

The current state of scientific publishing

...and future developments

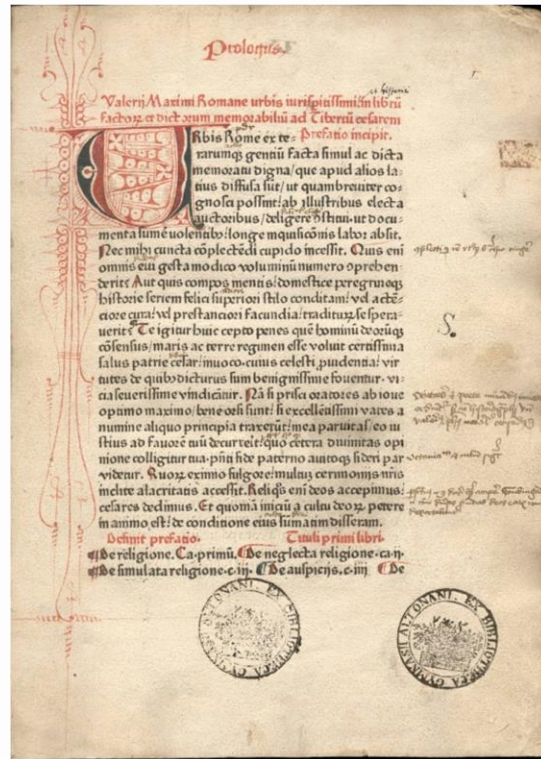
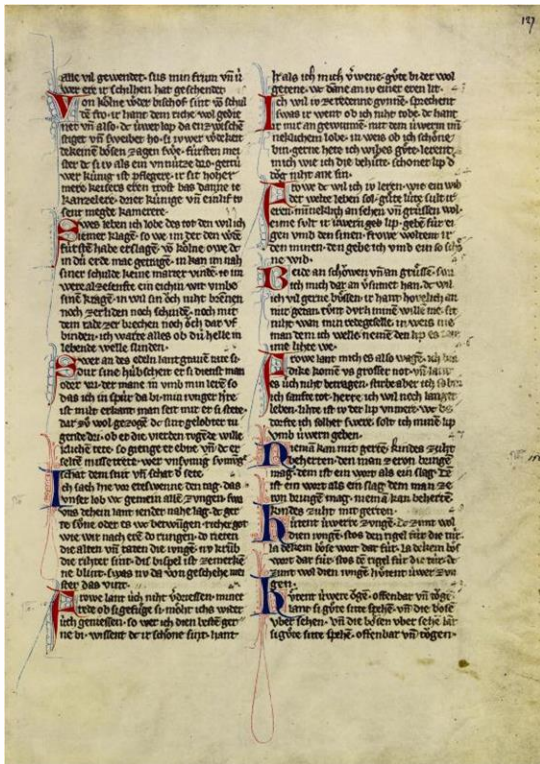
Dr. Bastian Drees

EUROfusion WG to assess publishing during Horizon Europe

10 November 2021



Incunabula



Why publish science?



"The whole concept of a 'journal' is kind of dead actually. What we need is a complete rethink"

