The Open Access Interviews

Richard Poynder talks to Dr Alma Swan

Last month it was announced that President Bush had <u>signed</u> the long-awaited omnibus <u>spending bill</u> that, amongst other things, will require the US National Institutes of Health (<u>NIH</u>) to mandate <u>Open Access</u> to all the research it funds. While a few have expressed <u>dissatisfaction</u> with some of the details of the mandate, the news has been widely greeted as a major victory for the Open Access movement in the US — a victory, moreover, that came only after a long struggle.

In Europe, meanwhile the news was decidedly disappointing, when it finally became <u>clear</u> that over-cautious European politicians and bureaucrats had chosen not to act in the interests of science, and would not be pushing for Open Access. The disappointment was all the greater given the enthusiastic way in which the research community had responded to a <u>petition</u> that Open Access advocates had organised earlier in the year urging the EC to act on the recommendations of its own report, and mandate all EU-funded researchers to make their papers freely available on the Internet. With the petition attracting 18,500 signatures in a matter of weeks, it was universally assumed that a mandate was inevitable. It turned out, however, that aggressive lobbying by self-serving publishers had persuaded EC officials to drop the mandate.

As project manager for the petition, Open Access advocate Dr Alma Swan was personally involved in events. When I learned that she was passing through Oxford, therefore, I tracked her down in Oxford's famous Randolph Hotel. Sitting in the (to me) somewhat incongruous surroundings of the Randolph's plush tea rooms, I asked Swan what had gone wrong, and where it leaves the Open Access movement in Europe. Far from being fazed by developments, however, Swan was as confident as ever. "One thing that those who oppose Open Access must understand is that we are not going to give up," she assured me. "Moreover, we are going to be more tenacious than the people who oppose us." Besides, she added, the battle isn't going to be won in the corridors of power, but in the meeting rooms and the labs of research institutions. Here, she assured me, the omens are good — as awareness continues to grow that Open Access isn't just a trendy buzz word, or even an end in itself, but the enabler for a much larger revolution; a revolution, moreover, that universities will find it increasingly difficult to resist.

Swan's quiet confidence is also hard to resist. What makes her arguments particularly compelling is that Swan is not an over-earnest ideologue, but a generous-spirited and witty woman with an infectious, and somewhat subversive, sense of fun. Nor is she obsessed with demonising publishers. After all, she points out, in resisting Open Access they are only doing what businesses are expected to do in capitalist democracies — seeking to maximise their profits. But she adds that their hypocrisy is nevertheless depressing. While making public statements claiming to support the principle of Open Access, she says, publishers are constantly engaged in behind-the-scenes attempts to derail it.

In characteristic Swan style, when pushed to take a jibe at publishers, she ends our meeting with a humorous anecdote, remarking that one prominent member of the publisher lobby group <u>STM</u> has developed a sneaky habit of stealing the jokes from her presentations. With a mischievous twinkle in her eye she says, "I've told him that whenever he's in the audience when I'm presenting, it'll be a strait-laced show."



The interview begins...

RP: There have been several stages to the recent attempt to get an Open Access mandate introduced in Europe. Indeed, the EC kick-started the process itself, when in 2004 it <u>commissioned</u> what it called a "Study on the economic and technical evolution of the scientific publication markets in Europe". A number of consultation days were then held in Brussels in 2005, and a report was <u>published</u> in January 2006. This included ten recommendations, the chief of which (recommendation A1) proposed a Europe-wide <u>self-archiving</u> mandate. In other words, the aim was to insist that researchers make their papers freely available on the Internet.

At the point it was assumed that the Open Access movement had won the argument, and everyone expected a mandate to follow didn't they?

AS: That's what everyone expected. Or perhaps I should say, being a realist, that's what they all <u>hoped</u> would happen, given the powerful case that was made.

RP: Following the publication of the report there was a two-month public comment period (between April and May 2006), and an EC Communication was published in February 2007.

It was during this process, however, that the proposed mandate slipped through the net. Instead, the Communication simply proposed that "specific guidelines" would be issued, "within specific programmes, on the publication of articles in open repositories". What went awry?

AS: The publishers won a battle.

RP: There was a ray of light however: The Communication proposed allowing researchers to use some of their grant money to publish in <u>Open Access journals</u> and, in presenting the Communication, the Commissioner for Information Society and Media <u>Viviane Reding</u> also <u>said</u>, "the Commission wants to start a discussion with the EU Ministers responsible for these issues, as well as with the European Parliament." Some treated this as a signal that the EC hoped to persuade the other two EU actors to pick up the OA ball and run with it.

AS: Sure, the problem is that Europe is run by a three-headed monster, and one head doesn't seem always to know what the other two heads are doing. Or responsibility for things seems to get pushed about between them. It's all very confusing.

Weak tea

RP: Let's remind ourselves that the three heads you refer to consist of the <u>Commission</u> — which is the executive branch of the European Union — and the two legislative bodies: the European <u>Council</u> and the European <u>Parliament</u>. And one way of reading Reding's comment was that the EC was inviting the European Council and Parliament to provide the necessary legislation to empower it to force Open Access through?

AS: True, but they have all now had a go at Open Access, and nothing has been achieved.

RP: The Council's <u>response</u> to the Communication was published at the end of November. You were disappointed with it?

AS: Well, you've read it. Does it sound like a strong document in favour of Open Access to you?

RP: No. Nor did it seem so to <u>Peter Suber</u>, who described it as "<u>weak tea</u>."

AS: Exactly. In fact, it was just hot water — or even more accurately, hot air! These documents are constantly being produced by the Council, and they are always in that format. It's <u>Eurospeak!</u> That said, I've been told that the Council's document is not quite as frothy as it appears to us ordinary mortals. Apparently the Eurospeak means something to those in Brussels, and we are to take heart from it. It is something they can work with.

