

# An editorial and technical journey into Post Publication Peer Review (PPPR)

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# An editorial and technical journey into Post Publication Peer Review (PPPR)

Laurent Romary, Inria

# Overview

- Basic concepts of scholarly publishing
  - Publication, peer review and current issues
- What is PPPR and why would we need it?
  - The various forms, features and issues related to PPPR
- How can it be implemented?
  - Various private and public platforms
- Moving forward
  - Data, protocols etc.

# Why PPPR, why now, why DARIAH?

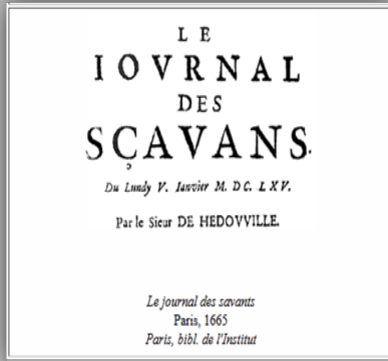
- Ever increasing concentration of services held by commercial publishers
  - Beyond their traditional realms: [Mendeley, bepress, Scopus, SSRN] <= Elsevier
- Request for more transparency of the reviewing process
  - Questioning the quality and objectives of traditional peer review
- Wider implementation of open science concepts
  - Cf. recent Plan S evolution: preservation of authors' copyright
- Emergence of technical platforms, public and private
  - ... we will see a few of them today
- Which interest for DARIAH?
  - Assessment in SSH: is this an opportunity to offer an alternative to SSH scholars?
    - Peer review is usually seen as a half-baked solution for SSH
    - Need to consider all types of objects
      - Sources, publications (books), education material
    - Role of the community
      - (re-) introducing the scholarly debate

In the beginning was scholarly  
publishing...

# What are we talking about?

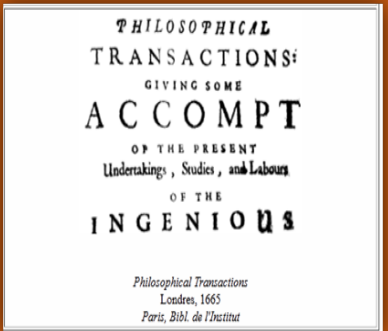
- Scholarly publication
  - The main communication channel of science
  - Has become the main assessment tool in academia (publish or perish)
  - Dates back to the Republic of letters...
- Peer-review
  - Initially carried out by the editors of journals, sometimes asking a friend
  - Since WWII: systematic resort to external reviewers
    - Consequence of the increasing number of submitted contributions
    - Transformation of scholarly publishing within a more standardized format
      - E.g. Zeitschrift für Naturforschung
- Publication in the digital world
  - Flexible publication timing: potentially disconnected from the notion of volume or issue
  - No need to keep out appropriate papers for lack of space
  - Ubiquity of the published object: multiple “publication”, versioning
    - Publishers’ front-end, researchers’ web sites, publication repository, scholarly social networks

# The scholarly publishing system: origins « 1665 »



## Journal des sçavans

- **Spread & communicate** scientific endeavour
- Dissemination & archiving on a **stable medium**



## Philosophical Transactions of the Royal Society of London

- Establish the principles of **peer-review** and scientific priority
- Genesis of **scientific communities** (Scientific networking)

# Zeitschrift für Naturforschung

- *Zeitschrift für Naturforschung A - A Journal of Physical Sciences*
  - founded by Alfred Klemm together with Hans Friedrich-Freksa in 1945
  - Volume 1 published in 1946

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IN MEMORIAM

IN MEMORIAM

Gottfried Wilhelm Leibniz

zur 300. Wiederkehr seines Geburtstags (1. Juli 1646)

Von MAX PLANCK \*

Es ist eine ebenso schwierige wie verlockende Aufgabe, sich im einzelnen klarzumachen, was Leibniz dem Gegenwartsmenschen zu sagen hat. Erschöpfend läßt sie sich schon deshalb nicht behandeln, weil zur vollständigen Erfassung der

unermeßlichen Fülle seiner Untersuchungen sind diejenigen am frühesten verblaßt, welche sich auf Lösungen naheliegender praktischer Aufgaben, auf unmittelbar Nützlichendes bezogen. Kalender-Reform, die Verbesserung der Seidenraupenzucht,

Wenn ruhende Gase ineinander diffundieren, entstehen vorübergehende Temperaturunterschiede, die abklingen in dem Maß, wie sich die Konzentrationsdifferenz ausgleicht (nichtstationärer Diffusionsthermoeffekt)<sup>1, 2</sup>. Bei stationär strömenden Gasen dagegen kann ein dauernder Diffusionsvorgang stattfinden und dementsprechend bildet sich in diesem Fall ein zeitlich konstantes Temperaturfeld aus (stationärer Diffusionsthermoeffekt), worüber kurz berichtet werde.

$$\text{u grad } \gamma = \text{div} (D \text{ grad } \gamma) \quad (1)$$

$$\frac{c_p}{v} \text{u grad } T = \text{div} (\lambda \text{ grad } T + \alpha p D \text{ grad } \gamma) \quad (2)$$

Hierin bedeuten u die Teilchengeschwindigkeit des Gasgemisches,  $\gamma$  den Molenbruch einer Komponente, D den Diffusionskoeffizienten,  $c_p$  die Molwärme bei konstantem Druck, v das Molvolumen, T die absolute Temperatur,  $\lambda$  den Wärmeleitkoeffizienten,  $\alpha$  den Thermoeffusionsfaktor, p den Druck.

Strömen die Gase nur in der z-Richtung mit

genügend großer, überall gleicher Geschwindigkeit w, so werden die Gl. (1) und (2) gleichlautend mit denjenigen für den nichtstationären Effekt<sup>1, 4</sup>, wenn man dort die Zeit t durch  $\frac{z}{w}$  ersetzt. Es treten dann also zeitlich konstante Temperaturdifferenzen auf, die nahe der Diffusionsgrenzschicht und der Eintrittsstelle von der Größe

$$(T - T_0)_{\text{extrem}} = 0.24 T_0 \frac{\alpha}{c_p} a (\gamma_{\infty} - \gamma_{-\infty}) \quad (3)$$

sind<sup>4</sup>. Dabei bedeuten  $\alpha$  die Gaskonstante,  $\gamma_{\infty, -\infty}$  den Molenbruch einer Komponente und  $T_0$  die Gastemperatur an den Stellen  $z = -\infty$  bzw.  $\infty$ , wo die Gase unvermischt bzw. völlig vermischt sind. Der stationäre Effekt muß demnach ebenso leicht meßbar sein wie der nichtstationäre.

