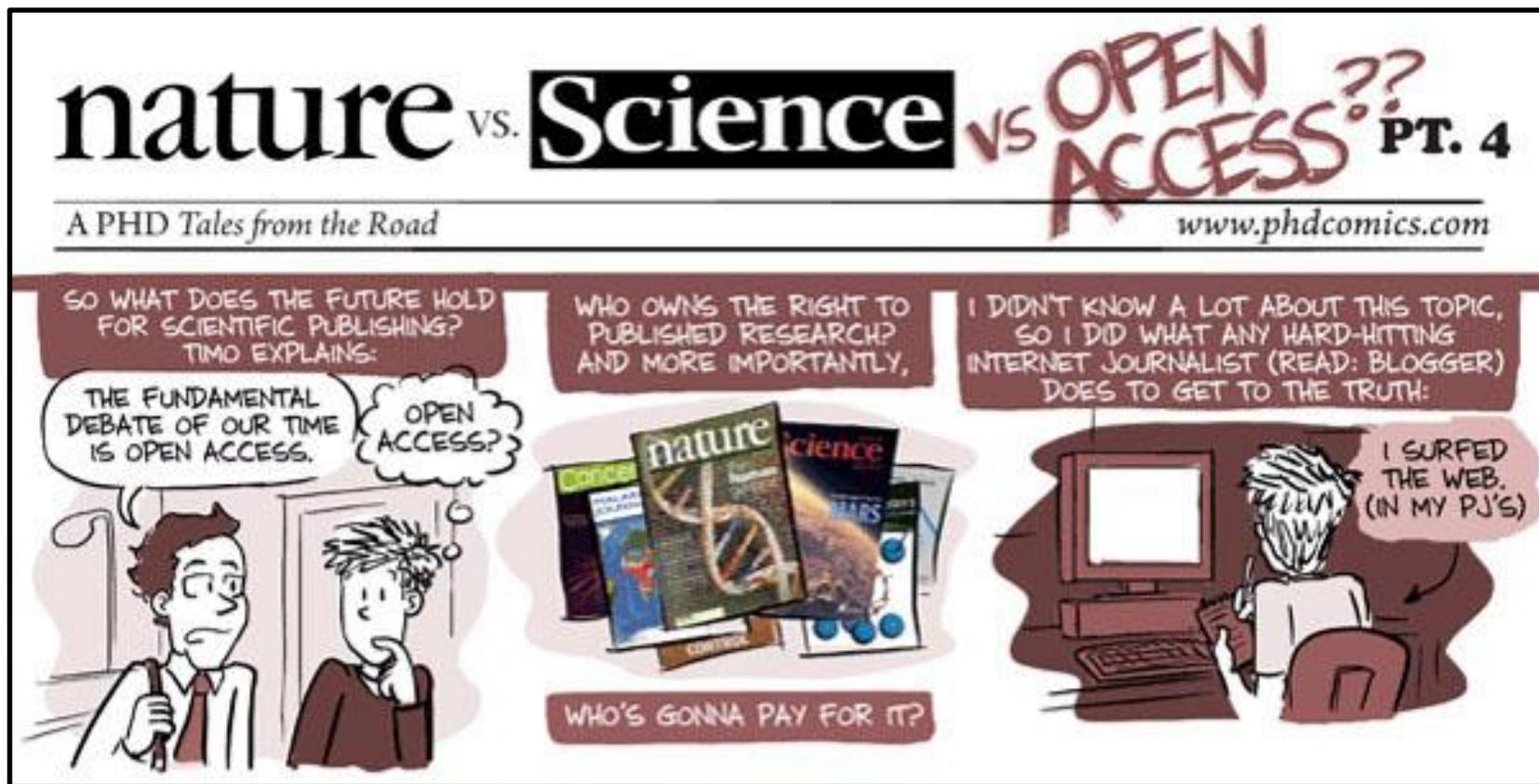


# Scientific publishing (2019)

Assoc. Prof., PhD Michael Pittelkow  
Department of Chemistry  
University of Copenhagen