RP: But you personally took it to mean that the European Council has no interest in Open Access?

AS: Actually, I concluded that it had decided to hedge its bets. But as I say, I'm told that there were some signals there to suggest that OA is *not* off the agenda. So the struggle goes on. For me, the real problem is that the Council's document not only didn't take Open Access any further, but it had some worrying phrases in it.

RP: Such as?

AS: It mentioned 'delayed Open Access' more than once for instance. Did you read the comments I made about it on my blog?

RP: I think you concluded that the Council still hasn't got the point of Open Access?

AS: Yes, and it's not just me. Did you see Žiga Turk's <u>comments</u>?

RP: His view was that while it was good to see the Council take an interest in Open Access it was clear that, as he put it, "someone managed to dilute a potentially powerful document." We should note that <u>Žiga Turk</u> is the Slovenian minister for growth.

AS: And he, of all of us, knows and understands what is going on and what is at stake.

The other thing that worried me about the Council's response, by the way, was the sentence about wanting to safeguard the viability of publishers' businesses. As soon as you read a sentence like that then you know two things. First, you know where the main influence on the authors of such a document has come from, and so who has won the argument. Second, it tells you that the authors are not in a position — or are not prepared — to put right before might.

RP: From what you said earlier I'm assuming you aren't really surprised at the outcome?

AS: No, I am not surprised. While it is true that the pro-Open Access lobby thought that a mandate was within reach in Europe, in retrospect, as European citizens and taxpayers, we should have known better. We all know what goes on in Brussels — and so it should have been no surprise that rationality didn't win out, and that pressure from big business did.

Nevertheless, I am disappointed that there doesn't seem to be anybody at a high level in the bureaucracy of Europe who can think straight about Open Access, and who is able to put the interests of society and the people who pay their salaries first.

RP: What do we learn from this?

AS: We learn that there are three ways of trying to push Open Access forward in Europe, but it is a difficult process when you have to deal with a monster with three heads, only one of which is composed of elected people.

Sometimes you think you are getting a little way with one of them, and then you find that it is the other two you should be addressing. Plus, as we all learned long ago, in capitalist democracies it is the people with the most money who hold sway, most of the time at least.

RP: But fortunately not all the time? The recent NIH mandate demonstrated that politicians do sometimes eventually do the right thing?

AS: That's true. The recent NIH developments have shown us that the interests of the big publishers did *not* win out there, so we have a beacon shining upon us from the US! Europe will look silly if it doesn't follow suit within a reasonable time.

Petition

RP: What cannot be disputed is that the Open Access movement tried hard to get the EU to do the right thing too. When, for instance, news leaked out that the proposed mandate was under threat — just weeks before the publication of the EC Communication — OA advocates sprung into action and organised a <u>petition</u> in support of it.

AS: As you say, somebody got wind that the recommendations of the EC's study were going to be watered down, and so a petition was started.

RP: It was you who organised the petition?

AS: No, I didn't organise it, in the sense of being the initiator. I was called up and asked to be the project manager. And I can tell you that doing so has taken a couple of years off my life, and given me <u>RSI</u>.

RP: But you did a great job.

AS: Well, it was a success in that we had 18,500 legitimate signatures by the time of the <u>conference</u> where we presented it to the EC. That's 18,500 signatures in just four weeks.

RP: And those signatures included major research institutions as well as individual researchers.

AS: Absolutely. And as I say, they were all legitimate signatures. I know because I personally went through the whole lot and eliminated the unusable or the unverifiable ones before organising the file for printing (hence the RSI...). By any measure, 18,500 *legitimate* signatures from the research community in four weeks, many from distinguished organisations and the vast majority of them from Europe, was a success.

RP: The petition was a powerful message to the eurocrats then?

AS: But one that appears to have been rather ignored, sadly.

RP: Even though the number of signatures has subsequently risen to nearly <u>27,000</u>.

AS: Thereby demonstrating that there is very strong support amongst the research community for the principle of Open Access. On the other hand, of course, hardly anybody who signed that petition has actually done anything about Open Access personally — just as so many of those who signed The Berlin Declaration haven't done anything about it either! So there is a level of exasperation for me there too. But that will change. I am sure of it.

RP: What happened to the petition?

AS: We presented it to the Commissioner for Science & Research <u>Jan Potočnik</u> at the conference, and he took it very politely, and listened to what we had to say for ten minutes.

However, I fear that he forgot about it as soon as we left the room. Just a month or so later he gave a speech on Open Access in which he sounded as if he had barely heard of the topic, let alone had it graphically demonstrated to him just how much his own research community wanted him to do something about it.

Peter Suber suggested to me the other day that the petition appears to have been treated as if it were milk past its sell-by date. As if all those signatures come to mean nothing after a while; that anyone who signed it can be assumed to have now changed their minds. That is ludicrous.

The facts of the matter are that a giant petition was presented to the Commission and that petition is as relevant today — almost a year later — as it was last February. What we can say, therefore, is that while the petition said something powerful, it seems that it had a limited amount of influence at the very top level within the Commission.

We are told that it had considerable impact, but you can only judge a pudding by its taste.

RP: I wonder if the problem was that you presented the petition to the wrong head of the European monster. As you say, MEPs are the only people who are elected to office in the European Union — maybe it would have been more effective if you had given it to them?

AS: We've been told that petitions to MEPs don't work. However, we do know what does work with MEPs, and we have plans to do something about that. It just won't be in the form of a petition.

RP: Can you tell me about those plans?

AS: No. I'm keeping my powder dry on that one.

RP: Well good luck with that. It has to be said that the response of MEPs to the Communication has not been particularly encouraging to date. When the EC presented the issue to the Parliament's Industry, Research and Energy Committee, MEPs decided to take no action at all.