Für den exakten Vergleich mit der Messung empfiehlt sich die Einführung des Temperaturlinienintegrals

$$\psi = \int_{-\infty}^{\infty} (T - T_0) dz, \quad (3)$$

welches der Gleichung genügt

$$\frac{\partial^2 \psi}{\partial x^2} + \frac{\partial^2 \psi}{\partial y^2} = \alpha p (\gamma_{\infty} - \gamma_{-\infty}) w / \lambda \quad (4)$$

Dabei ist wieder angenommen, daß sich die Gase nur in der z-Richtung bewegen mit der Geschwindigkeit w (x, y). — Gl. (4) läßt sich leicht lösen, wenn die Gase in zwei Kreisrohren strömen, welche längs einer gemeinsamen Mantellinie durch einen schmalen, genügend langen Schlitz, durch den die Diffusion erfolgt, in Verbindung stehen. Die auf jedes Rohr bezüglichen Größen seien durch die Indices I, II bezeichnet. In jedem Rohr herrsche Poiseuille'sche Strömung mit der mittleren Geschwindigkeit  $\bar{w}_{I, II}$ . R sei der für beide Rohre gleich angenommene Radius,  $\Psi$  ist am größten in der

jeweiligen Rohrachse. Mit der Abkürzung

$$\bar{w} = \frac{\bar{w}_I \bar{w}_{II}}{\bar{w}_I + \bar{w}_{II}} \quad (5)$$

für die „reduzierte Strömungsgeschwindigkeit“ ergibt sich

$$\Psi_{I(II), \text{max}} = \left( \frac{\alpha}{\lambda} \right)_{I(II)} (\gamma_{-\infty, II} - \gamma_{-\infty, I}) \bar{w} \quad (6)$$

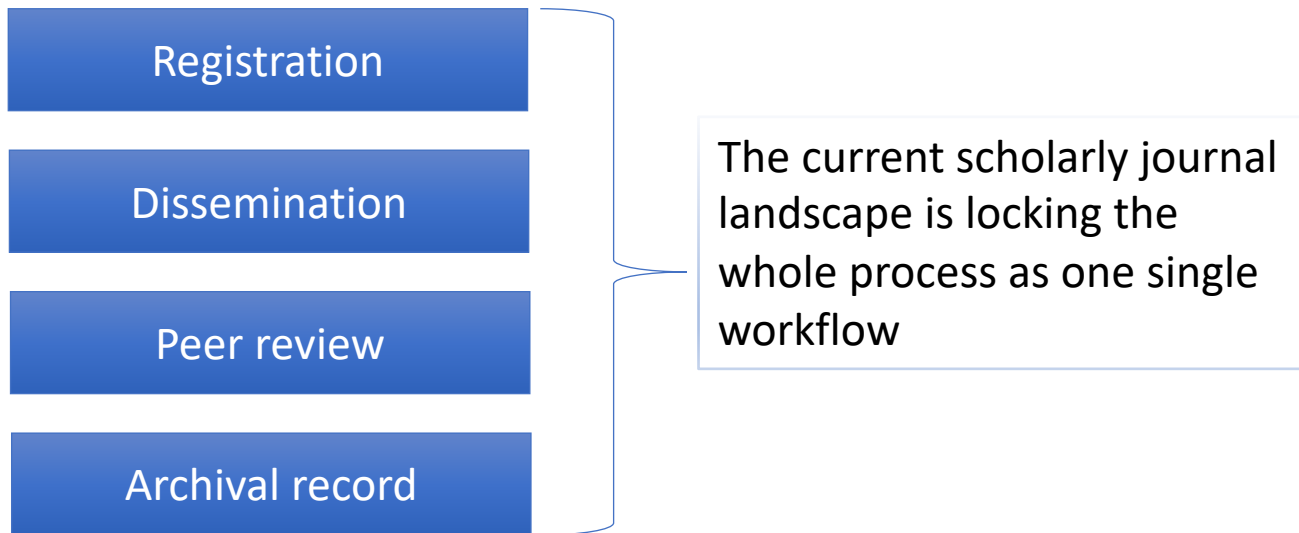
Zum Nachweis des Effekts und zur Prüfung der Beziehung (6) wurde ein Apparat benutzt, bestehend aus zwei 50 cm langen Röhren von 1 cm Durchmesser und mit einem gemeinsamen 40 cm langen, 0,5 cm breiten, mit einem feinen Netz überdeckten Schlitz. In der Achse jedes Rohres war ein Temperaturmeßdraht gespannt. Versuche mit  $\text{H}_2 \leftrightarrow \text{N}_2$  zeigten sogleich, daß sich tatsächlich der  $\text{H}_2$ -Strom erwärmt, der  $\text{N}_2$ -Strom abkühlt. Darüber hinaus konnte die Aussage von Gl. (6), daß die  $\Psi_{I, II, \text{max}}$  der reduzierten Strömungsgeschwindigkeit proportional sind und es auf das Verhältnis  $\bar{w}_I/\bar{w}_{II}$  selbst nicht ankommt, quantitativ bestätigt werden.  $\bar{w}$  lag dabei zwischen 0,5 und 5 cm/sec. Ebenfalls eine Bestätigung von Gl. (6) ergaben Versuche, bei denen 80%  $\text{N}_2$ , 20%  $\text{H}_2 \leftrightarrow \text{N}_2$  sowie  $\text{H}_2 \leftrightarrow 20\% \text{N}_2$ , 80%  $\text{H}_2$  diffundierten. Die Auswertung mittels Gl. (6) lieferte  $\alpha = 0.21$  für  $\gamma_{\text{N}_2} = 0.9$  sowie  $\alpha = 0.40$  für  $\gamma_{\text{N}_2} = 0.1$ . Dies ist in guter Übereinstimmung mit den auf Grund des nichtstationären Effekts gefundenen Werten, welche  $\alpha = 0.21$  bzw. 0.42 waren<sup>5</sup>. Schließlich wurde die Diffusion von  $\text{N}_2 \leftrightarrow \text{O}_2$  untersucht. Aus den etwas unsicheren Messungen folgte  $\alpha = 0.018$ . Der nichtstationäre Effekt hatte  $\alpha = 0.018$  ergeben<sup>5</sup>. Der Deutschen Forschungsgemeinschaft danke ich für die Unterstützung dieser Arbeit. Ein ausführlicher Bericht wurde der Z. Physik eingereicht.

\* L. Waldmann, Z. Physik 121, 501 [1943].