# From 1997-2019

Michael Pittelkow

1997  
Started at KU

2000  
BSc / KU

2000-2001  
6 months at CSIRO / Melbourne  
6 months at TU/E / Eindhoven

2003  
MSc / KU

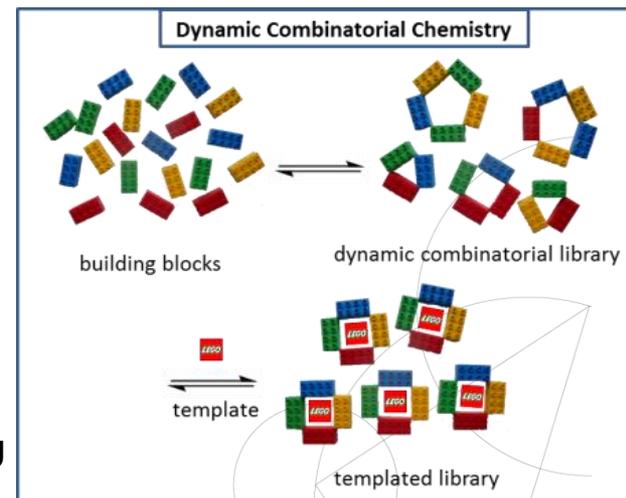
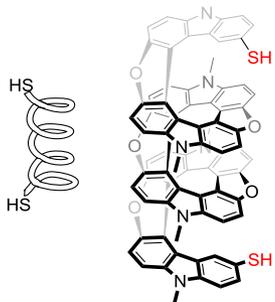
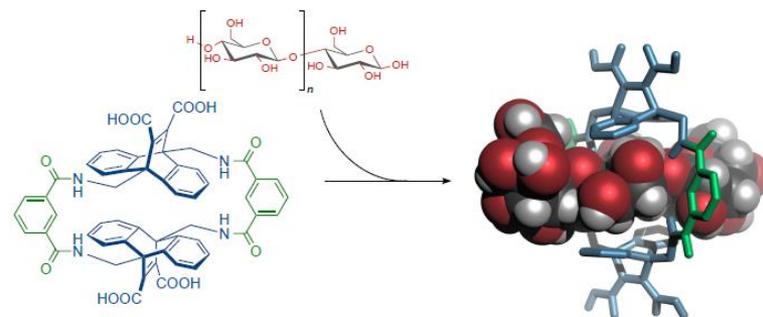
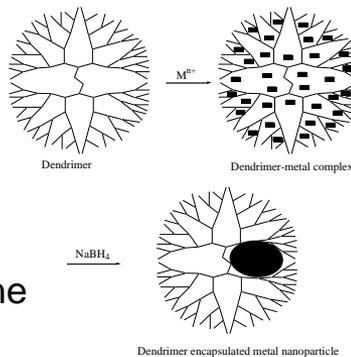
2006  
6 months in Cambridge

2006  
Ph.d. / KU

2006-2008  
Postdoc / Cambridge

2008-2013  
Assistant Prof. (Steno adjunkt) / KU

2013-2019...  
Associate Prof. (Lektor) / KU



# Scientific publishing (2019)

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**Publishing tradition is different within the natural sciences (and other sciences). I know about the publishing tradition in chemistry – and this presentations takes this as a starting point.**

**This is essentially an internet problem. We must remember that online publishing is great, and we don't ever want to go back.**

**Goal for 2019 for the Department of Chemistry (38 PI's, mix of ass., assoc. and full profs):**

- **Publish >200 peer reviewed papers (20 with JIF>8). That amounts to 5-6 papers/PI. This is more than 2-times more papers that 30 years ago/PI.**
- **Publish > 10 inventions (patent applications). 30 years ago this was not a parameter.**
- **Books, book chapters and other not-peer-reviewed publications is considered a waste of time.**
- **Publishing matters. Impact matters. Numbers (sadly) matters.**

