# European Studies on Society, Science and Technology (ESST)

Vincent Lagendijk March 24, 2018

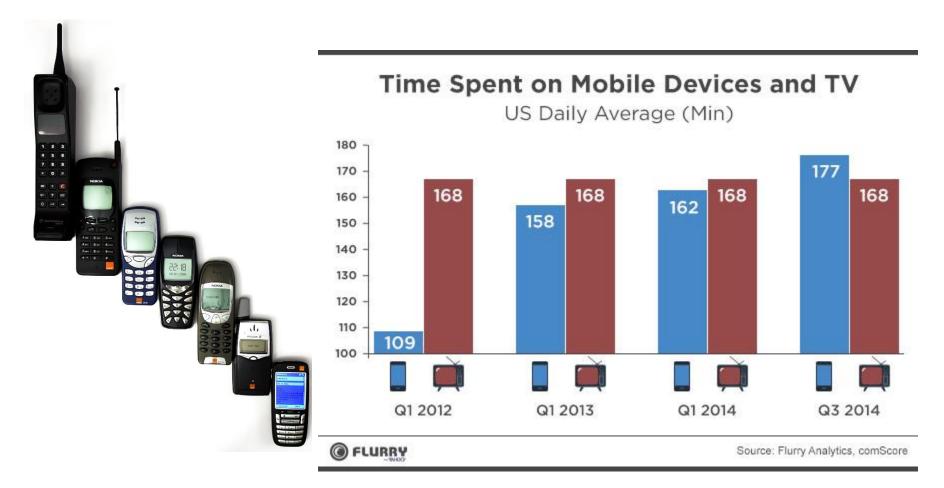








# Living in a Technological Culture







# New risks?





Maastricht University

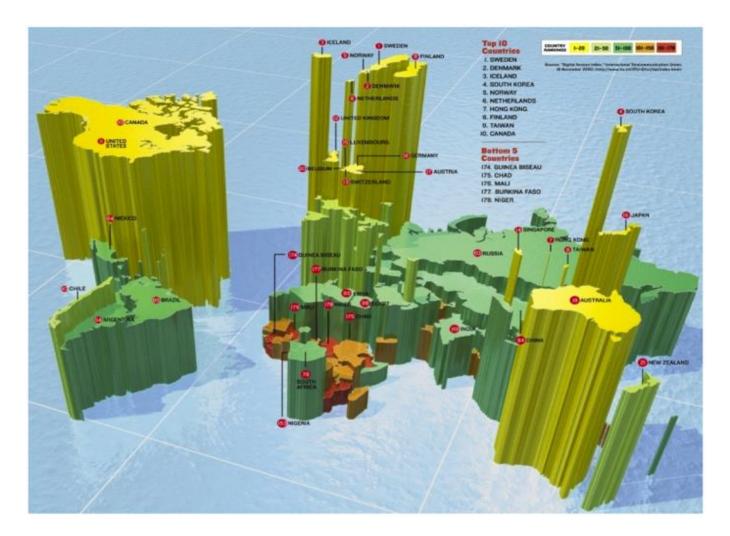
# What is socially acceptable?







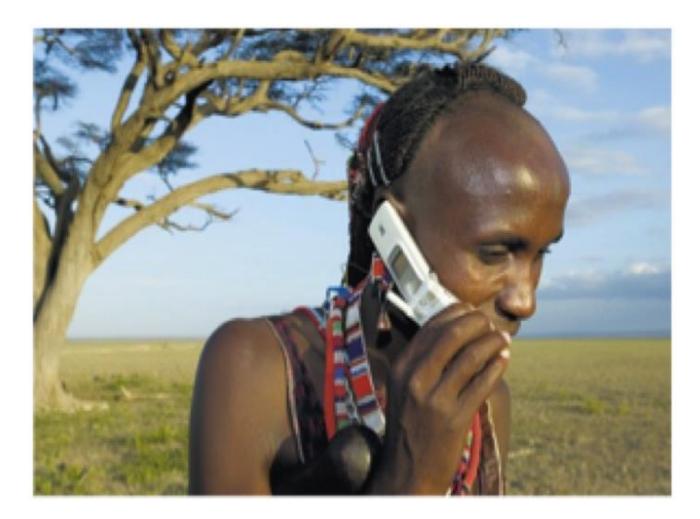
# **Uneven spread of science/technology**







