THE OA INTERVIEWS: MIKHAIL SERGEEV, CHIEF STRATEGY OFFICER AT RUSSIA-BASED CYBERLENINKA

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Пока рак на горе не свистнет, мужик не перекрестится

While open access was not conceivable until the emergence of the Internet (and thus could be viewed as just a natural development of the network) the "OA movement" primarily grew out of a conviction that scholarly publishers have been exploiting the research community, not least by constantly increasing journal subscriptions. It was for this reason that the movement was initially driven by librarians.

OA advocates reasoned that while the research community freely contributes the content in scholarly journals, and freely peer reviews that content, publishers then sell it back to research institutions at ever more extortionate prices, at levels in fact that have made it increasingly difficult for research institutions to provide faculty members with access to all the research they need to do their jobs.

What was required, it was concluded, was for subscription paywalls to be dismantled so that anyone can access all the research they need — i.e. open access. In the process, argued OA advocates, the ability of publishers to overcharge would be removed, and the cost of scholarly publishing would come down accordingly.

But while the movement has persuaded many governments, funders and research institutions that open access is both inevitable and optimal, and should therefore increasingly be made compulsory, publishers have shown themselves to be extremely adept at appropriating OA for their own ends, not least by simply swapping subscription fees for article-processing charges (APCs) without realising any savings for the research community.

This is all too evident in Europe right now. In the UK, for instance, government policy is enabling legacy publishers to migrate to an open access environment with their high profits intact. Indeed, not only are costs not coming down but — as subscription publishers introduce hybrid OA options that enable them to earn both APCs and subscriptions from the same journals (i.e. to "double-dip") — they are increasing.

Meanwhile, in The Netherlands universities are signing new-style Big Deals that combine both subscription and OA fees. While these are intended to manage the transition to OA in a cost-efficient way, publishers are clearly ensuring that they experience no loss of revenue as a result (although we cannot state that as a fact since the contracts are subject to non-disclosure clauses).

More recently, the German funder Max Planck has begun a campaign intended to engineer a mass "flipping" of legacy journals to OA business models. Again, we can be confident that publishers will not co-operate with any such plan unless they are able to retain their current profit levels.

It is no surprise, therefore, that many OA advocates have become concerned that the OA project has gone awry.

Alternative models

As the implications of this have sunk in there has been growing interest in alternative publishing models, particularly ones that hold out the promise of disintermediating legacy publishers.

So, for instance, we are seeing the creation of "overlay journals", and other new publishing initiatives in which the whole process is managed and controlled by the research community itself. Examples of the latter include the use of institutional repositories as publishing platforms, and the founding of new OA university presses like Collabra and Lever Press.

Others have cast their eyes to the Global South (where the affordability problem is both more longstanding and far more acute) for possible alternative models. In doing so, they frequently point to Latin American initiatives like SciELO and Redalyc. (See, for instance, here, here, and here).

Both these services started out as regional bibliographic databases, but over time have added more and more freely-available full-text journal content. Today SciELO hosts 573,525 research articles from 1,249 journals. Redalyc has more than 425,000 full-text articles from over 1,000 journals.

But does Western Europe need to look as far afield as Latin America for this kind of model? The Moscow-based CyberLeninka, for instance, reports that it currently hosts 940,000 papers from 990 journals, all of which are open access, and approximately 70% of which are available under a CC BY licence. Moreover, it has amassed this content in just three years.

Significantly, it has achieved this without the support of either the Russian government, or any private venture capital, as CyberLeninka's Chief Strategy Officer Mikhail Sergeev explains in the Q&A below. The service was created, and is maintained, by five people working from home. Their goal: to create a prototype for a Russian open science infrastructure.

What struck me in speaking to Sergeev is that many of the problems the Russian research community faces today are strikingly similar to those facing the research community everywhere, if somewhat more extreme in both scope and effect. So could CyberLeninka be developing solutions that the West could learn from?

On one hand it would seem not, since CyberLeninka does not currently have a business model, and so no income. It is also not entirely clear to me how the 990 journals it hosts fund and manage themselves. One would also want to know more about the quality and topicality of the 940,000 papers on the service. What *is* clear is that the most prestigious Russian journals are not freely available today. We in the West can certainly identify with that problem.