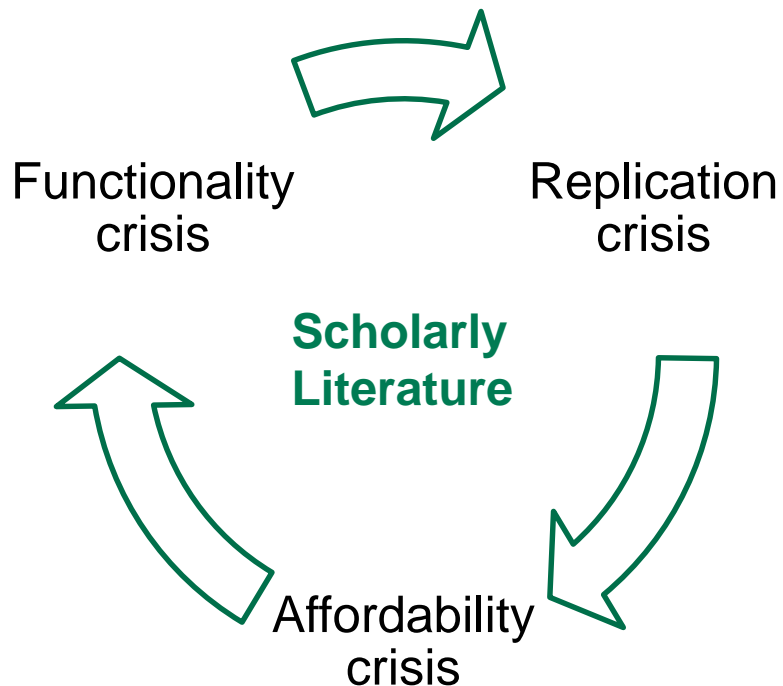
Robert Terry, WHO project manager

Status quo of the scholarly publication system

- Slow
- Expensive
- Intransparent
- Unreliable
- Inaccessible
- Doesn't scale!

- Peer review
- Paywalls
- Research assessment
 - JIF, h-index etc.
 - Publish or perish
- Publication bias
- Rejection rates
- Oligopoly/monopoly of publishers/journals

Status quo of the scholarly publication system



Traditional subscription based model



APC based, gold OA model

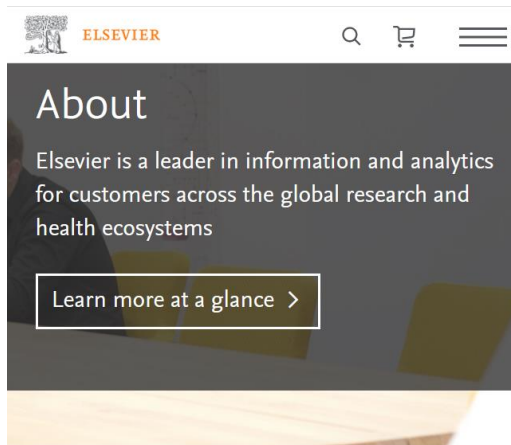


Hybrid model



Monopolization of the scientific workflow

very real threat of a few corporations effectively owning all scientific data, both research data and user data



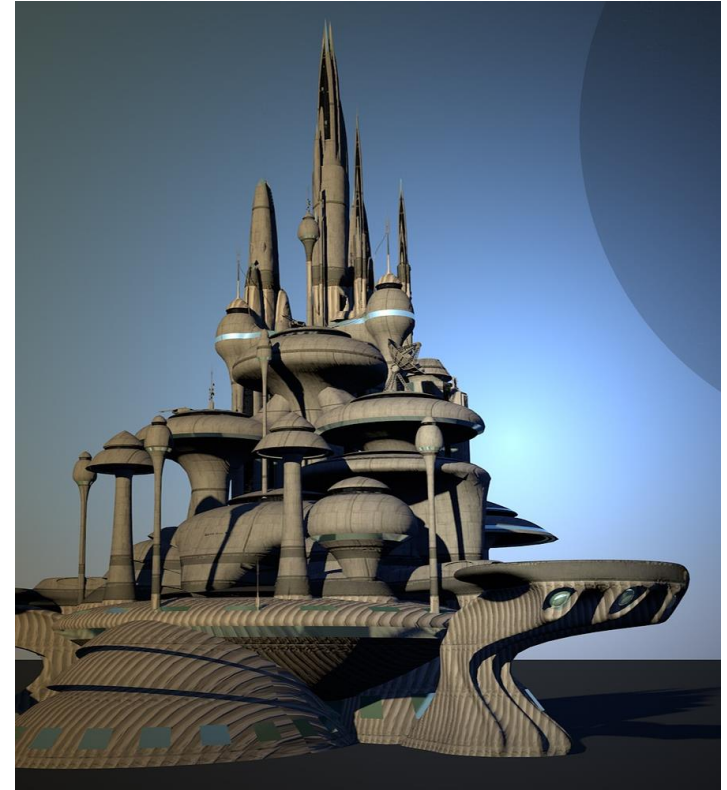
Our mission

Elsevier helps researchers and healthcare professionals advance science and improve health outcomes for the benefit of society.



