

Symposium 大学からの研究成果 オープンアクセス化方針を考える」

Panel Discussion

Facilitator : Jun Adachi (Professor and Director of Cyber Science Infrastructure Development Department, National Institute of Informatics)

Panelists : Stuart M. Shieber (Welch Professor of Computer Science and Director of the Harvard University Office for Scholarly Communication)

Andrew A. Adams (Professor of Information Ethics and Deputy Director of the Centre for Business Information Ethics at Meiji University)

Kazuo Yamamoto (Director of Academic Systems, Hokkaido University Library)

Satoru Endo (Professor, University Management Center, Tokyo Institute of Technology)

Kenji Kato (Director of Shizuoka University Library)

People asking questions

Q 1 : **Professor Furuyama**

Q 2 : **Professor Takigawa**

Q 3 : **Mr. Koga**

●Adachi I have been participating in the activities of SPARC Japan in Japan for the past six or seven years, and what I most regret is that although I was able to do various jobs with people at libraries, there was no way to approach researchers. Activities such as advocacy are extremely difficult and I think that we in Japan still have much to do in that area. This kind of thinking lies behind our sponsoring a symposium such as the one today. Professor Shieber's talk gave us a comprehensive summary of what has been achieved so far, although he hardly mentioned all the sweat it took to reach this point. We have also heard from

Hokkaido University about their everyday efforts. Professor Shieber said that it took two years to establish that sort of policy. I presume that it must have taken quite an effort during those two years and hope you will tell us some of your experiences.

●Shieber I can say a few words about the process that we adopted to pass and implement open-access policies in different schools. The process was initiated by the provosts. Before each of the open-access policies was voted, we took a lot of time, 2 years in the case of Faculty of Arts and Sciences, to meet with as many groups as possible such as

department faculties, department chairs, committees, so that everyone in the campus was comfortable with the policy. This is especially important because the rights retention part of the policy happens in perpetuity the moment the vote occurs. The process does not end when the vote is taken although the rights retention part ends because from then on rights are retained except for few cases of waivers. The effort to handle these waivers is minimal. For the other part of the policy, it requires ongoing effort to ensure that faculty researchers are putting articles into the repository. In the Office for Scholarly Communication which I direct, a major part of our activity is making the process as simple and straightforward as possible for faculties to get their articles into the repository. There is another thing about the process leading up to voting on a policy. Our experience was that it was important not to rush that process and more important to have broad support for the policy, even if it meant taking a longer time than trying to get the policy earlier with grudging or a majority support, but without an overwhelming support. The result was that because we took a lot of time, the votes in the various schools were overwhelming and often unanimously supportive of the policies.

● **Adams** In terms of the process that you go through to develop advocacy at an institution, I felt that we got it right at Reading when we had a combination of technical, library, and academic staff involved in promoting the idea of a repository and mandate. In terms of identifying academic staff, this is for the library representatives who are passionate about this, the first thing is to find out who might be already depositing their own work either in your repository, if you have one, or on their

own webpage or possibly even on their own webpage even though you have a repository. They are the ones who are most likely to be receptive, to be interested in, and to get involved in promoting the repository and mandate as part of a team.

Another key indicator to look for is people with a broad range of research interests rather than somebody with very deep research in one very specific field. A deep researcher in a very specific field is less likely to be interested in the broader question of the university's situation of scholarly communication. I am not criticizing the deep researchers. We need people like that in universities who are very deep into one field, but they are going to be less interested and often are less good at talking more broadly across the university. Someone like me who is very much an interdisciplinary researcher will find it easier to talk to people from a diverse range of backgrounds in a way that they understand. An interdisciplinary researcher is also likely to have come across the access problem themselves. A deep researcher will probably have access to the five or six journals they need, whereas since I look across so many subjects, there is always a subject in which we do not have a subscription. The final point is, it is easier if you can get existing academic archivangelists involved in helping you find people at your own institution because they will be able to talk "academic to academic" and get them involved as part of your team. So, that is how you build that in a combination team.

● **Adachi** Professor Kato, what is the situation at your university with drawing in researchers and others?

●Kato As I briefly mentioned, we have mandated registration in the repository as a part of our support for submitting articles. I think that this has provided a stimulus.

