## SPARC http://www.arl.org/sparc/media/QandA with Gowers Neylon.shtml

## A Look Inside the Boycott of Elsevier: A Q&A with Tim Gowers and Tyler Neylon

Proponents of Open Access have long criticized the business practices of Elsevier, the largest publisher of academic journals in the world. But in late January, Timothy Gowers, the accomplished Cambridge mathematician, took things to a new level, issuing a call for researchers to enact a boycott of Elsevier-run journals in his blog.

By Caralee Adams Posted March 5, 2012

Proponents of Open Access have long criticized the business practices of Elsevier, the largest publisher of academic journals in the world. But in late January, Timothy Gowers, the accomplished Cambridge mathematician, took things to a new level, issuing a call for researchers to enact a <u>boycott of Elsevier-run</u> journals in his blog.



After reading the post, Tyler Neylon, a mathematician running a start-up company in Silicon Valley, offered to start a website devoted to the cause. Within a day, it was up and running.

The Cost of Knowledge website opens with a listing of objections to Elsevier:

• They charge exorbitantly high prices for subscriptions to individual journals.

• In the light of these high prices, the only realistic option for many libraries is to agree to buy very large "bundles", which will include many journals that those libraries do not actually want. Elsevier thus makes huge profits by exploiting the fact that some of their journals are essential.

• They support measures such as SOPA, PIPA and the Research Works Act, that aim to restrict the free exchange of information.

Scholars are invited to declare publicly that they will not support any Elsevier journal unless they radically change how they operate.

To date, more than 7,700 have joined the boycott, with the number rising daily.

Here are some highlights of two separate interviews with Gowers and Neylon.

Gowers, 48, is a Royal Society Research Professor in the Department of Pure Mathematics and Mathematical Statistics at Cambridge University. He received his PhD from the University of Cambridge. In 1998, he was awarded the Fields Medal for his research. Gowers broke new ground recently with his "Polymath project," challenging mathematicians to collectively solve a math problem online. Neylon, 32, is Chief Technology Officer and co-founder of Zillabyte, a data analysis start-up in Mountain View, California. He earned his PhD in applied math from New York University in 2006. Neylon started his career as a computer programmer and worked as a software engineer at Google for two years before launching Zillabyte.

Q: What motivated you to call for the boycott?

**Gowers:** For a long time, I've been aware that Elsevier was annoying to many mathematicians. For this reason, I have avoided publishing with them and refereeing for them. However, it occurred to me recently that it could make a difference if, rather than just privately avoiding Elsevier, I were to go public. I felt it would be easier for people to decide to boycott Elsevier if they knew a lot of other people were doing the same thing, which could be done via a website. I knew that if I suggested this, there would be somebody out there who would be able to produce a website very quickly – and Tyler was that person.

Q: What did you think of Tyler's offer?

**Gowers:** I was very pleased. I like the website and the fairly minimal design of it.

**Q:** When did you become an advocate for a change in the journal publishing system, and for Open Access?

**Neylon:** I have two major interests: math research and software. With both, you are aware of how easy it is to disseminate information on the Internet. Throughout my career I have been painfully aware of the inefficiency of scholarly publishing. If you know what technology can do, you are always seeing better ways of doing things. When I left NYU, it got harder for me to access research. I either had to sneak into, or pay \$500 per year for access to an academic library. You shouldn't have to pay if researchers don't want you to pay.

**Q:** What was your reaction to reading Tim Gowers's blog pledging a boycott of Elsevier?

**Neylon:** I thought it was a great idea. I really wanted to help out. I feel I can't do research right now as an individual. It's very difficult to do the background work. I knew it was a problem I wanted to solve. When I read the blog, I thought 'I can actually make a difference'. Tim is a superstar. If he is taking a stand, it would generate enough publicity and interest to get something started. I knew it was a great opportunity – I wanted to help build awareness and a community.

Q: What are your roles and how do you collaborate on the project?

