

# Research Infrastructures in the Humanities: The Past, the Present and the Future

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# **An overview of RIs in the Humanities**

- **for an international/global audience**
- **researchers from all domains**

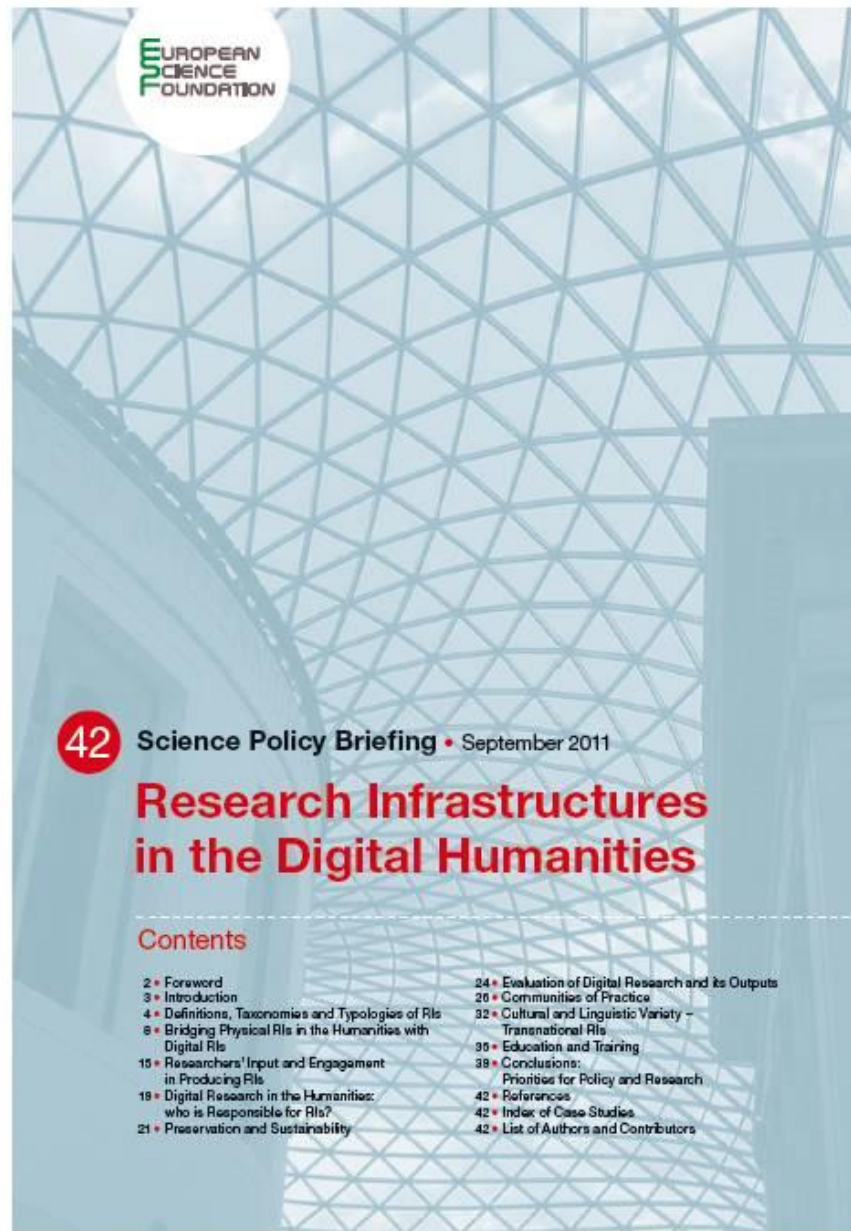
# **There is still a lack of awareness of the existence and importance of RIs in the Humanities**

- **RIs that are not only significant for Humanities research, but also for inter/multi/transdisciplinary topics/projects**

# The Past

- **It is worth noting that it was in the domain of the Humanities that the idea of RIs was first born**
- **As early as 3rd century B.C. the imperative to collect, organize and conserve knowledge with the aim to advance knowledge, gave birth to the *Mouseion*, a cultural centre, university and library founded in Alexandria**
- **Further development during Roman Empire, followed by the development of medieval libraries and the formation of art collections, etc.**

# The Present



[http://www.esf.org/fileadmin/Public\\_documents/Publications/spb42\\_RI\\_DigitalHumanities.pdf](http://www.esf.org/fileadmin/Public_documents/Publications/spb42_RI_DigitalHumanities.pdf)

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# STANDING COMMITTEE FOR THE HUMANITIES RI Expert Group

- **Professor Claudine Moulin** (Chair of the SCH RI Expert Group), Trier Center for Digital Humanities, Universität Trier, Germany – SCH member (LU)
- Dr Arianna Ciula, Humanities and Social Sciences Unit, European Science Foundation (FR)
- Professor Margaret Kelleher, An Foras Feasa, National University of Ireland Maynooth – SCH member (IE)
- Professor Marko Tadić, Department of Linguistics, University of Zagreb – SCH member (HR)
- Professor Maria Ågren, Department of History, Uppsala University – SCH member (SE)
- Professor Andrea Bozzi, Istituto Linguistica Computazionale, CNR – SCH member (IT)
- Professor Kristin Kuutma, Institute of Cultural Research and Fine Arts, University of Tartu – SCH member (EE)



## Urgent science policy issues for RIs in Humanities in SPB

- six main topics covered
  - recording the state of art and needs
  - integrating physical and digital RIs
  - **following strategic directions**
  - **support partnerships and networking**
  - reaching academic recognition
  - disseminating information

