



INSTITUT FÜR HÖHERE STUDIEN
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Complex unknown mobilities: Kinotopias & social epistemology

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The future of automobility

- ▶ How would I know?
 - ▶ Is it a technology fix issue?
 - ▶ Is it a policy issue?
 - ▶ Is it an ethical issue?
 - ▶ Is it a mobility issue?
- ▶ Automobility ++
 - ▶ Urban spaces
 - ▶ Connectivity
 - ▶ Persuasiveness
 - ▶ Sustainability
 - ▶ Design
 - ▶ IoT
 - ▶ Smart cities
 - ▶

Complex(ity)

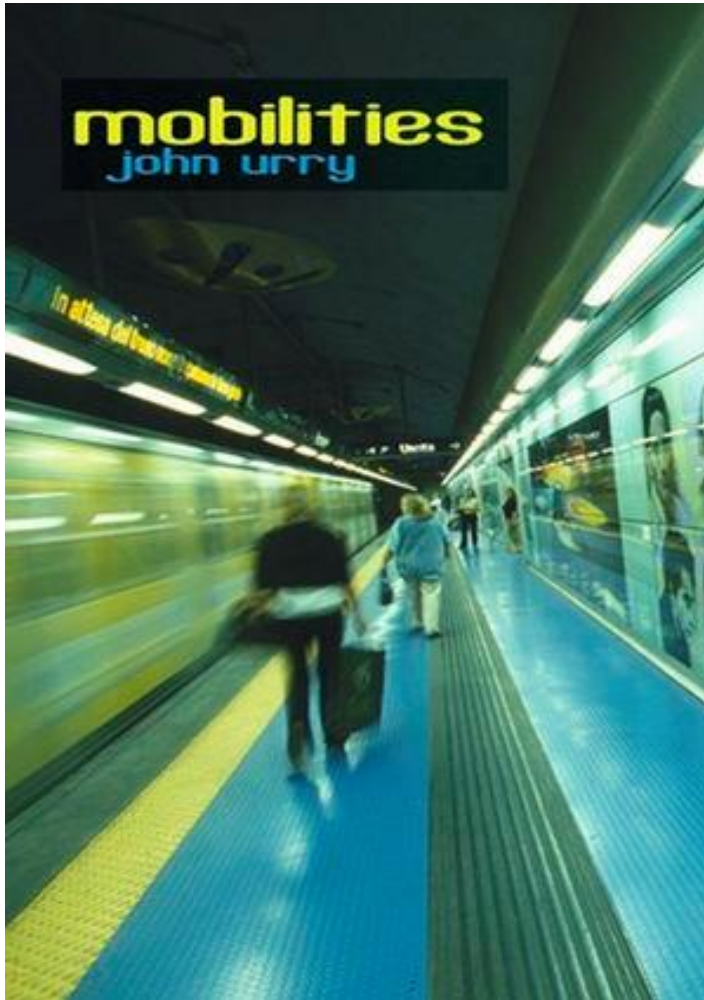
- ▶ Contingent openness
- ▶ Multiple futures
- ▶ Unpredictability of outcomes
- ▶ Diverse & non-linear changes
- ▶ Ability of adaptation and co-evolution
- ▶ Irreducibility to elementary laws and simple processes





Unknown

- ▶ The 'unknown' elevated to the mainstream
- ▶ Risk society not limited to environmental and health risks alone
 - ▶ shifting employment patterns
 - ▶ heightened job insecurity
 - ▶ declining influence of tradition and custom
 - ▶ erosion of traditional family patterns
 - ▶ democratization of personal relations.



Mobilities

- ▶ The „End of Sedantrism“
 - ▶ Stability
 - ▶ Meaning
 - ▶ Place
- ▶ The age of fluidity
(movement of everything)
 - ▶ Corporeal travel
 - ▶ Physical movement of objects
 - ▶ Imaginative travel
 - ▶ Virtual travel
 - ▶ Communicative travel



Kinotopia(s)

- ▶ Complex-unknown-mobilities: a new form of Foucauldian Heterotopias
- ▶ N-dimensional instances of space/time created by the complexity of networks, links, exchanges, and connections
- ▶ Multiplicity of both being in space and moving through it
- ▶ Spatial fluidity

