



Random open impressions

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READ REVIEWS

WRITE A REVIEW

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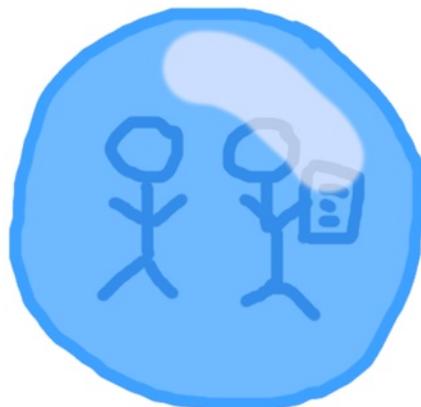


Disclaimer: Maybe you do not agree with some of the points. But before you rush to the comment section or Twitter: Think about it. Just one day or night. **Purpose** of this text is to give some impressions. Some things might sound very sad, some might make you angry, some might make you hate me, but still be nice. I am not against one thing or another. I just describe things, which bug me.

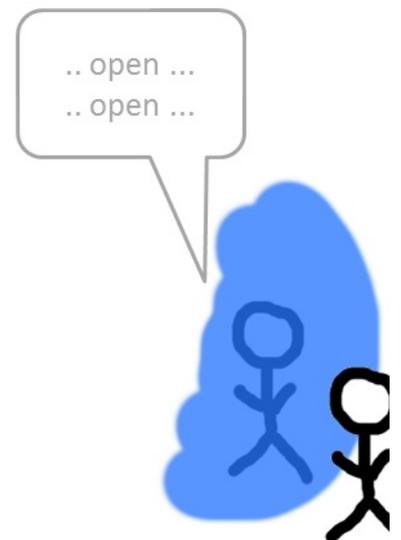
TL;DR: Free some time, grab some tea, and come back. Or never come back. Life will not always give you an abstract. (Think about it: if you just have time for the abstract, why do you need open access?)

THE SEMANTIC OPEN BUBBLE

As with probably each community, there are insiders and outsiders. As insider you will get used to phrases, terms, and concepts and use them very natural and without thinking about them. For an insider everything is clear. Context, semantics, For outsiders however, the situation is a little bit different:



Situation



Outsider's perspective

The bubble phenomenon. And yes, I used "it" instead of "he" or "she".

In this case, everything else than "open" is unclear. Please keep this in mind when reading the following texts.

Let me tell you a story from my time at Regensburg. It was a while ago at [Scientometrics 2012 at the University of Regensburg](#) (most of the content is broken already). I found this interesting, so I attended some of the talks.

At one of the days, there was also a meeting of our alumni association (Chemistry). One of the attendees was a not-so-young professor, who's name I redact (don't want to denounce someone). Actually, he wondered what was going on downstairs because the Scientometric talks were actually in

our department. So, I told him. His response left me baffled: "*Scientometrics? That can't be that important if no one knows what it is.*"

THE TRADITIONAL SYSTEM WORKS

That is true. Ok, it has some flaws and, therefore, might be not the very best system, but it works. Just very roughly: people do science, write about it, get reviewed, publish it, there is some progress. Nothing is really open or transparent. Like an old car, the current publishing system works. It became rusty over time. Oil is leaking from somewhere. There is now new technology for comfort, safety, etc., but still this old car takes the owner from A to B. It works, because it does what it should do. The owner got used to its flaws, bugs, and discomforts. The owner likes the car very much.

This is point zero.

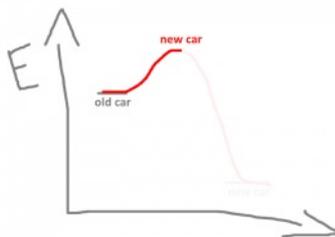
Now, you – as a friend of the owner – come around the corner and tell the owner that this car is not up-to-date anymore in terms of safety and technology. Furthermore, the costs for maintaining the old car outweigh its value by magnitudes. Conclusion: The owner should get a new car. An open car. Have you ever tried this (or something similar)?

Anyway, I think everyone can imagine this situation, right? We have two perspectives here: the owner and the friend. First, let us look at the process of getting a new car from the perspective of the friend. Getting a new car is similar to an exothermic process. The benefits of having a new car (more comfort, less flaws) outweigh keeping the old one:



How the friend sees it and tries to describe it.

However, the same process looks a little different to the owner, who loves the car and got used to it. The owner also does not see the full picture, but the huge activation energy. Thus, the process is more like this:

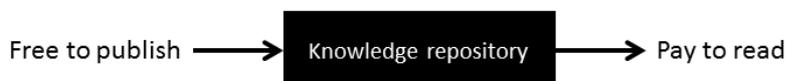


How the car owner sees it. Endothermic.