**Neylon:** Tim had the key idea. His role was to communicate his position and to publicize it. My role was to build and maintain the website. After I read his blog post, I wrote in the comments that I was interested in helping. He responded by email with some suggestions for the site. Within 24 hours, the site was up. It was extremely simple.

**Gowers:** I made a few suggestions about the website, but Tyler designed it and maintains it, which I am not competent to do.

Q: Did you know Gowers before this?

**Neylon:** No. I did participate in his Polymath experiment and knew about what he'd done, but we never met.

Q: What is your goal for this movement?

**Neylon:** I think there is an awareness of how much better things could be through a nonprofit publishing system. People want to get rid of high-profit publishing. The ultimate goal is that the current Elsevier business model becomes irrelevant – that there would be a switch to a free-to-read model where authors retain copyrights of their papers. PLoS is one example of this.

Q: What can you tell us about the traffic on the website?

**Neylon:** There are thousands of views a day. The highest was 15,000 in one day. Now the average is about 4,000 a day. There have been spikes with publicity such as when the National Public Radio piece on the boycott ran in mid-February.

**Q:** Who is responding to the boycott?

**Neylon:** The vast majority are professors at good universities. The most are in math, about 20 percent.

**Q:** Why are most in math?

**Neylon:** People in math are particularly done with Elsevier. There were many resignations from their editorial boards. Mathematicians hate drama. To get a mathematician to resign, something must be seriously wrong.

Q: Who else is responding to the boycott?

**Neylon:** About 800 are from computer science. Biology is also big. People in medicine are aware of the current negative impacts of the system. In developing countries, critical medical care suffers because cutting-edge knowledge is behind a pay wall. They are aware it is a serious problem. People don't stumble on the website without hearing about it some other way. There is a cultural awareness at schools and research institutions.

Q: What do you know about the demographics of the boycott supporters?

**Neylon:** We don't track that information, but looking at the email addresses, it is a wide international phenomenon. About half are American and British. There are many German-language users.

There are two groups: older researchers who have tenure and less to lose by giving up a publisher, and young people who are not on a tenure track now. Postdocs, whose career depends on these journals - that's the hardest to recruit.

**Q:** What do you think of the response?

**Gowers:** I am pleased, though I don't have a good idea of how many mathematicians there are in the world or how many biologists. I don't know how many people you could expect to sign it. There are a number of quite high profile people as signatures. Also, I think there are many people who have not signed but who are nevertheless broadly sympathetic to the aims of the boycott.

**Neylon:** I am delighted with how much attention and response we've gotten. I did not expect that much. These are all research-level professors refraining from doing work with Elsevier. There have been a lot of people who wanted to do something, but felt powerless. They didn't say much publicly, but now they are coming to understand there are many who feel the same way.

**Q:** Why would someone not join the boycott?

**Gowers:** Some people are not in a position where it's easy to commit to not publishing with Elsevier. Others would like to see journals get cheaper, but they are just not very vocal and signing a petition might feel to them a bit too political. Some just want to go on publishing papers the way they always have. And a surprising number are not very active online and have therefore not heard about the boycott.

Q: Do you have a goal for the number of supporters?

**Neylon:** It's ongoing. We are throwing around ideas for a possible deadline to reach a certain number of people – that might motivate some people to join.

**Q:** How are you getting the word out?

**Neylon:** Through a Twitter account and a blog. I plan to create a low-volume mailing list for those who are interested in receiving updates.

Q: How much time do you put into the website?

**Neylon:** I try to keep it to one hour a day, but on the weekends that's impossible. I've spent at least 100 hours on it, much of that time on things that are not obvious by looking at the site. I've recruited friends to help with a new design.

**Q:** Is it hard to balance this project with your day job?

**Neylon:** It's been a struggle. The movement deserves full-time attention. I'm trying to get people to spend more time on it and I've had some success. Because my job is important, I'm forced to limit my time. I have passions for both.

Q: How do you feel about the term that this movement is an "academic spring" ?

**Neylon:** I love that term. I hope we can live up to it. It's implying a lot of victory. What is crystallizing is support for Open Access to research funded with public dollars.

