

## Questions & Answers Session IV

### **Pieter Bolman**

Contrary to presentations you have made in the past, you have confined yourself today to the essential points. However, you also note that there are side effects, such as solving the library crisis or competing with the publishing business.

### **Stevan Harnad**

I did not say that competing with publishers was a side effect.

### **Pieter Bolman**

Possible side effects could be that the publishing business is undermined. We discussed this point yesterday.

### **Stevan Harnad**

I would not describe this as undermining the publishing industry. Rather, I would say it is changing or evolving the publishing industry in a positive direction.

### **Pieter Bolman**

You use the term evolved. I would say that it is an evolution directed by you.

### **Stevan Harnad**

Not by me, but by the research community.

### **Pieter Bolman**

That may be the case but I am not sure that you speak on behalf of the entire research community. (However, it should be noted that when the side effects of a drug are found to be very negative, the drug may have to be withdrawn. Perhaps you could comment on this later.) The second point I would like to make is that the importance of the impact is questionable. The Lawrence article does not prove that open access is necessarily beneficial for impact. A system such as the one in Ohio where licensing systems have been developed and accepted, and everyone has paid access, has absolutely the same effect.

### **Stevan Harnad**

You are quite right that if every researcher in the world were somehow granted prepaid access to all refereed research, then everything would be fine. However, there are at least 20 000 peer reviewed journals on the planet, and not even the richest institutions can afford subscriptions to more than a minor subset of those 20 000 journals. Therefore, prepaid access is *not* universal, nor is it a realistic option (is there to be a global click-through oligopoly licensing the planet?). Thus, from the point of view of the author of an article, today, the universal paid-access solution simply does not exist. What is available to the researcher today? Rather than waiting for an economic model to be developed that would perhaps allow everyone to have prepaid access someday/somehow, researchers can already provide this open

access right now. Every year that is lost represents a year of lost impact, that is, a year of lost prizes and research support. We have already lost ten years in this context.

**Pieter Bolman**

Given time, I believe that publishers will succeed in designing licensing schemes that allow everyone access. Open access is very much in its initial stages and many people do not practise it.

**Stevan Harnad**

That is correct. As I noted yesterday, the villains and the victims in this area are the research community. For the past ten years, they have had the means to provide open access but have not yet chosen to do so. However, we are working on this. That is why research-impact measurement is so important in showing researchers the causal connection between access and impact and progress in research.

**Erik Sandewall**

You mentioned the possibility of using bibliometry to assess research. It is well known that when we measure something, we also influence it. Have we analysed the effects on the research community of using bibliometric methods in making funding decisions? This could have very significant side effects on our community.

**Stevan Harnad**

I did not say that bibliometry could be used to measure the quality of research, but only its impact. In our scientific culture, impact has a very significant effect on results and scientific progress as a whole. In the current system, impact is also a significant factor in rewarding researchers and in the promotion of research. It would be completely illogical not to increase impact when we have the capacity to do so. Of course, abuse is possible and the system can have negative effects. However, our aim is to maximise impact and not to change the current system of assessment.

**Marc Minon, Liège University**

In order to promote my own laboratory, I work with a French language publishing company in the human sciences. Given that they represent half of the titles present in French universities, it is regrettable that they are not present today. Publishers should not be perceived as predators. On the contrary, researchers solicit them to publish their articles. For years, we controlled the peer review process, printing and dissemination of articles. Publishers do not accept to publish articles for economic reasons given that the margins generated by these journals are minimal. Without public subsidies, these publications would not exist.

These publishers are currently concerned by the fact that French language human science journals do not have a significant presence in the networks. Researchers are thus asking that these journals be placed online in order to increase access and impact. To this end, there are five possibilities and I would ask you to advise on which of these five is preferable. First, the moving wall option. Second, placing articles online for free, subsidised by public authorities. Third, require authors to pay to have their article published. Fourth, modify contracts with authors, authorising them to self-archive. Should subscriptions drop by 10%, publication will be stopped. Fifth, consider that scientific journals are now obsolete. From now on, they will no longer be published online and authors will be responsible for publication themselves.

**Stevan Harnad**

As I stated earlier, the aim of open access is not to replace publishers. At the same time, our role is not to protect the economic viability of small journals, which has always been problematic. I would definitely not recommend that you jeopardise your journals by placing them on open access. We have to allow researchers to self-archive. Even if you are not in favour of this, you will not be able to prevent it occurring. It is possible that this could lead to some journals going out of business but there are solutions to this. I cannot predict what is going to happen in the future. However, open access is the optimum solution and it is possible today.

**Bernard Lang**

It was stated yesterday that scientific results are rediscovered every five years. We have just been given a demonstration for this statement, as I remember Stevan Harnad providing the same type of arguments about five years ago. A Wisconsin study of that period showed that open software was of better quality than commercial software. I have been hearing about the benefits of open access for years now, and yet we still do not have a system of open access.

**Stevan Harnad**

Your analogy with free software is not a pertinent one as those who write free software are paid for their work. In contrast, researchers are not paid for placing their work online.

**Paul Uhler**

I was impressed by the presentation on the work being carried out to digitise our mathematical heritage. However, I note that all of the institutions you mentioned are located in either the US or Europe. My understanding of our mathematical heritage is that it comes from China, India, Persia and Egypt. To what extent are those mathematical works being digitised?

**Laurent Guillopé**

Digitisation centres are currently located in the Europe and the US. However, work is also being carried out in China and South America, for example, and there is no intention to exclude any area from this work. It is merely a question of time.