On the other hand, to focus on business models alone is perhaps to miss the point. Surely the Russian government should be funding CyberLeninka, and surely it should be seeking to get the prestigious journals published by the Russian Academy of Sciences on CyberLeninka too? Admittedly the latter could present challenges as the journals were in, effect, (and mistakenly) "privatised" in the 1990s. But that does not mean it should not happen.

The point to bear in mind is that the OA strategies currently being pursued in the West appear to be no more sustainable than the subscription system. Better solutions are therefore needed, and so the more experimentation the better.

And remember, CyberLeninka says it has achieved what it has achieved with no source of revenue. Moreover, in the process of loading journals on its system it is making them OA — without the costs normally associated with journal "flipping". That should focus minds on the cost of scholarly publishing.

In the meantime, of course, CyberLeninka continues to face a serious financial challenge. If it is to prosper, and to embark on the many new initiatives it has set its sights on — including developing overlay journals and offering other repository-based publishing services — some source of funding will be essential.

Mikhail Sergeev

The interview begins …

RP: Can you start by something about yourself, your background, your research interests, where you are based, and your role at CyberLeninka?

MS: My name is Mikhail Sergeev, I am the Chief Strategy Officer at the CyberLeninka project. I was born in Moscow, Russia, graduated at Physical and Mathematical Gymnasium 1534 in 1998, and then at the National Research Nuclear University (formerly the Moscow Engineering Physics Institute) in 2003.

My graduate diploma [thesis] was called: "Research and development of steganographic methods in information security". Right now my research interests include: open science, open access, scientometrics, the research e-infrastructure, current research information systems (CRISes), recommender systems, expert systems and electronic libraries.

RP: To provide some national context before we go on to discuss CyberLeninka, can you say roughly how many researchers there are in Russia today, and what Russia's research strengths are?

MS: According to RosStat there are currently 373,905 researchers in Russia. Our research strengths are: physics, mathematics, astronomy, IT, biology, and chemistry.

RP: How many universities and research institutions are there in Russia?

MS: RosStat reports that there are 3,604 organizations involved in research in Russia today.

RP: Who are the main Russian research funders, and how is research money distributed?

MS: The main Russian research funder is the Russian government, and research money is distributed via a number of different funds by means of grant programs.

RP: How large is the Russian research budget and how does that compare on a like-for-like basis with other countries? (By percentage of GDP for instance)?

MS: The UNESCO Institute for Statistics reports that the Russian research budget is 1.13% of GDP. [A country comparison is available here].

RP: Can you say roughly what proportion of the research papers published each year globally are produced by Russian researchers?

MS: I don't know the global numbers, but in in terms of the Web of Science it was 1.71% in 2014.

RP: What are the main challenges Russia faces today with regard to scholarly communication?

MS: As noted, most of the funding for Russian science is provided by the government. The problem is that due to corruption and imperfections in the system most of Russia's scientific output ends up benefiting business interests.

In fact, it is not just that it benefits business interests, it creates monopolies, and these monopolies then sell the results of publicly-funded research back to scientists and — most absurdly — the government itself.

So the government pays at least twice — first, it funds research to produce scientific results; second, it pays to use the results of that funding (in order to produce new research).

Monopolies & fake reports

RP: Can you give me an example of this?

MS: The Russian government wanted to produce a system that could chart scientific activity in Russia, which led to a project called "Map of Science". But in order to populate the map, data from 3 or 4 different data sources has to be purchased. Yet all of these data sources were themselves created with taxpayer's money.

In other words, in order to create a new scientific service a publicly-funded project has to buy data from other projects that were also created with taxpayer's money.

RP: I note a report [here](#) says that the Map of Science study was outsourced to PriceWaterHouseCoopers. Where does that fit with what you say? I also note that Elsevier will be [adding Scopus data](#) to the Map of Science.

MS: Yes, you are right. The project was initially outsourced to PwC, but it is now run by another organization. Some background information on what happened is available in Russian [here](#).

I have no information on the Scopus matter you mention. But I will give you another example of the problems we face: using government money a system called [eLibrary](#) was created. The Ministry of Education and Science [requires that research institutions populate the eLibrary database](#) (in order to report on their publication activity). But eLibrary doesn't belong to the government, so institutions have to buy access to the database in order to complete the Map of Science.

eLibrary was also given a [monopoly to sell](#) the most elite Russian journals.