# Understanding the role of scholarly journals

*Main functions of scholarly journals*  
(Mabe, 2010)



Consequences on scholars' attitude/objectives:

- Registration: used to claim priority
- Dissemination: receiving feedback, getting fame
- Peer review: canvassing content to fit into the expected model
- Archival record: obviating a personal management of publication assets

# Issues with the current scholarly system

- Ambiguity of the term publication
  - Making something public
    - Cf. use of online documents in patent examination
  - Having it peer-reviewed
    - “How many publications do you have?”
  - Reflected in the terminology: preprint – postprint
  - Raises a lot of critical IP issues
    - Who has the rights on a given document? Author vs. publisher
- Variety of peer-reviewed (or not) objects
  - Journal paper, conference proceedings, books, book chapters, blog posts, data sets, educational objects (cf. DARIAH campus) etc.
    - What counts as a “publication”?
- The scholarly publishing business
  - Price and copyright
  - Open access publishing has not necessarily contributed to improving the landscape
    - Bias towards publishing more (not just predatory journals), to earn more, not to improve science

# General issues related to peer review

- A slow and inefficient process?
  - Time to publication
  - Subjectivity and biased judgement
    - Cf. competition, appropriate level of expertise, interest
    - “recurrent inability to detect fraud and misconduct ” (Torny, 2018)
  - Small number of reviewers, one stop shop for being accessible
    - Often leads to desk rejection (by editor, prior to any peer review)
  - Conservatism
    - Journal topics, editorial cautiousness, level of expertise (“I don’t understand this new idea”)
  - Leads to cascading submissions and possibly to research invisibility
- Benjamin List, director at the Max Planck Institut für Kohlenforschung in Mülheim an der Ruhr, Germany, and the editor-in-chief of *Synlett*.
  - “When it works — and that’s much of the time — peer review is a wondrous thing. But all too often, it can be an exercise in frustration for all concerned. Authors are on tenterhooks to learn of potentially career-changing decisions. Generous peer-reviewers are overwhelmed. And editors are condemned to doggedly sending reminders weeks after deadlines pass.”
    - Source: (List, 2017)

# Escaping the increasing journal desperation

- Tough figures
  - Number of peer-reviewed journals has increased by 3.5% year-on-year for the past 200 years (Ware & Mabe, 2015)
  - Kovanis et al. (2015) reported that across a range of journals, the supply of submitted papers exceeded reviewer availability by between 15 and 249%
    - 63.4 million hours were devoted to peer review, of which 18.9 million hours were undertaken by the top 5% of contributing reviewers
- (Villar, 2019) “why not practise immediate acceptance, too?”
  - “is it time to consider whether a paper needs review on submission in the first place?”
- We see the point where open science and post publication peer review may come into the game

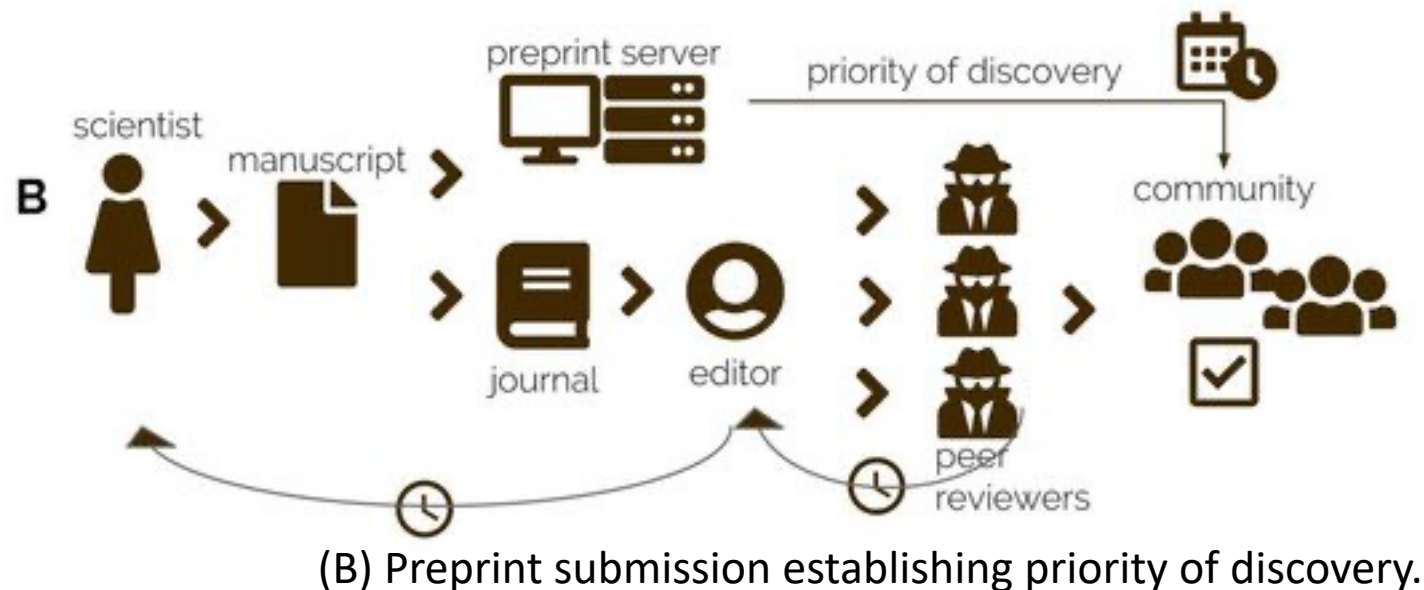
# Back to basics: the role of scholarly publication (Tennant et al. 2019)

- Makes science public
- Ensures the quality of science
- Defines anteriority of results
- Makes articles searchable/findable
- Archives for the future

*Do the current scholarly publication mechanisms fulfil these requirements?*

**OPEN SCIENCE:  
JUST  
SCIENCE  
DONE RIGHT**

# The scholarly publishing tension (Tennant et al. 2019)



“[I]t seems that the strong coupling between journals and peer review as a requirement to protect scientific integrity seems to undermine the very foundations of scholarly inquiry.”

Decoupling publication and peer  
review with PPPR

# General principles of post publication peer review

- By definition: providing an assessment mechanism after a scholarly document has been “published”, i.e. made publicly available
- Two basic building blocks
  - A publication repository where the document is made available (*host*)
  - A certification platforms that allows reviewers to carry out their assessment (*overlay service*)
- Beyond these basic concepts, a variety of approaches



# Various forms of PPPR - 1

- Un-peer-reviewed material vs already reviewed material
  - PPPR as the first assessment process
    - The manuscript is available as a preprint in a repository
    - E.g. *F1000 Research*, *PeerJ*, *Figshare*, and *ArXiv*
  - PPPR as a further selection/proof-checking mechanisms
    - The article is already selected in a journal and made available from a journal's website (or related repository – cf. PubMed Central)
    - E.g. journal commenting mechanisms, PubPeer
    - Cf. “Rigorous post-publication assessment of papers is crucial for the filtering and potential integration of meritorious data into the scientific collective. [...] numerous article retractions and corrections have been catalyzed by PPPR” (Knoepfler 2015, *Trends in Genetics*)

# Various forms of PPPR - 2

- Levels of formality (free vs. channelled PPPR)
  - Formally invited reviewers, after publication of the un-reviewed article
    - Light editorial check before publication
    - Traditional editorial work to find reviewers
      - E.g. F1000Research and Copernicus
  - Volunteer reviewers, after publication of the un-reviewed article
    - Credits associated to potential reviews
      - E.g. Science Open, The Winnover
    - Cf. commenting system already existing in traditional journals
  - Comments on a 3rd party site (e.g. Blog or dedicated commenting platform)
    - Towards a free commenting space
      - PubPeer, Pubmed Commons, ResearchGate, Academia

