

LIACC

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Artificial Intelligence for Public Administration

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AI for PA - Opportunities

- Public Administration
 - Processing a **huge amount of data**
 - Solving **very complex problems**
- Artificial Intelligence (AI)
 - Significant role in the modernisation and improvement of public administration
 - **Extracting** appropriate **information** from the available data
 - Using it to help the **decision-making** process
- However...
 - We need to open up data – free-flow of data
 - Need for transparency, explicability, correctness, fairness, and security on the use of AI
 - Collecting and processing data but also **solving** Public Administration **problems**

AI for PA - Opportunities

Opportunities:

- **Advances** in Artificial Intelligence: Machine Learning, Natural Language Processing, Robotics
- Huge Increment in the **Quantity (and Quality) of Data** available (in the public administration)
- Increment in **Computational Power**
- **New Algorithms** in several areas of Artificial Intelligence

Process Automation and Decision Support for Public Administration:

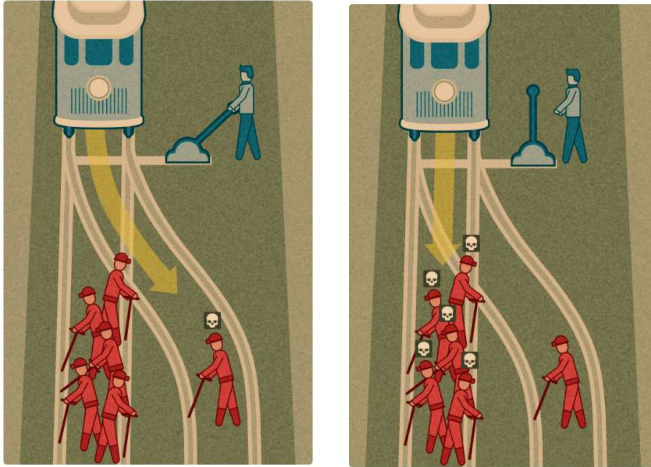
- Government, Urban Planning, Transportations, Traffic Management, Energy, Water and Waste, Citizenship, Hospital and Public Health Management, Police and Surveillance, Education and Science, Heritage and Tourism Management

AI offers a large set of areas:

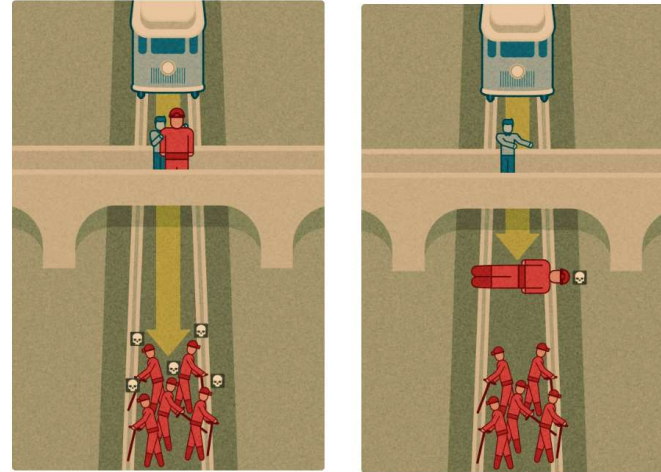
- Machine Learning, Data Science, Decision Support Systems, Optimization, Natural Language Processing, Simulation, Intelligent Planning, Agents and Multi-Agent Systems, Internet of Things, Machine Perception, Robotics and Automation, Cloud and Big Data, Cyber-Security, Sustainable Computing

Moral Machine

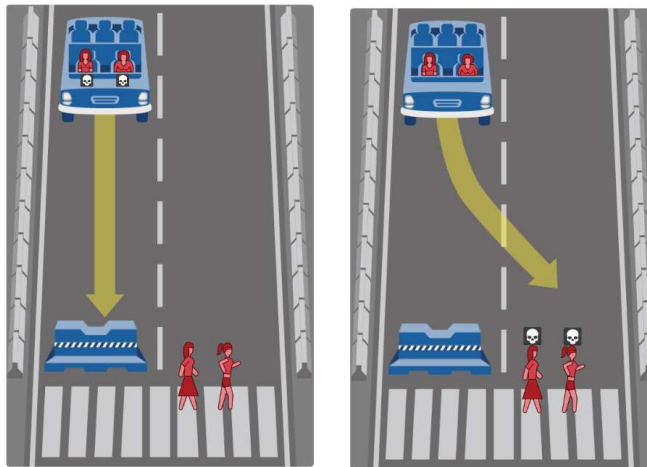
What should the man in blue do?



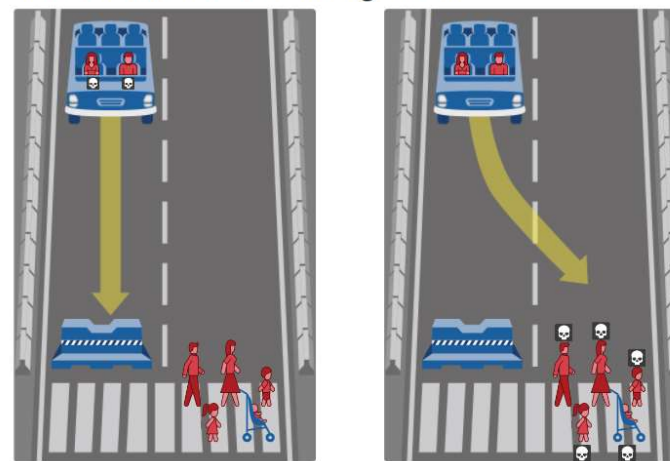
What should the man in blue do?



