

Participatory Cultural Lexicography

Innovating a dialectal dictionary by applying an
Open Innovation in Science Approach:
the example of exploreAT!

Amelie Dorn, Caitlin Gura & Eveline Wandl-Vogt

Methods in Dialectology XVI, Tokyo, Japan
07.-11.08.2017


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Outline

1. Introduction
2. Open Innovation in Science (OIS) – principles & methods
[OI strategy for Austria](#)
3. OIS & the Digital Humanities: 
4. examples: towards participatory cultural lexicography
[\(DARIAH Public Humanities Grant\)](#)
5. Conclusions & outlook

Introduction

- Collaboration across scientific disciplines → exploitation of local & global digital network infrastructures
- Increased emphasis on **participatory infrastructures**
citizen science ≠ crowdsourcing
- Digital Humanities (DH) → opportunities for novel approaches to traditional research areas
 - cross-disciplinary
 - participatory

Introduction

Open Innovation in Science (OIS) (cf. Chesbrough, 2003)

- innovative approaches & methods linking across sectors
- change in lexicographical workprocess → bottom-up approach



- *exploring Austria's culture through the language glass*

(cf. Wandl-Vogt, Therón, O'Connor & Kieslinger, 2015)

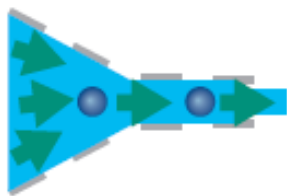
→ „demonstrator“ for experimenting with OI methods in DH
towards

participatory cultural lexicography

Open Innovation (OI)

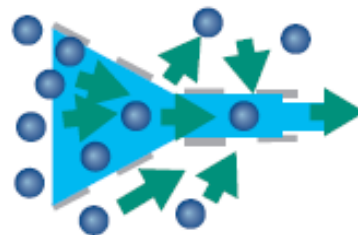
*“Open innovation is the use of **purposive inflows and outflows of knowledge** to **accelerate internal innovation**, and expand the markets **for external use of innovation**, respectively.”*

(Chesbrough, 2006)



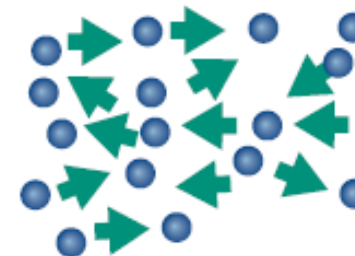
Centralised
inward-
looking
innovation

**Closed
Innovation**



Externally
focused,
collaborative
innovation

**Open
Innovation**



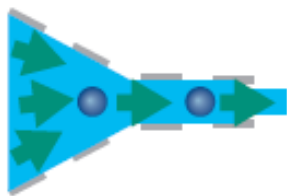
Ecosystem
centric, cross-
organisational
innovation

**Innovation
Networks**

Open Innovation (OI)

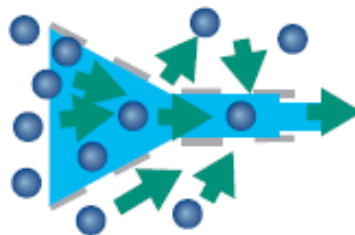
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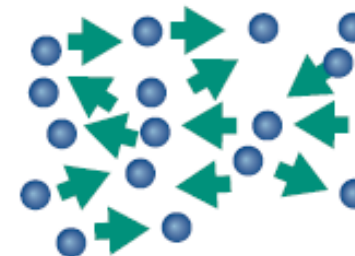
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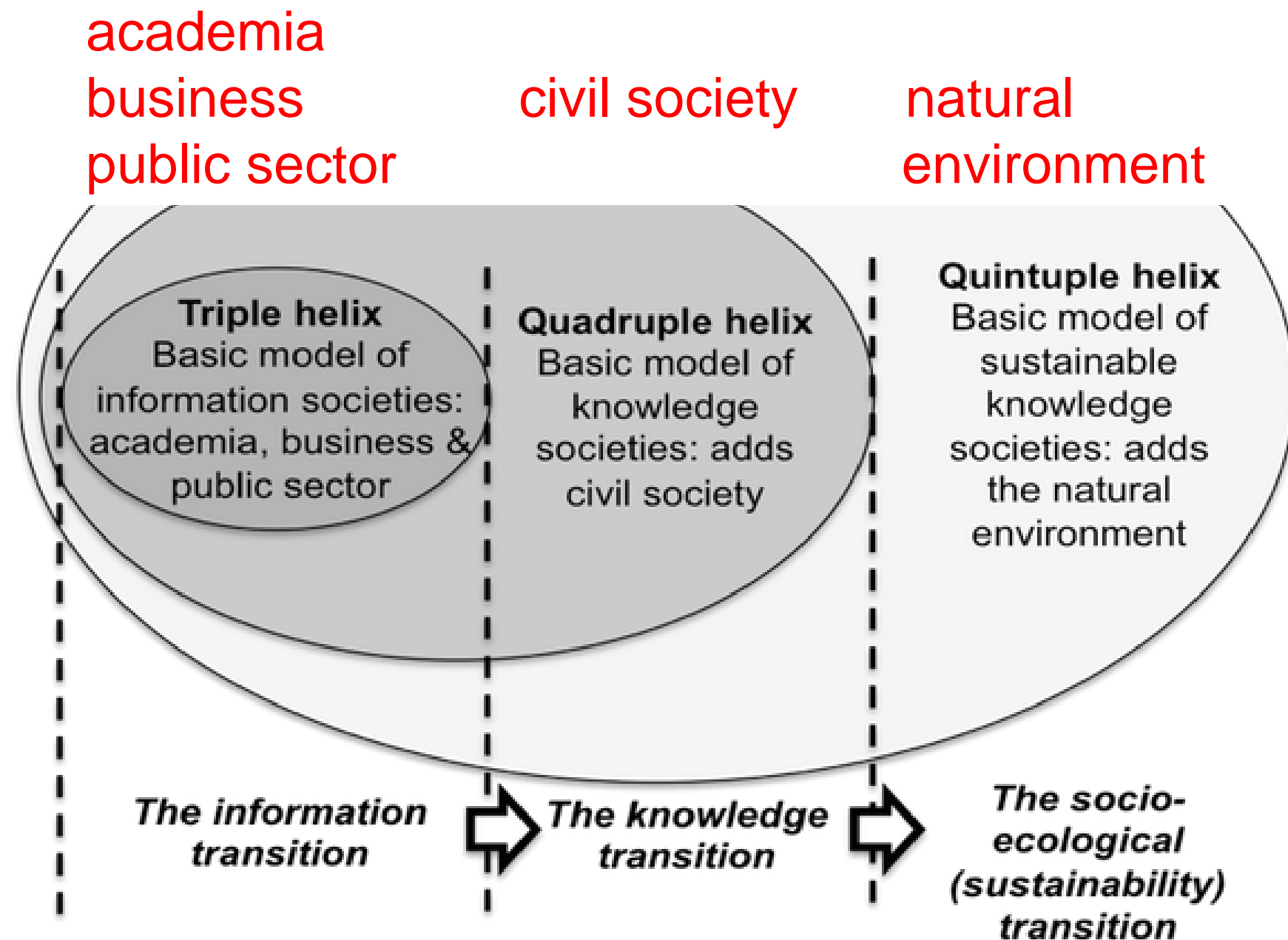