# Channelled peer-review as a process

- “journals could institute periodic post-publication review, in which the journal would solicit formal review of the article, focusing on how well its methods and results have held up, given the research that has been published in the intervening period. Such reviews would provide valuable historical perspective.” (T.A. Gibson, Nature-Correspondance, 2007)
- Note: PPPR seen as an opportunity to question the traditional peer-review process

# A disruptive view on scholarly publishing?

- Contributes to getting a disruptive view on publishing in any case...
  - Beyond “open access”
- Services
  - Better identification of the services needed for scholarly publication
  - Better specification of the workflows/interfaces between them (cf. COAR initiative)
  - Better compensation models for peer reviewers
    - Better tracing, better acknowledgements (cf. Publons),
- Business models
  - Contributing to associating precise costs to services:
    - to hosting, certification, long-term archiving
    - Cf. PEER project economic report
  - Getting a better estimate of what we pay with commercial offers
- Caveats
  - Theoretical decoupling?
    - E.g. F1000, myScienceWorks (not to mention RG or Academia)
  - Not so disruptive because not so novel...

# So in a way, this is not new...

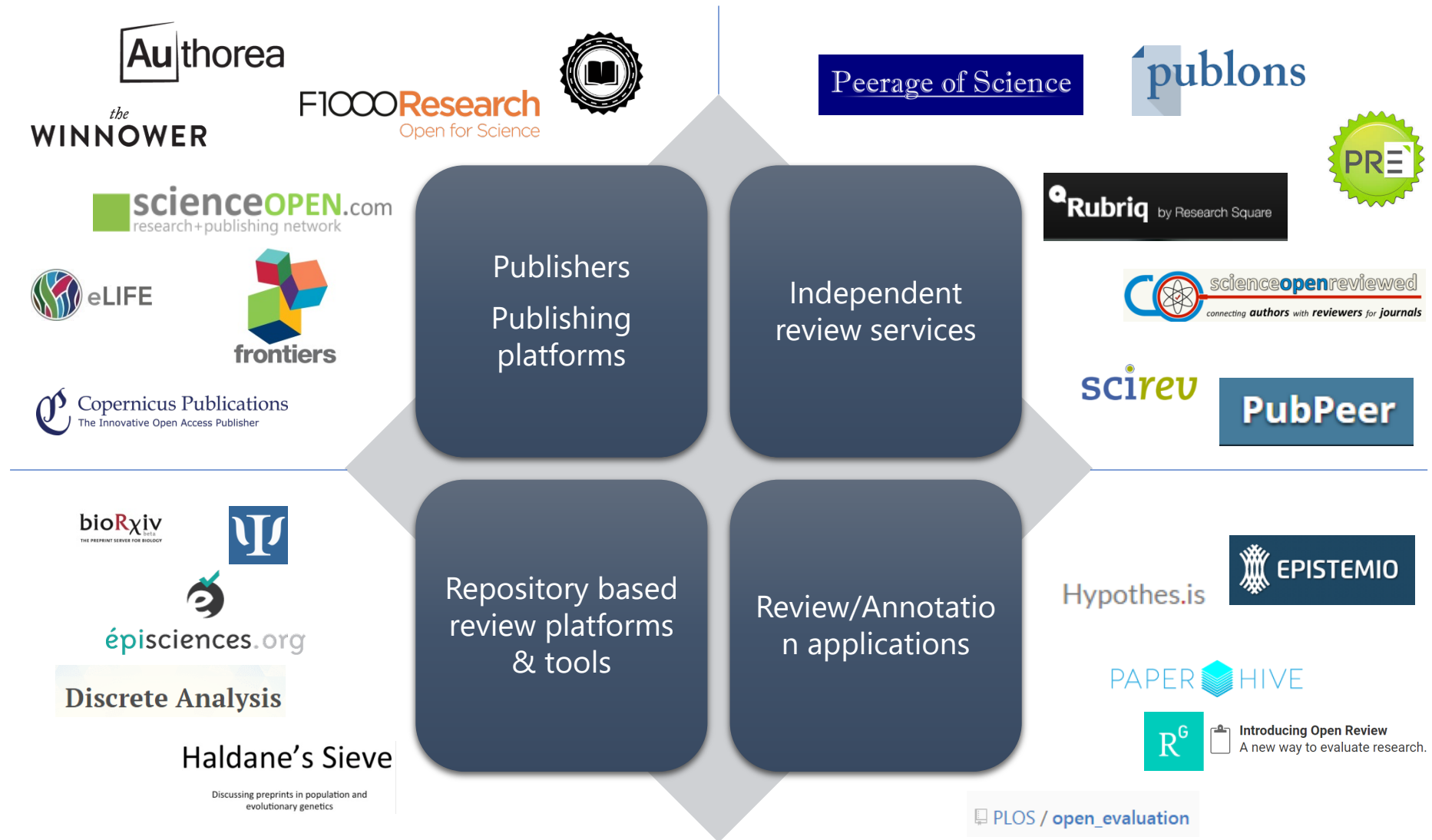
- Papers presented at a conference before publishing a journal full version, or an edited book
- Comments from colleagues, scholarly correspondence
  - Cf. “LMF and TEI crosswalks”: <https://hal.inria.fr/hal-00762664v4>
- Letters to the Editor
- Formal reviews as publications
  - Recensions in the SSH domain
- Comments on a blog post

# Challenges for post-publication peer review

- Ensuring participation
  - Limited corpus of papers gaining interest, bias towards controversial ones (cf. Science Open, The Winnower)
  - Traditional reviewers' selection proves more efficient
- Controlling reviewers' expertise
  - Science Open requires reviewers to have five articles in ORCID, PubMed Commons requires one article in PubMed.
  - No check of expertise in the field of the commented article
- Preventing the fragmentation of discussions
  - A general issue of social networks: comments on the article itself (if that feature is available), in PubPeer, on PubMed Commons, on Research Gate, on blogs, on Twitter, on F1000Prime...
- Ensuring an open scholarly debate (see Pubpeer)
  - 'gotcha' mentality
- Encouraging online junk... or fostering responsibility (online persona)

PPPR – How? Looking at existing  
platforms

# Alternative peer review tools and services





Post (peer-reviewed) publication  
peer review

# PubPeer

- Conceived for the biological domain
  - Objective of the creators: develop critical thinking
- Workflow
  - Based upon already published papers (DOI, entry in ArXiv as identification means)
  - Open comments à la Amazon => automatic notification of authors
  - Possible answers from authors
- Commenters remain anonymous
  - Not part of the initial design, but as a request from younger scholars
  - Shift in practices: whistle blowing and/or harassment
- Cf. Torny, 2018: “Pubpeer: vigilante science, journal club or alarm raiser? The controversies over anonymity in post-publication peer review”

# Possible consequences...

## Researcher files lawsuit over anonymous PubPeer comments

By Kelly Servick | Oct. 26, 2014, 9:45 PM

The scientist who claimed that comments on the postpublication peer-review website PubPeer caused him to lose a job offer has now filed suit against the anonymous posters and has subpoenaed the website's operators in a bid to obtain their identities.

