



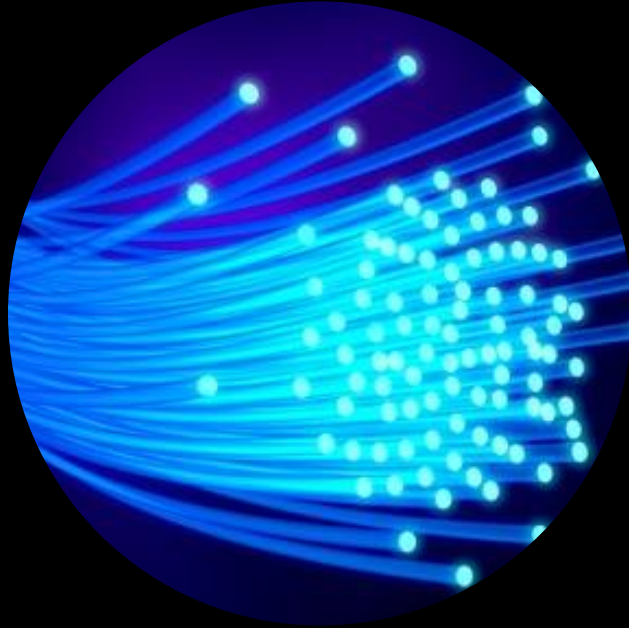
THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA

CREATE CHANGE

Legal Challenges for Future Technologies

Rain Liivoja
Associate Professor
TC Beirne School of Law
law.uq.edu.au/future-war

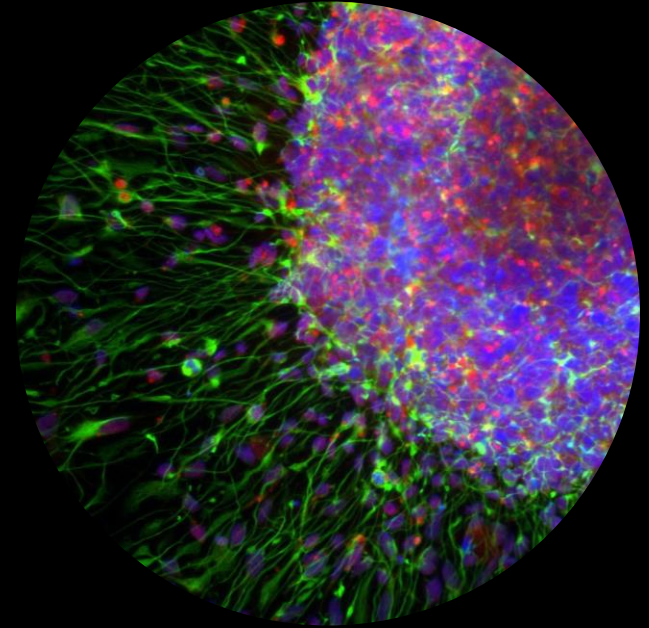




Cyber
capabilities



Robotic and
autonomous
systems



Biomedical
performance
enhancement



TALLINN MANUAL ON THE INTERNATIONAL LAW APPLICABLE TO CYBER WARFARE

Prepared by the International Group of Experts
at the Invitation of The NATO Cooperative
Cyber Defence Centre of Excellence

CAMBRIDGE

TALLINN MANUAL 2.0 ON THE INTERNATIONAL LAW APPLICABLE TO CYBER OPERATIONS

SECOND EDITION

Prepared by the International Groups of Experts
at the Invitation of the NATO Cooperative
Cyber Defence Centre of Excellence

CAMBRIDGE





Cyber operations – some current legal issues



data as an
object

operations
not
amounting to
attacks

peacetime
breaches of
sovereignty







CAMPAIGN TO **STOP**  **KILLER ROBOTS**

StopKillerRobots.org



Autonomous weapon systems – some legal issues



compliance
with targeting
rules

dictates of
public
conscience

“meaningful
human
control”

Cyber operations and autonomous systems - some common issues



Article 36
weapons
reviews

attribution

occupation

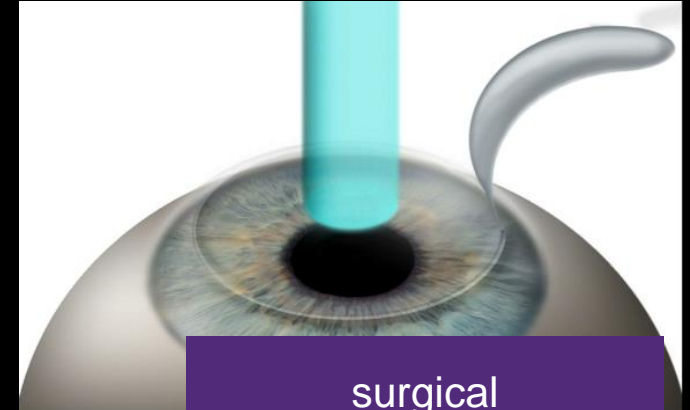
Means of human performance enhancement



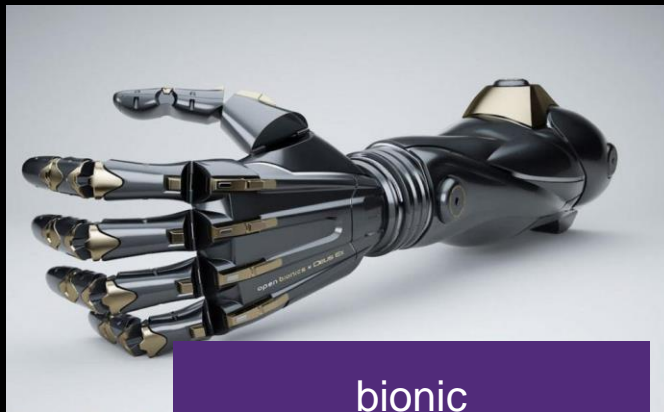
immunological



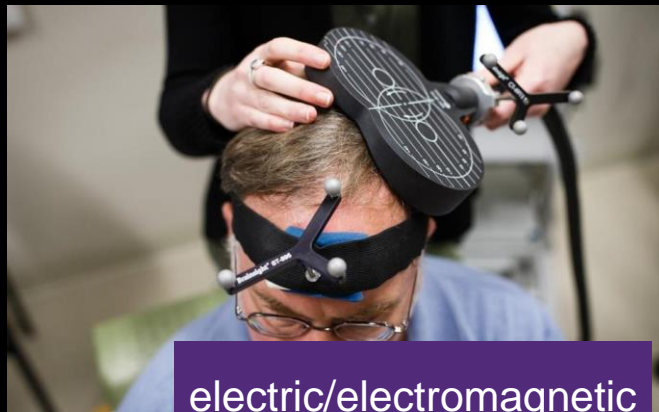
pharmacological



surgical



bionic



electric/electromagnetic



genetic



Human enhancement - some LOAC issues



individual
responsibility

superfluous
injury

protection of
medical
personnel

Now what?

- Amending or adopting treaties? Unlikely
- Creative interpretation of existing law
- Articulation of national positions to influence customary law
- Various political and practical measures



LAW *and the*
FUTURE *of* **WAR**

