

USING AI ROBOTS IN MEDICINE: THE INTERPLAY BETWEEN TECHNOLOGY, MEDICINE, AND LAW AS A GATEWAY FOR DISCOVERING AN APPROPRIATE LIABILITY REGIME

Dr Maja Nisević CiTiP KUL

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Authors

Hana Kulenovic KU Leuven,

Faculty of Biomedical Sciences, Research Group Ophthalmology



 Nikolaos Tsiogkas KU Leuven,
 Department of Computer Science, DTAI group (supervisor)



Maja Nisevic KU Leuven, CiTiP



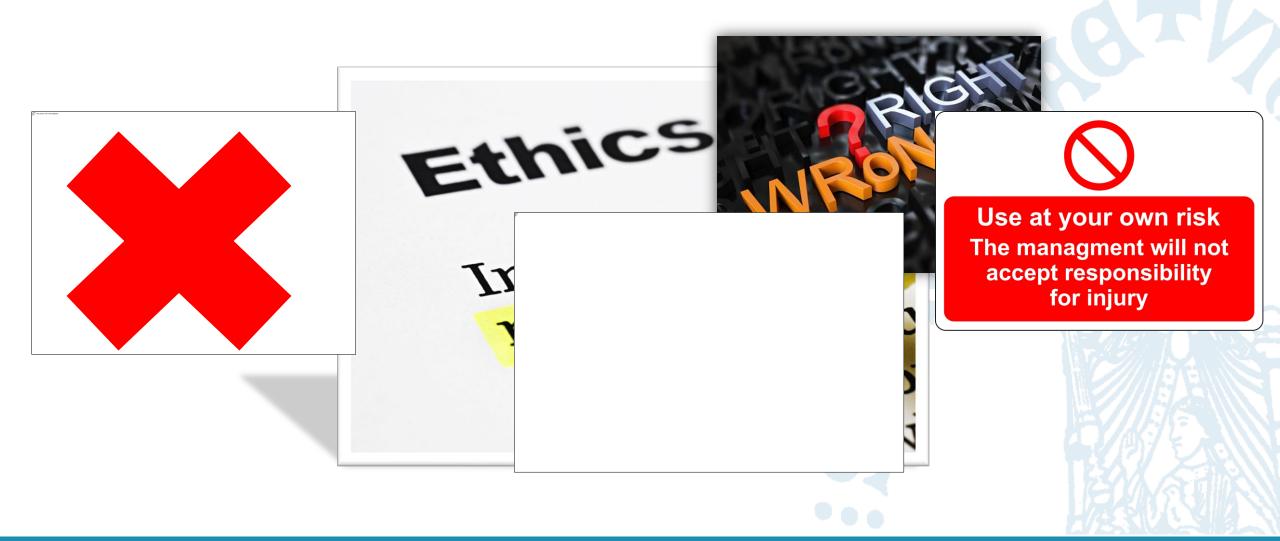


- Introduction
- Research questions
- Concerns regarding technology
- Concerns regarding medicine
- Legal liability and Al-powered robots
- Preliminary conclusion





Introduction





Introduction to the research idea

Theory of Legal Liability (the perspective of the general theory of law):

Human personhood- An unlawful act- Consequences

An expression of the condemnation by the state of illegal conduct that consists of an obligation to bear a deprivation

The observance of the norms of law, applied by the state organs against those who commit illegal acts

The sanction of the criminal act, the consequence established by law for committing such an act

A deprivation applied to that person, a state constraint by which the person in question is obliged to execute the requirements of law