**OA goal for 2019 for Department of Chemistry (aligned with Faculty of Science / KU):**

- **Publish mainly open access. Green is 'enough'.**

**„Realpolitik“ or honest to god „real politics“**

DEPARTMENT OF CHEMISTRY  
UNIVERSITY OF COPENHAGEN



# Scientific publishing (2019)

## nature vs. Science **PT. 2**

A PHD Tales from the Road

[www.phdcomics.com](http://www.phdcomics.com)

AT A RECENT CONFERENCE IN CAMBRIDGE, I MET NATURE'S ONLINE PUBLISHING DIRECTOR, TIMO HANNAY.

YOU GUYS RUN MY COMICS ON YOUR WEBSITE.

WE DO?

IN HIS PRESENTATION, TIMO CANDIDLY DESCRIBES THE BUSINESS OF NATURE:

① BASICALLY, SCIENTISTS GIVE US THEIR WORK FOR FREE...

② ...THEN WE HAVE VOLUNTEER SCIENTISTS REVIEW IT FOR US FOR FREE...

③ ...THEN WE BUNDLE IT ALL UP AND SELL IT BACK TO THEM FOR A PROFIT.

IT SOUNDS OUTRAGEOUS, BUT SCIENTISTS WILL DO IT BECAUSE THEY WANT TO BE PUBLISHED.

WE CAN CHARGE WHATEVER WE WANT, IT'S ESSENTIALLY A MONOPOLY,

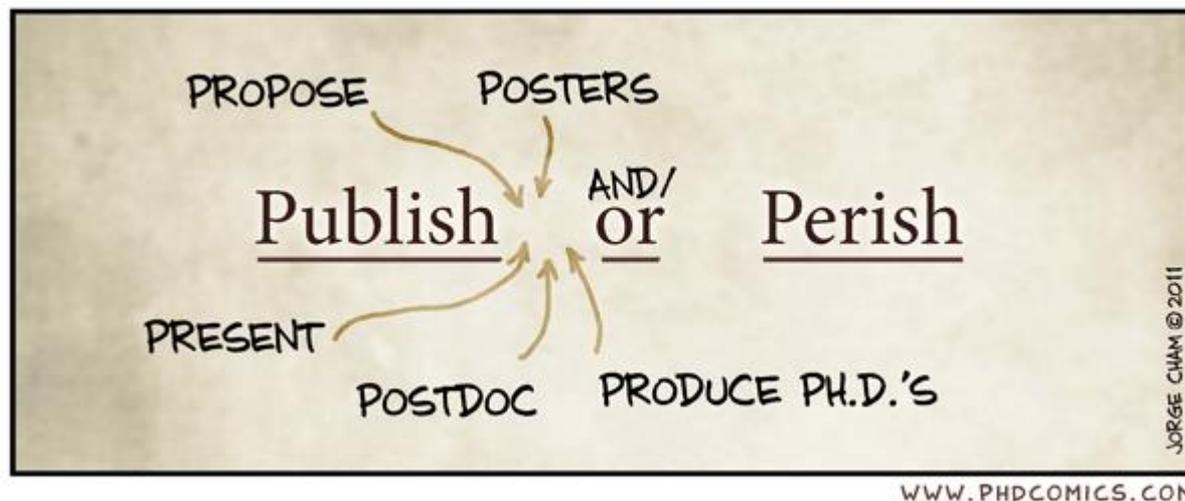
JORGE CHAM © 2009



# Scientific publishing (2019)

Why, where, how much and in what form?  
...and should OA be a factor?