In September, PubPeer's anonymous moderators revealed that Fazlul Sarkar, a cancer researcher at Wayne State University in Detroit, Michigan, had **threatened legal action** after the University of Mississippi rescinded its offer of a tenured, \$350,000-per-year position. Sarkar, who remains employed at Wayne State, claimed that anonymous comments suggesting misconduct in his research caused the university to revoke its offer.

### Numerous Anonymous Statements Were Posted On PubPeer About Sarkar That Violated Their Terms of Services, Were False, Spread Rumors, Disclosed Illegally Confidential Information, and Accused Him of Research Misconduct

7. PubPeer posted numerous statements about Dr. Sarkar that violated their own strict service, and called into question whether any screening process was employed before

8. The reason for PubPeer's in adequate screening may be gleaned from their own admission: "The truth is that there a lot of things we would like to do/change with PubPeer

but we are scientists focusing on running experiments and have little time/expertise to focus on PubPeer." [https://pubpeer.uservoice.com/forums/188932-general/suggestions/5330661-force-

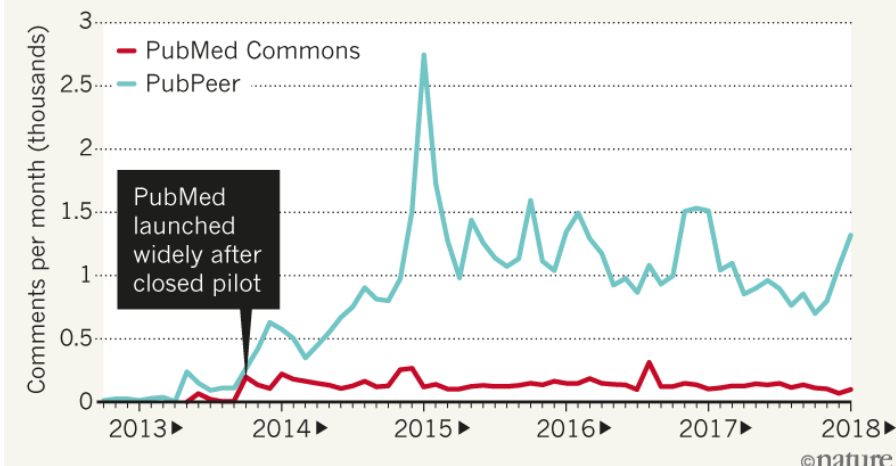
# Failed attempts - PubMed Commons

- Platform launched in 2013 (NIH's National Library of Medicine (NLM))
  - Posting comments on any published paper indexed by PubMed (Registered users)
    - “responsible post-publication peer review,”
  - Comments that can be viewed by anyone accessing the paper
- Closes door in 2018:
  - Low levels of engagement
  - Alternate venues for public discussion
    - PubPeer, journals' sites (BMJ, PLOS, eLife)
  - “it just wasn't really useful, let alone essential”

Cf. Dolgin, 2018

## A LITTLE-USED COMMONS?

Around 7,500 comments have been logged on published abstracts on PubMed Commons. By contrast, more than 54,000 comments have been made at PubPeer.



# Post publication peer-review of authors' manuscripts

Overlay models of scholarly publishing

# Post publication peer review in relation to the traditional journal workflow

Main functions of  
scholarly journals  
(Mabe, 2010)

Registration

Dissemination

Peer review

Archival record

Implementation in an overlay model

*registration with precise affiliation  
information: **repository***

*high visibility in search engines:  
**repository***

*certification by editorial  
committees: **overlay journal***

*long term archiving: **repository***

# The baseline: a publication repository

- Useful/required functionalities of a publication repository
  - User identification, time stamping
  - Online release of content, with stable URIs
    - Questioning immediacy (cf. next slide)
  - Licencing information
  - Resource versioning
    - Able to deal with all stages of existence of a scientific work (living resource)
  - Long-term archiving
- Advantages for the user
  - Digital sovereignty on the user's part
    - Sovereignty on content (e.g. version to be made public)
    - Sovereignty on metadata (licence, affiliations)

# Publication repositories – discussion points

- The ambiguity again: are they intended for “published” or unpublished materials
  - E.g HAL allows both, but scholars have sometimes difficulties to make the difference
- Publication repositories as infrastructures
  - Should they rely on public or private platforms?
  - Impacts on sovereignty and copyright protection
  - Identifying the corresponding costs, even if low
    - E.g. arXiv: 800 000 \$/year; 120 000 article/year; ~ 7 \$/article
    - Cf. PEER project economic report for a complete analysis
- Should publication repositories have a publication policy? (cf. HAL vs. Zenodo)
  - Trusted users
  - Types of content
  - Scholarly relevance
  - Consequence on time to publication...



# Sovereignty?

- King's College or U. Amsterdam etc. are using Pure (yes, Elsevier)
- 4TU.ResearchData at TUDelft is switching to Figshare...
  - <https://openworking.wordpress.com/2020/08/18/why-figshare-choosing-a-new-technical-infrastructure-for-4tu-researchdata/>
- Jisc is providing a general service for repository procurement
  - 4ScienceSrl, Elsevier, figshare, MyScienceWork, Reach Solutions
  - <https://www.jisc.ac.uk/research-outputs-repository-systems-purchasing>
- There are always good reasons...