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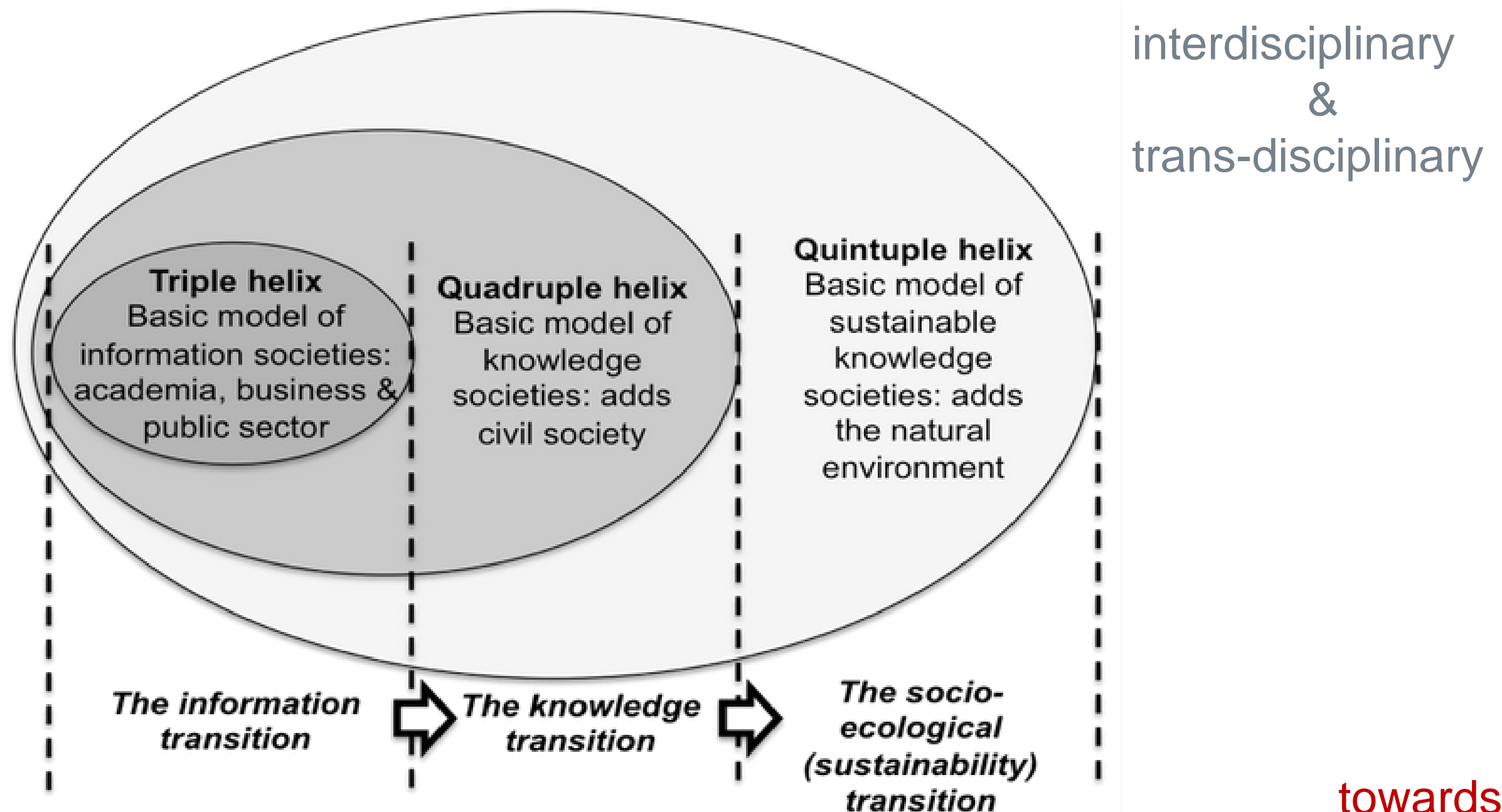
**Innovation
Networks**

innovation networks
ecosystems

Open Innovation (OI) Models



Open Innovation (OI) Models



Open Innovation Strategy for Austria



- among first European member states to have developed a **comprehensive** **OI strategy**
- analysis of national & international **status quo on OI**
- vision for **2025** → measures for implementation
- work of numerous actors (**business, science, administration & citizens**)