RP: What do you mean when you talk about elite journals?

MS: I mean the science journals created during the Soviet period. These journals belong to the Russian Academy of Science ([RAS](#)), and historically they are the most cited and respected Russian journals. Today eLibrary has a monopoly to sell these journals to Russian scientists and to the government. That is, eLibrary is the only way for scientists in Russia to read articles that RAS publishes (in the Russian language). This a consequence of some unwise decisions made by the Russian Academy of Science [in the early 90s](#).

In addition, eLibrary acquired a monopoly on selling international journals in Russia. This was [initially with one organisation](#), today a different organisation provides access to the journals.

RP: Is eLibrary the same thing as the Russian Scientific Electronic Library? Also, where does the Russian Science Citation Index ([RSCI](#)) fit in here?

MS: Yes, eLibrary is the same thing as the Scientific Electronic Library. And RSCI is part of the same organisation.

RP: And would I be right in thinking that eLibrary, RSCI and the Russian Scientific Electronic Library all belong to [Alexander Shustorovich's](#) Pleiades Publishing.

MS: Well, there are a number affiliations involved. If you take a look at the [whois history for the domain name elibrary.ru](#), you will see that in 2010 it belonged to LLC RUNEB. According to our [Federal Tax Service](#) 51% of LLC RUNEB belongs to Pleiades. However, the connection is not made transparent.

RP: I note on [this web site](#) it states that in 1992 a company called Nauka/Interperiodica was created by the Russian Academy of Sciences and Pleiades Publishing in order to sell RAS journals and books. And in 2005 that company agreed a deal with Springer to jointly promote and distribute these publications?

MS: Well, the deal with Springer is to sell translated versions of the RAS journals worldwide. The point is that eLibrary was created as a monopoly to sell Russian journals in the home market, so when it contracted with Springer to sell English versions it created a new monopoly. This means that today we have the absurd situation in which English versions of our most elite journals somehow belong to Springer.

That said, I don't think Springer is itself very happy with the arrangements with eLibrary, and it sought to review its agreement with Pleiades in the course of its merger with Nature [see also].

The larger point here is that all the distortions we see in Russian science have had a drastic impact on the whole system of scholarly communication, not least on the quality of research outputs, peer review, etc. Today, most research papers are written not in order to communicate research findings but in order to create fake reports.

RP: Can you clarify what you mean by fake reports, and why they are written?

MS: The distribution of funds in Russian research is based on a number of metrics. The main one is "publication activity". This means that in order to receive more money from the government, research institutions must produce metrics (papers). As a result, researchers are compelled to publish as much as possible, but nobody really cares about the quality of/demand for these papers.

Moreover, in order to satisfy this demand many so called predatory publishers have emerged. These publishers create a "journal", and then take money to publish literally anything in it.

In addition, existing journals are now seeking to "monetise" their workflow in this way.

RP: The common understanding of a predatory journal is an open access journal that charges authors to publish their papers, but provides little or no peer review in return. Are the journals you refer to similar to or the same as the predatory publishers listed on Jeffrey Beall's site?

MS: They are not "predatory" in the sense that the OA movement uses the term, because they are not related to open access. That is, we have journals that are not OA but still charge authors to publish their papers without peer review. We also have dozens of fake "conferences".

RP: Are these publishers and conference organisers based in Russia, or do Russian researchers tend to use predatory operations based elsewhere?

MS: To the best of my knowledge our researchers will use anything that is available. There are conferences in Bulgaria, Greece, Ukraine and so on.

But the worst are the so called "zaochnie" conferences. I am not sure how to translate that word into English, but these "conferences" require nothing from the researcher. They just have to send a paper and pay some money. They are not even online/video conferences.

Then after the "conference" the papers are published as a compilation and listed in the RSCI so that they can be reported as "research publications".

RP: Would it be accurate to call these "correspondence conferences" (in the model of [correspondence courses](#)). The key thing presumably is that they do not require attendance at a physical event.

MS: I am not sure that that's an accurate translation. But the point is that a conference is a meeting of people who "confer" on a topic. With a regular conference if you don't attend physically you need to take part online, or confer in some other way. In the case of zaochnie conferences it's just an excuse to publish something. No opportunity is provided to confer about anything.

