



# Can we lower the knowledge barrier?

Using academic publishing to empower society

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# Challenges in academic publishing

Any 3 – contained crisis    3-6 – escalated crisis    7-9 – systemic crisis

- Shrinking library budgets coupled with escalating costs
- Stalled/inequitable progress on open access
- Growing dominance of major publishing corporations
- Risks and challenges of AI development and deployment
- Constraints on innovation/ lack of new opportunities
- Manipulation and exploitation poisoning the literature
- Hyper-specialization of knowledge
- (In US), political and ideological war on academia and research
- Lack of consensus among key stakeholders in the sector





# Welcome to postnormal publishing

- Term drawn from Postnormal Science\*, a problem-solving approach suited to situations where facts are uncertain, values are in conflict, stakes are high, and decisions are urgent.

\*Funtowicz, S. O. and Ravetz, J. R., 1991. "A New Scientific Methodology for Global Environmental Issues", in Costanza, R. (ed.), *Ecological Economics: The Science and Management of Sustainability*: 137–152. New York: Columbia University Press.

- PNS can be "framed in terms of a call for the democratization of expertise."
- Can we frame PNP as "the democratization of expert knowledge?"





Academic publishers view publication as the completion of our task (more or less). What if it was just the midpoint?

Can we do good—and do well—by making academic knowledge more widely relevant?

**We are exploring several approaches**



# Where I'm coming from—Annual Reviews



- Nonprofit organization dedicated to synthesizing and integrating knowledge and wisdom from the global research community for the progress of science and the benefit of society.
- Almost 100 years old.
- 51 journals covering physical science, biological and biomedical science, social science, and economics.
- Created for, and by, the research community.
- Half the titles rank in top 3 in their field by 2-year IF.
- “Slow science” approach.
- Through S2O, last 3 years of content OA; last 10 freely accessible.
- 2.5 million article accesses per month.



# Purpose of review articles

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- Capture current understanding of a topic.
- Set the work in historical context.
- Highlight the major questions to be addressed and future research directions.
- Outline the practical applications and general significance of the research to society.





# Strategy: Assemble a Brains Trust

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- An 8-person external/internal team tasked with identifying new mission-aligned initiatives.
- May include new AR-led programs, investments in startups, or engagement in collaborative ventures.
- Projects should generate a surplus that contributes back to AR.
- Proposals should consider **scale** (with potential for meaningful impact), a multi-year **timeline**, and an appropriate level of **risk** aligned with AR's capacity and strategic goals.

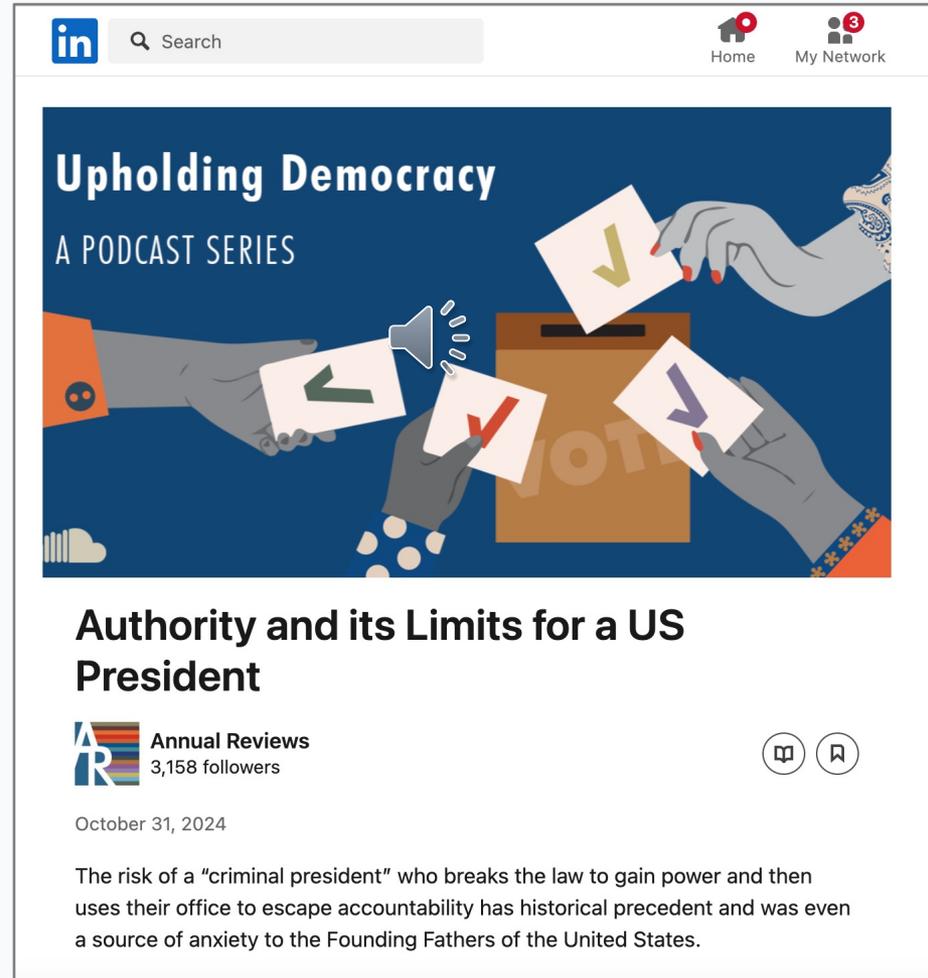


# AI tools that open content: NotebookLM

## Google's AI-Powered Research Assistant

- Summaries and insights
- Context-aware Q&A
- Smart note organization
- Podcast tool generates audio summaries

This podcast provides a dynamic summary of the article "The US Presidency: Power and Constraint" published in the Annual Review of Political Science. The article's author did not participate in creating the podcast but has listened to and approved its content.