# PPPR as a monolithic commercial platform

F1000

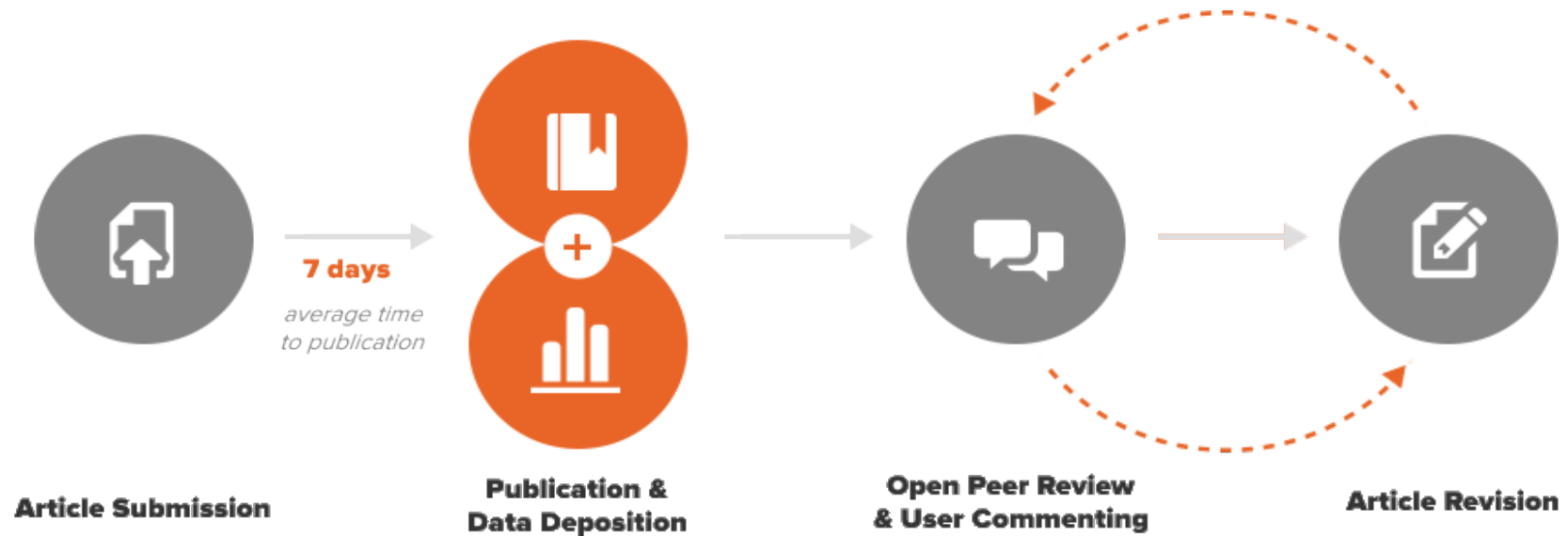
# F1000 – coupling again the decoupled model

- F1000Research (now Taylor&Francis)
  - Founded by Vitek Tracz (cf. BioMed Central)
- Winners of the the European Commission *Open Research Publishing Platform*
- Workflow:
  - Article submission in F1000 repository (“publication”)
  - Peer review by invited referees
    - Note: open peer review - peer reviewer's names and comments are visible on the site
  - Associated data behind are also published on the platform.

<https://www.youtube.com/watch?v=KdgkffQ5NoU>

See: <https://blog.f1000.com/2014/07/08/what-is-post-publication-peer-review/>

# The F1000 workflow



# PPPR as transitioning from traditional publication settings

ACP and Episciences

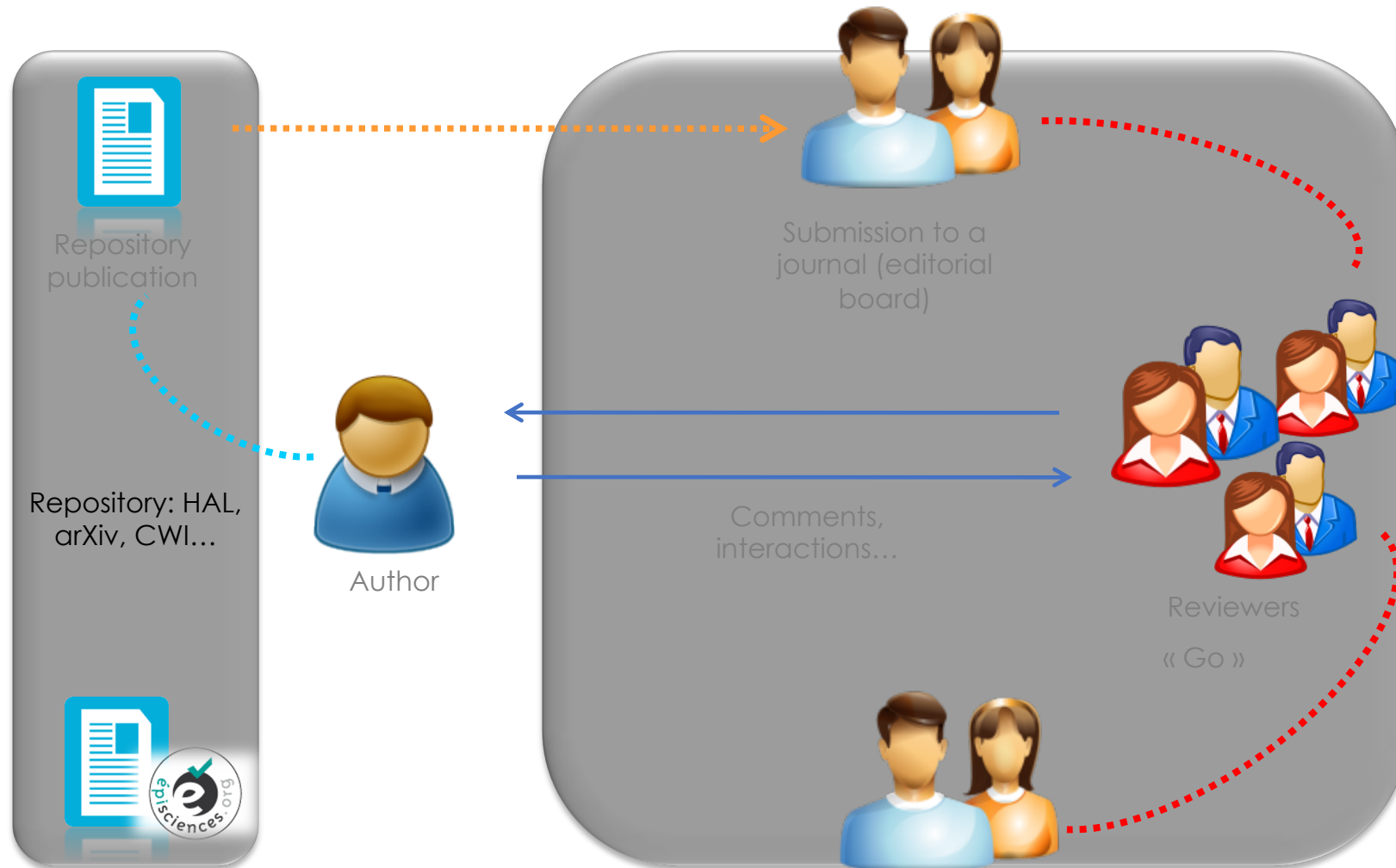
# Atmospheric Chemistry and Physics (ACP)

- Hosted by Copernicus publisher
- Coupled with a discussion forum:
  - Atmospheric Chemistry and Physics Discussions (ACPD)
- Open access, CC-BY
- Workflow:
  - Quick screening by the editor => preprint posted
  - Interactive public discussion on ACPD
    - Immediate posting of referee comments (anonymous or attributed) by at least two independent referees
    - Author comments (on behalf of all authors)
    - Short comments by any registered member of the scientific community (attributed)
  - Final acceptance for ACP or rejection (Copy-editing, APCs...)