RP: Some argue that the pay-to-publish business model that many open access journals now operate encourages predatory publishing. This would suggest that the problem of predatory publishing is likely to increase as a result of OA. Would you agree?

MS: In my opinion OA is not the problem here. As I noted, in Russia we have journals that have nothing to do with open access that nevertheless offer pay-to-publish services without peer review. Essentially, this is an ethical problem.

RP: The scenario you paint of researchers having to publish more and more papers in order to assure future funding and continued employment and/or promotion (with a consequent fall in the quality of the research produced) is a growing global problem today. What is unique about the situation in Russia?

MS: What is unique is the fact that there are practically no scholarly ethics in Russia. Nobody, even those who work in the research community, cares about what's going on; and if some do care, they treat the issue as a political football. The problems have become completely politicised, which frustrates any attempt to rectify the situation.

RP: Ok, so I guess predatory publishing is particularly acute in Russia. What can be done about it?

MS: Yes, it is a big problem. As noted, the seriousness of the problem is due to the fact that the system itself enforces this kind of activity.

The best solution we see is to open all of Russian science to the public. It would be much more difficult to engage in this kind of activity if all research papers were open to the world.

Globally, what is needed is to refocus science from a "publish or perish" model to one that emphasised knowledge-sharing. This is the vision [described](#) by European Commissioners Günther Oettinger and Carlos Moedas on the occasion of the "Opening up to an ERA of Innovation" conference.

CyberLeninka

RP: Let's move on to discuss CyberLeninka: when was the service established and what is its objective?

MS: [CyberLeninka](#) is a non-profit Russian open access scientific library founded in 2012. The main objectives of the library are to promote Russian science and research activities, to

enable public control of the quality of scientific publications, and to develop a modern institute for peer review and interdisciplinary research.

We believe that CyberLeninka will prove the first step in the construction of an open science infrastructure in Russia (or at least a prototype). Most of the content is licensed under the Creative Commons Attribution License (CC BY). So the aim is to promote the ideas of open science, open access, and open licences here in Russia.

RP: The name you chose for the service would seem to imply you want to create a virtual equivalent to the Russian national library in Moscow, previously known as the Lenin Library and now the Russian State Library. Is that right?

MS: You are right, Leninka (as the library is affectionately known) is the biggest library in Russia (and possibly in the world, since it competes with the US Library of Congress in terms of storage units).

Our goal was to become the largest open access library in Russia. We've reached that goal, and we continue to grow.

RP: Can you share with me some figures on CyberLeninka?

MS: Right now we host more than 900,000 scientific articles. We rank well in the Webometrics database, we are 3rd in the world in terms of visibility in Google Scholar, and 5th in the world in terms of rich files (i.e. pdf files). As a result of our work OpenAIRE lists Russia as one of the top five European countries in terms of open access provision. In fact, the latest data suggests we are now in number 1 position.

I've just produced more detailed numbers for our annual report. This shows there are 990 journals, 940,000 papers, 365,000 registered users, 22 million visitors, 800,000 unique visitors from Europe and the US, 26,000 Facebook subscribers with an overall reach of 2.6 million, 94,000 VK.com subscribers with an overall reach of 1.6 million, and 6,800 twitter subscribers with an overall reach of 1 million.

Please also refer your readers to the poster we produced for OAI9.

RP: What about the content hosted by CyberLeninka? I assume it is all peer-reviewed, but is it just scholarly papers, or other types of content as well? Is it all full-text? Is CyberLeninka intended to be a national repository that pools copies of papers published in Russian and international journals in the manner of the French HAL, or is it (like, say, SciELO or AJOL) more of a platform for national/regional journals to make their papers openly available online?

MS: Currently, we host only peer-reviewed scholarly papers, all of which are full-text. Roughly 70% of our journals use the CC BY licence.

At the moment we are more of a platform for journals and we offer them the opportunity to make their papers more visible worldwide.

RP: So the content is not posted to CyberLeninka by the authors, but by journal publishers?

MS: Yes, all the content in CyberLeninka comes directly from journal publishers.