**Q:** What else might you do to further the cause?

**Neylon:** I'd like to make it easy to facilitate specific actions, such as providing information on calling a Congress person or supporting White House efforts with Open Access. I'm interested in supporting an online community – it might be more effective online than in person.

Q: Has there been any reaction from Elsevier to your efforts?

**Neylon:** There was an open letter published on its website, which defended their practices. More recently, Elsevier has rescinded their stance on the Research Works Act. It's possible that the bill's sponsors didn't like the unpopularity they saw. This is a great sign for the boycott, and a positive move in the right direction, although many people, including me, are interested in even further change.

Gowers: I have received some emails and requests to talk.

**Q:** What impact do you think the boycott had on Elsevier backing off of the Research Works Act?

**Gowers:** Alicia Wise from Elsevier has denied that the decision had to do with the boycott. My guess is that there was at least some connection. The boycott has made Elsevier more concerned about its public image, and their support for RWA was damaging that image.

**Q:** What is next for the movement?

**Neylon:** About five years ago, there wasn't much optimism around this issue. People would complain, but not really do that much. That attitude is changing. People are saying this is unacceptable, and we can do something about it. If FRPAA (Federal Research Public Access Act) passed, that would be great. Even a sense that it has a chance of passing would change the culture of the community.

**Gowers:** I've always felt that the boycott wasn't aimed at getting concessions out of Elsevier. It was more aimed at getting mathematicians to produce a new and better system for evaluating their work. Since we write articles for no charge, it's obvious there exists a better system. In fact, I would say that there is a spectrum of different systems, from relatively modest changes to how journals work to much more radical alternatives. At the conventional end of the spectrum, we can set up cheap new electronic journals. Funding these is a challenge, but in theory they would save libraries so much money that the libraries should support them for the sake of their own long-term financial interest. At the more radical end there are ideas for websites where people can submit papers, anybody can write a review, and everyone gets a collection of reviews. The challenge there is to provide suitable incentives to reviewers. In between, you might have free floating editorial boards offering their stamp of approval to papers that are submitted to the arXiv. We need to try out a number of things. There are further ideas I'd like to see that are probably too radical at the moment. One assumption that most people take for granted is that the right unit of discourse is the journal article. You do your research quietly, then polish into a neat form, and publish it. However, this hides a lot of the thought processes that go into discovering mathematical results. Recently, I experimented with something more radical where you do your thinking online and anybody who wants to can contribute to it. A difficulty with that kind of approach is how you apportion credit: I wish the whole notion of credit would go away, because it creates a number of difficulties.

**Q:** What about the PLoS model for math?

**Gowers:** There is significant resistance amongst mathematicians to author charges, so the PLoS model would not be possible without a big cultural shift. However, if a journal was simply trying to cover costs, and to keep those costs as

low as possible, I think the charges could be a lot lower than the \$2000 or so that currently seems to be typical of open-access journals.

Q: How do you feel about the future of your effort?

**Gowers:** I'll hedge my bets and say that I am cautiously optimistic and that I expect it to bear fruit in the medium term. I don't see anything dramatic happening in the next few weeks that's going to be game changing, but I wouldn't rule out that a lot of progress will be made within a year. I certainly don't feel that it is going to fizzle out. We won't look back in a year and wonder what happened to it. That is partly because once you decide to boycott, it is easy to continue: indeed, boycotting a publisher saves you work rather than causing it. I therefore think Elsevier would have to do something quite significant to woo people back, and I don't see that happening.

**Neylon:** Things look good for fields where there is both awareness of technology and a culture of sharing. In these cases, I think a move to Open Access is just a matter of time, where researchers want it to be sooner, and businesses want to extend their profit window as much as possible. Community interest in The Cost of Knowledge boosts the momentum of that change. We're at an inflection point in academic publishing. In business, usually one side has money and the other provides a value for that money. In this case, researchers and universities/funding agencies have both the core value - the research - and the money, and they're all in favor of open access. So I think the future is bright.

#