

The role of funders in promoting open science

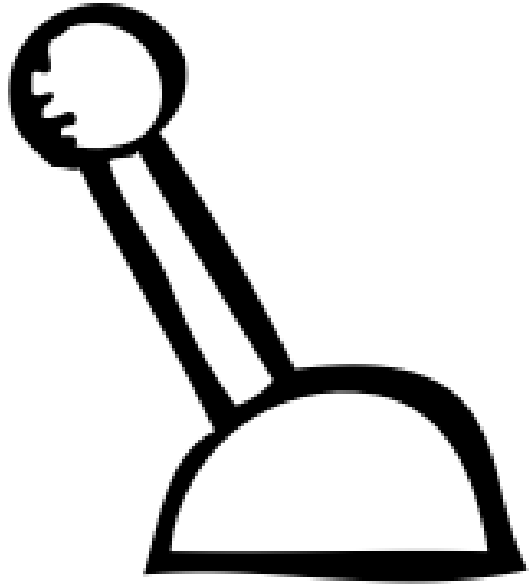
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Two levers for the ‘keepers of the purse’



- *Design best practices or policies* that encourage or mandate open science.
- *Fund solutions* that promote open science



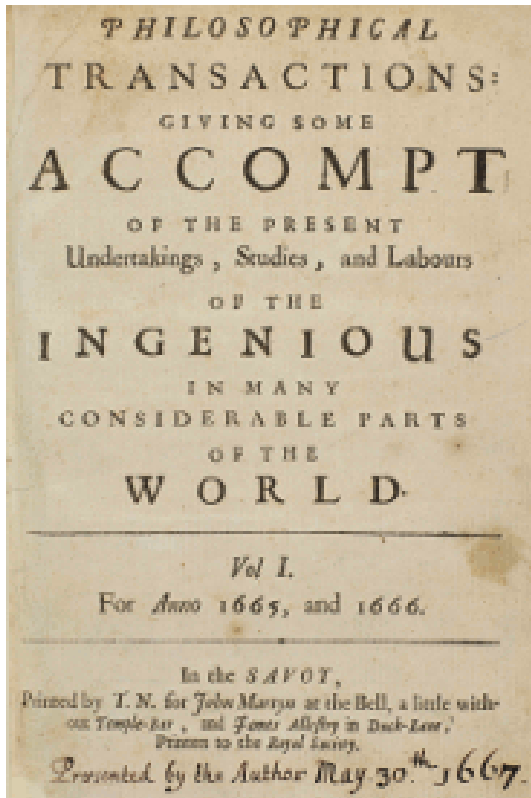
Why isn't open science a 'no brainer'?

We have met the enemy, and they are us:

Desired behavior benefits science but comes at a (perceived) cost to individual scientists

- Peer recognition and career advancement suffers

We have been here before....



Pre -1665: Scientists kept discoveries a secret; they feared competitors would steal them.

Post -1665: publication with authorship links disclosure to priority claim.

Disadvantage of disclosure turns into advantage!

Turn open science into an advantage for individual scientists

Good News

Open science more used & cited.

Bad News

Name brand journals shape careers

Careers don't rely
on journal metrics

Contributions are
*discoverable and
useable*

A shift in the primary role of scientific publishers

- Focus on *content* as the major product is outdated because digital content is easily generated and shared
- Primary value-add has shifted to the *credentialing of scientific work (evaluation and curation)*
- Yet publishers still operate as if they are primarily content providers: charge for content; publishing process organized to select content.