RP: You say that 70% of the journals in CyberLeninka use the CC BY licence. Does that mean that the others are not open access (i.e. freely available in full text), but just provide the bibliographic details?

MS: No, it means that when we sign agreements with publishers some are happy to adopt CC-BY, some are not. Either way, we never host the metadata alone. So some of the full-text is licenced under CC BY, some isn't. We only enter into an agreement with a publisher if it is willing to provide the full-text.

RP: How do the journals whose content is hosted on CyberLeninka fund themselves: do they charge APCs, do they charge subscriptions, or what?

MS: The journals use a number of different business models.

RP: I was pointed to a [presentation](#) you gave at CRIS 2014. In there it is stated: "CyberLeninka – open access repository with gold-like method which assumes placing articles of traditional (non-OA) academic journals in public domain and ensuring their visibility on the Internet". I am wondering what that means in practice." What, for instance, does "gold-like method" imply here, and what does putting them in the public domain mean? (does it for instance mean attaching CC BY). Have your views about what CyberLeninka is changed since then?

MS: At the time of the presentation we had not come across the term "platinum open access". Which is why we said "gold-like". All of the journals we host were "non-OA" when we approached them. So you could say that we are converting them to OA by hosting them.

RP: I am wondering why a non-OA journal would make its content OA in this way, particularly if it normally charges a subscription for its content.

MS: Journals work with us because they don't make any noticeable revenue from their subscriptions. The government pays them, and it pays more if their articles go into a global database like Google Scholar. We provide that service for the journal for free, which is really why they are willing to work with us. We also provide them with some metrics for their articles (i.e. download rates). Again the government will pay them more if those metrics are available.

RP: When you say that CyberLeninka puts the journals it hosts in the public domain I assume you mean that you attach a CC-BY licence?

MS: Correct.

RP: What checks do you do to ensure that the journals whose articles you host are not predatory journals?

MS: We don't do any checks on the journals we host, as we view ourselves as an infrastructure provider only. However, we are working on a system that will rank documents (and display them to end users) according to a number of metrics. This will lower the visibility of poor-quality papers.

RP: So what is CyberLeninka's business model? Do you have any income at present?

MS: Sadly, CyberLeninka doesn't currently have any income. Our hope is eventually to monetise what we do by offering services for publishers and/or institutions (B2B), but we haven't found a way yet. We see no possibility of offering payable services to end users (B2C).

RP: Is the content in CyberLeninka exclusively in Russian, or partly in Russian. If the latter, what are the language percentages?

MS: Most of the papers are in Russian, but we also have articles in English, French, German, Greek, Armenian, Ukrainian, Belarusian, Kazakh, Uzbek, and Serbian. However, foreign languages are very much in the minority, and I would say roughly 95% of our content is in the Russian language.

RP: Do you also host scientific data, or plan to do so?

MS: We don't host any scientific data at the moment, but, yes, we have plans to do so.

RP: You said earlier that one of the goals you have set for CyberLeninka is to enable "public control of the quality of scientific publications". How do you plan to do that?

MS: We believe that openness leads to transparency, and if we open all our papers, society will read them and respond. Moreover, if it is known that every new paper will be freely available to the public it will impose some discipline and responsibility on the people that participate in scholarly communication — i.e. those who write, review and publish scholarly papers.

RP: An [article](#) on a Russian open science web site suggests that obtaining funding is proving particularly difficult for CyberLeninka, both private funding and government funding. Can you say more about that and how you hope to overcome the funding challenge?

MS: Funding is a huge problem for us, not least because we are growing rapidly. At the beginning of the year we published [an article](#) about this. In that article we explained how, despite the fact that our work is recognized and valued by Russian society, by business, and by government, no one is willing to support us with funding.

The article had considerable resonance and we managed to start a dialogue with the Russian Ministry of Education and Science. But time has passed and nothing has changed.

Our problem is that we are operating outside the existing system, and as a result of the endemic corruption I mentioned nobody in executive authority is interested in what we are doing, not least because if our approach became the norm it would completely change the rules and so require the existing system to adapt.

So we face the absurd situation where everybody uses and appreciates the services we provide, but nobody is willing to support us. Corporate social responsibility is completely

broken in Russia: it's much easier to spend money on corporate parties or bonuses for top managers than on projects of real social value.