Modern scholarly digital infrastructure

- Focus on all components of the scholarly workflow not only the journal article
 - text, data, and code,
 - allowing dynamic updating,
 - version/quality control,
 - and tracking of contributorship.
- Open standards:
 - substitutable service providers instead of monopolies
 - avoiding another vendor lock-in.
- Governed by scholars



Modern scholarly digital infrastructure

- Publish first, curate second
- Focus on scientific reliability
- Transparency, peer-mediated improvement, and post-publication assessment
- Improved functionalities
- Additional infrastructure for research data and software



Stern BM, O'Shea EK (2019) A proposal for the future of scientific publishing in the life sciences <https://doi.org/10.1371/journal.pbio.3000116>

Brems B (2019) Reliable novelty: New should not trump true. <https://doi.org/10.1371/journal.pbio.3000117>

Open Research Central Principles

1. Equitable participation in research communication
2. Rapid access to research
3. Transparent and accountable processes
4. Maximise reuse of research outputs
5. Value all research outputs and processes across the research lifecycle

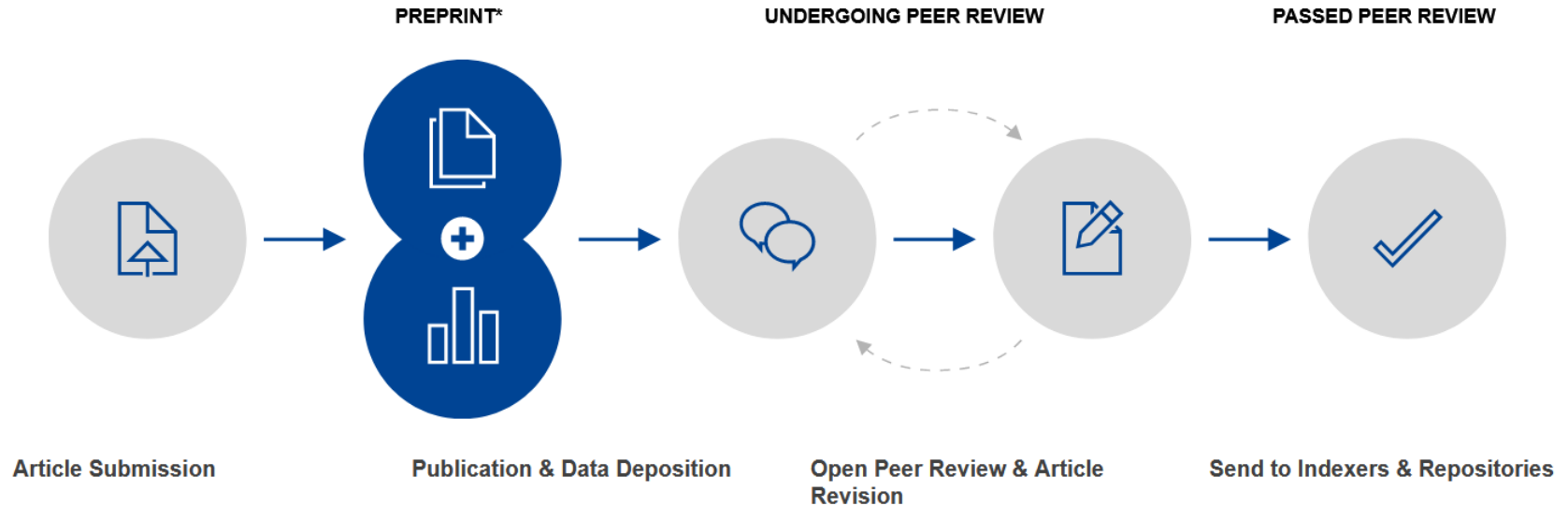


Any publication venue adhering to these principles can be indexed on ORC

Open Research Europe



Our Publishing Process



New infrastructure needed