AS: The Commission was asked to make a presentation just a week before the meeting. That was not very helpful, and it gives some indication of how seriously the topic was taken by the Parliament. By then the committee had been influenced by publishers in any case, who assured them that it was not an important issue.

We should not be surprised that publishers are lobbying against Open Access. Nor should we doubt that they will continue to do so. But I don't blame them. They do what such businesses are meant to do — they maximise their profits.

I would also stress, however, that this is mainly the activity of a handful of publishers, not the hundreds and hundreds of publishers out there, most of whom are starting to understand that Open Access is the way of the future.

I am talking about the three or four big wealthy publishers who want to run the world. And protect their bottom lines.

RP: How do publishers influence European politicians and bureaucrats?

AS: The way all big businesses fight for their own interests. They keep talking to them, and telling them that thousands of jobs are at stake. And apparently the Commission, the European Council, and the MEPs have so far bought that line.

RP: The publishers and politicians concerned would probably deny there had been any of this going on.

AS: Perhaps. I'm tempted to say, in that Mandy Rice-Davies way, "Well, they would say that, wouldn't they"? Richard, we know what 'the publishers' are doing, all the time, both in an out of the corridors of power. One very large one, for example, has a senior man trekking round the capitals of the newer EU member states, making presentations to information ministries on how important it is for them that the publisher keeps doing business the way it currently does. I even have his set of PowerPoint slides — very professional. It is also alleged that the same company has mined the petition for the institutional signatories so that it can try to make them see the error of their ways!

But as I say, I don't blame them for that if they see it as their job, though there is an argument for saying that if instead they focused themselves on what OA will bring they would see plenty more new business ahead. What's interesting is how much effort and money they are putting into forestalling OA while bleating publicly — in nice statements — about how important it is and how they are bending over backwards to do their best for science.

So if you want a criticism from me, then that's the rub — the two-facedness. I admire the fight for their business; I abhor the duplicity and the misrepresentation of facts that they produce to support their cause, viz the laughable PRISM initiative. They're at it again now in Washington in response to the NIH bill. How tedious it all is to have to keep pursuing this fight when we want to get on with the future.

But never mind, all this will be recorded in the annals and people of the future will look back and smile upon that quaint old set of standards that mankind had around the turn of the twenty-first century.

RP: You talk in terms of publisher profits. But one of the arguments used by the EC to justify being cautious about Open Access is that it could damage a successful European industry. In its Communication, for instance, the EC pointed out that the European scholarly publishing industry currently employs 36,000 full-time staff and 10,000 freelancers.

AS: Yes, as I said, those are the numbers that publishers gave them. What the EC didn't add, of course, is that those figures are minute when compared to the number of jobs in the European research community.

RP: Sure, but no one is suggesting that researchers' jobs hang on the outcome of the struggle for Open Access.

AS: No, researchers' jobs are not on the line, but looking at it like that is the wrong way round. There are many service industries for the research community (probably employing far more people than publishers do) and they could benefit from a healthier research process. I'm talking about things like laboratory supplies companies, software companies, chemicals companies.

On top of that we have thousands of jobs in industries that innovate on top of basic research findings. That is where the prosperity of Europe is built. The biggest ones of course do their own basic research and then develop on it, but the small and medium sized ones rely on the basic research being done in universities across Europe. They then take that research and innovate, producing the new technological products and services we all benefit from.

RP: So Open Access could create far more jobs that it might threaten?

AS: The way to put it is that it is completely bizarre to argue that Open Access wouldn't benefit the process I described, and equally bizarre, therefore, to thwart it for the sake of dubious arguments from one particular service industry.

In any case, jobs in the publishing industry need not be assumed to be on the line either. We can see that many publishers are turning to an Open Access business models and retaining their staff as they do.

So it is a false argument — or, shall we say, at the least it's disingenuous. The point is that when you have got loads of money, and you can pay professional people to help you to dream up a message that sounds good to an MEP or someone in the Commission, and you can then pay lobbyists to put it over to those people, you've won the argument. It is just money talking; money rather than sense. So there is nothing new there.

Too little, too late?



RP: The Open Access movement in Europe has no doubt had to learn on the hoof so far as lobbying is concerned. Nevertheless, there is a view that it should have been better organised from the get-go—that it should have done more to put its case, that it should have done it in a more effective manner and, above all, that it should have acted much earlier. After all, the Commission had already decided on the wording of its Communication before you organised a petition. By then, the idea of a mandate had already been abandoned. Were you guilty of doing too little, too late?

As: Yes, the Commission had decided on the wording before we handed in our petition, and it had undoubtedly by then been persuaded against a mandate by the publishers. On the other hand, the Commission knew the petition was coming, and by all accounts it was following its growth closely. So it was not a surprise when we turned up with it.

But to answer your question: were we guilty of doing too little too late? The evidence would suggest we were. I think the research community would say, though, that it was too busy getting on with its research. After all, it is not known for being political, and it is very disorganised and not particularly politically aware. And as a consequence, it has allowed its interests to be ridden over roughshod by one of its service industries — the publishers.

RP: Another view says that Open Access advocates were naive to think that a mandate was ever possible in the first place. For instance, one Open Access advocate who frequents the <u>American Scientist Open Access Forum</u> [AmSci] mailing list — a man usually referred to as "the mysterious <u>Napoleon Miradon</u>" (because no one knows who he is, although it is suspected that he is either an EC mole, or a former EU official) — has <u>pointed out</u> that if the EC had been serious about Open Access it would have produced a draft Regulation or a Directive, not a lowly Communication. Should not the Open Access movement have realised that a mandate was never on the cards?

AS: I don't know. We <u>are</u> naïve about these things. Maybe the EC was paying lip service to the OA movement by discussing it. Or maybe it thought there was a way to make Open Access happen.

RP: By persuading MEPs and/or the Council to run with the ball?