Introduction

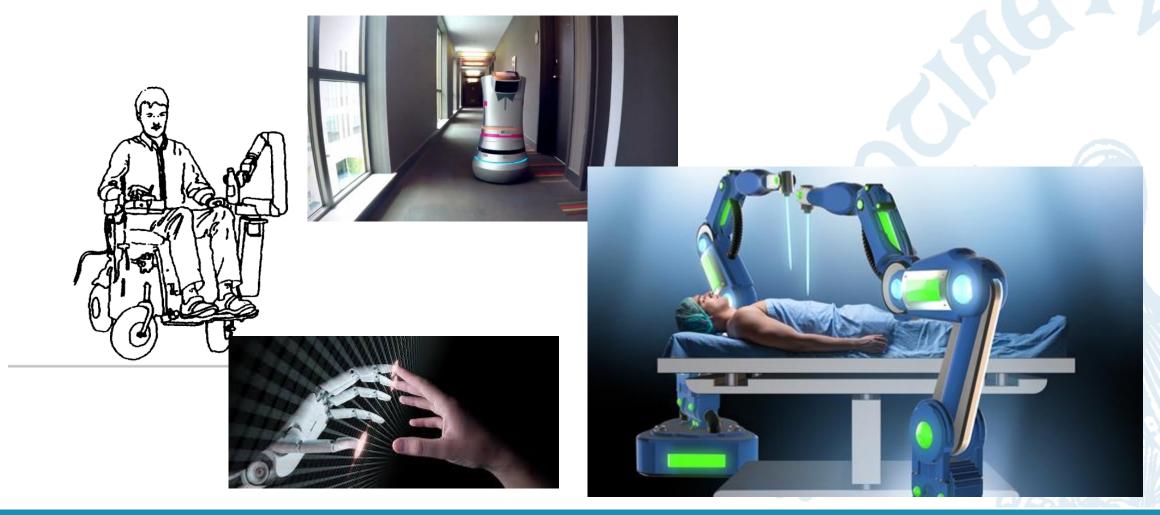


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To be holder of legal liability means to be subject to it - the ability of one person to be legally liable for illegal conduct is the ability of another person to be held legally liable by submitting an action to the competent court - the ability to answer and ability to prosecute



Research questions

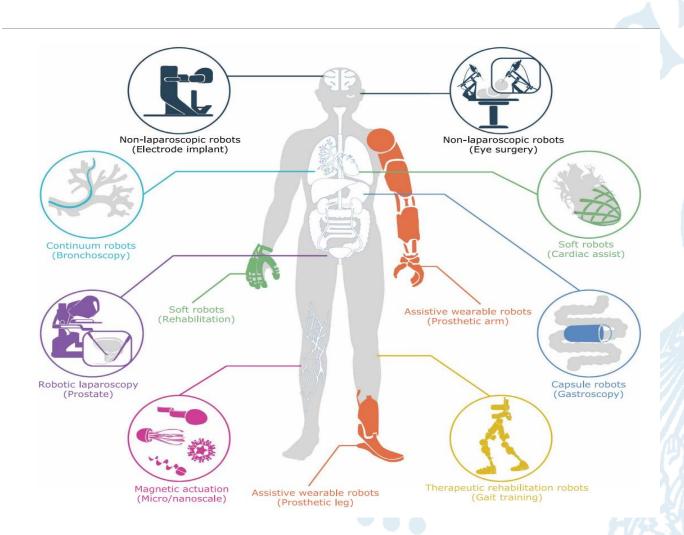




Introduction to the research idea

Developments until 2023







Concerns regarding technology

Operate digitally

No human intervention

Operate physically

Direct human intervention

Al-powered robots

As a service provider

AI- powered robots

As an operator instead service provider



Concerns regarding technology

The ability and need of humans to explain has been studied for centuries, initially in philosophy and more recently also in all those sciences aiming at a better understanding of intelligence (Sovrano et al., 2022)

Cognitive robotics is the study of the knowledge representation and reasoning problems faced by an autonomous robot (or an agent) in a dynamic and incompletely known world. (Levesque, Hector, and Gerhard Lakemeyer.,2008)