Lets look at the publishing landscape in chemistry.  
Everything in 2019 is essentially online (even text books and book chapters).  
How does it work:



# Scientific publishing (2019)

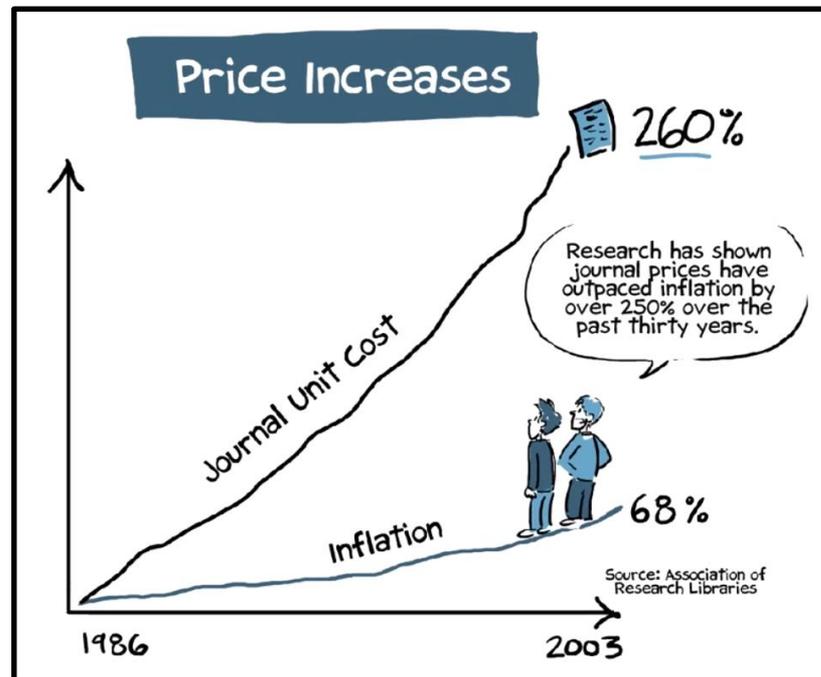
Is it time for true disruption?

OA: Is it about money or ideology?

Ideology



Money



# Scientific publishing (2019)

Is it time for true disruption?

## First, let's talk Ideology

”Forskerne selv er som regel fraværende, når diskussionerne finder sted. Det er jo lidt paradoksalt, eftersom det jo er dem, og deres arbejde det handler om og eftersom de gennem de sidste næsten 2000 år og indtil for relativt nylig, har delt deres publikationer og deres data kvit og frit.”

”Taget forskernes nuværende arbejdsvilkår i betragtning med manglende incitamerter for Open Access, mener vi ikke, at man kan forvente ret meget af dem i denne henseende. Skal noget ændres, så må det drives af incitamerter. De skal skabes. Det kan ske på mange måder: Universiteterne kan uddele priser til de forskere, der publicerer Open Access, eller på anden måde gøre det meriterende at åbne op for forskningen og dens resultater. Forlagene kan vise deres gode vilje ved at sponsorere frikøb fra undervisning og administration til forskere, der gør en særlig indsats for Open Access. Universiteterne kan lade det indgå i bedømmelseskriterierne i forbindelse med videnskabelige stillinger, og kunne ved samme lejlighed også inkludere kriterier som samfundsengagement og forskningsformidling som evalueringskriterier.”

## Quotes like these worry me



# Scientific publishing (2019)

Is it time for true disruption?

## First, let's talk ideology

38 PI's at CHEM:

- Ca. 35 have (strong) reservations against #PLANS in the current form (some don't care / have never heard about it).
- 3 are passionately for OA. But only one actually (mostly) follows through. Reality vs ideology.
- Open access: is it something that is desirable? Is it even possible? Why do some people want it?
- Interest of the reader: Who is the reader? Is the public interested in the technical publication, or is it perhaps better to get a more popular version? Who is it really for?
- Interest of the author, due to prestige of journal. Do the people I want to read my paper actually read it?
- Easy to measure how good a scientist is (rubbish, but it can't be ignored!).



# Scientific publishing (2019)

Is it time for true disruption?

**Money, money, money...**

All 38 PI's at CHEM's first comment is: I am certainly not paying for it, and absolutely not twice!

Is open access cheaper than what we have now? Most probably would never be.