# **Alternative uses**











# Science and Technology - Society



"We can't solve problems by using the same kind of thinking we used when we created them." Albert Einstein

Science and Technology Studies: Transform your perspective on the world so that you notice that the 'stuff of the world' can be reflected on in new ways which offer opportunities for interventions





## **ESST** in sum

- •2018: Received Top Label from Elsevier Keuzegids (86/100)
- •One of the oldest MAs (20 years of experience)
- •One-year Master of max 30 students
- •Multi-disciplinary and multi-cultural background
- International joint Master (student exchange)
- •Many specializations: see esst.eu/specialisations
- •You receive two diplomas: Maastricht University + European Inter-University Association





### What are the aims of the ESST program?

**to train** future researchers, innovation consultants, managers and policy-analysts, ..

#### with a profound and critical understanding of:

- •the relation between research, innovation and society
- •Including governance structures, processes of policy-formation, ethics, etc.
- •the specific socio-historical context from which they emerge
- and of today's European and global socio-economical context in which they take place





## What kind of graduate does ESST 'produce'?

# 1. Problem-definers in order to act as problem-solvers

# 2. Bridge-builders with an advanced level of generic skills

# 3. Specialised generalists with a cosmopolitan quality





## What types of students enroll in ESST?

- **1. Multi-disciplinary background:** 
  - Science and Engineering: social dimensions of science and technology
  - Social science and Humanities: ethical and political dimensions of science and technology
- High international diversity: ESST students come from all over the world (22 students – 8/9 nationalities)





## How and what does ESST teach you?

- Small groups, interactive sessions
- Five intensive courses of four weeks, specialization phase
- Problematise and analyse issues faced policy-makers, industrial organisations, NGOs etc.
- Understand the perspectives of different stakeholders
- Cope with complexity
- Understand and unpack scientific knowledge, and grasp how this is being 'produced'



## How and what does ESST teach you?

- Experiment and reflect on relation between theory and empirical material
- Awareness for the 'politics' of any method or theory (idea of a lens)
- Recognising the dynamics of science and technology
- Be proactive and reactive





# The academic year in a nutshell

First semester: Becoming a generalists		Second semester: Becoming a specialist
1. Introduction in Science and Technology Studies	<ul> <li>sociology of technology</li> <li>philosophy of technology</li> <li>cultural studies</li> </ul>	Introduction in Science and Public Policy / Specialisation elsewhere
2. Science and technology in the making	<ul> <li>science studies,</li> <li>philosophy of science</li> <li>anthropology of science</li> <li>innovation studies</li> </ul>	Research project and writing of Master thesis
3. Interpreting the history of science and technology	<ul> <li>history of science and technology</li> <li>historiography</li> </ul>	
4. Science and technology dynamics	<ul> <li>innovation studies,</li> <li>evolutionary economics</li> <li>political science</li> </ul>	
5. The Politics of knowledge	<ul><li> political science</li><li> risk studies</li></ul>	



Core questions modules:	Core disciplines modules:
1. What are the different approaches towards the relationship between science, technology and society?	<ul> <li>sociology of technology</li> <li>philosophy of technology</li> <li>cultural studies</li> </ul>
2. How are fact and artefact established? What is the relationship between science, industry and the state?	<ul> <li>science studies,</li> <li>philosophy of science</li> <li>anthropology of science</li> <li>innovation studies</li> </ul>
3. How to interpret the history of science and technology?	<ul><li>history of science and technology</li><li>historiography</li></ul>
4. What are the dynamics of science and technology from an Economics and policymaking perspective?	<ul><li>innovation studies,</li><li>evolutionary economics</li><li>political science</li></ul>
5. How to analyse controversies about technology and risks as conflicts about knowledge and expertise?	<ul><li> political science</li><li> risk studies</li></ul>