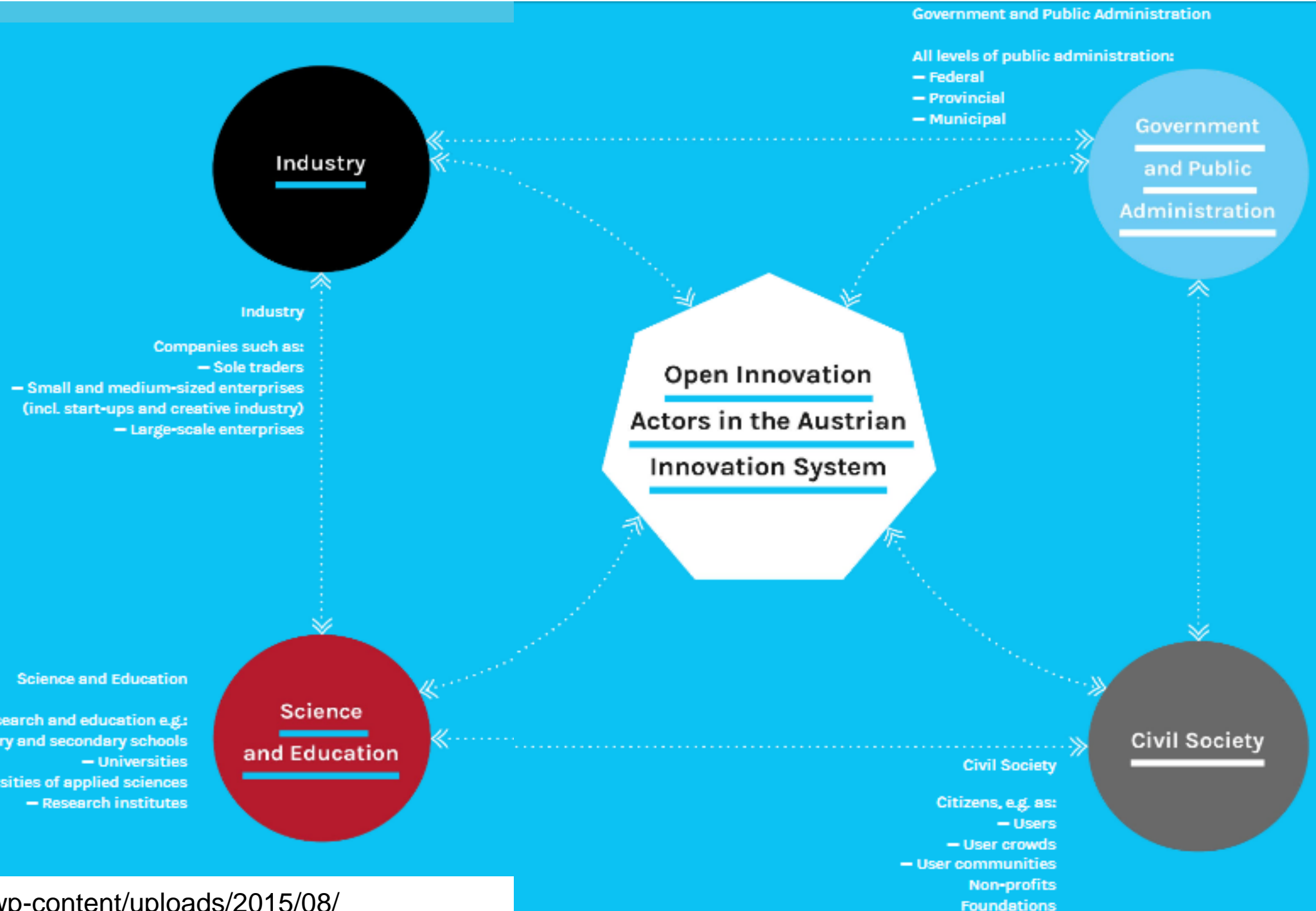
Open Innovation Actors - Austria

Actors, Challenges & Action Areas

The cornerstones of the Austrian innovation system are its actors: industry, science, civil society and public administration. Within each of these groups there are in turn a multitude of different actors, with examples being shown in the following figure