OPEN ACCESS: OPEN ON ONE SIDE ONLY

Probably, the primary argument for open access is the "**free to all**"-argument, i.e. **free access to knowledge**. I mean, the name says it, right? The reader does not have to pay.

Let us visualize this a little bit! First, the classical model:



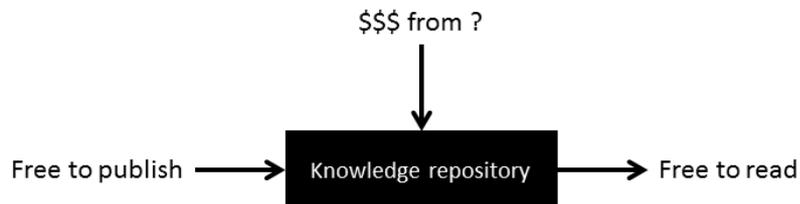
Open access:



So, whoever could not afford to read the journals, now cannot afford to publish in the journals. An indicator for this is the raising of the predatory publishers all over the world. They offer what people can afford: discount publishing. Of course, discount is exactly what people get: Saving peer-review, copy-editing, etc. This is despite the fact that there are a lot of waivers for publishing in more reputable journals (e.g. [PLOS One](#)). However, there are waivers for accessing, too (e.g. [Elsevier](#)).

From this point, I am not sure which model is better. Here, open access does not seem to be the fantastic game changer. It is not like people could not get access to things if they really wanted to. Ask a friend or use another affiliation (e.g. through VPN) to read some paper you could not access to. What is easier? To share a PDF or to share publishing costs?

Do not get me wrong, though: I am not against open access. But, maybe like a Pokémon it should evolve into "open science" at some level – like depicted below (where ? is some government funded agency)...



OPENTRANSSPARENT PEER-REVIEW

Here, I refer here to the story of [put a man on your paper to improve it](#). Still, I do not know the reviewer or editor. Only the victim. If you every asked yourself why sexism (or any other form of discrimination) is still so present: Here you might have one of the major reasons.

The female postdoc who experienced this situation is known (I will not repeat her name here). In fact, she had to go to the public to deal with this situation. IMHO nothing would have happend if she just wrote a formal complain to one of the other editors. Actually – let’s be honest – nothing really had happend to the editor and reviewer at all. They removed the anonymous reviewer from the database and asked the anonymous editor to leave. We do not want to [damage their CVs and harm their careers](#), right?

Before I want to go on, I also want to refer to [the post of Michael Eisen](#). It and its comments section explain very well why this situation might not be easy to deal with. I agree. Not easy. Maybe you need a case-by-case discussion/jury/etc.

However, this case is clear IMHO. This is not a border case. There is no misunderstanding. I hereby demand the name of the reviewer. Why? Simply because **I do not want to work** with such an asshole, ever. Furthermore, I think the career of the reviewer cries for an arrow to its knee.

There are of course other reasons as well. What about the postdoc for example? As said, the postdoc is now known. Does this harm her? Who knows. Somewhere in future she might actually – without knowing – meet the reviewer again. The reviewer knows her. Driven by envy (she got a lot of attention) or irascibility (removed from the reviewer database? because of her?) or any other illogical emotion, he can do the same thing again – or harm her more. *“Oh, she needs this grant/position for her male-free research? Well...”* And what about other authors? But do not worry, I am sure they eventually remove the reviewer from other databases as well!

Also, other people from the scientific tea party might just not like her for what she did. But her name is known.

Will open peer reviewing be a solution to harassment? I think, it has nothing to do with this. Obviously, it might be not as easy (instead: *joking*: *“Also, I think there are too many female authors on your paper... just joking, I do not want to make you cry ☺”*) or direct (instead: parallel communication) as a closed, one-side-anonymous peer reviews but it will happen. For sure. Look at all the social networks. Facebook and Youtube. Oh, how nice people are there! And do not make the mistake to think that you

(neither me!) are better because you are a scientist! In the end, we are all humans. Driven by emotions and passions (otherwise I would not do research).

Open peer review also opens the other direction (from authors towards reviewers) for harassments. Imagine, someone will write a very critical review on one of your papers. Next time you write a review for their paper – are you biased? What if someone is not just biased but really angry? What if a particular subcommunity tolerates harassment (social auto-regulation does not work in every case)? Does open peer review solve this?

No. You will deal with the same good or bad people. They just re-dressed in a nice suit. Harassment will find its way. The point is just how we deal with it. Code of conduct? Ethical guidelines for reviews? Yes, very important.

