Tilburg University
Understanding Society

Tilt
Tilburg Institute for Law, Technology, and Society

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RoboLaw

Regulating emerging technologies in Europe: Robotics facing Law and Ethics

The research leading to these results has received funding from the European Union's Seventh Framework Programme FP7/2007-2013 under grant agreement n° 289092 RoboLaw project

SEVENTH FRAMEWORK PROGRAMME

Objective of the project

To investigate the ways in which emerging technologies in the field of (bio-) robotics (e.g. bionics, neural interfaces and nanotechnologies) have a bearing on the content, meaning and setting of the law.

Focus on the ways in which regulation (both in terms of soft and hard law) may be affected by – and should be adjusted in light of– advances in robotics, with a special focus on human enhancement.

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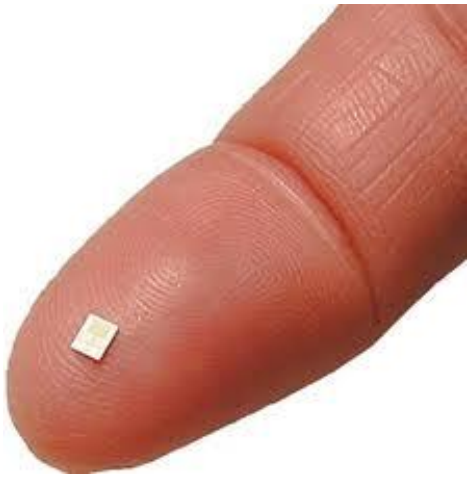
Some examples

1. RFID chips and tracking devices for surveillance and care:

How do they limit individual rights of physical integrity, liberty, identity, privacy?



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Some examples

2. Brain-computer interfaces

Whether and to what extent the will expressed by the individual through these biomedical technologies can be considered legally relevant and valid?

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Some examples

3. Cochlear implants, prosthetic devices restoring functioning

what effects do they have on our legislation on disability?

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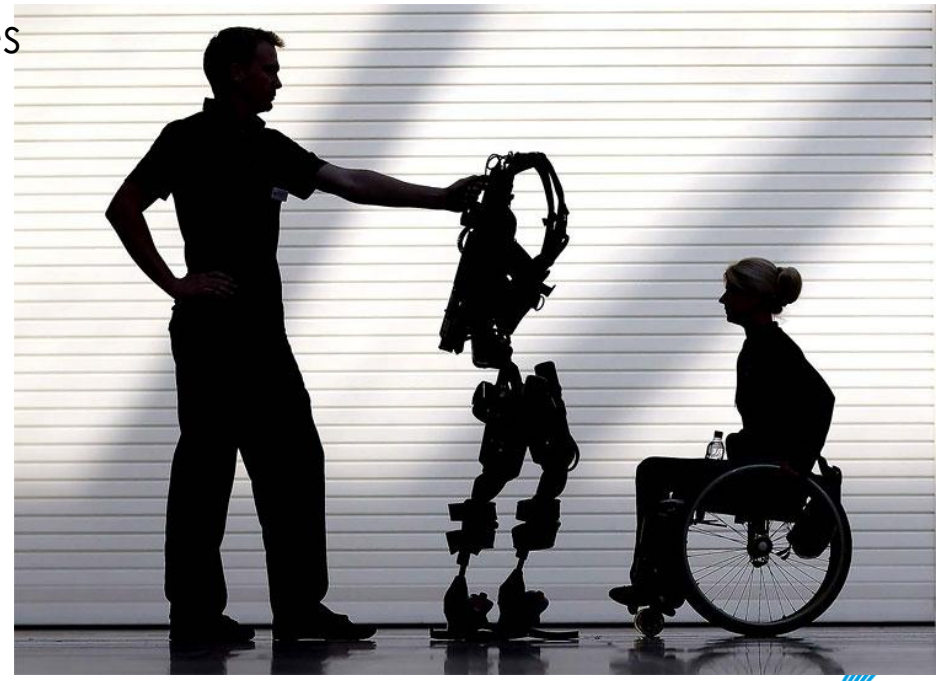
One exoskeleton, many variables

- Technology and contexts of use
- Jurisdictions (transnational)
- Areas of law
- Regulative tools and regimes



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Approach

1. Analysis of the current state-of-the-art of **legislation and regulation** pertaining to robotics, and identification of the areas of regulation that are in need of adjustment or revision due to the advent of emerging robotics technologies. (soft law + hard law)

2. Clarification of terminology and classification of **robotic applications** and identification of **case studies** relevant, for constitutional interests and rights