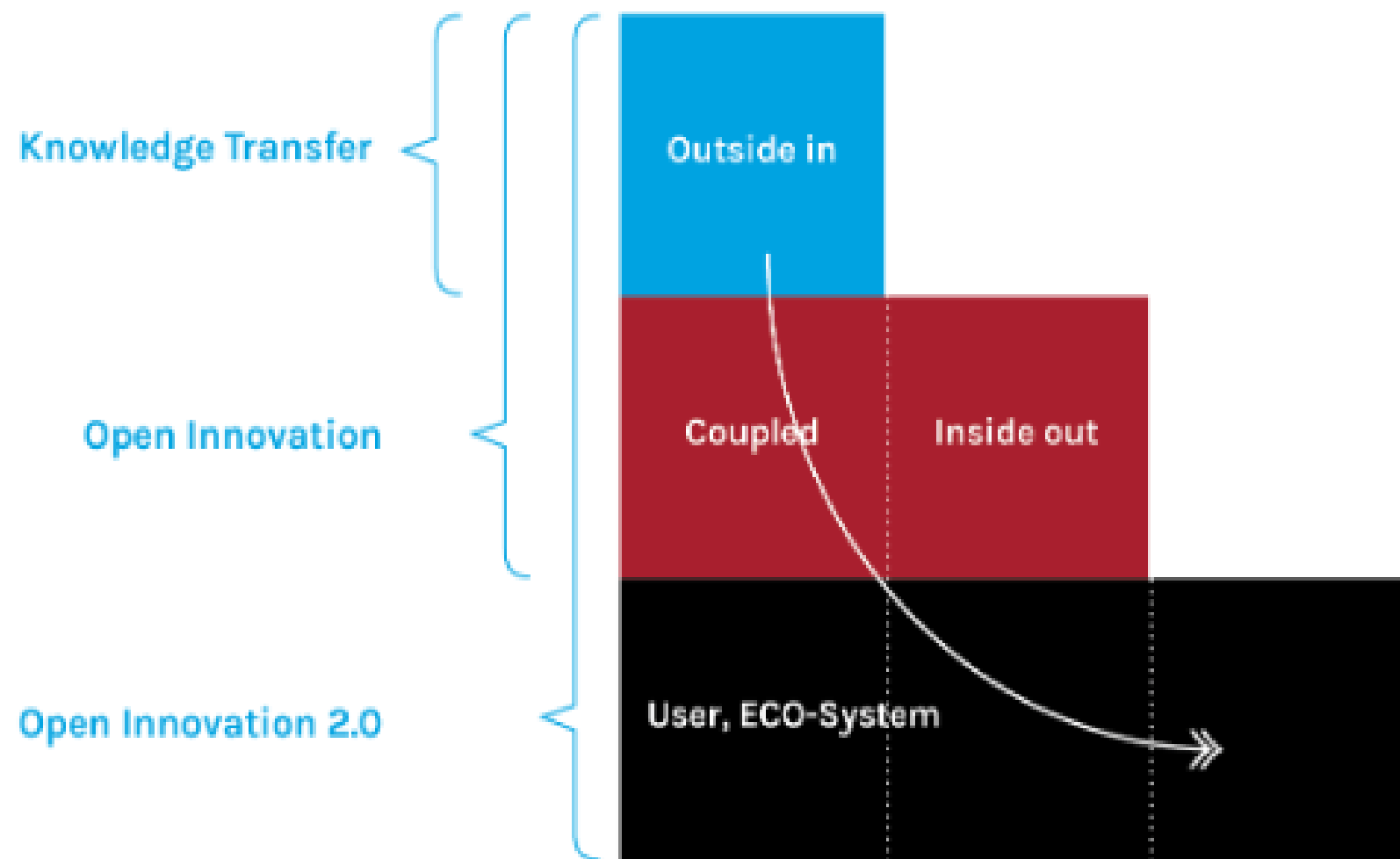


Fig. 6
Open innovation actors and
their networking potential in the
Austrian innovation system



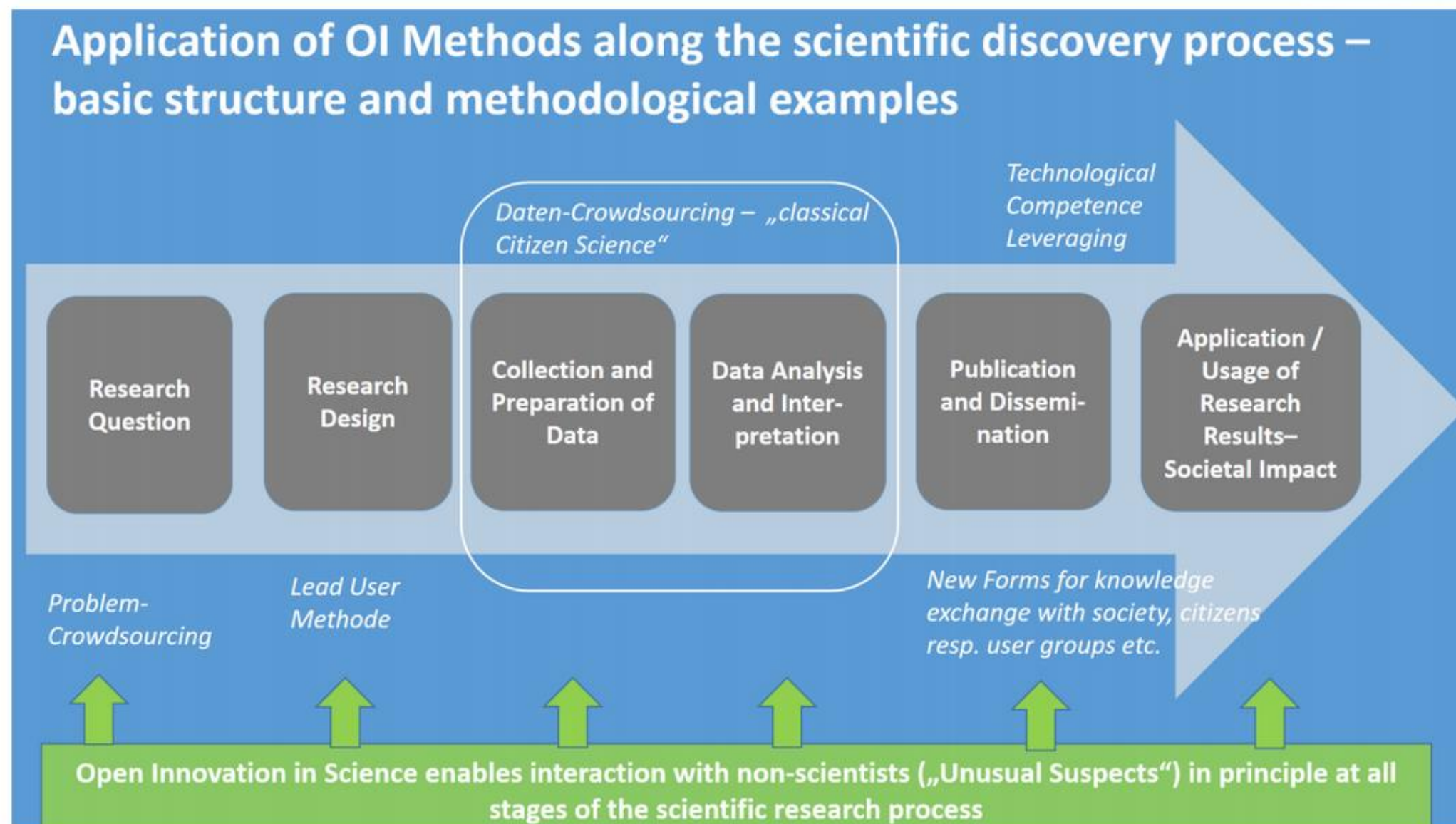
Open Innovation Strategy for Austria

Knowledge transformation process




Source: European Commission, Open Innovation, Open Science, Open to the World - a vision for Europe, 2016, p. 12

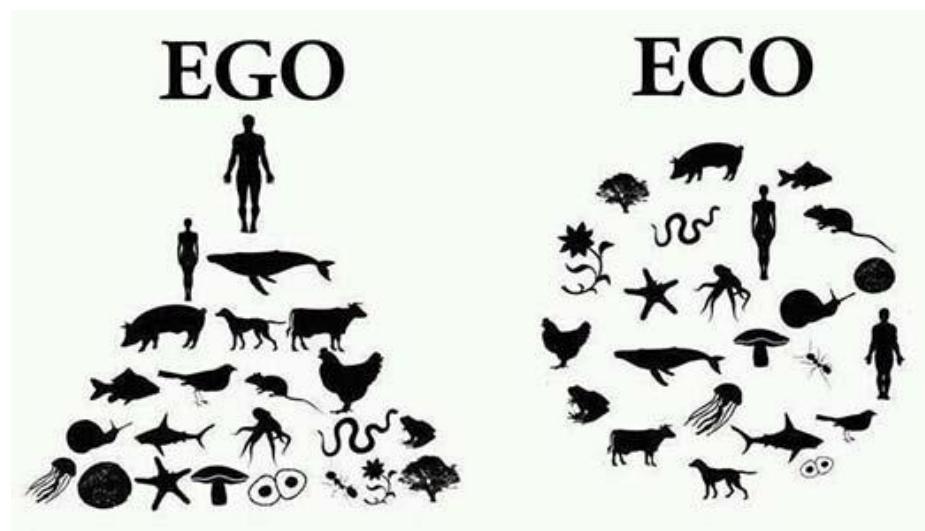
OIS & the scientific discovery process



Source: Gertraud Leimüller, **winnovation** open innovation research, 2016, www.winnovation.at

