## Digital histories of industrialization, innovation & beyond



#### **HISTORY OF INDUSTRIALIZATION & INNOVATION**

#### Mats Fridlund, FT DI

Professor of the History of Industrialization
History of Industrialization & Innovation Group (hiiva)
Aalto University School of Engineering

### Hiiva digital historians



#### **Professor Mats Fridlund Head of the Hiiva Group**

PhD, (1999) History of Technology, KTH

#### Docent Petri Paju Kone Foundation Research Fellow

• PhD (2008) Cultural History, University of Turku



#### Dr Mila Oiva Kone Foundation Postdoctoral Fellow

• PhD (2016) Cultural History, Univ. of Turku & Aleksanteri Institute



• PhD (2016) History, European University Institute, Florence





### Prof. Joanna Guldi Kone Foundation Digital History Fellow

• **Assist. Professor** in History of Britain & its Empire, Southern Methodist University, USA, **PhD** (2008) History, UC Berkeley



### **Docent Johan Jarlbring Kone Foundation Digital History Fellow**

• Senior Lecturer Media & Communication Studies, Affiliated Researcher HUMlab, Umeå University, PhD (2009) Cultural Studies, Linköping Univ.

### Helping history happen

### Symposia series

2013: Digital Humanities Finland

#### Conferences

2015-2016: Digital History in Finland Conference

#### Conferences sessions

- Annual Meeting of Society for History of Technology
- Swedish History of Technology and Science Days
- Finnish History Days

### Hackathons & ThatCamps

- Annual Meeting of Society for the History of Technology
- DHH2015
- DHH2017

### Collective research & dissemination projects

- 2015: Roadmap project
- 2016: From Roadmap to Roadshow



### Roadmap project

### Towards a Roadmap for Digital History in Finland:

Mapping the Past, Present & Future Developments of Digital Historical Scholarship

- Collective application of Finnish digital historians Fridlund as PI
- Funded by the Kone Foundation 2016–2017
- Petri Paju as postdoc researcher
- Aims
  - To map current position of Finnish digital historians are as a collective
  - Where it could be headed in digital history research and teaching
- Arranged two seminars April 2016 & June 2017
- Presentations at various conferences
  - DHN 2016, Oslo, DHN 2017, Göteborg
  - SHOT

### Roadmap project - projects

### Online Questionnaire

- With Finnish 'digital historians'
- Identified key problems
- Online: <a href="https://digihistfinlandroadmapblog.wordpress.com">https://digihistfinlandroadmapblog.wordpress.com</a>

### Studying Finnish historian's use of computers

- Empirical historical project
- Identified key periods from 1960s
- Published in Haik



- Zotero group "Digital history Finnish bibliography"
  - https://www.zotero.org/groups/digital history finnish bibliography/

### Follow-up project

## From Roadmap to Roadshow: A collective demonstration & information project to strengthen Finnish digital history

- Combined research & dissemination project
- Aim:
  - identify best practices to facilitate Finnish digital history research
- Targeting key issues identified in Roadmap project
  - Collaboration between Historians and IT specialists
  - Best practices in research projects
  - Lack of teaching in digital humanities methods

### Roadmap to Roadshow

### Four project researchers

- Full-time Finnish reserachers: Petri Paju & Mila Oiva
- Part-time international researchers: Joanna Guldi & Johan Jarlbrink
- Both as lecturers & resource persons

### Research part – research on Digital History

- Research on critical issues
- Studies of Finnish & international experience

### Dissemination part – teaching Digital History

- Travelling symposia
- To major Finnish universities with history departments

### Roadmap - Research

- Research on critical issues
- Interviews, participant observation & literature reviews
- Institutions:
  - Studies of experience of setting-up DH laboratories
- Practices:
  - Investigate interdisciplinary collaborative research in DH-projects
- Methodologies:
  - Mapping state-of the-art of digital history research methods

### Roadshow - Teaching

### Disseminating

- February 2018
- All projects researchers participating
- Half-day symposia + tryout workshop