AS: It's possible. I don't know enough about the way the Commission works to answer these questions.

RP: Which is precisely the point perhaps? Miradon argues that the Open Access movement is losing the war because it doesn't know how to lobby politicians effectively, or even get their attention. As he <u>put it</u> on AmSci the recently: "Thus are battles lost." Does he have a point?

AS: Well we clearly didn't win this year, because however one interprets events we haven't managed to progress Open Access one jot. So in that sense I guess Miradon is right.

Look Richard, I am happy to admit that we are novices, and that we are naïve when it comes to political lobbying. For heaven's sake, of course we are naïve, and we don't lobby well. But the reality is that there simply aren't millions of Euros sloshing about in the research community to spend on lobbying in any case. And there is no Open Access organisation as such either. The Open Access 'movement' is not a lobbying organisation, and we don't have a lobbying group. We are simply not organised to do that.

So we are up against a very wealthy industry that is spending millions of Euros lobbying Brussels. And here we are, a disparate set of researchers, ex-researchers, interest groups and people who are fighting for the right cause. The Open Access movement is a genuine, well-intentioned, honest community committed to doing something that will improve European society's life in one way or another. I am not ashamed of that: I am proud of it. I am also glad to be on the side that history will fete!

So even though our cause is just, we are up against a big industry. And how many times in the history of capitalist society have we seen battles fought with such uneven odds.

RP: The good news is that the NIH mandate demonstrates that battles can be won even when the odds are so uneven.

AS: Indeed. On Capitol Hill, the best argument eventually won out over the money. And we should take heart from that. Though the argument didn't just stand up and win on its own: a massive, massive amount of effort went into putting it to the right people, effort made by a handful of energetic and dedicated individuals. Heather Joseph was the leader and chief energiser for that whole campaign and deserves huge acclaim.

Anyway, it's true that we don't get our case across well in Europe, and I am a bit disappointed that the powers-that-be at European level didn't recognise that the research community feels strongly about this issue.

But we did have our say, in the shape of all those petition signatures, 1,500 of which were from institutions — and some very powerful institutions at that. The petition was our voice.

RP: You said you were unsure of the EC's intentions. Yet another view has it that the EC did intend to push Open Access through, but it changed its mind after concluding that it would need to fund and manage a large central repository like the NIH's <u>PubMed Central</u>. It concluded, that is, that it would need to provide somewhere for European researchers to put their papers.

AS: It is not my impression that the EC suddenly got lily livered. And I don't believe they thought they would have to build their own archive — although it's true that I have been in meetings where that idea has been raised as something that might be desirable. On such occasions I always point out that doing so is neither necessary nor particularly desirable.

RP: Because you believe that researchers should be mandated to put their papers in their own <u>institutional repository</u>, not a central subject-based repository like PubMed Central, or indeed <u>arXiv</u>?

AS: Exactly. And that is the way I expect things to develop in general. Research institutions are the natural locus for these collections, not some central archive. After all, institutions have so much to gain from collecting their own research.

Big, centralised archives are fine, but they need to be seen as overlay services that obtain their content by harvesting from the network of institutional collections. We already have examples of this structure in Europe, mostly Netherlands initiatives (the Dutch think these things through well and then get on and do it). <u>Economists Online</u> is one such service, but there are others in other fields.

RP: In other words, the EC doesn't need to take responsibility for housing its own research?

AS: It doesn't need to think that it *has* to build its own archive, and it doesn't need to need to put a single penny into doing so. Plenty of us have made that point to the Commission.

On the other hand, if a specific European repository has to come as part of a mandated package of OA measures, then so be it. I don't mind my taxes going towards that if it gets us to an open European research corpus. Institutions could then harvest from such an archive the bits and bobs that 'belong' to their researchers. It's an extra fiddle for institutions but it's workable as a second-best scenario.

There is a mandate?

RP: We've been discussing the failure to secure a European Open Access mandate. Earlier this year, however, there was a flurry of excitement on Open Access mailing lists when it was <u>pointed out</u> that one of the conditions of receiving a European research grant is that grantees have to provide copies of all their papers to the EC. In effect, it was suggested that there is therefore an Open Access mandate in place already. What's your view?

AS: It's true that there are words in the <u>grant conditions</u> of the Seventh Research Framework Programme (<u>FP7</u>) requiring anyone who is funded under the programme to make their work available to the Commission. So in theory you could argue that — if it has all the papers it has funded — the Commission could itself make them Open Access; it could put all this research into its own archive.

Miradon, for instance, has pointed out that the EC could put all these papers into Cordis¹, which would be a natural home for it. As such, his argument is that the Commission doesn't need to do anything more; it already has a mandate as a condition of providing grant money.

RP: You are talking about the general conditions attached to EU grant money. Miradon has, of course, also pointed out that researchers are not individually asked to sign up to these conditions.

As: No, I don't think they are all personally asked to commit to providing copies of their papers, but since it is one of the conditions of receiving a grant, they couldn't argue that they were ignorant of the condition.

RP: So is there a European mandate?

AS: No, there is a mandate requiring researchers to make their findings available to the Commission, not that they have to make them Open Access. But all grant funders ask for that; I don't know of anybody that provides research grants that doesn't require grant holders to report at the end of the project, in some form or another.

¹ Cordis (Community Research and Development Information System) is an Internet information system containing information on past and on-going European research projects, current calls for proposals, partner search facilities etc.

RP: Given the lack of a specific mandate, however, Miradon <u>predicts</u> that very few of the papers resulting from the 54 billion Euros of research money available in FP7 will become freely available on the Web. Do you agree?

AS: Well that is up to the Commission. Since they will receive copies of all the papers they could make everything Open Access if they wanted to. I'm sure there's nobody in the Commission itself who could make practical use of the articles! So what's the point of hoarding such a collection? Best to show it all to the research community, who just might be able to make some real use of it.