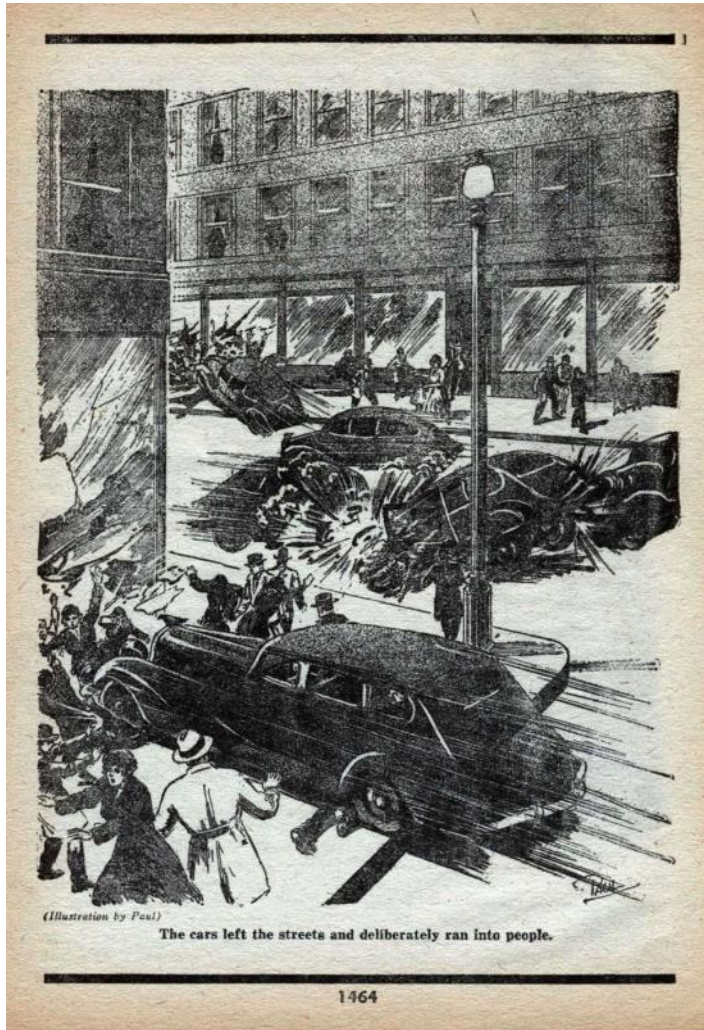
Examples of kinotopias



- ▶ Mobile devices
- ▶ Wearables
- ▶ Biotech sensors and instruments
- ▶ Autonomous vehicles
- ▶

Autonomous cars

- ▶ Utopias or kinotopias
- ▶ Science fiction:
 - ▶ 1930s: David H. Keller: *The Living Machine*, 1935
 - ▶ 1950s: Asimov: *Sally*, 1953
 - ▶ 1970s: Arthur C. Clarke: *Imperial Earth*, 1976



Kinotopias: an autonomous world

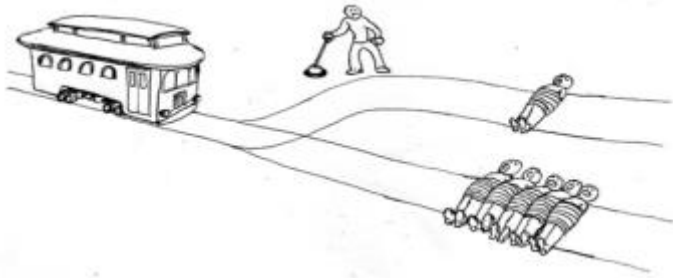




Hopes and fears

- ▶ Less (or no) accidents
- ▶ Increased accessibility
- ▶ Better time utilization
- ▶ Increased personal wellbeing
- ▶ Better utilization of urban space
- ▶ Increased environmental sustainability
- ▶ Lost jobs
- ▶ Increased dependence on technology
- ▶ Increased inequality
- ▶ Creation of three tier societies
- ▶ Loss of traditional social structures
- ▶ Loss of privacy
- ▶ Reduced “free time“

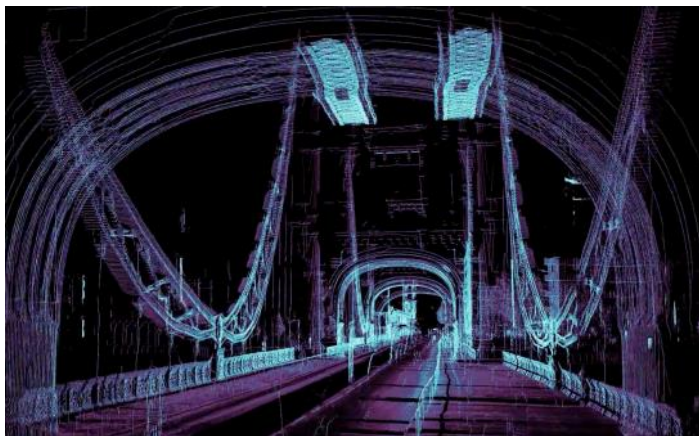
Current challenges



- ▶ Social:
 - ▶ Trolley problem (ethics)
 - ▶ MaaS/PT solutions (business)



- ▶ Public policy
 - ▶ Vienna Convention
 - ▶ Accessibility levels



- ▶ Tech:
 - ▶ High-resolution mapping vs improved vision systems
 - ▶ Scaling up LIDAR scanner solutions



Future challenges

- ▶ **PTs & MaaS**
 - ▶ How will public and private transportation coexist?
- ▶ **Urban infrastructure**
 - ▶ How will AM impact our shared spaces?
 - ▶ How to plan our UI for the unknown?
- ▶ **Politics of Research and Innovation**
 - ▶ How will technology shape our future(s)?



Political challenges

- ▶ Politics of epistemology
 - ▶ Who knows what?
 - ▶ Participation & citizens engagement
 - ▶ Who controls what?
 - ▶ Technology/industry push vs. ?
- ▶ Politics of the spatial
 - ▶ Who designs what?
 - ▶ How to design for the unknown?
 - ▶ Who inhabits what?
 - ▶ How to plan for ‘the brave new world’
- ▶ Politics of technology
 - ▶ Is there still a private and public?

Why is this important?

- ▶ Technology fix is not enough
 - ▶ New social/civic epistemology
 - ▶ Responsible Research and Innovation
 - ▶ Democratic cooperation
 - ▶ Stakeholder engagement





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Thank you!

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