The screenshot shows a LinkedIn post from the organization 'Annual Reviews', which has 3,158 followers. The post is dated October 31, 2024, and features a blue graphic with the text 'Upholding Democracy' and 'A PODCAST SERIES'. The graphic depicts several hands of different colors (grey, orange, blue) holding white cards with colored arrows (green, red, purple) pointing towards a brown ballot box. The main title of the post is 'Authority and its Limits for a US President'. The post includes a short introductory paragraph: 'The risk of a "criminal president" who breaks the law to gain power and then uses their office to escape accountability has historical precedent and was even a source of anxiety to the Founding Fathers of the United States.'



# AI tools that open content: PaperQA

## AI-Powered Research Assistant by FutureHouse

- Answers questions from academic papers and research documents
- Context-aware Q&A for precise answers
- Smart citation tracking
- Paper Linking to connect related studies

Agent Bibliographies History About | Richard user external Logout

**PaperQA** v1.0  
by FutureHouse

Ask New Question

Starting Finding papers  
Gathering evidence  
Finding papers  
Gathering evidence  
**Answering question**

Paper Count	36
Relevant Papers	17
Clinical Trial Count	0
Relevant Clinical Trials	0
Current Evidence	41
Current Cost	\$0.6098
Disease-Target Associations	0

**Question:** What are the best ways to bring academic knowledge to wider society - policy makers, educators, businesses, etc.?

**Answer:**

Based on the provided context, here is a comprehensive analysis of the best ways to bring academic knowledge to wider society:

1. Adopt Multi-Channel Dissemination Strategies
  - Use multiple channels including journals, social media, conferences, and educational sessions to reach different audiences (curtis2017translatingresearchfindings pages 2-4)
  - Create targeted stakeholder summaries and engage with media to broaden reach (curtis2017translatingresearchfindings pages 2-4)
  - Leverage social networking sites which enable widespread information sharing, discussion, and virtual community building (eid2016socialnetworkingknowledge pages 1-2)
2. Implement Co-Creation and Partnership Approaches
  - Move beyond simple one-way knowledge transfer to collaborative knowledge generation between academics and stakeholders (frantzeskaki2019naturebasedsolutionsfor pages 1-4)
  - Establish research-practice partnerships (RPPs) that create long-term collaborations and co-construct knowledge (farleyripple2018rethinkingconnectionsbetween pages 7-8)
  - Develop university-community partnerships that focus on local needs and practical impact (frantzeskaki2019naturebasedsolutionsfor pages 2-3)
3. Utilize Knowledge Brokers and Intermediaries
  - Employ trusted knowledge brokers who understand different stakeholder cultures and can facilitate two-way communication (frantzeskaki2019naturebasedsolutionsfor pages 7-8)
  - Use intermediary organizations to bridge the research-practice gap effectively (farleyripple2018rethinkingconnectionsbetween pages 6-7)
  - Create dedicated research/evaluation divisions within organizations to foster deeper research use (farleyripple2018rethinkingconnectionsbetween pages 6-7)
4. Focus on Implementation and Context
  - Consider implementation strategies from the initial research design phase (curtis2017translatingresearchfindings pages 1-2)
  - Address organizational culture, time constraints, and individual motivation as factors influencing knowledge uptake (curtis2017translatingresearchfindings pages 5-6)
  - Use demonstration projects and real-world experimentation to provide concrete examples (frantzeskaki2019naturebasedsolutionsfor pages 7-8)
5. Engage Stakeholders Throughout the Process





# Mission-Aligned Investment Strategy

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- Invest in pre-seed or seed-stage startups developing technologies to enhance the integration of science into society.
- Often overlooked by traditional funding due to smaller exit opportunities, but lean capital can yield strong returns.
- Our expertise and networks ensure effective assessment.
- Early capital to help establish proof-of-concept and reach key milestones.
- Non-financial support, including:
  - Expert Access: Links to top scientists.
  - Credibility: Association with Annual Reviews
  - Academic Bridges: Partnerships with research institutions to accelerate growth.





# Smart Teams for Complex Questions

- Expert engagement platform with AR editors and authors across disciplines
- Tailored expert groups to meet organizational needs
- Sample projects:
  - Guide (small) foundations toward emerging research areas
  - Support businesses with interdisciplinary teams (e.g., risk modeling in insurance/reinsurance)
  - Provide (commissioned) reports on research-heavy business topics (e.g., Pillars of the Bioeconomy)





# AI powered audio learning platform

- Audio summaries that make complex subjects accessible and engaging.
- informed by research on effective learning methodologies
- Content tailored to user profiles
- Multilingual potential
  
- Sample project: Global network of local governments committed to sustainability and climate action.
  - Climate action briefs/ best practice stories/ policy updates/ training modules
  - Tailored to urban planners/ policymakers/ sustainability officers
  - Multiple distribution options, including organization platform
  
- Expansion potential: Curated learning, certification, conference packages





# Collaborative Organization Among Academic Publishers?

- Establish a new entity jointly owned by several (small) academic publishers, each representing different subject areas.
- Cross-publisher working groups for innovation, knowledge sharing, and strategy alignment.
- Operate with a centralized management and shared infrastructure for technology, marketing, and analytics; individual projects led by the partner best suited to the topic.
- Project costs split among partners, and any surpluses distributed based on each partner's contribution to the project, along with an ownership-based dividend.





Dedication to quality publishing remains at the heart of our mission. But a powerful path forward is to lower the knowledge barrier and empower society by making this content more engaging and relevant to other sectors—industry, policy, education, and beyond.

Collaborations can turn insight into impact. And if we can achieve that, we're not just preserving the value of scholarly publishing—we're expanding it.

Thank you