Imagine a journal that is primarily a credentialing service

Such a journal would want its evaluation services to be discoverable:

- Peer review reports are published to showcase the quality and rigor of the peer review process
- *All* peer reviews are valuable, independent on what happens to the article afterwards

Uncouple dissemination and evaluation

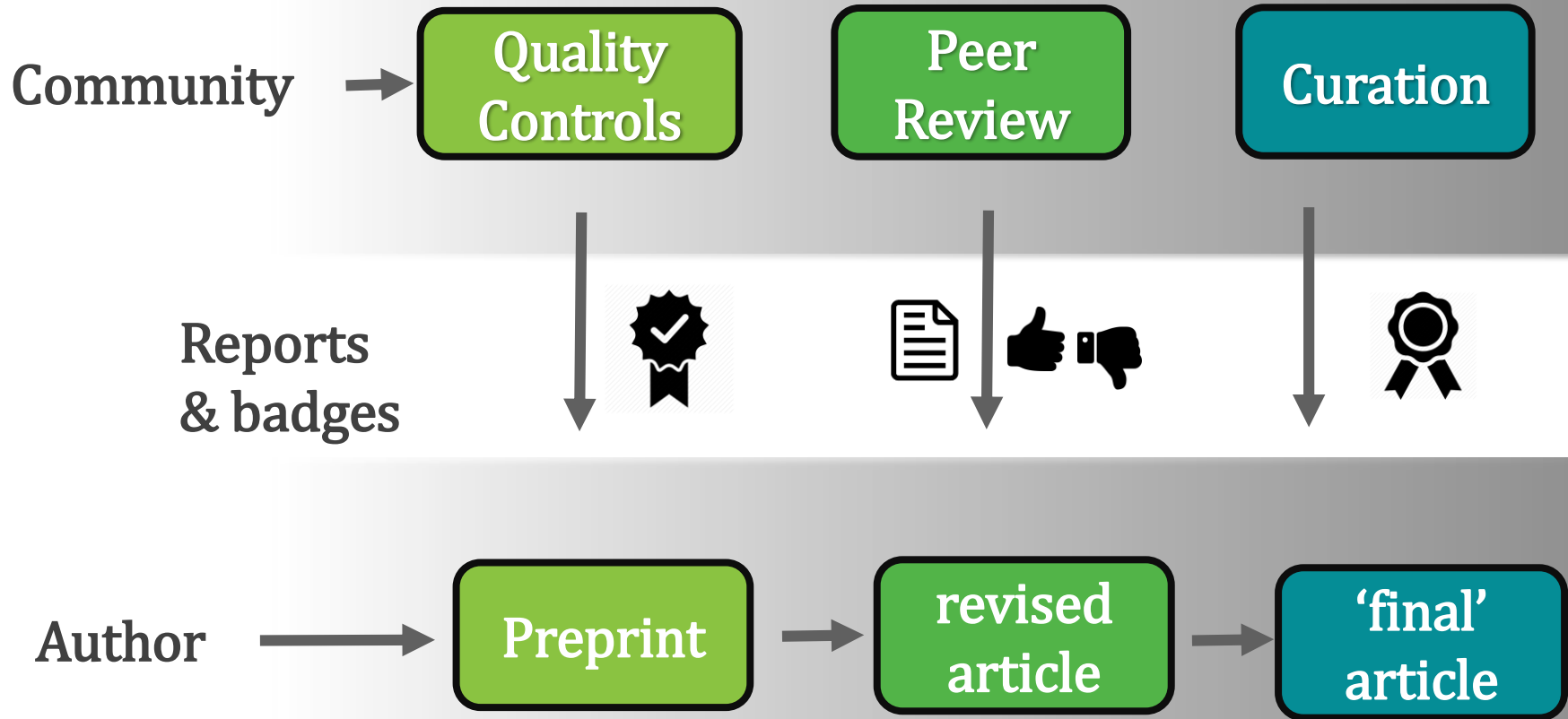
Today



Tomorrow



Separate dissemination and evaluation



Levers for the NASEM roundtable

- Fix the root cause, not the symptoms: we are stuck in a system that was fit for print but is not fit for digital.
- A shared vision.
- Open at scale: Funders, institutions (libraries), learned societies and non-profit publishers can come together to support desired sharing infrastructure and processes.