●Adachi Mr. Yamamoto, would you like to add anything to your previous concrete remarks?

●Yamamoto The fact is, librarians do not know how the researchers are doing their work, so I think that basically, it is important to approach them without any preconceived notions.

●Kato A researcher is delighted when the librarian in charge reads his article published in the Web of Science and emails him, so I think that the researchers will agree, though I can't say for sure that most of them will.

●Yamamoto I think that the Web of Science has been quite successful at Hokkaido University. As for advocacy, there are professors who say, at the time of depositing, "I am going to send an article to the contact person in the library, so please register it," or, "I would be obliged if you would prepare a deposit form because I am familiar with the process of contributing an article." Some very positive professors tell us that they are fully prepared to use open access and as their articles let the university know of their achievements, they ask that all of their articles be automatically deposited. However, a system for doing it automatically has not been developed yet, so I think that this is an issue to be addressed in the future.

●Adachi Are there any questions from the floor?

●Q 1 I am a member of the Japan Society for Business Ethics Study and also a member of the Society for Business Ethics Study of the United States. My question is addressed to Professor Shieber. I am a frequent user of ProQuest. I think ProQuest is a commercially sustained, *profit-motivated kind of organization. The search engine is very well designed, but sometimes, I can only access the abstract and not the full text. When I get an abstract, I can get the full text through interlibrary loan by paying the copy cost, which is very inexpensive. I could say my research would be impossible without the assistance of ProQuest. So, how do you evaluate ProQuest? To what extent do you think ProQuest is used in the United States?

●Shieber I do not know the usage statistics for ProQuest in the United States or even in Harvard, although we are a subscriber, but I expect that it is widely used. We are subscribers of various different products that ProQuest provides. To the extent that they enable yours and other people's research, they are worth whatever the price that is being paid. One nice thing about open access is that products like ProQuest can be built on top of the availability of open-access articles.

●Adachi I would like to go on to the next question. One thing I have noticed in today's talks is that, as Professor Endo mentioned in his talk, the nations are involved in different ways, in Japan and the United States, as well as in European countries like England. We would like to hear a little more about the way of changing to open access or changing scholarly communication. How would a government participate? In the United States,

NIH creates public access policy, but should the government participate more? Should it not participate? I would like to hear more about this issue. How should the areas of participation be divided up? First of all, Professor Endo, we would like to hear anything you might have to add.

●Endo It is basically the way that I described it, but if I were to point out the most important fact, I think it is that we need to upgrade research support itself. For instance, if we increase the Grant-in-Aid for Scientific Research, there is a possibility that that will encourage the business model of having authors pay the expenses of research. Of course, there are many different strategies, but I am hoping that the government will support this sort of research as a whole.

●Adams An interesting issue some people talked to me in the last 6 months or so was, would the economic downturn be good for open access in that it might help promote people's concern about the serials crisis? The problem with this is a simple solution to solving access is the repository and deposit, but that does not solve individually your access to other people's work. It does solve other people's problem of access to your work. The difficulty in persuading governments to get involved is that the UK government mandates British research to be made accessible, which it can do, but there is still the problem of British researchers' access to American research, to Japanese research, and other research from around the world. This is not going to very quickly lead to any reduction in the cost of these things.

●Yamamoto When it comes to government

participation, I think that it is a problem that journals have gone too far over into the area of business. When the researchers work on the issue of open-access with a clearer focus on information, shouldn't we be thinking within the framework of infrastructure? It may be difficult to treat it like a business, and I think that to a certain extent, the expenses should be covered with public funds.

●Adachi Speaking from my personal experience, I feel that SCOAP³ is a very great problem now, but when it was first mentioned several years ago, the reaction was, first of all, to approach the Ministry of Education, Culture, Sports, Science and Technology asking for 100 million yen. This is a classic pattern of action in Japan, and I was once again persuaded to believe that that sort of thing will not contribute to open access at all. In my opinion, the traditional way that the Japanese government participates is contrary to the directions just mentioned.

Next, I would like to ask a third question of all of you on the panel.