Mostly needed is transparency, however. The more transparent a process (to everyone) is the better. There can be transparent open as well as closed peer reviews. Let's take the situation from above. Why is nothing known about the actual evaluation process of this known? Did they ask author, editor, and reviewer for statements? If yes, what were these? Did they tell the author who the reviewer was? How came they up with the conclusion "*The best way to deal with the situation is to remove editor and reviewer from our database and never talk about this again.*"? Afterwards, you could just publish the whole story as a paper (to be clear: during investigation is another thing. Care must be taken.). Or do nothing of this at all. Well.

BOTTLED SCIENCE FOR EVERYONE

Still, some people seem to be surprised about how capitalism works. Just a little reminder: You probably buy (like me here in Canada, because the tap water is not as good as back in Europe – here in my apartment) bottled water. Bottled. Water. Water is THE basis for life. Should be available for everyone. People die of thirst on this planet. Still, there **are companies such as Nestlé out there, which think these people should buy water.** Bottled.

Back to academia! Let's take foe #1 of the community: **Elsevier**. Elsevier is a Dutch company and it's a corporation (Elsevier B.V. – *Besloten vennootschap met beperkte aansprakelijkheid*, Ger. *Gesellschaft mit beschränkter Haftung, Limited Company, ...*). What is the #1 aim of such a corporation? Yield (Ger. *Rendite*). People do not invest their money in a corporation for curing cancer. They want yield, i.e. more money.

How do we generate yield? We sell a product for the highest price possible, i.e. the price – in this case – libraries, universities, and public/private institutes are willing to pay. And Elsevier does a pretty good job. It individually negotiates with every single customer about the price. They want science. Elsevier sells it. Bottled.

There is no 'damage'. You may say that you paid too much, because you found out that the product you bought is not as much as worth as you thought. You may say that other paid less than you. However, you were willing to pay **USD\$9.8 billion** (too much). Maybe Elsevier (and/or other publishers) ripped you off (which makes you look kind of stupid, retrospectively). Well, feel free to change this for the future!

But besides that, 'arbitrary money value' is the impact factor of the capitalistic world. It is really bad at measuring anything, i.e. impact/relevance or 'damage'. Why? **Sorites paradox**. People will say a 'damage' of €1/\$1/apple is not relevant (well actually it is relevant – just depends on the situation, perspective, etc.). When does it become relevant? €1? €100? €10 000? €1 000 000? ... And can you just compare a \$10k-'damage' to another \$9.8b-'damage'? I think not.

'But my numbers are not arbitrary! Here, take a look at my method/data!'. Oh, I am sure you can put your little numbers in Excel and it will calculate something out of it. As does **Thomson Reuters**. There is just a little – negotiated – correction factor. Did I mention capitalism, yet?

Just do not get me wrong: There is real damage done by these publishers. Björn Brembs mentions **some of them in his blog**. Irreproducibility for example. Kills humans. I cannot object.

Is **that not enough**, though? Do we need a dollar sign to have a stronger argument? Stronger than 'kills humans'? Sometimes, I get the impression it is just about 'whining' ('*But my/this damage is so much more!!!!111one*') not about the actual issue. For me, it could be \$9.8 (why do we even give .8? As if it would matter that it is .2 less from \$10...) fantastillion arbitrary 'damage'. Don't care. The number is so high and unimaginable that it loses any relevance (for me). The number is not even connected to me, i.e. I do not pay it (just a negligible part of it due to my role as taxpayer). Thus, this number does not bother me. And I am **very sure**, I am not the only one...

SOCIALISM IN ACADEMIA

I perceive academia as social community. The community provides PDF not available for everyone (e.g. **#icanhazpdf**), collaborates on projects, and shares ideas, source code, data, etc. Orally on

conferences as well as in any kind of written form. Most people I met keenly told me about their research/projects. The community wants to be 'open' by nature. There is even a [pirate bay for publications](#). Money – again as I perceive it – plays a minor part (excluding things such as patents). Money is just a resource you have to harvest (funding) and then can spend on more research. If Sigma Aldrich would accept apples, every research group would have their own orchard – and a major task of PhD students would be to maintain it.

Academia wants to put knowledge into a well of wisdom, free for everyone, who is thirsty. This 'ideal' world is now confronted with the 'real' one: bottled science. Obviously, this will not work for good. From the perspective of academia, the issue it has to solve (for every single part) is: Quo vadis?

Do you want private publishers? If not, why not nationalize/socialize academic publishing? Why not taking these fantastillion dollars from above and just let a public institution handle this? In my honest opinion: As electricity, health, water – knowledge is a human right – should be delivered to your home for a nickel. To every home.