RP: Perhaps it was at this point in their thinking that the EC began to worry about the costs and responsibility of having to build its own PubMed Central and lost heart as a result?

AS: But it doesn't have to. It has Cordis, although it isn't ideal because it's not <u>OAI-compliant</u>.

RP: In other words, it wouldn't be interoperable with other repositories?

AS: And for that reason it would be better if the EC were to use, say, a service like <u>The Depot</u> that the UK's <u>JISC</u> has developed. And, indeed, a new central service is in the process of being built right now so that the lack of a European 'catch-all' repository cannot be used as an excuse for not making European-funded papers freely available. In other words, if the Commission <u>has</u> to stipulate a central repository, there it will be. It would be better all round, though, to tell its grant holders to use their own institution's repository.

Of course, I have no doubt that the EC could spend a lot of money on a repository if it wanted to! But why on earth would they choose to do that? It would be crazy. If they decided to build a PubMed Central they would definitely have lost their heads.

As I say, while I can see the attraction of building centralised subject-specific collections as services, the natural locus for depositing papers is at the lowest level — in an institutional repository, or even a departmental one, one that is properly constructed and OAI-compliant.

RP: Just to be clear: the purpose of the OAI protocol is to enable multiple distributed repositories to behave as though they were one central virtual archive.

AS: Exactly.

RP: All in all, then, it seems highly unlikely that there will be a European mandate for FP7 research, or that the EC will make that research Open Access itself. Since it can take so long to change European policy, some have therefore concluded that OA advocates should forget about FP7 and work toward securing a mandate for FP8. However, that would mean giving up any hope of Open Access in Europe until 2013 wouldn't it?

As: And that's much too late. No, one thing that those who oppose Open Access must understand is that we are not going to give up. Moreover, we are going to be more tenacious than the people who oppose us.

But in reality, you know, all of us who advocate for Open Access could retire to some tropical island today, and in ten years time Open Access would in any case be in place. I have no doubt about that.

RP: Why?

AS: Because it is a natural development now. Even aside from the way science is going — the way it is actually being done, I mean, which is in a big, collaborative, interdisciplinary way — if you were to talk to any 20-something-year-old working at the bench in a European or North American university and ask them whether their work will be hidden away from the world when they are 35 they would laugh in your face.

RP: Ok, so Open Access is inevitable.

AS: Which means that it would be rather silly to give up now! It is going to happen, whatever the Open Access movement does or does not do, but it would be good to make it sooner rather than later.

Targeting the research community



RP: I feel I should ask: Why are you beating your head against the wall of European bureaucracy when you could be lying on a beach on a tropical island then?

AS: I don't like lying about on beaches!

But to answer your question properly, Open Access may be inevitable, but I would still like to see it happen as soon as possible. It is a cause worth putting a bit of energy into. In addition, it is a very interesting struggle, and I am having a great deal of fun playing my part in developments.

RP: I am wondering how much of a setback the failure to get a European mandate really is. I was struck by some comments made by <u>SPARC Europe's</u> David Prosser in a recent <u>podcast</u> conversation with <u>Information Today's</u> Dick Kaser, for instance. Prosser said, in so many words, "So what? The European Union didn't run with the ball, but the situation remains very positive and real progress is being made."

AS: That's true. And that is why most of our work today goes on at the research community level. I would estimate that only about 5% of my time goes into advocacy at the EU level, including all the work I did on the petition. I do things at European level because it would help to have Europe follow the example of the recent US mandate. Moreover, it's fun to have a go, and try and work out how the three-headed monster works! But it is much more important to get universities to understand things.

So while I am prepared to put a bit more effort into informing certain people at the EU level, and arguing the case for Open Access, I am not going to put in a great deal of time on it, because I don't think it matters very much, and I certainly don't think, "If only we could get a European mandate that would be the problem solved."

RP: Prosser's argument was that, even though the EU decided to sit on its hands, we are witnessing a constant growth in the number of institutional repositories, more and more Open Access journals being created, and a rising interest in university mandates. You agree with his diagnosis?

AS: Yes, I do. The number of institutional repositories has grown by an average of one per day over the last couple of years. We can certainly expect the number of mandates to start rising, and David is dead right about OA journals. For example, Peter Suber's latest <u>study</u> (with <u>Caroline Sutton</u>) on Open Access journals published by learned societies counted 480 journals from 450 societies. These journals either use an article processing charge [<u>APC</u>] business model, or they are supported in some other way, and so charge no APC at all.

That is one hell of a lot of journals, from one hell of a lot of societies. And every week Peter seems to blog a note of yet another society journal converting to OA.

What the more gloomy Open Access advocates need to bear in mind is that when you are heavily involved in pushing for change little setbacks can too easily be viewed as major hurdles, and you can feel that the movement has gone backwards. But if you stand back and look at what has been achieved, even over the last year, you realise that there has been tremendous progress — and that's without even taking into account the NIH mandate.

So things are changing, and David is right to say that that the situation is positive.

Yes, it would have been nice to have seen something — a statement, or a move of some kind — at European level, because it would have been yet another big indicator that the world is moving in the right direction. But as I said, it isn't that important.

What matters is what the research community does about Open Access, and that is why the bulk of my activism is focused on the research community today.

RP: The primary objective today, then, is to target the research community, not politicians or European bureaucrats. And the priority is to persuade universities to introduce institutional self-archiving mandates.

AS: Yes. Mandates are key.

Metrics

RP: You gave a <u>presentation</u> recently at a Universities UK (<u>UUK</u>) <u>event</u>. Your audience there would have been university <u>Pro-Vice-Chancellors</u> and Principals — precisely the people who are in a postion to introduce institutional mandates. Did you find them receptive to Open Access?

