



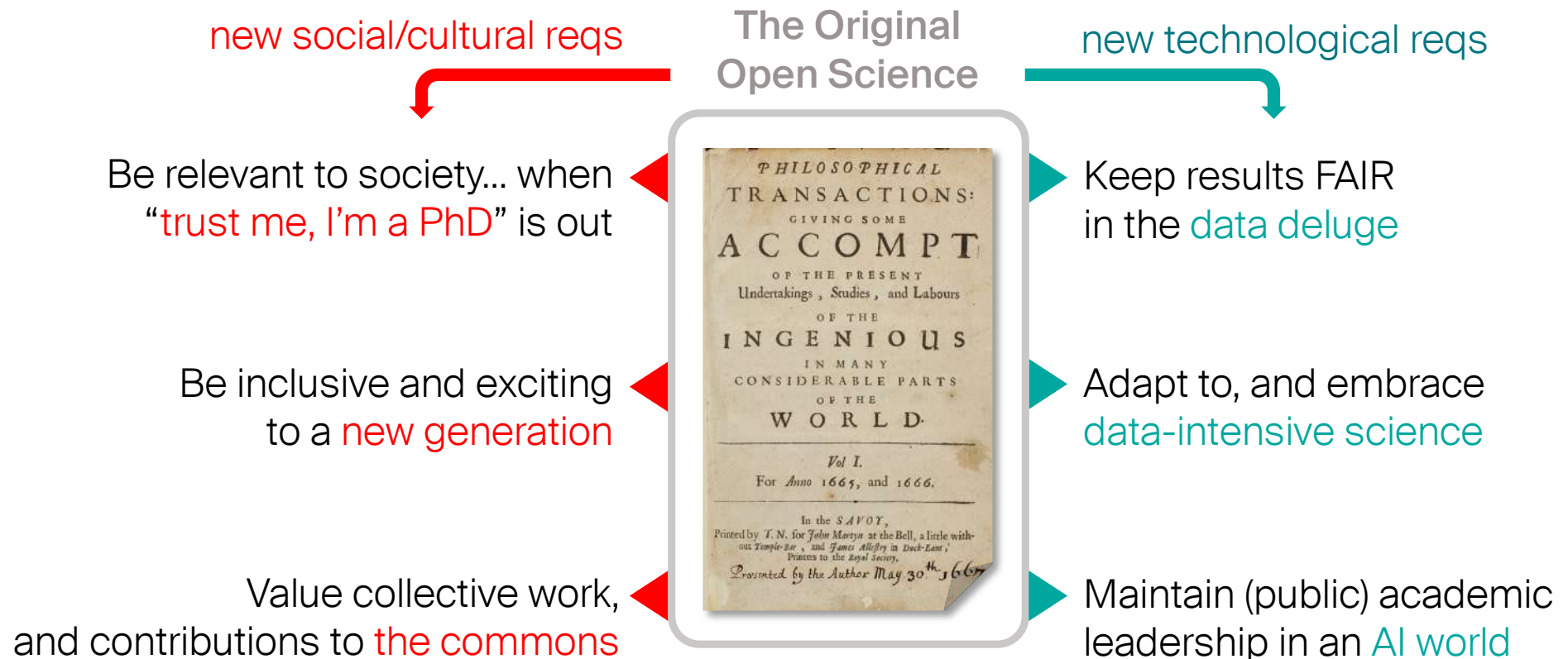
**Open
Science**

**RSE
Kickof**



Gilles Dubochet

Open Science: Academia with New Requirements



RSE contribute to the Open Science Culture

Be relevant to society... when
“trust me, I’m a PhD” is out

Be inclusive and exciting
to a new generation

Value **open source software**,
and contributions to the commons



Keep **code** FAIR
in the data deluge

Adapt to, and embrace
data-intensive research

Maintain (public) academic
open code for an AI world

EPFL's Four Open Science Pillars

3.

Infrastructure For Open Science

Evolve our infrastructure and services to be open by default, and better support open practices.

2.

Open Knowledge

Share our knowledge far and wide. Quantify and showcase it. Train students to use it for research and for work.

1.

Open Communities in Collaboration and Dialogue

Promote collective research practices and the knowledge commons that underpin them. Give people involved the recognition they deserve.

4.

Open Engagement with Society

Welcome all societal actors. Tell them truthfully what we do. Bring innovation to society by sharing it, and take responsibility for its consequences.

Pillar 3: Infrastructures for Open Science

1. Provide practical support and infrastructure for open knowledge management & sharing
2. Open and develop EPFL's Research Data Infrastructure that can impact global research

ETH Domain ORD Programme

1. **Infrastructure Measure** - Central infrastructure Infopoint, authentication standards. SISB and some schools (ENAC IT4Research) provide **RDM and ORD services**. Establish networks of data stewards and research software engineers.
2. **Project Funding to** support RDIs - explore, establish and contribute
Coordination of large-scale RDI development through National ORD Strategy Council

A Call for Action By RSE

- Develop RSE expertise to connect data-intensive science and open research data
 - Better leverage FAIR data and ORD in research software
 - Write software to be FAIR
- Help make research software a community resources
 - Manage community engagement
 - Contribute, contribute, contribute
- Create an “common-good” ecosystem of relevant OSS services and resources for use in EPFL
 - Coordinate with IT

Research Data Infrastructures

Research Infrastructure

- Big-ticket facilities with shared use
- Long-term planning
- High impact on research
- Community comes together
- Fosters innovation & expertise
- Infrastructures are political



Swiss Roadmap for Research Infrastructures in view of the
2025–2028 ERI Dispatch
(Roadmap for Research Infrastructures 2023)

Part I: National Research infrastructures



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra
Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Education,
Research and Innovation SERI

Data Infrastructure are the New Normal

- Data infrastructure: 40%
- Facilities are becoming data infrastructure too
- **Quality is a huge problem**
- No one understands RDI

