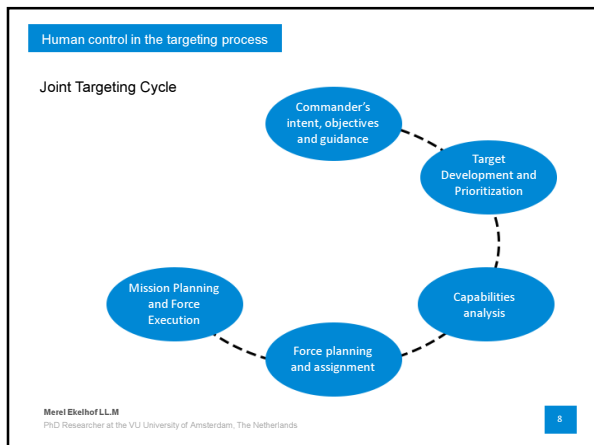
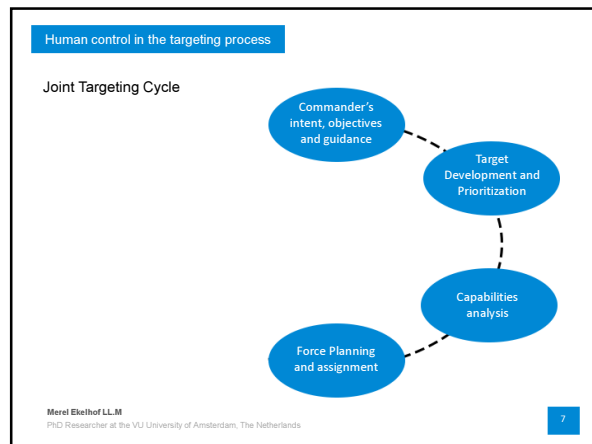
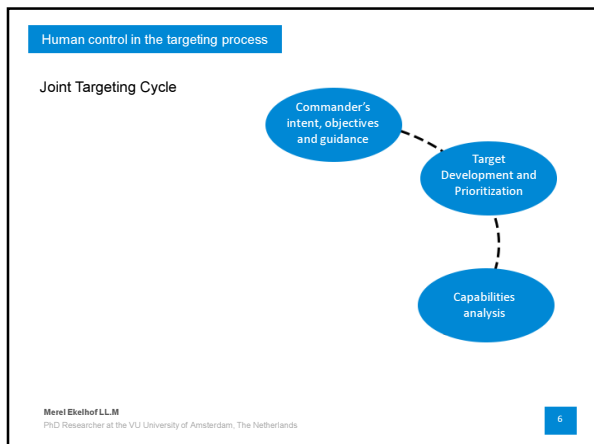
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- Current examples of weapons that select and attack targets without human intervention (e.g. the Harpy) are to be analyzed to see how MHC is understood and implemented in the targeting process today.
- Even when these AWS execute the critical functions without human intervention, humans
 - formulate the overall goals,
 - gather intelligence,
 - select and develop targets,
 - analyze and match the most suitable weapon,
 - decide under what circumstances and preconditions to employ a particular weapon.

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Key elements of MHC

- The concept of MHC is often explained as having key elements or components of human control, such as
 - Limiting the geographical area
 - Limiting the time
 - Requirement for humans to make informed, conscious decisions
 - Based on sufficient information about the applicable law, the target, the weapon, and the context.
- The targeting process provides opportunities for humans to actually exercise these and other key elements or components of control in an organized and structured manner.

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Conclusions

- As no weapon operates in a vacuum, the targeting process is a process that should be considered when thinking about increasingly autonomous weapons and the manner through which humans can remain in control of them.
- But that is not where the analysis should end:
 - Rapid technological advances may result in more complex AWS. The possibility of a machine-dominated targeting process should be taken seriously.
 - Besides the targeting process, other decision-making processes (e.g. design, validation and verification processes, Article 36) play a role in exercising human control over AWS.



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