Open Innovation & the (Digital) Humanities

- meeting needs in the do-it-yourself-(science)-world
→ potential to innovate Humanities
-  towards eco-systems in the (Digital) Humanities

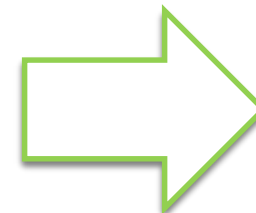
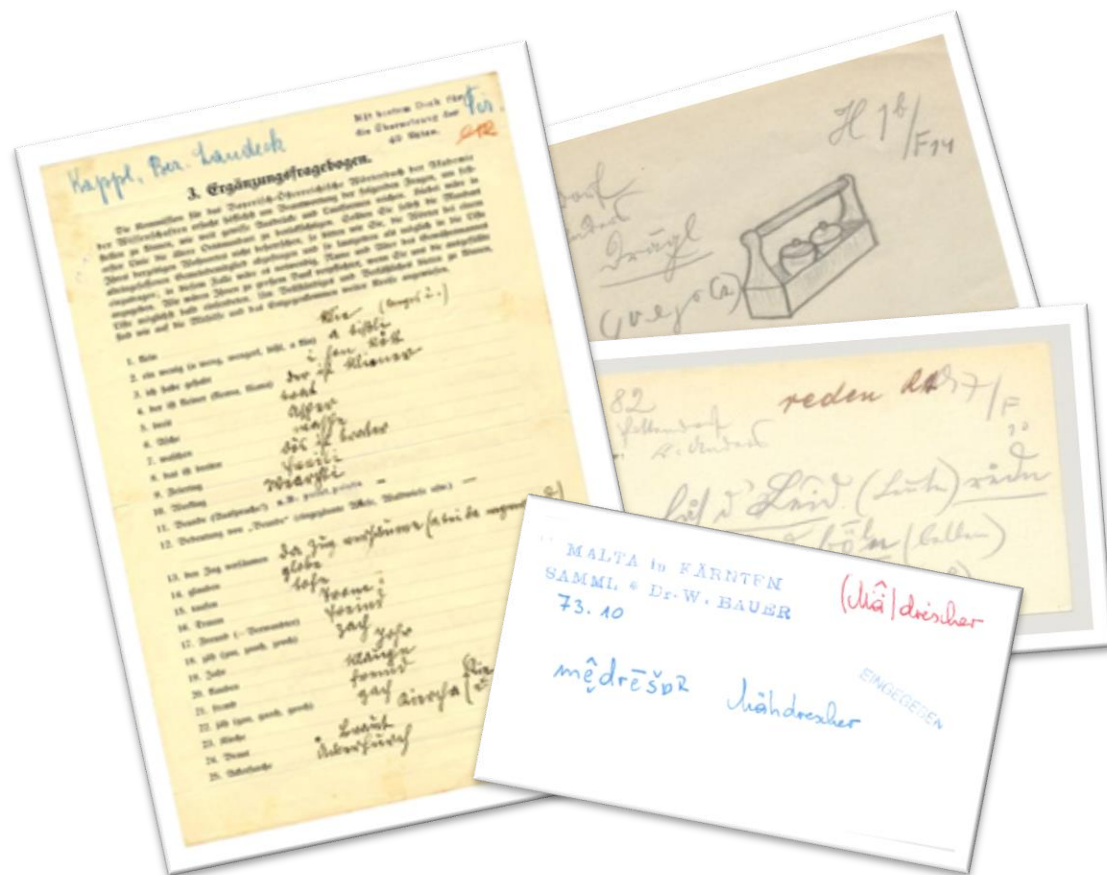


ecological thinking for business transformation @ [hutchins](https://hutchins.com)

culture &
participatory engagement

100 years of scientific lexicography

collection of the Bavarian Dialects in the region
of the former Austro-Hungarian empire



- Cultural lexicography
- Visual analysis tools
- Semantic technologies
- Citizen science



partners



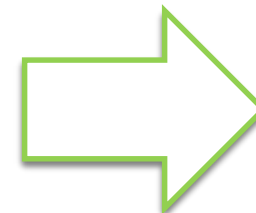
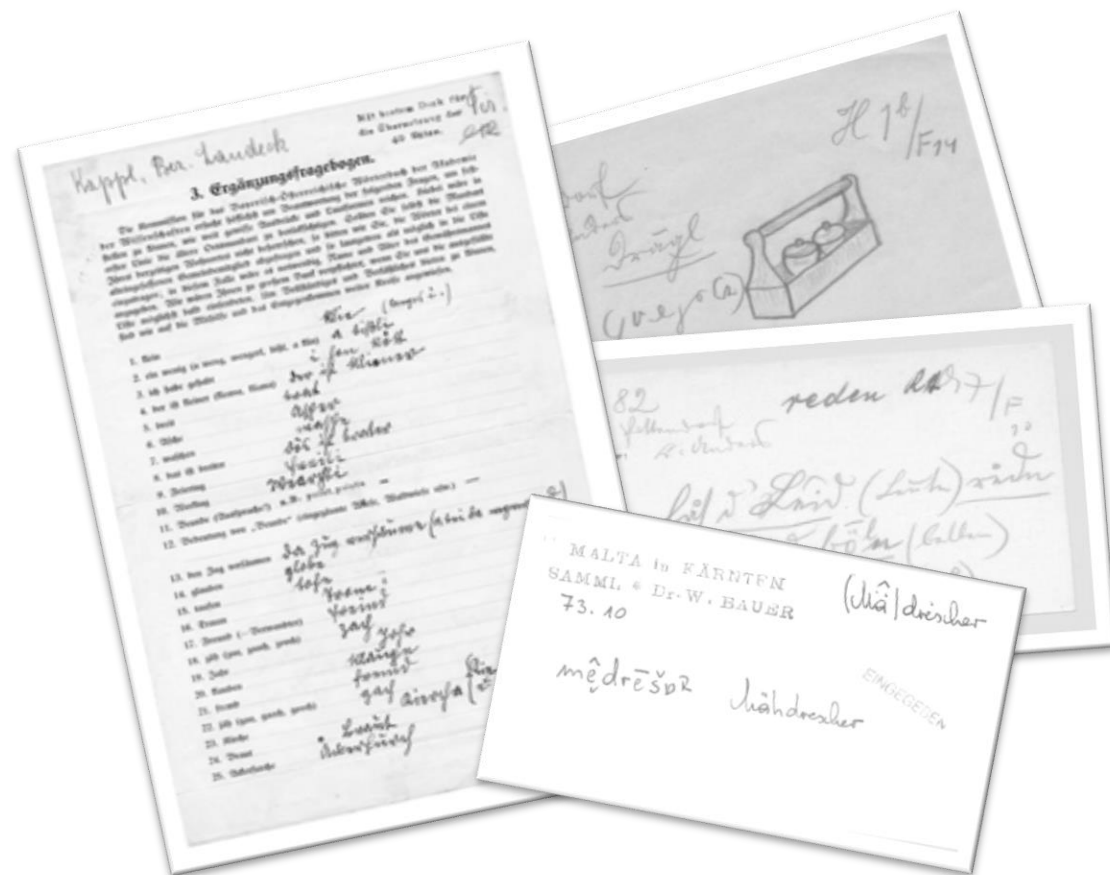
VNIVERSIDAD
SALAMANCA
CAMPUS DE EXCELENCIA INTERNACIONAL