What should the self-driving car do?

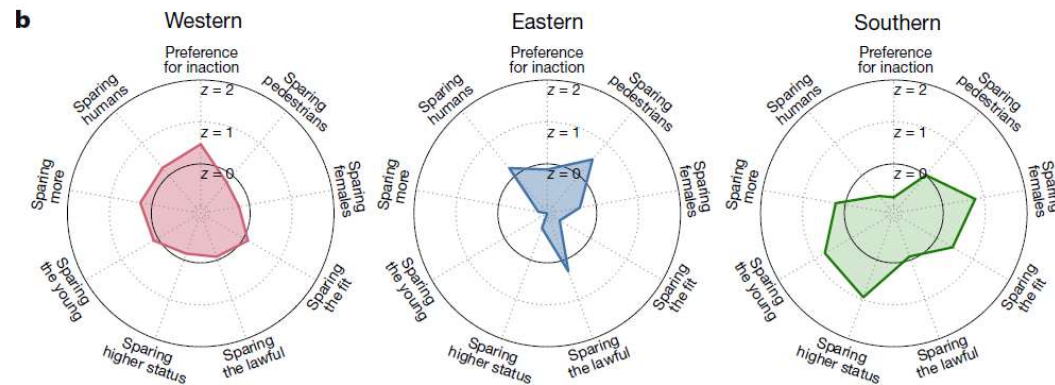
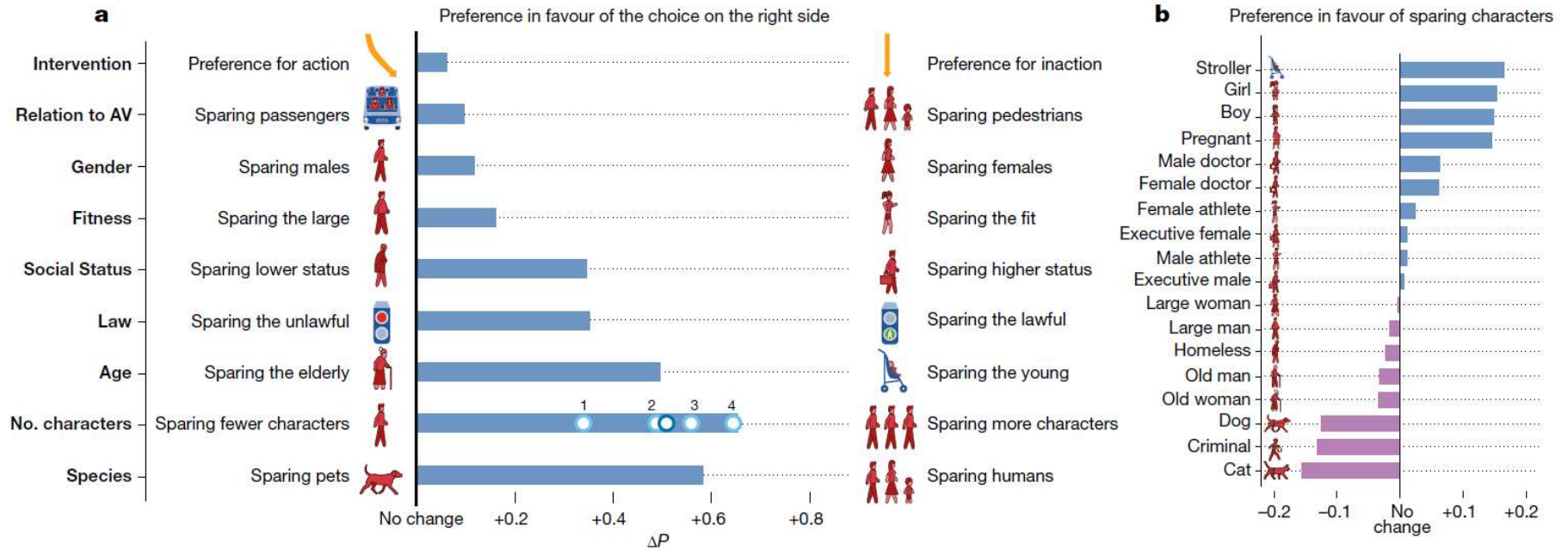


What should the self-driving car do?



mit
media
lab

Moral Machine



Configurable AI:

- European Union
- Region
- Country
- Citizen

Conclusions

- AI is growing steadily worldwide with emphasis for Machine Learning, NLP and Intelligent Robotics
- Powered by huge amount of data, computer power and new algorithms
- But we need to open data... Need of free flow of non-personal public sector data!
- Need for Explainability, Trust, Transparency, Fairness and Security
- Too much concern with data, low concern with Decision-Making?
- Need for Configurable AI!
- Need for specific funding “AI for Public Administration”
 - Funding competitive projects for Public Administration/Government together with Universities/Companies!

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