Open access is about creating a new system, right? It means creating a new structure for scholarly communication in the form of open access, but will new models like COPE and SCOAP³ and the old subscription model be able to coexist and cooperate to reach our destination, or are they mutually exclusive? Besides that, if we meddle with the very complicated system of academic research might there not be bad repercussions? For instance, in the case of government-run social pensions, when we observe a cross-section of them at any one time, they make sense, but the pension system is actually huge and has finally gotten completely out of hand. I would particularly like to

ask Professor Shieber: Can we be unreservedly optimistic about artificially changing the system? I am very much interested in your opinion.

●Shieber Yes, we can be optimistic. The various methods for funding the scholarly publishing mechanisms are consistent with each other. You can have simultaneously some journals that charge subscription fees and others that charge publication fees paid for by or on behalf of authors by universities and funding agencies. They are all consistent. They are also consistent with SCOAP³ in which for a particular set of journals, you have a separate funding mechanism by consortium. So, because there is a range of journals, there can be a range of business models as well simultaneously and which are perfectly consistent. I have to confess I am a fan of market approaches to solving these complex problems where you have a real effective competitive market. The problem is we know there is no real effective competitive market with the current funding situation for journals. Hence, we cannot possibly be worse off by proposing new models which at least have the potential to be real effective markets. To predict the future, my guess is we will continue to see simultaneously different kinds of journals using different kinds of support systems.

●Adams So, partly playing devil's advocate, but also partly being a European and having less faith in markets than an American might do, I am slightly more pessimistic or slightly less optimistic. If we look at the example of other areas of copyright middleman industries like music production and also books and magazines, it is clear that those areas are being dragged away from their

rent-seeking behavior of the past and that it is also clear what we see in journal publishing is rent-seeking behavior. In many ways, we have a clash of culture between the professional publishing arm and the academic arm. In academia, it is a combination of results and prestige and they do not always go together, although we hope they do. On the business side, we have money. I am not sure I can see a market solution where money is the principal driver and a way of making that driver match with the prestige and the quality of the results that we are interested in as academics. I am not sure I can see a happy outcome, rather something of a mess developing, and eventually after 10 years of difficulties, as we have seen in other areas, finally, a new model emerging there. I will explain it to you after the panel.

●Kato There are various opinions, depending on the point from which you view this problem, but in the case of Japan—particularly in regard to transmitting academic information in the field of STM—there is no question that open access journals are going to increase. For six or seven years, our academic journal tried and failed to get a subsidy from the Ministry of Education, Culture, Sports, Science and Technology, but this year it was granted one after it was made open access and the impact factor became evident. This sort of trend is important. That is to say, it is not just government encouragement that is important, but whether you have strong determination that the community will launch itself in the world. I think that that is the first thing that is necessary.

●Adachi Professor Endo, do you have any comments to add?

● Endo Were I called on to label myself as optimistic or pessimistic, as you have seen on my last slide, there are interrelations shown by a great many arrows, so I find it difficult to use either “optimistic” or “pessimistic.”

In actuality, there are still other relationships apart from the flow of funds and information indicated on the slide, which could not yet be written down. Take quality, for instance: I mentioned that there are various debates going on about peer reviewing in the United States, and there are also things we don’t understand yet about the effects of open access. Another point is how the incentives for researchers will change. I wanted to indicate the relationships of various stakeholders such as these, but was forced to recognize that this was a difficult problem that refused to be charted even if a lot of time were spent on it. That is why I can’t say anything definite, but I do think that there is a great reason to be optimistic in the fact that this debate has been opened and this sort of discussion is taking place, not only among the people here, but in the general researchers or general public as well.

● Kato Excuse me for saying this, but I think that peer review quality is not a problem connected with open access. Rather, now that editing has been digitalized, reviewing has become extremely easy to do, but it is also easy to declare that one will not review something, so a great deal depends on the extent to which the reviewer has entered the digital world. Added to that, we researchers in Japan also have a problem with language. We do not have a quick answer to this problem at this point.

● Adachi Mr. Yamamoto, please go ahead.

● Yamamoto Concerning the question about the old system and the new one being able to coexist, you are all engaged in promotion or obtaining funding or doing competing research; so I think that so long as there is competition, there will be business opportunities. That is why I am optimistic.