~ 20.000 questions | ~ 3000 locations | ~ 3.5 Mio records

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collection of the Bavarian Dialects in the region
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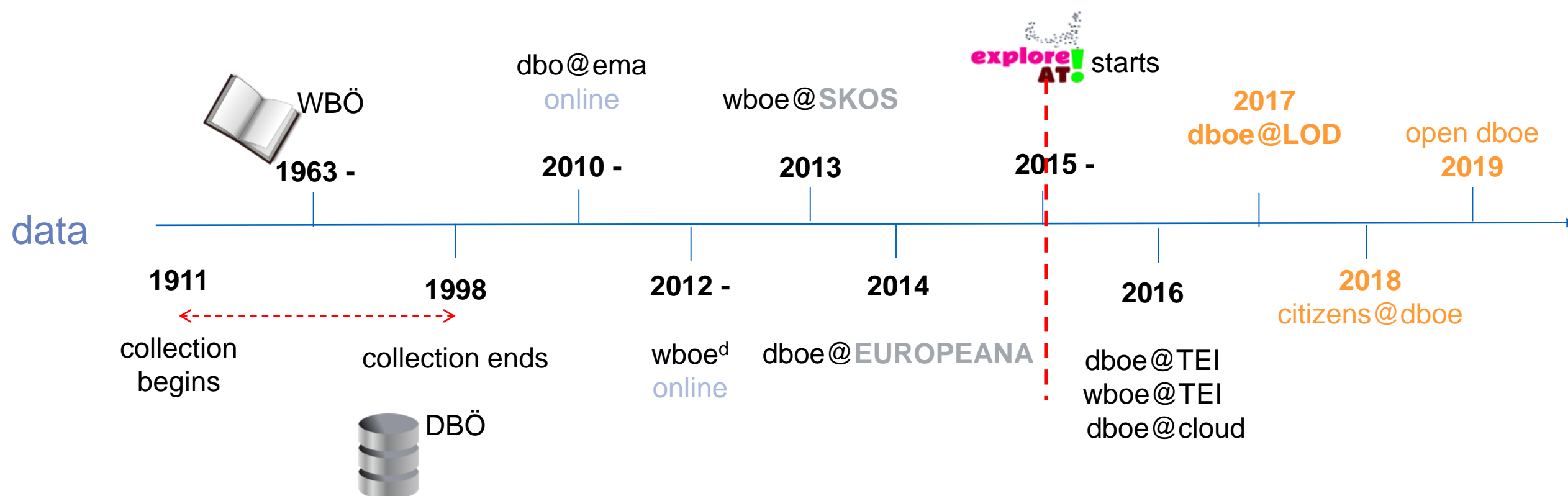


- Cultural lexicography
- Visual analysis tools
- Semantic technologies
- Citizen science