# PPPR as a platform: Episciences

- Initiated in 2012 as an overlay platform on top of HAL and arXiv
- Developed by CCSD, Funded by the French state
- Innovative services on publication repositories
  - All document management aspects are left to the publication repository
    - Metadata, hosting, versioning
  - Certification process leading to the branding of a document (a version thereof)
  - Platform agnosticism through OAI/PMH
    - arXiv, HAL, CWI...
    - OAI/PMH is ageing
- Traditional journal management services
  - Editors, peer-reviewers
  - Special issues
  - Mailing system

# Editorial workflow





# Episciences – lessons learnt

- Variable acceptance of the post-publication peer-review model
  - Candidate journals may be frightened by the feature
- Sustainability
  - Decoupling the sustainability of content from that of the certification platforms
- Towards even more certification models
  - Open peer review, author's initiative, community review
- “Transitioning” from the existing journal eco-system
  - Candidate journals are reassured to feel “at home”
- Raises a few questions
  - Community and traditional review in parallel
    - Authors ask friends to provide feedback during the review process
  - Multiple branding
    - The same paper can be pushed to more than one platform
    - But technicalities around metadata do not follow... 😞

# PPPR as a recommendation process

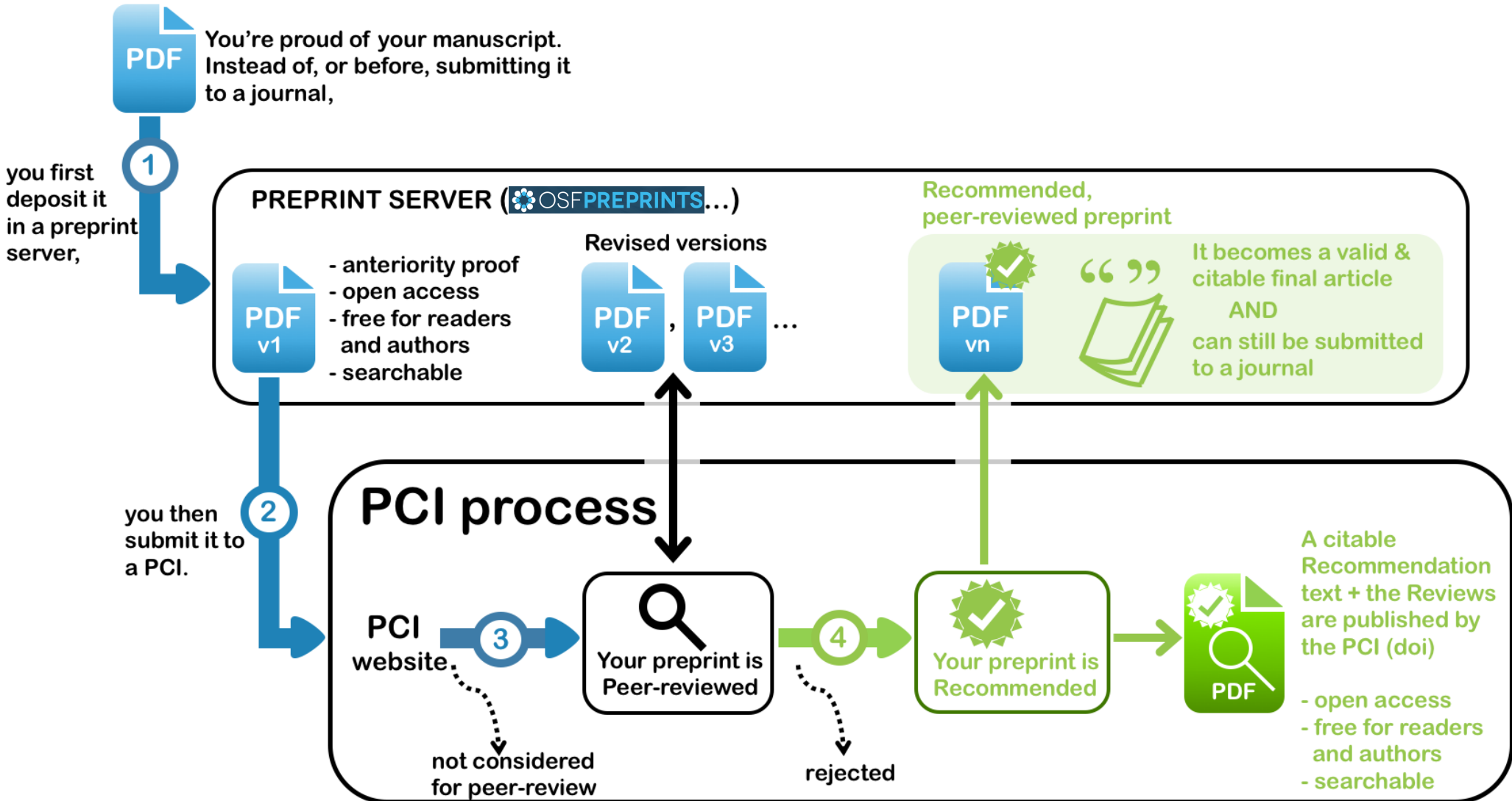
PCI

# The *Peer Community in (PCI)* project

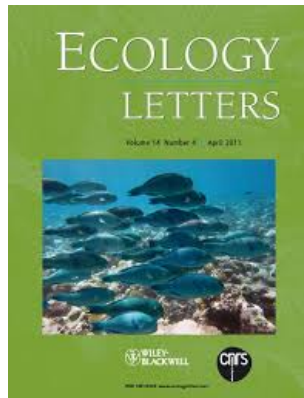
- Creating communities of researchers evaluating and recommending articles in their scientific field
  - e.g. *PCI Ecology*, *PCI Evolutionary Biology*, *PCI Paleontology*, etc.
- Information sources: preprint servers
- Publication of recommendation texts and reviews



# How does this work?



# PCI and journals



etc.

*"We would value the recommendations seriously and may even use them for handling without further peer review (only peer review by handling editors)"*