Quo vadis?

Now there are all these nice alternative publishers, such as [Winnower](#) and [F1000](#). You know what I am afraid of? That *The Winnower* and *F1000 Research Ltd.* as well as this other famous [California-based corporation](#) will at one point grow too much (economically) or simply be bought. Don't say it's not possible, because it is. That there might be a point in future, when capitalism-mode will take over. Ethics? Open values? Number one question will be: How to increase yield. Every year. Well, [I think I know how this will start](#). Any company can start by people with the most honest and best ideals. But every dollar earned will scratch just a little bit at these ideals. Until they break eventually. But yeah, let us do the same mistake again and again. Why not.

Quo vadis?

There *might* be strong arguments for private publishing, though. If so, and people want it, then things have to be arranged to not get ripped off now or in future. Negotiations must be open for example. The data for any kind of measure must be available and no arbitrary correction factors should be in use (*'Nice impact factor you have here. What a shame if it would drop...'*). Etc.

Quo vadis?

DAMAGE IN TRUST

Let me tell you a story about [one of my papers](#). As you can see (if you click the link), it was published in *Journal of Separation Science*, a nice little journal. It fits there very well, I think, and I still like it being there. Reviewer and editor were very nice. Nice experience!

Another thing you might recognize: I am the senior author (nice opportunity my PI gave me back then), i.e. I had completely free hand what to do and where to publish this work. *Journal of Separation Science* was not my first idea. Actually, I wanted to publish it in [Chromatography](#) (Publisher: MDPI). Open Access.

Back when we did the work, they just started with the journal and it was free to publish in there. I looked up some people on the board and the papers already published there and decided it would be a good home for our thing.

However, [this here also happend during this time](#). Beall put MDPI on his list (and removed it later – too late). Back then, I just recently got to know this list.

Now I was unsure and full of doubts if we should really publish at MDPI. I mediated and pondered. I tried to find more information, positive information about Chromatography and MDPI. There was none. Just Beall's post about this 'chinese' publisher, which is now a COPE member and all (but was not back then).

In the end, my doubts told me to go for a known journals rather than for an experiment. It was my first senior author paper and I didn't want to risk it (could not afford OA there, was glad to pay the 275 Euro for beyond-page-limit – seriously... page limit? in the digital age?). May sound stupid, but that is what happend. Up to now, I do not really trust MDPI – I cannot really say why. And I feel somehow sorry for this.

[The damage of trust is underestimated](#). And people such as Jeffrey Beall are really good at planting the *seeds of doubt*. I know there are a lot of people who prove him wrong [or finding flaws \(or no data at all\) in his lists](#). These people are important.

However, IMHO, no post will ever fully cure the **initial** damage done. I think that can only happen if one (here: me) successfully publishes a paper in Chromatography and sees that there is nothing wrong with doing so. Maybe I risk it in future. Maybe I don't.

Still stupid?

Well, Beall hates [Frontiers](#). Now you may know that [Frontiers](#) is 'good' – or [you don't](#). Imagine now that you want to persuade someone – maybe co-authors or colleagues – to publish there. It is new for them, so they will search the internet for information (i.e. ask the allmighty oracle: Google). They will find and read these negative blog posts. Seeds of doubt planted on this new world. And they know the old world still works (as stated above). You can have all arguments pro-[Frontiers](#) in your pocket, be to most charismatic person (you are not!), and I also grant you infinite amount of time. Guess your success rate. Be realistic.

Moreover, it is worse than you might think: Raising one negative concern in form of a Tweet or blog post (if right or wrong does not really matter) about one-of-these-open-access-journals does not hurt only this one journal but is a knife in the back of the whole open access community. All these nice ideals, and [then a commercial publisher seems to decide to just make money out of it by including \[npseudoscience\]\(#\)](#).

Is there a solution to this issue?

Bye the way: This is probably the section, which explains [my tweets with Brembs](#). It started with suggesting to start a community driven (black)list. Read for yourself.

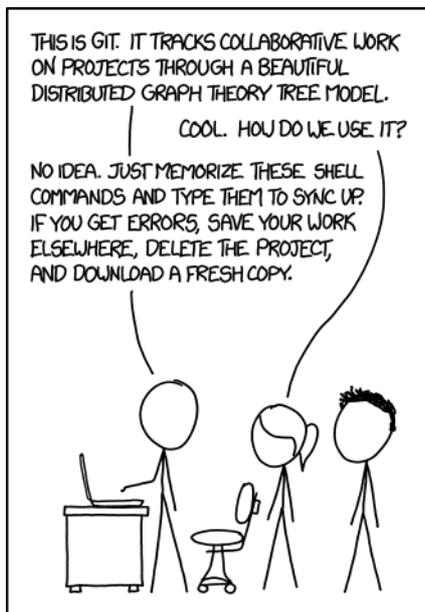
OPEN PRIVILEGE

I want to emphasize this shortly: Being open –[unfortunately](#)– is a privilege but not a right. Being a professor with tenure and everything is a good starting point. Being in a group where your boss is a convinced advocate of open science is a jackpot (play in the lottery!).