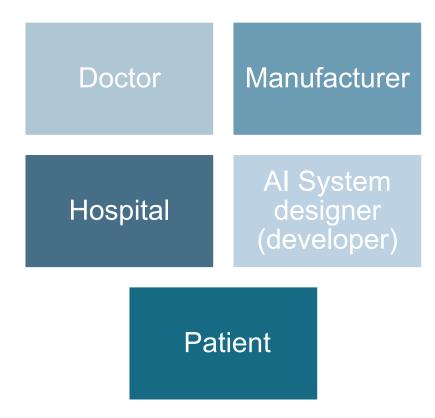


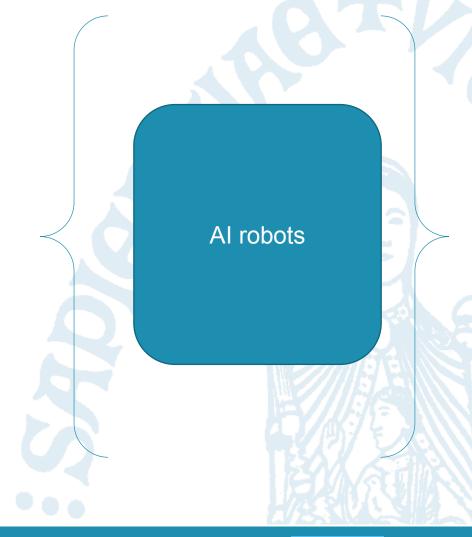


Concerns regarding medicine



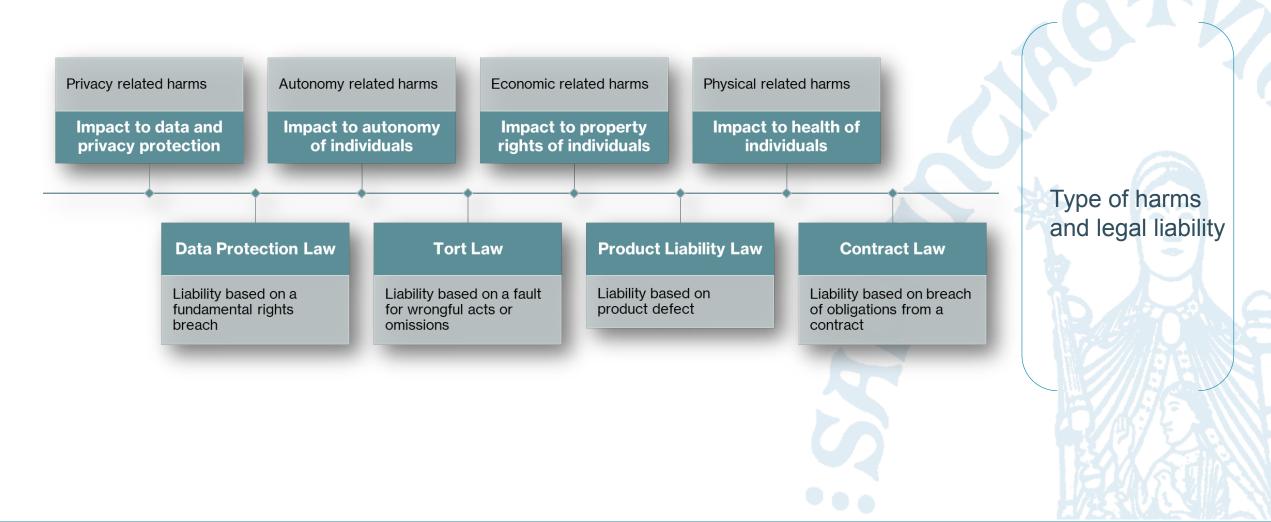
Legal liability and AI robots in medicine







Legal liability and AI robots in medicine



Legal liability and Al robots in medicine

Non-specific sectoral rules Specific sectorial rules e.g., Product liability (Contract and Tort Law) e.g., Medical Devices Regulation Sources for legal liability in the EU



Preliminary research findings

Al- powered robots in medicine

- Machine-to- machine relation
- Machine- to- human relation
- Liability ex-ante and ex-post

Liability models

- The interplay between human and machine
- The interplay between different links in a chain





THANK YOU FOR YOUR ATTENTION



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