

Publishing without perishing. Are there such things as “research products”?

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Nostra res agitur: open science as a social question



Overview

- 1 An old Platonic conundrum
- 2 Are we so enlightened, after all?
 - A still unfulfilled prophecy
- 3 The Game of Publishing
- 4 Searching for the root cause of our alienation
 - A grey road to open access?
- 5 A way out? It's up to us



A too much cited Plato quote

Phaedrus 275a on the invention of letters

For this invention will produce forgetfulness in the minds of those who learn to use it, because they will not practice their memory. Their trust in writing, produced by external characters which are no part of themselves, will discourage the use of their own memory within them. You have invented an elixir not of memory, but of reminding; and you offer your pupils the appearance of wisdom, not true wisdom, for they will read many things without instruction and will therefore seem to know many things, when they are for the most part ignorant and hard to get along with, since they are not wise, but only appear wise.



Doing science without publishing?

“We, as children of the bookish twentieth century, have irrational prejudices against Plato’s esoteric position, that we get on the wrong path of interpretation. Plato never thought of entrusting his entire philosophy to writing.”

“The Enlightenment as well as so-called post-modernity, has no use for the conscious limitation of philosophical communication and consequently has no comprehension of it.”

T.A. Szlezak, Reading Plato, 1999



A bookish prejudice?

Publishing = publicity

If you do not publish:

- maybe you are esoteric, like - allegedly - Plato
- maybe you are just lazy, like - allegedly - Peter Higgs

An unproductive researcher?

Shortly after being awarded the Nobel Prize in Physics in 2013, Peter Higgs, of Higgs boson fame, said he doubted he would have gotten a job, not to mention tenure, in today's academic system. The professor emeritus at the University of Edinburgh said he simply wouldn't have been "productive" enough, with academe's premium on publication metrics. Conversely, said Higgs, working in today's academic system probably wouldn't have afforded him the opportunity to identify how subatomic material requires mass.

C. Flaherty, The Costs of Publish or Perish, 2015



S. Harnad, 2003: Back to the Oral Tradition Through Skywriting at the Speed of Thought

Orality:

- 1 Hearsay has an adaptive advantage over trial and error. Unlike toilers, cognitive barterers have not to reinvent the wheel every time
- 2 Oral tradition: collective, serial form of cognitive barter, whereby we inherit the knowledge of others and we add what we ourselves know and/or we pass on what we have learned
- 3 Knowledge passes across generation during synchronous discourse, by saying and hearing - in a living database



S. Harnad, 2003: Back to the Oral Tradition Through Skywriting at the Speed of Thought

Literacy, and beyond:

- ➊ Writing dissociated asynchronous interactions from the speed and synchronicity of interacting thoughts. But: *verba volant, scripta manent*
- ➋ The Net: as fast as synchronous oral exchange, and yet preserving written records.
- ➌ Paywalls separating skywriters from their would-be skyreaders will not make sense anymore

Harnad: it is - or it used to be? - only a matter of time

“Our talking heads and their interacting minds will be incomparably more fecund’ once those lazy iterative cycles by which our knowledge has been created are restored to the speed of stone age thought by skywriting in the post-Gutenberg galaxy. It is only a matter of timing.”



Easier said than done

A bug in the machine: a research assessment system based on the so-called “core journals”

- Researchers have to be measured to get managed
- “Research products” fetishism as commodity fetishism

Richard Poynder on the state of open access: Where are we? What still needs to be done? (2014)

When the history of open access is written will it tell the story of **a group of high-minded individuals** who, in the teeth of fierce resistance from publishers, tore down the paywalls surrounding publicly-funded research? Or will it give an account of how **a highly innovative publishing industry** exploited the benefits of the digital network to set research free?



B. Brembs, So many symptoms, only one disease: a public good in private hands (2015)

"Science has infected itself (voluntarily!) with a life-threatening parasite. It has given away its crown jewels, the scientific knowledge contained in the scholarly archives, to entities with orthogonal interests: corporate publishers whose fiduciary duty is not knowledge dissemination or scholarly communication, but profit maximization."

C.Neylon, Researcher as victim. Researcher as predator. (2015)

Predatory publishers, peer review cartels, fake reviewers "are simply serving a demand. A demand created by researchers under **immense pressure to demonstrate their productivity**. Researchers who know how to play the game."





D. Stapel Faking Science: A True Story of Academic Fraud (2014)

The goal of research . . . is to produce knowledge, and the goal of teaching is to transmit that knowledge. Publication counts and teaching evaluation scores are indicators of how well that process is going. But the mechanics of human and organizational psychology ensure that these indicators rapidly acquire the status of formal criteria. Once people have worked out which outcome leads to the greatest reward, they will automatically focus their energy on achieving that outcome. By rewarding large numbers of publications and high ratings of teaching, you put a premium on churning out papers and being considered a fun and popular teacher, not on doing insightful research and challenging students to think. Over time, this changes the intrinsic satisfaction of writing and teaching into an extrinsic pursuit of the rewards that follow for people who write a lot and teach in the approved manner.

“Dig and Discover” has morphed into “Dig and Deliver.”



Open Science Collaboration, Estimating the reproducibility of psychological science (2015)

"A large portion of replications produced weaker evidence for the original findings despite using materials provided by the original authors, review in advance for methodological fidelity, and high statistical power to detect the original effect sizes." "There is still more work to do we to know whether we know what we think to know."

More than 50 shades of grey

The difference between Stapel and many of his former colleagues is just in degree, not in kind.



We can become aware that publishing is just a part of a wider process, but . . .

There is a gross misunderstanding in the open access debate about the nature of academic research and publication. Academic research publication is a form of teaching. Academic research publications deal not in sets of facts or figures but in understanding. But academic research publication is a form of teaching that assumes some prior knowledge.

For those who wish to have access, there is an admission cost : they must invest in the education prerequisite to enable them to understand the language used. Current publication practices work to ensure that the entry threshold for understanding my language is as low as possible. Open access will raise that entry threshold. Much more will be downloaded; much less will be understood.

R. Osborne, Why open access makes no sense, 2013



Esotericism: economic, not philosophical

- We are accustomed to use economics as proxy
- We are accustomed to assume the worst about people - and to get the worst



Mandating without persuading

- Trusting law and code
- Distrusting people
- Evaluating without reading

and getting:

- Predatory publishers
- Predatory "researchers"

Do we deserve to be treated like *homines oeconomici*?

We would have the tools

- to de-emphasize papers as products in favor of research as an unending conversation
- to choose and promote alternative ways of publishing
- to require a modern scholarly infrastructure (see Brembs)
- to take advantage from already existing infrastructures (Lockss, Zenodo etc.)

An example: anti-Mandevillian Mandevillians

The Riga Protocol for Open Bernard Mandeville Scholarship Community

"In order to become part of Open Bernard Mandeville Scholarship Community you need to upload at least one of your scholarly items with some link to Mandeville on Zenodo Open Bernard Mandeville Scholarship Community repository"

Knowing how to die - to know how to win?

"I cannot persuade Crito, my friends, that the Socrates who is now conversing and arranging the details of his argument is really I; he thinks I am the one whom he will presently see as a corpse and he asks how to bury me."

Plato, *Phaedo* 115c-d



This is not the end.