Open access (gold) in high-level chemistry journals cost 25.000-35.000 kr.

Can everyone in Denmark go to their local library and get access to scientific papers? YES they can.

Is this all 'u-lands bistand + public support of companies?'

What about back-files?

Any solution must, must, must be for everyone, not just people with additional funding!

'Cost' for KUB for online access for scientist/students (in million Kr). Ca. 5% increase/year.

2010: 47,9

2011: 49,0

2012: 51,0

2013: 53,7

2014: 55,5

2015: 58,1

2016: 60,2

2017: 62,0

2018: 65\*

Source: KUB årsregnskaber 2010-2017.

\* Universitetsavisen 2019

„Realpolitik“ or honest to god „real politics“

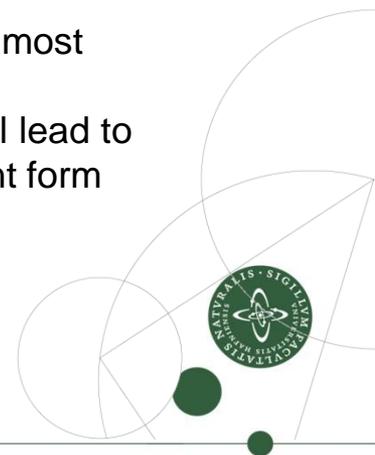


# Scientific publishing (2019)

## Problems with #PLANS

### Why is #PLANS problematic (here are some selected thoughts from Spinoza laureates)?

- The huge difference between commercial publishers and their aim (earn money) and Learned Societies and their aim (quality control and self-organization of the field) is ignored.
- It breaks with the century-old tradition of scientific publishing via the Learned Societies.
- It is way too expensive, as a whole and for the research groups. To give an idea, a sizeable Dutch research group or department with about 80 publications per year would have to pay 400 k€/year for “open access gold” in decent journals, corresponding to the costs of 5-6 PhD positions.
- **It undermines the reviewing system and thus quality control. Having a flood of poor-quality or even wrong, but freely available papers clearly is not in the interest of the general public, which still has to pay for this twice, namely for the research itself, and then for the “author pays” system.**
- **Authors who cannot pay are excluded from publishing.**
- It will decouple countries falling under planS from the international research community.
- It will presumably lead to loss of international collaborations as one cannot easily publish together any longer.
- It will lead to the loss of influx of international talent that depends on publishing in the most reputed journals.
- There is by far not sufficient cost and quality control, and this, as explained above, will lead to higher publication costs and more poor-quality publications. In fact, planS in its current form counteracts both cost and quality control.



# Do we know what we want (many opinions)?

No we don't really know...

Here are some options (many more and better options probably exist):

**1: We want open access of everything for everyone.** We want everything to be published in Arxiv (or similar) and all review to be crowd review. We will access all old literature via 'sci hub' or similar – or not at all? Result: = total disruption and anarchy!

Pros: Free, open for all, authors keep copyright.

Cons: Parts are illegal, real risk of complete overload of information in a non-systematic manner.

Open questions: what about books, book chapters? What about backfiles?, ...

**2: Open access is a joke and should disappear.** We want the system we know with a clear (and dynamic) hierarchy of journals. Science magazine = good, other journals = less good. We don't want to pay-to-publish.

Pros: We know the system, it is good and it works.

Cons: Essentially nothing OA, sometimes peer-review is slow, expensive (?), authors rights to copyright, ...

**3: Shut down all online access (via library) and give the money to the scientist / departments.**

Then everyone can pay per view.

Pros: Simple for departments, safe money on libraries.

Cons: Scientist/students can't read whatever/whenever, will probably be more expensive in the long run, ...



# Final thoughts



**Tusk: “I have been wondering what that special place in hell looks like for those who promoted brexit without even a sketch of a plan of how to carry it safely”**

**“I have been wondering what the special place in hell looks like for those who promoted #PLANS (implementation of open access) even without a sketch of a plan to carry it out”**