## SPB – four primary levels of RIs identified

- **Physical infrastructures:** collections of physical objects
- **Digital data infrastructures:** these comprise single-sited or interconnected data repositories, **spread over several institutions/countries**
- **E-infrastructures: networks and/or computing facilities spread over various institutions and/or countries** - examples include GRID computing, cluster computing, cloud computing and the networks that connect them
- **Meta-infrastructures:** conglomerates of independent RIs, **residing in different institutions/countries with different data formats and data structures** (i.e., resulting from different activities) yet connected using compatible metadata formats or processes, thus enabling access to different data archives

# The advent of *Digital Infrastructures* in the Humanities

- Digital Humanities offer Humanities scholars new and productive ways of exploring old questions and developing new ones
- Digital Humanities also, apart from making accessible our cultural heritage in digital form, **open up new frontiers** of research aimed at addressing '**Grand Challenges**'

**However, the *visibility* of Humanities  
RIs is still low, especially in  
comparison to other domains of  
research**



➤ Within MERIL Project RIs from the Humanities appear in very small numbers

- A reflection of a low degree of awareness of Humanities RIs – especially within the realm of Digital Humanities → connected to National Roadmaps which do not ‘recognize’ the existence of Humanities RIs

**How to increase ‘visibility’ and raise ‘awareness’?**

## SPB identifies '*pan-European*' infrastructures

The *European Strategy Forum on Research Infrastructures (ESFRI)* roadmap has taken an important first step towards **overcoming fragmentation** and **putting Humanities RIs on the map**

- **CLARIN** - *The Common Language Resources and Technology Infrastructure*
- **DARIAH** - *Digital Research Infrastructures for the Arts and Humanities*

- **global or pan-European level**
  - **national or community-driven level**
  - **local/institutional level**
- **‘relativity’ of concepts**

# The Future



# HORIZON 2020

## The EU Framework Programme for Research and Innovation

### ➤ ‘Grand’ / ‘Societal’ Challenges

- Implications for *resetting research agendas*
- Implications of the *global dimension*
- *Bridging* the gaps between *disciplines and research domains*

- **Health, Demographic Change and Wellbeing**
- **Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research and the Bioeconomy**
- **Secure, Clean and Efficient Energy**
- **Smart, Green and Integrated Transport**
- **Climate Action, Environment, Resource Efficiency and Raw Materials**
- **Europe in a changing world - Inclusive, innovative and reflective societies**
- **Secure societies – Protecting freedom and security of Europe and its citizens**

## **Vilnius Declaration – Horizons for Social Sciences and Humanities**

**(<http://horizons.mruni.eu/vilnius-declaration-horizons-for-social-sciences-and-humanities/>)**

**The Commissioner, Máire Geoghegan-Quinn 23  
September 2013 in Vilnius:**

**„... the social sciences and  
humanities are anchored at the heart of  
Horizon 2020”**

# Humanities in the Context of Interdisciplinarity: Understanding Innovation

- **Inter/Multi/Transdisciplinarity – Achieving Synergy**
- **The Humanities and Social Sciences** not only address **global** issues inherent in the **Grand Challenges**, but also identify and research cultural (national) differences or “**different cultures of knowledge**”. All Grand Challenges are by their nature societal and often global in nature, but inherently anchored in specific cultural domains.

- **Inter/multi/transdisciplinarity** in research on the Grand Challenges combines different cultures of knowledge, but this combining should result in **relational knowledge**, which often means reconceptualization of so-called hard facts.
- This implies new ways of interpreting facts and integrating them. In other words, *interdisciplinarity* connected with the Grand Challenges should result in **networks of knowledge** which in themselves would present **innovation** at the highest level.

# ICRI 12 International Conference on Research Infrastructures

(Copenhagen, 21-23 March 2012)

- Stress on **global infrastructures**
- The need to have **SSH dimension in RIs within different domains of science**

➤ **2 directions needed in building up 'new RIs'**

## Future developments for Humanities RIs

- Build a *European bibliographic* database
  - build an all-encompassing database which would reflect the true diversity and richness of European SSH research
  - **visibility of European SSH research**

“Towards comprehensive bibliographic coverage of the scholarly literatures in the Humanities and Social Sciences”

Report from a working group  
September 2011



## ***European bibliographic* database**

- produce new synergy in research
- give insights to researchers from different domains, open up avenues for collaboration between domains
- make visible European research at global level, especially necessary for addressing major issues within SSH disciplines, but also issues pertaining to wider topics of global dimension

# **Future developments for Humanities RIs in interdisciplinary contexts**

# Rethinking of “the human element” in new global contexts

- **Ethical/bioethical issues** – the individual, the individual and immediate social context, the individual and global contexts
  - Responsibility on different levels
- **Conceptual changes for the individual**, but also for bigger **social groups, countries** and **the world at large**

## The Global Dimension in Cognitive Science Research

- **Language as the mirror of the human mind and basis for neuroscience research**
  - Focus on Indoeuropean languages so far, the need arises for including the languages of China, Hindi, etc.
  - Answering Whorfian-type questions – does the language we speak with shape the way we think?
  - Are linguistic structures universal or language specific?

# **Concentrated effort in setting up specific databases for inter/multi/transdisciplinary research**

- **focused on research topics**
  
- **Filling in gaps where data does not exist / connecting data where it does exist, but lives a life of its own in an unconnected place**

## The challenge:

Motivate and organize focused efforts  
in establishing Humanities RIs and  
databases needed for achieving  
synergy in inter/multi/transdisciplinary  
research



**THANK YOU!**