In terms of private money, crowdfunding tends to work best for media and political causes, and start-ups are able to get funding only where they are working in very well-understood areas, and where it is clear exactly how the project can be monetised. Long-term infrastructure projects are doomed, and if they concern science and digital networks, well … they are triply doomed.

RP: So how are you funding your operations in the meantime? There must be costs associated with running CyberLeninka, and I understand there are a number of employees including you? I do not think you are selling any of your services.

MS: No, we don't sell any services. We are investing our own money in CyberLeninka. In terms of employees, there is a core team of 5 people, plus a number of others who work on a freelance basis.

RP: Are you also having to rent office space?

MS: No, we don't have money for that. We all work from home.

RP: The poster you pointed me to earlier concludes, "The next step [for CyberLeninka] is to refine and enrich this data through interacting with authors and scientific organizations, academic publishers, universities, etc. and collect additional data. Based on this data we plan to build new high-level services and provide special features for scientists to connect, collaborate and work together." Can you say more about these services?

MS: We have plenty of plans, including the implementation of scientometrics (including altmetrics), recommender systems, HR science, plagiarism detection, CMS for OA journals with open peer-review (PeerJ like), scoring papers by quality and/or demand, community driven expertise for papers and creating narrowly focused "must-read" lists, support for scientific data storage (and other formats, like presentations, diplomas etc.), OECD classification, author-related database normalisation, mobile design, ORCID integration, DOI and so on.

But the problem we face is that our funds only allow us to maintain and update what we have. Sadly, there are no resources to build new services.

RP: When you talk about wanting to develop a content management system (CMS) for OA journals, does that imply you would like CyberLeninka to become a publisher in its own right, or rather that you want to move beyond providing hosting services to providing a publishing platform for others?

MS: We want to move beyond providing hosting services and offer a publishing platform. To help kick start this we are looking to create our own journal covering open data and open science, and use that as a way of developing and testing our planned CMS service.

RP: It seems a great shame that there is no funding available to enable you to develop CyberLeninka in the way you would like. Is there anything that colleagues in Western Europe or the US could do to help?

MS: We are already getting a lot of non-monetary support from Western Europe and the US, from organisations like euroCRIS, EIFL, Creative Commons, OpenAIRE, EBSCO, OSF SHARE, RePEc, OCLC, and we are having very productive dialogues with many others.

Open access more broadly

RP: Can we look more broadly at open access in Russia. You said that there are 3,604 institutions in Russia that conduct research. The Registry of Open Access Repositories (ROAR) lists just 59 repositories in the Russian Federation, including CyberLeninka. This compares with 765 in the US (And in fact OpenDOAR appears to list even fewer Russian repositories). Since ROAR indicates that CyberLeninka has just 257 records we might want to take these figures with a large dose of salt, but would it be accurate to say that the institutional repository movement has failed to take hold in Russia?

MS: I don't think anybody in the existing system in Russia is interested in the institutional repository movement, not least because of the monopoly in scholarly paper distribution I mentioned.

As for ROAR, it is not clear to me that the service is supported any more. I tried recently to communicate with the University of Southampton (where the service is hosted) in order to have the problem fixed, but without success. For current CyberLeninka numbers, therefore, it is better to refer to Google Scholar or OpenAIRE.

RP: You say that nobody in Russia is interested in institutional repositories. I guess this means that there is no interest amongst Russian researchers or research libraries in making copies of papers published in subscription journals accessible outside paywalls?

MS: I would put it this way: There is in our research institutions no real interest in distributing digital materials, and this is because most papers are produced by the Russian Academy of Science, and RAS has created a system focused on making money not on distributing research.

But things are beginning to change, which is why we have been able to do what we are doing. One driver is that Russian research institutions who do not belong to RAS have become interested in increasing the visibility of their papers.

RP: What is also striking is that the Registry of Open Access Repository Mandates and Policies (ROARMAP) lists just 5 institutions in Russia with an OA policy. Does that sound right to you? Is there also little interest in OA polices in Russia?

MS: Those numbers seem about right to me. What you have to bear in mind is that most publishers, scientists and others engaged in scholarly communication in Russia have no real concept of open access. Here it is assumed that anything you can download from the Internet without paying for it is open access.