#### National Finnish roadshow

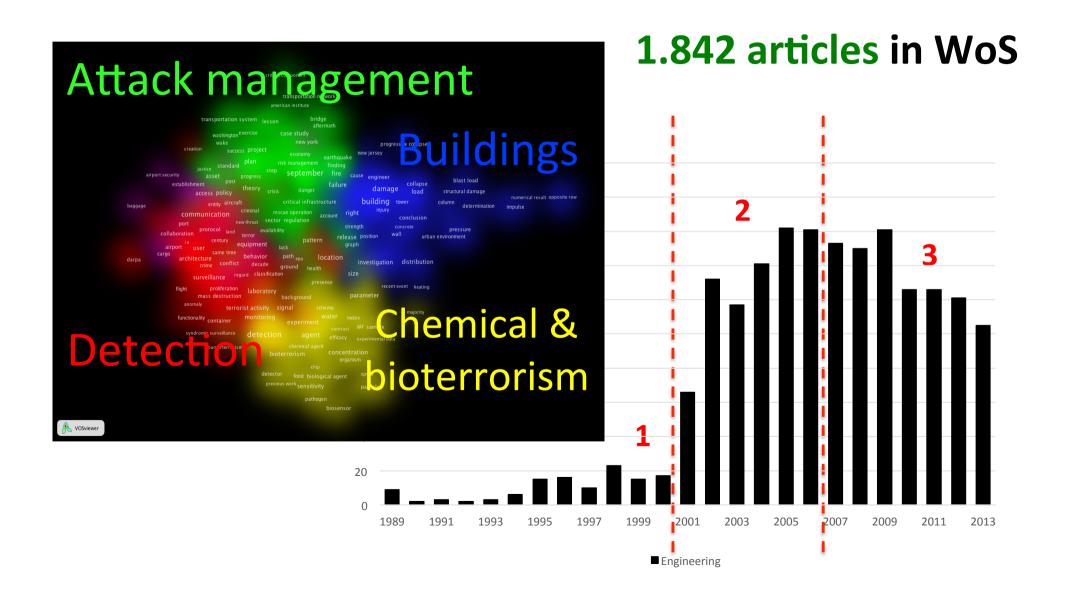
- Major Finnish universities with history departments
- Oulu, Joensuu, Jyväskylä, Tampere, Turku & Helsinki

### Teaching & Inspiring

- Sharing best practice
- Digital history research methods & sources
- Includes hands-on tryout sessions

### **Previous project:**

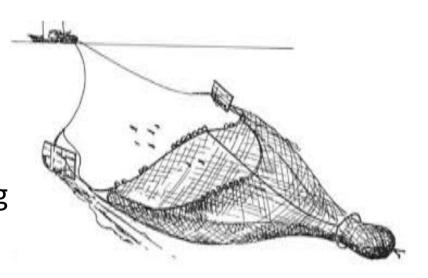
The 9/11-effect on engineering research, 1989-2013



### New methodological programme:

Conceptualizing 'Digital history 1.5'

- An exemplar of digital history 1.5 paradigm?
- 'Trawled reading'
  - Reading targeted through search
  - Combining close & distant reading
  - A quali-quantitative form of reading

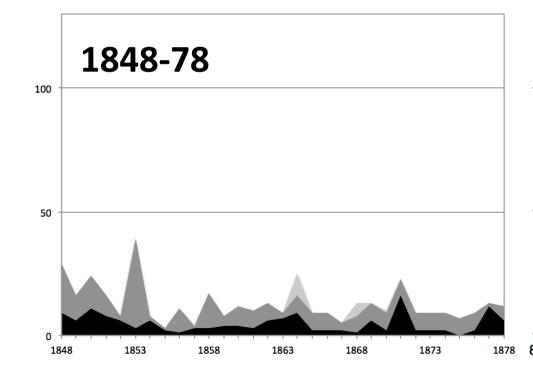


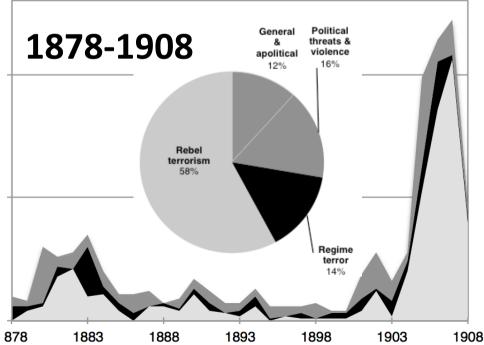
- Source criticism?
- Strengths & weaknesses?

### A first empirical & methodological project Emergence of terrorism in Sweden 1848-1914

- How did terrorism evolve?
- 1169 hits on 'terro?is\*'
   Aftonbladet 1848-1914







### A second empirical & methodological project Cloudy sightings of Qing China industrialization

työ eurooppaesine pieni
teosrata jaapanilainen japan
valkoinen valmistusintiaenglantikitti
määrä vanha kuva jaappanilainen tapa
tavara kuva jaappanilainen tapa
käytäntö
paperi hinta kultaliima hallitus
jaapan puu tehdas tina

'Kiina' i
Suomen
teollisuuslehti

Concordance word clouds (wordle) as 'context modeling'?



### Planned projects:

### Histories of transnational industrialization

- "Capitalist Products to Communist Markets, 1945-91"
  - Finnish-Russian-Swedish project
  - Using DH methods & creating digital source collection
- "The Industrialized Lingonberry, 1870-1920"
  - Using DH methods especially GIS
- Comparative history of 2nd and 4th Industrial Revolutions
  - Nordic industrializations 1880-1910 & 1990-2020
  - Comparisons of electrification and digitalization of industry
  - Using digitized Scandinavian engineering journals & newspapers

# Thank you!



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