CULTURAL TOPICS

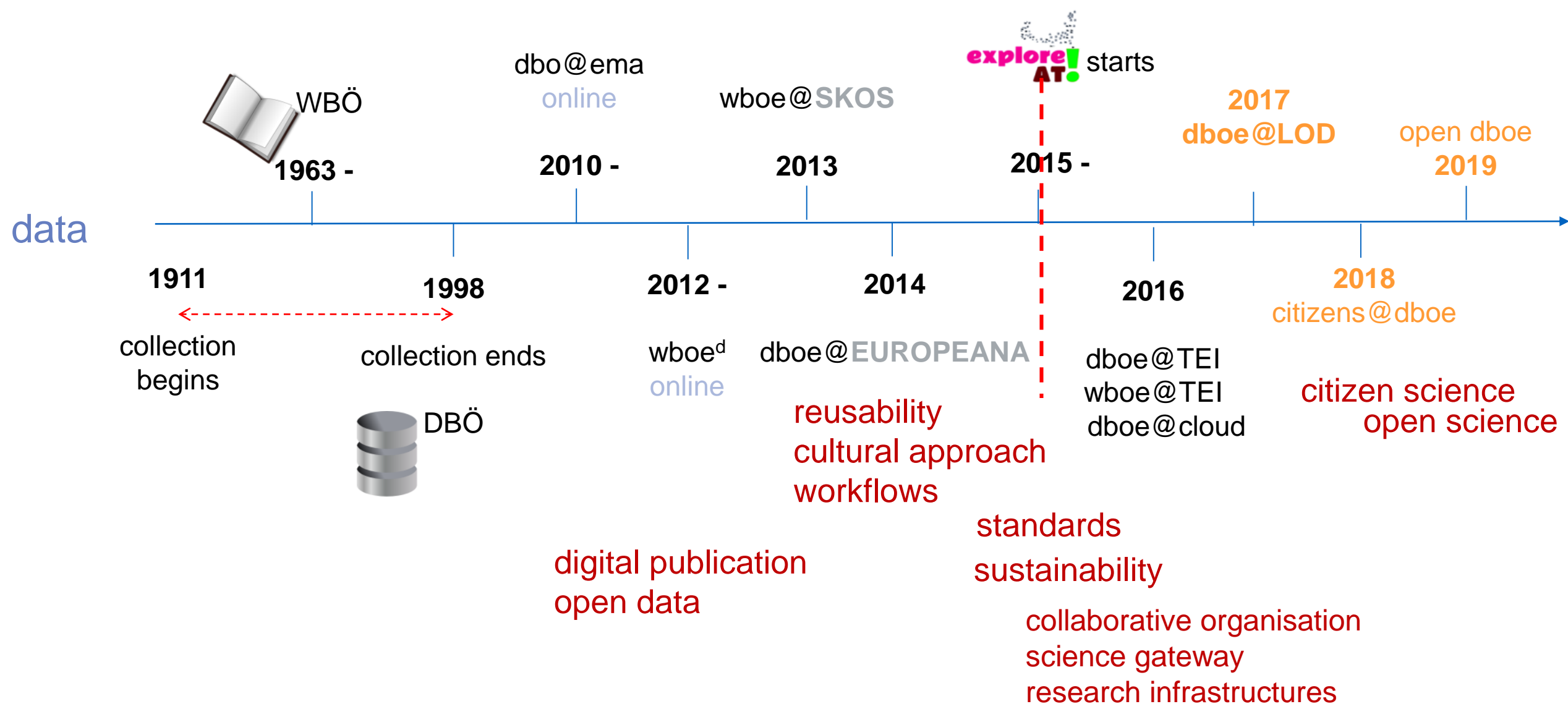
- Food
- Plant names
- Colour names

~ 20.000 questions | ~ 3000 locations | ~ 3.5 Mio records



partners

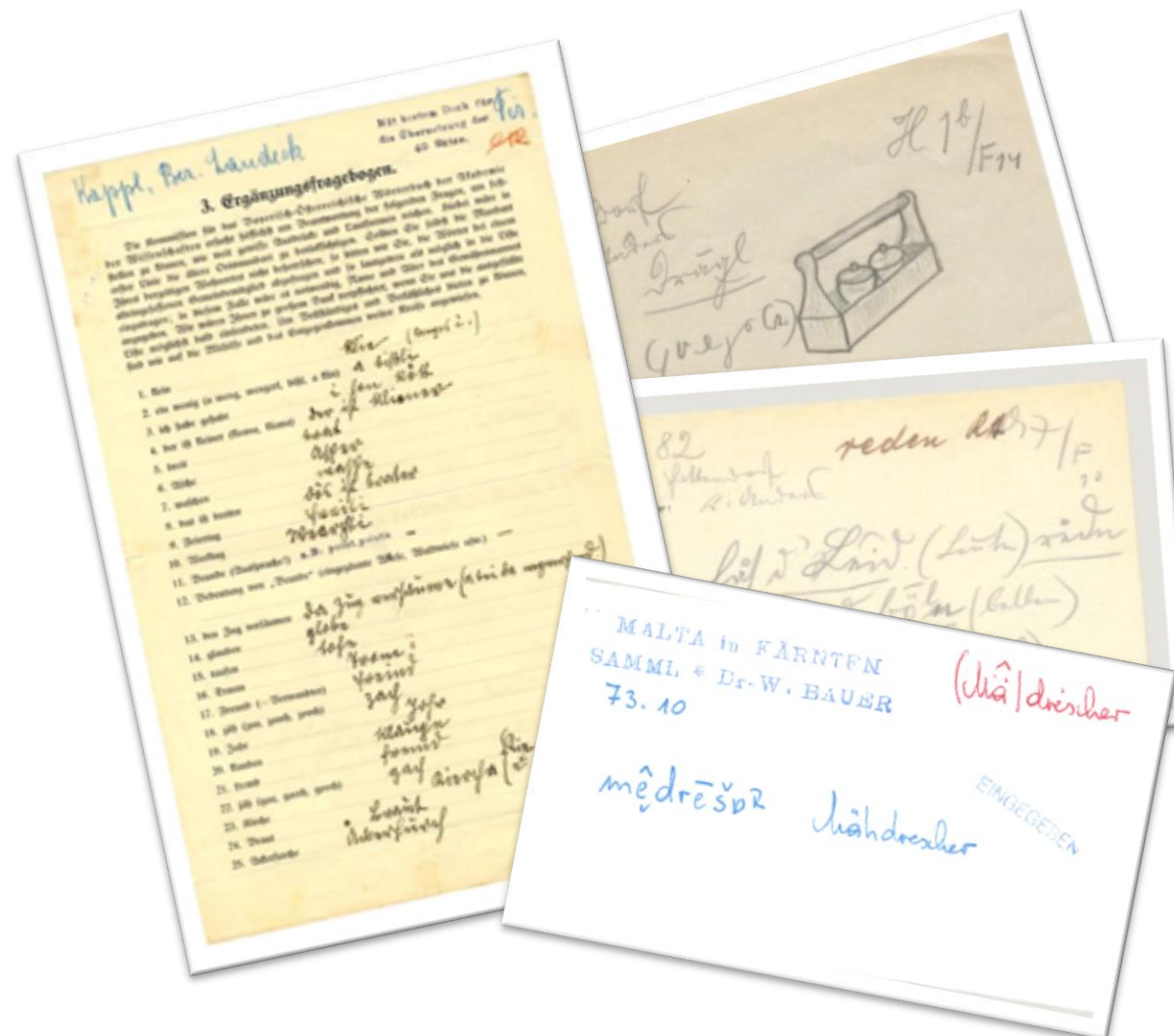
Explorative scholarship | Exploring methods in the Humanities



Identifying “culture”



How does culture manifest itself in our collection?