## 2<sup>nd</sup> semester at ESST partner universities or in Maastricht

- **Oslo, Norway**
- Athens, Greece
- **Copenhagen**, Denmark
- **Maastricht, The Netherlands**
- Tallinn, Estonia
- Klagenfurt/Graz, Austria
- **Moscow**, Russia
- Namur & Louvain, Belgium
- Strasbourg, France
- Madrid, Spain
- Lisbon, Portugal
- Trento, Italy
- Toruń, Poland









### **Examples of specializations:**

- Innovation Systems, Social and Ecological Change
- Economics and Management of Innovation
- Ethical and philosophical stakes of sciences in societies
- Situated Analysis of Global Connections
- Science and Public Policy
- Science, Technology and Sustainability: North-South Comparisons
- •
- Water management and water uses
- Historical, philosophical, ethical and governance aspects of ICT and emerging technologies
- Science and Politics in Controversies on Nature

Maastricht University



### **Recent theses**

•Knowing Social Fabric: An Ethnographic Account of Big Data Practice in Scientific Research

•The fluidity of knowledge. Constructing relevant knowledge in the context of flood management in England and the Netherlands

•What indicators do: The mediation of measures in the Walloon Regional

•Smart Grid: A Smart Solution: The Adoption of the Smart Grid Technology by the Residential Consumers in Germany

•The usage of science in settling trade disputes under the judicial component of the WTO Dispute Settlement Body

•European Air Traffic Management Network and Innovation. Moving Toward a Stasis? Combining a Large Technical System Approach and Organizational Path Dependency





### **Recent theses**

•The Internet Governance Forum Multistakeholder Approach: An Analysis through a STS perspective

•Communities in UK Drug Policy: Examining the role of epistemic communities in the formation of UK Drug Policy from 2010 to 2016

•Comparing European, German and Greek Interpretations of the Crisis-Induced Solar Energy Mega-Scale Project Helios: Opening the Black Box

•The Matryoshka doll principle of co-production: The interaction between science & politics in the EU's knowledge politics on social innovation and TRANSIT

•Security devices for Women and Securitization of the Public Space: the Siamo Sicure! case study in Genoa





#### **Internships : for example in Maastricht:**

'Science and Public Policy'

Base camp:	In collaboration with:
<i>Maastricht University Science and</i> <i>Technology Studies</i> (MUSTS) at Maastricht University	Rathenau Institute in The Hague Scientific and Public Involvement in Risk
	<i>Allocations Laboratory</i> (Spiral) at Université de Liège, Belgium
	<i>International Centre for Integrated</i> <i>Assessment and Sustainable Development</i> (ICIS) in Maastricht
	<b>Center for Science and Technology Studies</b> at Leiden University
	<b>Institute of Health Policy &amp; Management</b> at the Erasmus University Rotterdam



## Career perspectives: 2 diplomas

#### Universities/ Research Institutes

PhDs in Industrial ecology; health economics; governance and ethics of technology; sustainable studies; strategic management; nanotechnology

#### Policy Agencies

Rathenau Institute, Management Agencies of several Ministries (e.g. Environment; Transport, Public Works and Water), The National Committee for Research Ethics; Advisory Council; European Commission

#### • Consultancy:

Euro Info Centre (DG Enterprise EC), Ecorys; Technopolis Group Brussels; IDEA Consult Brussels

#### • Businesses:

Microsoft, Google, Statoil, DSM, Mercedes Benz, Sotheby's, Alliander



# **Admission criteria**



- University Bachelors degree
- High level of motivation
- English language test (TOEFL/IELTS)
- Essay of 2,000 words
- Curriculum vitae
- Deadline
  - 1 May 2018: Non-EU/EAA students
  - 1 August 2018: EU/EEA students



## More information:

# www.maastrichtuniversity.nl www.esst.eu



Vincent.Lagendijk@maastrichtuniversity.nl

