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

Milena Žic Fuchs

Chair of the Science Review Group for the Humanities, ESF (successor to the Standing Committee for the Humanities, ESF)
University of Zagreb, Croatian Academy of Sciences and Arts
Former Member of EC Expert Group for ESFRI Roadmap

Third Plenary for the Research Data Alliance, Ireland, March 26 to 28, 2014
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
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

www.esf.org/human
- 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.

www.esf.org/human
• **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!