→ identification of access layers

Exposing “culture” through a living corpus: innovation networks



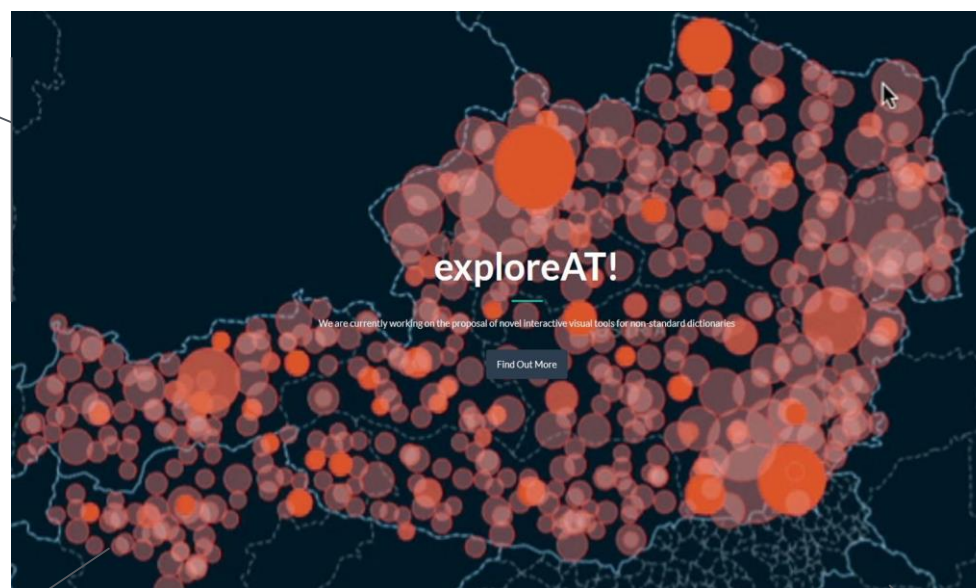
**NHM/Europeana
and Biodiversity**



**Citizen Science
(DARIAH PHG
Workshops)**

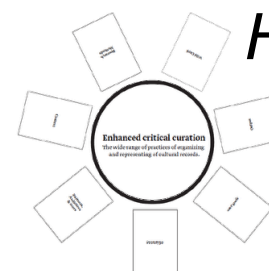


**APIS
(biographical
information;
ÖBL)**



exploreAT! website.jpg: Theron, R; Benito, A; Losada, A,
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**Creative Arts /Design
(survey; cards against
Humanities; design probes)**



Exposing “culture” through a living corpus: innovation networks

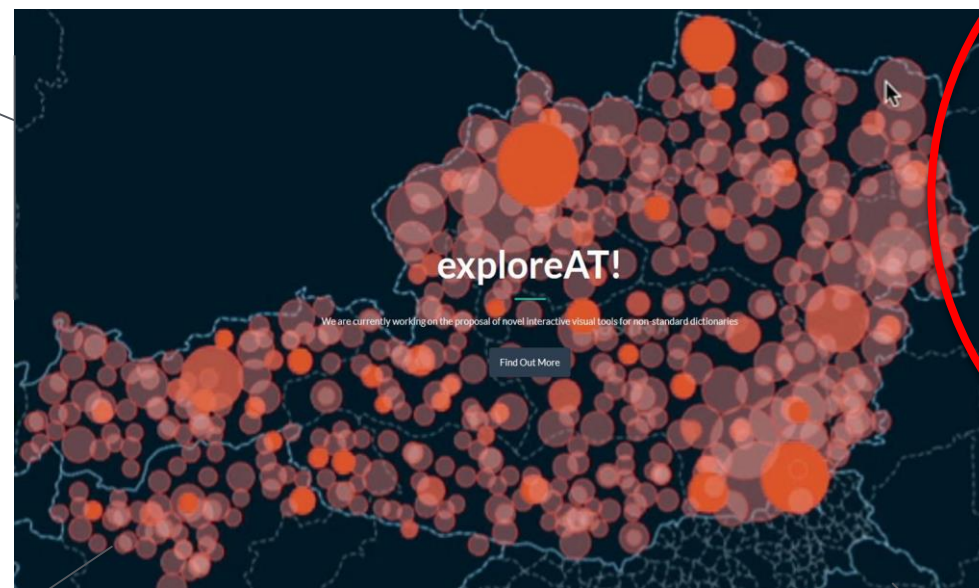
**NHM/Europeana
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APIS
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explore!
AT!

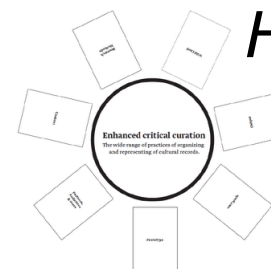


exploreAT! website.jpg: Theron, R; Benito, A; Losada, A,
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Citizen Science
(DARIAH PHG
Workshops)



Creative Arts /Design
(survey; cards against
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Towards participatory cultural lexicography

DARIAH Public Humanities Call 2016 / Grant



„activities of cultural institutions that engage the public with arts and humanities research”

→ exploring roles of citizens in research processes

series of expert workshops

practitioners, researchers, technologists with a focus on citizen science in lexicography

Towards participatory cultural lexicography

Food culture

WS1 2017-10 @ ADAPT Centre, DCU, Dublin, IE

WS2 2017-12 @ DHA, Innsbruck, AT

Focus group: food professionals & hobbyists

1) Lead users, innovators

2) Early adopters

- identification of common research questions
- consolidation of data
- towards a first data-model
- evaluation & data model testing

Towards participatory cultural lexicography

Food culture

WS1 2017-10 @ ADAPT Centre, DCU, Dublin, IE

WS2 2017-12 @ DHA, Innsbruck, AT


Results

- co-creation of open workflows (process orientated)
- connecting data through access layers
- opening of data access & use
- opportunities for citizens & researchers

Conclusion

- OIS methods & practices → to be applied along the entire research process
- detecting systematically needs of actor groups and scientific communities
- change of research processes in lexicography → bottom-up approach

Outlook

-  OIS methods & experimental scholarship in the Humanities
→ embedding into RI framework
- open innovation research infrastructure (OI-RI)
proposed within eINFRA 01_2017 design studies call supported by >40 institutions and infrastructures globally,
among them metaLab (at) Harvard, CERN ideaS², CLARIN, DARIAH, openAIRE and 15 European Academies

Thank you!

... time for questions, comments, etc

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