AS: That meeting was focused on research assessment, and so we were mainly talking about the management of research using new assessment procedures. As you know, there is in the UK right now an obsession with the form that the <u>new RAE</u> will take. The message was that developing new measures will only be possible on the back of an Open Access corpus. So yes, they were receptive to Open Access. Anecdotal feedback from conversations on planes and trains between the OA people there and delegates afterwards has been most encouraging.

What is clear is that until now the message has not been getting through clearly enough. Only a few visionaries in a few universities have so far "got it". But as we go forward we can expect to see the concept get through to all those under the main hump of the Gaussian curve.

RP: The point about the RAE is that the UK government has decided to move away from evaluating researchers and research institutions using traditional journal <u>impact factors</u> in favour of a new <u>metrics</u> approach.

AS: And so there is tons of interest in the topic at university level right now, and things are moving very fast, and very strongly.

I was, by the way, invited to speak about research assessment at a university away-day a couple of months ago. This was an event organised for all the heads of department — or heads of institutes as they called them at that particular institution — and it was devoted solely to talking about the new RAE, and what the university could do to optimise its performance in the new environment. And other universities have been in touch for the same reason.

What this tells us is that, on the ground, everybody is starting to see that new metrics are very important.

RP: And this topic feeds directly into a discussion about the advantage of Open Access. After all, OA advocates have been arguing from some time that Open Access will enable the research community to make beneficial use of metrics.

AS: Of course. That is precisely what we have been saying for a long time. We have argued all along that that in a networked OA environment measuring somebody's worth is going to shift naturally away from the journals that they publish in to their individual performance. And we already have ways to take a lot of different measurements of an individual's performance.

So the opportunity here for Open Access is that everybody in the UK has become interested in the topic because of the changes that will take place to the RAE.

RP: Just to clarify: the Open Access angle here is that a metrics-based RAE could be implemented simply by harvesting data from institutional repositories — by, for instance, counting the number of times a paper is downloaded from the institution's repository, how many times it is cited in papers available in other institutional repositories etc.?

AS: Yes, and we can measure many other things too of course. Universities will also want to team their repository with their <u>Current Research Information System</u>, for instance, in order to get all sorts of other information about people: How much grant money they bring in, how many students they are supervising, and so on.

Keith Jeffery, the President of <u>EuroCRIS</u>, has been <u>talking for some time</u> now about the opportunities available to institutions by linking their repository with their CRIS. It's a compelling story for anyone with research administration and policy responsibilities.

What this means is that using the various types of data it will be possible to develop a whole set of metrics on researchers. And if you really want just one metric as an end product you can collapse 10 or 20 or 30 numbers into one.

RP: Some people are inevitably sceptical about research metrics of course.

AS: Indeed. We all know how the UK government's obsession with measuring everything has turned out some very bad results. A prime example was given a couple of weeks ago when there was

discussion about a new policy of sending one paramedic in a car instead of a fully-equipped ambulance with two paramedics, because cars are more likely to get to the scene within the 9-minute 'government guideline'.

One paramedic interviewed said, "If I go in my car to the scene and get there within nine minutes and the patient dies, that is counted as a success. If an ambulance gets there in eleven minutes and has the equipment to keep the patient alive until he gets to hospital and can be properly looked after that is recorded as a failure".

So in the world of metrics we need to go carefully: Rankings and assessments based on one or two measures are extremely prone to error or manipulation or, worse, can work against the good that they are intended to produce. This means that as many measures as possible need to be developed and validated, and then the ways those are used need to be thought through very carefully. The basic rule is that the more measures that can be developed the better.

RP: The essential promise of metrics, I guess, is that they will provide a much better understanding than is possible with current methods of the value that an individual researcher has to his or her institution?

AS: That's exactly the point. And not only value to an institution, but value to their field, immediately or in a long time frame, and other important insights and understandings of how research works. We can now look forward to something much better.

Any one of the component parts of a metrics system would be a much better way of judging researchers than simply looking at the impact of the journals they have published in as we do today, since it will be measuring their individual performance. Moreover, the journal impact factor has been used extremely badly, as even its creator Gene Garfield readily admits. And remember, instead of one measure, we will have multiple measures with metrics.

RP: Are you personally involved in developing new metrics systems?

AS: Yes. We are now in the process of developing specific new ways of evaluating an individual researcher's performance. And as part of the eventual output we plan a new set of rankings. Once we start ranking people we expect it to attract the interest both of researchers themselves, and of their institutions, and that will be a boost for Open Access.

RP: Because, as we said, the research papers will need to be Open Access in order for the metrics systems to work?

AS: Exactly.

Riding in on the waves



RP: While they have a similar system in Australia, the RAE is a very British concept isn't it? Could this prove a hurdle when it comes to convincing research institutions in other countries of the value of metrics, and so the need for Open Access?

AS: No. We expect interest to develop right across the world. As you say, the topic of metrics is already hot in Australia, because they are going through much the same process as we are in the UK. But interest is growing in Europe too. In October, for instance, we saw the launch of <u>EurOpen Scholarship</u>, an initiative intended precisely to push these kinds of developments.

RP: What is EurOpen Scholarship?

AS: It is a group of European universities committed to having a dialogue about this whole area, and helping us to develop the necessary tools. We want to get a proper discussion going among European universities; a discussion that will take place at the Pro-Vice-Chancellor (for research) level.

So, for instance, we will be asking Pro-Vice-Chancellors what kind of things they want measured, what they don't want measured, how often they want them measured, what they want us to be able to feed into these measurements, how they want the information made public, and whether they want to be able to order their own set of measures etc.

RP: To summarise what we have been saying then: While it would have been good to see a European mandate introduced, you are not overly disappointed because you believe that the key change agents are not politicians or European bureaucrats, but university managers. And you believe that the best way of persuading this constituency of the benefits of Open Access is to promote the institutional repository as a tool that can create a fairer and more accurate metrics-based evaluation system. Essentially, Open Access can ride in on the waves of the current interest in metrics?