● Adams A quick comment about the slide with all the arrows on, I think you are highly ethical. If you had added more arrows to the end, I do not think any of us would have known whether you spent the hours you needed or put a bunch of random extra arrows up there. It is a complicated diagram and those extra arrows might have made the point perhaps, but would not have been properly representative. So, I salute your ethics in not just making the point without putting in the effort to be accurate.

● Adachi I would like to wind up this subject and take questions from the floor.

● Q 2 I am an instructor at Tokyo University in the field of physics and at the same time am also supervising the publication of the journal of the Physical Society. I found Professor Shieber’s statement concerning COPE very impressive, and I have two questions about open access. One is, that I am very much interested in what answer there might be to the question just asked. The fourth one in particular concerns me, journals already being extremely expensive, and if universities continue to pay for high expenses, they will have to seek out new funding. Isn’t there a lot of resistance to doing that? Another thought related to this question: I think that since several years have passed since that statement was issued,

various universities must have actually set up funds, but the statement itself consisted merely of an idea and says nothing about its implementation and operation. That means that there will be variations, so I would be much interested in hearing about any examples of success.

● Shieber You are right, the statement in the compact is abstract and any university that signs the compact needs to decide on particular implementation which will determine cost processes and so forth. But although the compact is high level, there are several universities that have implemented and now have some experience with implementing the compact. So, we now have some results on how that works. We spent a lot of time designing the implementation of the open-access fund that implements COPE so that the costs in the short term are extremely low and the economic system that is setup does not have the market failures that the subscription model does. It also does not depend on monopoly goods and does not have a moral hazard.

I do not have time to explain all the details, but what I would urge you to do is, first, to look at an article I wrote in PLoS Biology that provides the background for COPE that describes how to set things up in this way and predicts the cost will be very low, and second, to look at a post on my blog that provides data on the expenditures by the signatories of COPE over approximately 1 year's time the system has been implemented and show the costs would be extremely low.

In the longer term, if COPE and similar efforts are successful and publishers start changing business model to this open-access publication fee model from the subscription fee model, then the costs of

implementing an open-access fund will go up. But if that happens, we will similarly be saving money on the subscription fees which we will no longer have to pay.

● Adachi I think what was said last is the answer to your first question, and it is true that if we do not do careful calculations, there will be a temporary rise in expenses in some cases. Any other comments?

● Adams I have a quick addition to that. A lot of my problems with this is not that I do not think there is a sustainable model we can reach for. It is like an old joke in English where somebody asks you how do you get to such and such place, and you say, well, I would not start from here. The biggest problem is, from where we are starting, it is difficult for us to get out without involving a system crash. Going back to my previous point, I do not see a view. I would be happy to be educated by Stuart on how we can get from here to there. We agree on where we need to go, but I am not sure getting from here to there is going to be smooth.

● Kato The success stories we have heard here today from our two guests belong to the English-speaking world, and I think it highly unlikely that ordinary Japanese speakers will read our English articles and negotiate with hospitals. That is to say, it will end up with us being asked to write Japanese abstracts, as I said previously, but unless we regulate their contents and who will be allowed to view them, even if we speak of an "institutional repository" or a "mandate," things will just become more confusing, won't they?

● Adachi I'm afraid our two guests from English-speaking countries might find this hard to understand, but in Japan, how to transmit a Japanese academic journal and strengthen it is quite a big problem. Looking at this from a different side, research being international, some might say that we should fight on the international stage, but in Japan there is no avoiding the fact that there is Japan-based debate.

● Kato I just can't imagine ordinary citizens reading English articles.

● Adachi I disagree. I think that they will read English articles, but we need to discuss this quantitatively.

Well, now, are there any questions from the floor?

● Q 3 My name is Koga and I am here from the Kyoto University Library. Considering the previous discussion, I feel that giving something back to the public or to the taxpayers is emphasized in the United States and in England, but Professor Kato has spoken of contributing to the local community, and taking such differences between Japan and England and the United States into account may become a matter for debate. What I mean is that the idea of giving something back to the taxpayers brings to mind an entire nation of people, or some group such as patients, while speaking of local communities limits it to certain areas.

How can we turn this difference to an advantage when considering the promotion of open access? This is a vague question, but I would appreciate your thoughts about it.