We are trying to correct this perception, but our resources don't stretch very far. We are having some success in convincing publishers that they should make their papers available under a Creative Commons licence, but explaining the nature and need for OA policies is a huge challenge, one we are simply not able to take on alone.

RP: You say there is little interest in, or knowledge about, open access in Russia today. However, I would like to explore some possible futures. Most researchers today, wherever they are based, are incentivised to submit their papers to international journals published by large companies like Elsevier, Wiley and Springer. I assume it is the same for Russian researchers. If so, what are the implications if these subscription publishers increasingly move to a pay-to-publish gold OA model where article-processing charges of around $3,000 per paper are levied (which is the norm for hybrid OA today). Would it be problematic for Russian researchers if they had to pay these kind of fees to have their work published? For instance, do any research institutions in Russia operate [OA journal funds](#) in order to make money available for faculty who want to pay to publish in gold OA journals? Does the Russian government allow researchers to use their grant money to pay publication charges?

MS: I don't think the gold OA model would really suit us. Certainly I am not aware of any institutions that operate OA funds.

In terms of grants, currently the percentage of a grant that can be spent on publication fees in Russia is around 0.5%. This contrasts with other parts of the world, where the figure can be more than 8%. So no, there is no possibility that researchers can use their grant money to pay APCs.

RP: As you know, open access advocates talk about green OA and gold OA, where green implies that researchers continue to publish in subscription journals and then self-archive a copy of their papers in a repository (normally assumed to be an institutional repository). From what you say about the availability of money to pay APCs, and what you said earlier about institutional repositories, I am thinking that neither model is really suitable for Russia. Would that be right?

MS: Given the current situation, I think that is right.

RP: More recently there has been talk of so-called [platinum open access](#) (or what is sometimes called [diamond OA](#)). This is where journals fund themselves by other means than APCs. The aim is to allow authors to publish for free, and readers to read for free. One way of achieving this is to fund journals by means of institutional membership programs — see, for instance, the proposal outlined by the [Open Access Network](#), or the international library consortium [approach](#) pioneered by the Open Library of Humanities (a model the [newly launched](#) Lever Press also plans to use). Do you see this kind of model having any traction in Russia?

MS: Yes, I think Russia's road to OA would need to be a platinum one, and that makes sense because the government funds most of our research activity. And I think the fact that most research funding comes from the government gives Russia a unique opportunity to create a new open science infrastructure. Our work on the CyberLeninka project is a recognition of this.

RP: Another emerging model is the so-called "[overlay journal](#)", where journals or "peer review platforms" are created on top of central repositories like arXiv. Could you see this model emerging in Russia? Are there already examples of this?

MS: Yes, and it is our dream to enable such journals to be created in Russia. Right now I do not think there are yet any Russian examples of such journals.

RP: To return briefly to the funding challenge: the open access movement was kick-started by, and has been consistently supported by, George Soros' Open Society Foundation. Many OA projects around the world have been funded or part-funded by OSF. I note that recently OSF was banned from disbursing grants in Russia, on the grounds that it is a threat to the country's constitutional order. Will this have any impact on the growth of open access and open science in Russia do you think?

MS: This will have no impact on open access in Russia. Sadly, in these days of the "second cold war" most external funding has political motivation or implications. I don't think anyone outside Russia really cares about Russian science, particularly given that we don't care about it ourselves.

RP: What is your vision for scholarly communication in Russia in the future?

MS: Our vision fully coincides with that outlined by Oleg Utkin, Head of Thomson Reuters IP & Science in Russia. In an interview published last December, he said "I think most of the journals will move to open access. Subscription cost will be reduced to a level comparable to the monthly payment for the Internet. There will be found other forms of commercialization. For example, you can take the money for qualified search and selection of sources for the desired topic".

When crawfish whistle

RP: There are today growing concerns that a handful of international publishing companies have monopolised global scholarly publishing — creating what a PLOS ONE article describes as "The Oligopoly of Academic Publishers in the Digital Era". Springer's partnership with Pleiades suggests that the ambitions of these companies by no means end at the Russian border. Can you envisage the possibility of Springer, Elsevier, Wiley or Taylor & Francis acquiring Pleiades and other Russian publishers?