AS: I think so. But rather than saying that Open Access can ride in on the waves produced by the interest in metrics, I would put the stress elsewhere. I have never argued for Open Access as an end in itself, although it is undoubtedly a Very Good Thing in itself, just as a principle. No, I think the way to put it is that a lot of good new things will ride in on the wave of Open Access, not the other way round.

Mandates and repositories

RP: Can we go back to mandates for a minute? As we've said, in order for the new metrics systems to work effectively research papers need to be deposited in institutional repositories. I'm conscious that Open Access advocates have long promoted the idea of the so-called <u>Open Access Advantage</u>, which says that researchers benefit from making their papers Open Access, since doing so increases the impact and visibility of their research? Why then isn't it enough just to demonstrate the Open Access Advantage? Why do we need mandates?

AS: Mandates are essential for lots of reasons. One reason is that they make researchers aware of Open Access where they weren't before. The level of ignorance is still very high. And if their university suddenly requires them to do something it will focus researchers' minds.

More importantly, of course, a mandate will actually make them do it, because regardless of the Open Access Advantage, they won't put their research into a repository if they don't have to. It's another bureaucratic thing to do. And they still have worries about the legality of it. Being told by their institution to do it gives them the feeling that it is safe and sensible to do it.

So to make them do it you need to tell them that they have to!

RP: Telling researchers what they <u>have</u> to do is a sensitive issue of course.

AS: True, but universities don't have to be overly authoritative. They need only say, "The repository is the place we want your research kept, and we want it for the following reasons".

RP: And at the same time they can remind researchers that doing so will increase the impact of their research.

As: There are various reasons that can be given. But in my view the best one — and it is one I have no doubt will be used in the future — is to say to researchers that they need to put their papers in the repository because when the university has its next assessment exercise, or when it creates its departmental or university annual records, it will compile those records from data held in the repository.

RP: With the implication that if their work isn't in the institutional repository then it won't be counted?

AS: That's right. If your work is not there it is not counted. Now that doesn't matter if you don't want it to be counted, but your salary will not continue to be paid after a while, as we won't have your name on our lists!

RP: You make it sound all very logical, simple and straightforward. However, the reality today is that there are still very few institutional mandates in place.

AS: It's true that at university level there are few mandates in place right now. But I really believe that's largely because we haven't made the message clear. And, as I said, the measurements and rankings we plan to develop will spur mandates along.

RP: You will be publishing these rankings under the aegis of organisations like EurOpenScholarship will you?

AS: Yes.

I would add that there are also a number of mandates in the offing that have yet to be announced. I know this because wherever I have been in the last 6 to 12 months, at every conference I have attended where there are representatives from universities, I have been told — in the corridors or over a cup of coffee — "Our mandate is coming; it is just not finalised."

And here I am talking both about the UK and other countries. So it is just a matter of time.

That is why I am fairly relaxed about EU-level advocacy. It's important, but it cannot drive the change we need on its own.

RP: I think it would be fair to say that not all Open Access advocates are as confident as you are about the growth of institutional repositories. You will be aware, for instance, of the <u>doom</u> and <u>gloom</u> aired frequently by Dorothea Salo, a librarian at the <u>University of Wisconsin</u> who has been struggling to fill her <u>repository</u>. In the process, Salo has become rather pessimistic about the future of institutional repositories. Indeed, she recently <u>predicted</u> that there would be a high-profile failure of a US institutional repository in 2008. Institutional repositories are apparently facing more of an uphill struggle to get established in the US, but does she have a point?

AS: There is some point to what she says, because many institutional repositories are not yet being used properly — in the US and elsewhere. That's because senior management hasn't yet cottoned on to their potential, which is huge, and not just for visibility and impact. There is much, much more importance to institutional Open Access collections than that.

Dorothea bemoans the fact that repository software doesn't do all she needs it to but that will come. Developers can't always be the seers in this game: sometimes they need to be told what the market wants, and be allowed or encouraged to respond accordingly.

RP: Developers need to be told that the main role of an institutional repository is to help in the process of assessment?

AS: Not just that. Institutional repositories will also be essential vehicles for fostering interdisciplinary research and thinking — and teaching — for example. For that reason, it is unlikely that any serious research-based institution will not have its own digital repository by the end of this decade.

So I am much more optimistic than Dorothea Salo. And my optimism is predicated upon the belief that we can explain — and show — how institutional Open Access digital collections are critically important to the progress of future, data-based research.

As to whether we can expect a US repository to fail next year — I don't know. It's possible that some might do if they don't find the proper hook to hang themselves on.

What we learn from Dorothea's jeremiads, I suspect, is that the US is lagging behind Europe in thinking about repositories, and it needs to be woken up. European thinking — not at the EU-organised level but one step down from that — on repositories is well developed; and not just its thinking but also what it is doing in terms of technical and technological developments.

Over here we have had the benefit of the big JISC- and <u>SURF</u>-funded programmes which have pushed the thinking along and acted as coordinating principles. As a result there are some clear views as to where we are going with repositories, I think. I don't see quite the same level of activity in that sense in the US, although I think it's on its way.

I am confident that there is a lot of very exciting stuff ahead, and I have just written a <u>paper</u> that will be published shortly that starts to talk a bit about the next stage, and which emphasises the huge research payoff that we can expect from the Open Access corpus.

RP: Most discussion of Open Access today tends to be focused on Europe and America. You travel more widely than many Open Access advocates. What level of interest is there in Open Access in other parts of the world, particularly in developing countries?

AS: Other countries are desperately interested in Open Access, and there are very strong levels of activity evident in all the major areas that you would expect to see it — in countries, that is, that are research intensive.