Just wanted to say here: Don't exclude people who want, but maybe cannot be open.

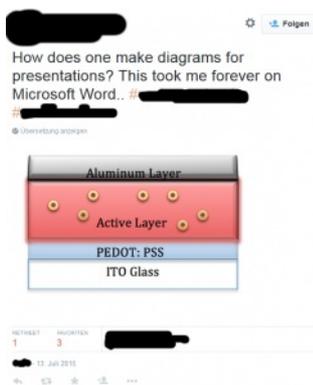
OPEN TOOLS

Being open requires new tools. Open tools. Open source for open science needs! Yeah! So, what do people point you to when asked? Github and Python. [Github](#). And. Python.



Maybe, we should start talking about the technical skills of people. I recently had to explain someone how to make a screenshot. Twice. And how to actually print – it's harder when you have virtual and physical printers set up on every machine and you have to adjust the settings – people ignore the settings dialog completely and just press OK. Everything which looks confusing on the screen will be ignored. There is a nice presentation on Figshare about this but couldn't find it anymore.

Anyway. We live in a world where people put "Word" as technical skill in their CV. Have you ever thought about what this actually means? It means "I can turn on the computer, double click on an icon, and use the keyboard to input letters and words to the computer. Sometimes I save them, too." It is the digital equivalent to "I am able to write with my pen on a notebook." – and really, they use it for everything:



Everything redacted. As I said, I do not want to denounce anyone.

And these people are not only undergraduates or pupils, they are professors, postdocs, or research associates. People who can use a smartphone and log into Twitter/Facebook/whatever, but fail to use basic functions of a work computer. People who get half of their life trained to use a specific piece of software such as Office or Origin and are then unable to use something new.

We have control and evaluation software for our capillary electrophoresis instruments here. In the old version there is an “analyze”-button in the toolbar with a little green calculator on it. In newer versions they replaced the icons of some buttons including this one. The button is at the exact same position as before. Has the exact same size and tooltip. Does the exact same thing. What happened? People complained “*There is no analyze-button anymore!*” – they just could not find it. People with several degrees could not find a single button.

The situation with Office is even worse. I have to submit papers in Word-format – not because the submission-software of the publishers could not handle Latex-scripts (actually all these platforms can handle a lot of formats! It’s really amazing!) – but because at the step of copy-editing someone is not able to handle formats other than a fancy docx-file. Yeah, be open but please use this proprietary format from Microsoft (I know it is theoretical open – **but is it really an open standard?**).

Now, if people are trained to use certain software and you want to give them an alternative, you just have to copy the UI and say it is the same, right? Well, people use Origin, which is probably the worst designed software on earth. This software costs a lot of money (500 bucks in whatever currency for a single license). There are free alternatives such as Qtiplot or SciDAVis. They do exactly the same. They even copy the hell-of-a-user-interface. But what do people do? Yes. They use Origin. And I am not talking about legal versions yet.

And the best part: Do you know who people blame if something goes wrong, i.e. they make a mistake or cannot figure out something? The software (“*Origin did not want to plot my data exactly how I wanted*”). The computer (“*crashed last time*”). It is so easy!

Once. Again. You point this people to Github? And. iPython? *[include very loud laughing here]*.

No. Let us be serious. You cannot exclude technical-not-so-skilled people from the scientific community. However, there is no way that in a lifetime you will train all these people to use software like Python or Git. And to be honest – I do not think it is necessary. We can develop good, robust, open software for all our needs. And we should do this, because it is necessary!

I give you an example. There are all these discussions about “*open/publish all your data*” around. But, if you cannot properly document your data, then – for me – the data is worthless. Documentation is so important. A single little step – you may or may not document – can make a hell-of-a-difference.

So, I had an idea: I wrote a grant for a software tool to help chemists document and organize data. For people with technical skills as described above. Furthermore, I think only a chemists knows or understands what another chemists needs (or might need). At least the communication between chemists is easier than informatician and chemists or else. After half a year, the grant was finally rejected. The reason was given to me like this: “*This can be done by any informatic group in 3-7 months and probably the author never heard of Github or iPython.*” Welcome to the bubble. Well, I think I just have to make myself more clear in the next try.