MS: I think that if Springer (or any other large publisher) was really interested in our journals Pleiades would have been bought long ago. The fact is that these big companies don't need Russian language journals, and the English-language versions that Springer finds itself having to promote offer only very poor quality translations. Moreover, the way the system is currently organised is disastrous.

So I don't think anyone is ever going to be interested in buying that part of Russian science, especially with open access gaining pace, and posing a large geopolitical risk for publishers. It's just too late for that kind of acquisition.

RP: On the other hand, of course, the PLOS ONE study I mentioned suggests that the power of the publishing oligopoly has increased in the digital environment. And right now it appears that these large publishers are appropriating open access in a way that could further consolidate their power. Time will tell of course, but I want to ask: the picture of the Russian research environment that has emerged from our interview seems to me to be quite gloomy. To finish on a positive note can you give me three or four signs that suggest the future for Russian research is likely to improve in the near future?

MS: I can. First, our society and even our government have started to talk about open access, which is a very positive sign. And even if the government backpedals or inappropriately exploits OA, society is moving ahead. [Sci-Hub](#) is good example of this.

Second, Massive Open Online Courses ([MOOCs](#)) are currently growing rapidly in Russia, and OA would be a very good resource for such courses. This should help stimulate the growth of OA.

The third — and somewhat bi-polar — point to make is that historically the main driver of Soviet science was our military-industrial complex. Right now the "second cold war" is seeing budgets in this area increase. I would think that this can only provide a new impetus for Russian science, however regrettable the reason.

So while the picture might seem gloomy, there are positive signs (at least I hope so!). I would also say that history teaches us that the Russian way is to move to extreme positons, and then do something extraordinary. We have a proverb: "Пока рак на горе не свистнет, мужик не перекрестится". This means something like: "Man will not cross himself until the crawfish whistles on the mountain".

So we can but hope that the gloomy situation we find ourselves in right now is the pregnant silence before the crawfish starts to whistle!

RP: I see that proverb has been [translated into English](#) as "Pigs might fly" or "once in a blue moon". But you mentioned [Sci-Hub](#), which is a "pirate" search engine for scientific articles that bypasses publisher paywalls. As I understand it, Sci-Hub is run out of St Petersburg by neuroscientist [Alexandra Elbakyan](#). As you will know, Elsevier won a preliminary injunction against the service last year and the domain name was disabled. Shortly afterwards, however, a defiant Elbakyan changed the domain name and put the site [back up](#). Elbakyan [argues that](#) "Everyone should have access to knowledge regardless of their income or affiliation. And that's absolutely legal. Also the idea that knowledge can be a private property of some commercial company sounds absolutely weird to me." Sci-Hub is an example of civil disobedience, and is intended to force scholarly publishers to embrace open access. Do you think this is a legitimate strategy for open access advocates to adopt, and do you think it can be a successful strategy?

MS: Well, if the court says it is not legitimate … However, the point is that Sci-Hub exists, and technically it will be practically impossible to destroy it (certainly as an idea). And if one believes (as I do) that the "Sci-Hub way" is inevitable (as [BitTorrent](#) was) then it seems clear that even large scholarly publishers will have to embrace open access.

Personally, I think publishers need to say this to themselves: "Whatever happens scientists are going to read these papers, so we have to choose whether they are going to read them on our platform or elsewhere."

It is obvious that "our platform" is better than "elsewhere", since that gives publishers an opportunity to monetize the content by offering different services, advertising etc.

RP: My final question then: I think that uppermost in both our minds during this discussion have been the [STEM subjects](#), not the humanities or social sciences. Do you think discussions about these latter subjects need to be framed in a different way to STEM

so far as OA is concerned? For instance, humanities scholars are more focused on producing books than journal articles, which perhaps raises different issues when it comes to OA. Would you agree? If so, what are these different issues, and is there a specific Russian context that needs to be understood in discussing them?

MS: I don't think we should differentiate the sciences from the humanities when discussing open access. In my opinion we should not constrict OA, but expand it beyond scientific publications. All research should be in the public domain. As I see it, in the digital era copyright laws need to be viewed as little more than atavism.

RP: Thank you for taking time to speak with me. I wish you and your team at CyberLeninka the very best for the future.

MS: Thank you, Richard, that was the most interesting and thorough interview that I ever had.

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