● Adachi To put it in concrete terms, do you mean, for example, having a network of hospitals in which university hospitals would create an environment for the depositing of articles, in order to benefit regional doctors? What would you say to that, Professor Kato?

● Kato As far as STM is concerned, there is no access problem for articles published in international journals, no matter where they may be kept. For instance, when considering whether or not a certain person at a certain university would be suitable for reviewing a particular article, we run a search on that person, and if there are some PDFs, that is to the advantage of the researcher. Beyond that, if it doesn't matter where the article is, then people will go to the places with well-arranged formats. Universities have their own policies, but I personally think, considering where one might be seen or one's voice heard when disseminating scholarly achievements, that it would be better to focus on the taxpayers and keep the local community in mind.

● Yamamoto As I am a library clerk, I have been at universities here and there and worked at large ones like Tokyo University and small ones like Ibaraki University. Along with the reorganization of universities as corporations, each university has been launching its own ideas and policy; Tokyo University is for "contributing to the world," while Ibaraki University is for "contributing to the local community." I think each university has its own individuality.

● Adachi I think that in his speech Professor Endo gave an opinion from the point of view of preserving

the power of competition, which I presume is an American idea. The government is behind the notion of taxpayers, but is there any debate on a scope beyond the national? I seem to recall that we have heard a negative opinion on open access, from the point of view of what can be done to speed up a country's innovation.

●Endo What I explained had to do with testimony given during a public hearing of the United States Congress on open access; there was an opinion based on the point of view of the competitive strength of the United States, as compared with other countries. To be specific, the point was made that open access in the United States was profiting China without any benefit to the United States. However, there were many problems that I could not handle adequately in my speech, such as the discrepancy in the benefit different countries receive from open access because in some countries articles are open access, while in other countries they are not, or the problem of how taxpayers feel about it. Of course, the United States, being focused on itself, or because it is the center of academic research, is at the same time a wellspring of funding, but many articles are published in American journals, thanks to the backing of Japanese taxpayers. Moreover, taking another point of view, we might say that by promoting open access, the Japanese government is also making an international contribution. I think that it could be looked at that way.

●Adachi Do you have any comments on this issue?

●Adams There is nothing wrong with considering taxpayers in this area, but the focus on the taxpayer

reader is overstating the interest of most non-academics in academic outputs. Except in a small number of areas, principally clinical studies and clinical trials report, not even most of medicine, most of the public are not able to read what we produce. The reason is not that we are trying to exclude them, but the things we are producing are aimed at experts like us in order to have a conversation between ourselves. That is the first point, and there is a followup to that. When we focus on what the taxpayer gets out of the money that they put into research, there are two answers to improving that. First, we need open access because when the taxpayers pay for a researcher to do their work and if the money is going into the coffers of a private publisher, their money is being wasted and/or if they do not have access, then their time is being wasted. The other thing is it is much broader than open access. We need to change the way the academy is structured so that engagement with the public is valued more and rewarded more within the academy so that the taxpayer gets it more directly. They will not get that out of journal articles, but out of different outputs that we produce.

●Shieber With respect to this question of who the audience is, whether it is the local community, the international general public, or other scholars in the academy and how to tune the system to provide access to the appropriate audience, open access actually simplifies this question considerably. For any given article, what we do know is that the odds that the audience will be in the scope of the average subscription journal are extremely low whereas the odds that potential audience will be within the scope of an internet connection are extremely high.

So, as long as we have open access, it does not matter who the audience is, we are going to cover much more of the audience than under a system with closed access.

●Kato Just now I mentioned STM, but perhaps I ought to have said articles written in English. There are some here from the Japan branches of publishers, and open access is certainly a tool to be used in competing. We have to define its meaning. I wanted to say that, since unfortunately, in the case of Japan, the things that the audience can understand are written in Japanese, there is a problem in deciding what to aim at and how to go about making things open.

●Adachi Thank you very much.

Panel discussions tend to end just as the debate has reached white heat. As we have already gone fifteen minutes overtime, I would like to adjourn the meeting. It was not our object of this panel to draw conclusions, and it is my fervent hope that the conclusions will appear as we keep on with our activities. I would like to press on in the debate and help advance this important issue.

Thank you for your presence here today.