1. Exploration of the **interrelations between technical, legal and moral norms** in this field will be studied, in order to define what could be the best balance between them, and to promote a technically feasible, yet also ethically and legally sound basis for future robotics developments (focus on robotics and human enhancement: changing legally relevant concepts and standards)

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Main outcome

Draft "White Paper on Regulating Robotics", containing regulatory guidelines for the European Commission, in order to establish of a solid framework of 'robolaw' in Europe

>focus on a diverse range of regulatory tools beyond hard law (soft law) that can guide decision-making and behavior (in institutional, corporate or other settings)

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RoboLaw. Regulating emerging technologies in Europe: Robotics facing Law and Ethics

Funding scheme: Collaborative project
Programme: Capacities
Activity Code: SiS.2011.1.1.1-3: Regulating emerging scientific and technological developments
EU Financial Contribution:1.497.966 EUR
Duration: 24 Months
Starting date: March 1st, 2012
Name of coordinating person: Prof. Erica Palmerini (Scuola Superiore Sant'Anna, Pisa, Italy)
Consortium:

1. Scuola Superiore Sant'Anna di Studi Universitari e di Perfezionamento di Pisa (SSSA)
2. University of Tilburg, Law School, Tilburg Institute for Law, Technology, and Society (TILT)
3. University of Reading (UoR), England, School of Systems Engineering
4. Humboldt University of Berlin (HUB), Germany, Department of Philosophy

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ELSI/A and TA

1. Early assessment

2. Supporting institutions and policy makers (audience) with recommendation and opinion paper

1. Interdisciplinary approach: legal scholars philosophers, roboticists

2. Acknowledging that we live in a ¨technological culture

- No focus on public participation
- Expert-based
- Report oriented

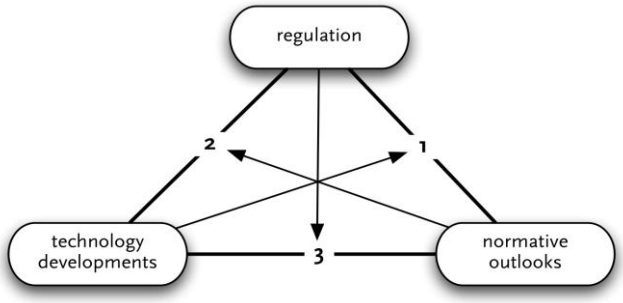

Figure 1. The interplay between regulation, technology, and normative outlooks

TILT Research Program:
http://www.tilburguniversity.edu/upload/6f87f6ff-3b6e-4097-84eb-8726c54ce95c_rp.2013.pdf

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Some questions for discussion

- Does the focus on regulative framework of emerging technologies add new dimensions to TA? (it seems to me that it unpacks the concept of ¨governance¨ on the one hand, while on the other hand specifies the the type of opinion/recommendation offered to policy makers)
- Is a project like RoboLaw any different from a TA study?
- What is the current distribution of work between ELSI/A studies and TA?
- What would be an ideal distribution of work?
- Or should we strive for a further integration of ELSI and TA? And how would that look like?

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Thanks for your attention!

Further information concerning the RoboLaw project can be found at:

http://www.robolaw.eu

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TILT NEWSLETTER

February 2013

CALL FOR PARTICIPATION

TILTing Perspectives 2013: Bridging Distances in Technology and Regulation
25-26 April 2013, Tilburg, The Netherlands

TILTing Perspectives is a series of bi-annual international conferences, organized by the Tilburg Institute for Law, Technology, and Society (TILT) at Tilburg University in the Netherlands. TILT is a multidisciplinary institute conducting research into the legal and social implications of various emerging technologies, ranging from ICT and biotechnologies to neurotechnologies and robotics, in a variety of domains ranging from health care to justice.

This year's conference provides a prospective outlook on the near and middle-term future in which technologies are used across distances both in space and in time.
Keynote speakers:

- Karen Yeung, King's College London
- Dan Burk, University of California at Irvine
- Ian Walden Queen Mary University London

Panel sessions with around 20 paper presentations:

- technology regulation, governance and innovation
- trust and healthcare
- robotics
- synthetic biology, biologicals, and nanotechnology
- energy and climate change
- privacy and data protection

The two-day conference brings together experts from around the world in the fields of law, technology, philosophy, and social sciences, facilitating a dialogue between lawyers, legal scholars, social scientists, technology developers, philosophers, science & technology scholars, robotics and neuroscience scholars, and policy makers. The presentations address fundamental issues as well as present case studies.

Full programme on the conference website: http://goo.gl/khth3

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