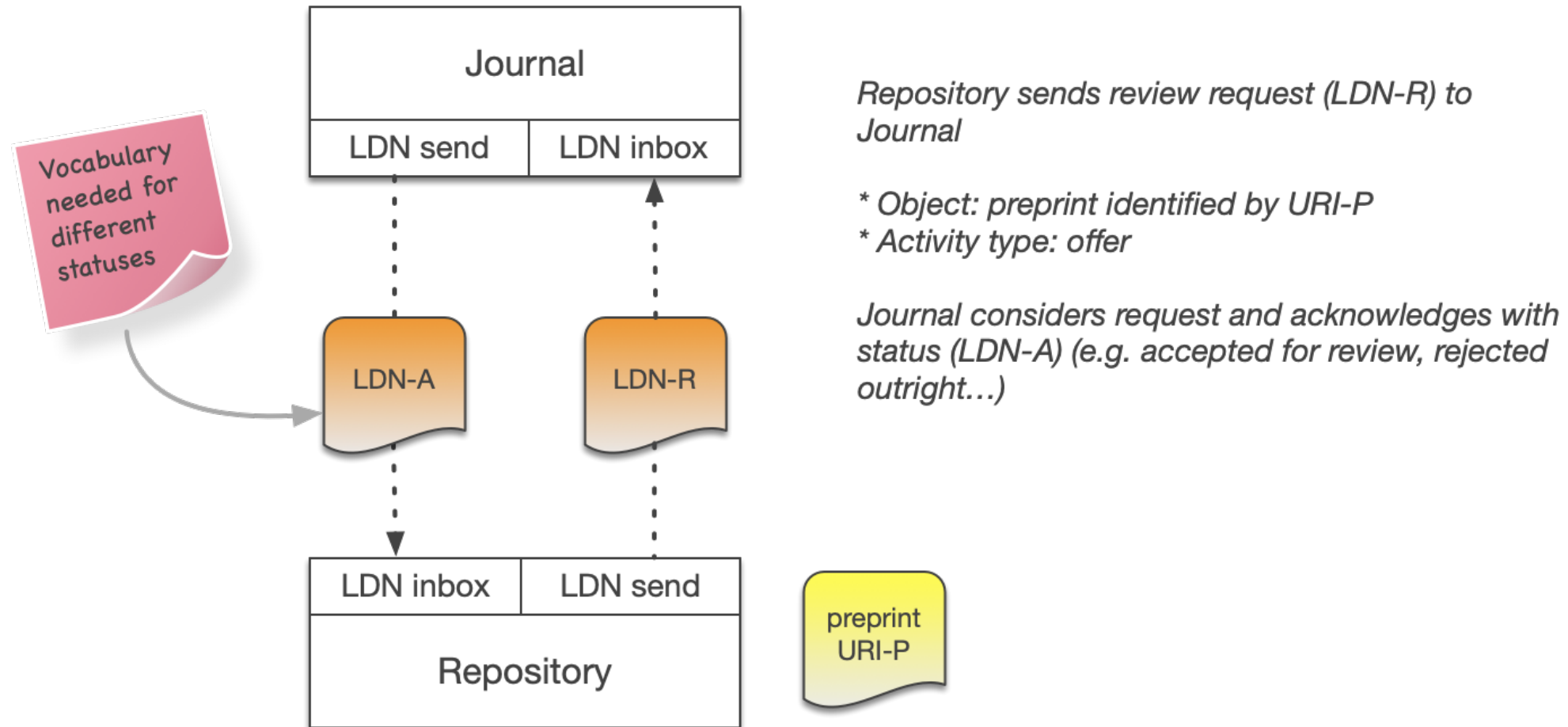
# Generalising PPPR platforms

The COAR initiative

# Modelling Overlay Peer Review Processes with Linked Data Notifications (Walk, 2020)

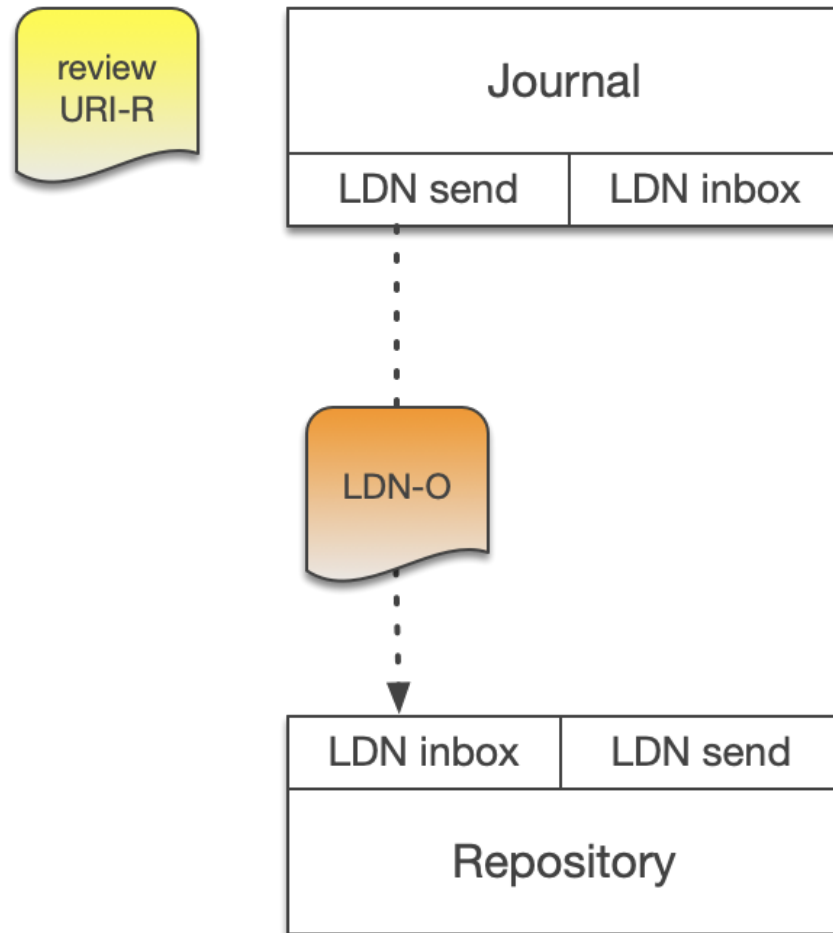
- An initiative by COAR (cf. Pubfair)
  - Cf. report: Next Generation Repository (NGR)
- Resource-centric network (metadata and content)
  - Connected with resource-oriented networked services
    - Passing content as *reference*
  - Typical case of services: commentary, annotation and peer reviews
- Objective: achieve interoperability between repositories and peer review systems
  - Meeting in Paris in January 2020: representatives from (cf. google doc)
  - Avoid bespoke point to point interaction between repositories and services
  - Based upon W3C standards (Linked Data Notifications, Activity Stream)

# Example 1: Request for review initiated via a repository





# Example 2: Outcome of review



*The Journal sends a notification to the Repository*

- \* Object: offer previously sent by repository*
- \* Activity type: "accept" or "reject"*
- \* Payload extra: URI-R identifying review details*

*This decision refers to an offer previously sent by the repository, not directly to the preprint identified by URI-P (although, since the offer refers directly to this preprint, the decision does refer to it indirectly).*

preprint  
URI-P

# Where do we stand?

- Building blocks of a generalized architecture for PPPR
  - Covering a wide variety of scholarly objects
- Contributing to the evolution of peer review
  - Decoupling prevents peer review from being a go/no-go activity
  - Scholarly relevance seen as a long term activity
- Lessons for DARIAH
  - Understanding
    - Looking at existing platforms, matching features to SSH needs
  - Recommending
    - As part of DARIAH's open science policy (e.g. preprints, early publication of results)
  - Experimenting
    - Data journals, assessment of educational material (DARIAH campus)
- Need for a cultural revolution?

Merci pour votre attention

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