With respect to developing countries or regions, there is strong interest, as you might expect, but there are certain countries that are foci of interest and activism. In South America, for instance, it is in Brazil where the activity is most intense. As you know, Brazil has just set up an <u>initiative</u> very similar to EurOpen Scholarship — with the aim of bringing universities together to work for Open Access. There is also a law going through the Brazilian Parliament at the moment which looks likely to become the first complete national mandate.

There is also a lot of active interest in China. As yet there is no mandate in place, but there is a lot of activity, particularly in the Academy of Sciences.

In India, meanwhile, interest is huge, with a lot of practical activity — technological development and advocacy — going on on the ground. The Indian Institute of Technology at Rourkela has already introduced a mandate, and we can probably expect to see more mandates introduced there quite soon at institutional level. And India has suddenly got very serious about science and technology: it realises how the health of its economy will rest upon success in this area, and so is tripling its R&D budget.

RP: Right. A decision incarnated in India's Eleventh Five Year Plan — <u>Vision 2025</u>. I also noted that as part of its new interest in science and technology India proposes establishing Centres of Relevance and Excellence in academic and R&D institutions, and is calling for "greater diffusion of knowledge". Open Access would certainly help with the latter aim I guess.

AS: And the good news is that more and more people are coming to realise that. All the EU Innovation Reports have shown that better access to research findings is key to success for innovation-based SMEs, so the argument for Open Access in India becomes non-ignorable.

Watch out also for developments in Southern Africa: There are a couple of universities with their mandates being drafted as we speak.

The payoff



RP: How then do you see the next 5 years panning out for Open Access, and what predictions would you make?

AS: My prediction is that the Open Access corpus will grow hugely over the next five years. People talk about a tipping point, but the truth is that we are past the tipping point; we are now on the downhill run. So the constant struggling and carping and whinging that the movement engages in is just not necessary.

But what I am really looking forward to over the next five years is seeing how we will start to benefit from the many new possibilities that will arise once all this research is freely available.

RP: I guess you are talking about things like data mining?

AS: Exactly, or cyberscholarship, or data-driven scholarship, or whatever moniker you want to put on it. We're talking about the actual *use* of the openly-available research material to further knowledge. That's the whole purpose of this struggle.

So I am looking forward not just to seeing the corpus grow, but watching as all the new tools begin to be developed. Some are already here, of course, waiting for more raw material to work on. It's an exciting outlook for science.

RP: This is the payoff you mentioned. Can you expand on that?

AS: Once the content and the infrastructure are in place we are going to see knowledge take a giant leap. The way to view it is that the last 7-8,000 years or so of human civilisation's struggle for knowledge has taken place on one plane, determined and constrained by what our own brains can absorb, put together and make sense of: now we are about to move to another plane altogether, with the help of machine brains.

RP: So what we are saying is that where the emphasis of Open Access has until now been on how we achieve it, we can now begin to visualise what it will do for society once it has become the norm. For once research is Open Access we can mine it, aggregate it, and combine it in ways that are not possible when it is locked behind subscription firewalls — and in ways that will benefit all of us?

AS: Yes, that is where we want to get to. <u>Stevan Harnad</u> was writing about this in the mid-90s. Open Access is just the enabler of the really important things ahead. We are looking forward to all those things Stevan foresaw and told us about back then: as <u>Leslie Carr</u> recently put it, we look forward to open bibliometric analysis, open semantic analysis, open comment and commentary and <u>more</u> efficient and effective scholarship. More bangs for our bucks.

The point is that the battle for Open Access has had to go through a number of phases, each with an argument to appeal to some constituency or other that we need to convert to the cause. Initially we had the kind of <u>studies</u> that Stevan Harnad has done, showing how individuals can have greater impact with Open Access. Now we are starting to talk about how Open Access benefits individual institutions in terms of greater impact — for which, by the way, there is already evidence.

But these are just tiny steps to help move things along. What has always been clear is that there is a societal benefit in having all the research out there. Once it is freely available, it can be manipulated and used in the best way possible, and in new ways, as I just described.

So until now we have been talking about the necessary first steps to create the infrastructure. The big picture is much more exciting, but you have to progress step by step by step.

RP: Essentially, you are talking about the promise of the Semantic Web.

As: Precisely. The true benefits of the Web on science and scholarship will come from the intelligent (semantic) machine-to-machine linking of items, not just at item level, but at sub-item level such as by paragraph, sentence, phrase or significant concept.

RP: And at that point a lot of new knowledge will be created by machines as much as by humans?

AS: Well, the benefits will come not only from more precise, meaningful linking, but from the fact that machine tools will be able to work across documents and datasets and other research records, putting together pieces of information that have additional or new meaning, and truly taking us into a realm where the whole is greater than the sum of the parts.

As you say, pieces of information from similar, dissimilar or downright different sources will be put together to create new knowledge, and make possible more enlightened and advanced thinking

RP: It sounds fascinating. Thanks for taking time to speak with me.



© 2008 Richard Poynder

This interview is published under the terms of the Attribution-Non-Commercial-No Derivative Works 2.0 UK: England & Wales (http://creativecommons.org/licenses/by-nc-nd/2.0/uk/). This permits you to copy and distribute it as you wish, so long as you credit me as the author, do not alter or transform the text, and do not use it for any commercial purpose. If you would like to republish the interview on a commercial basis, or have any comments on it, please email me at richard.poynder@btinternet.com.

Please note that while I make this interview freely available to all, I am a freelance journalist by profession, and so make my living from writing. To assist me to continue making my work available in this way I invite anyone who reads this article to make a voluntary contribution. I have in mind a figure of \$8, but whatever anyone felt inspired to contribute would be fine. This can be done quite simply by sending a payment to my PayPal account quoting the email address <u>richard.poynder@btinternet.com</u>. It is <u>not necessary</u> to have a PayPal account to make a payment.