

To VSNU, NWO, NRO, HBO-Raad, FvOv, Platform VVVO, VOR, OC and NVvW

October 12 2016 – Appendix October 17 2016

Concerning: A new way for membership dues and open access publishing

Dear Sir, Madam,

I have limited experience with respect to the publishing industry. Around 1980 as a student I was member of the board ("publisher") of the "Universiteitskrant" (UK) in Groningen. In 1982-1991 at the Dutch Central Planning Bureau (CPB) I was, for about the first four years, the industry specialist for the paper, printing and publishing sector. I have also some self-published books.

I noted the Max Planck Society roadmap^{1 2} and the VSNU reports on open access publishing.³

Let me suggest a new way for membership dues and open access publishing.

Teacher organisations aren't scientific organisations but teaching should be evidence based and the associations would tend to respect research and applied science. For teachers there is the suggestion of *academic schools*, modeled after academic hospitals, where there is integration of practice, research and training.⁴ The experience of VSNU on open access can be relevant for teacher associations (think also of textbooks), and the notion of membership dues might be relevant for VSNU.

(1) Membership dues

Membership dues of professional organisations like (academic) "Vereniging Onderwijs Research" (VOR) and teacher associations can be recovered from the employers, via the CAO rule on employment costs.⁵

Problem: When someone doesn't join up, then this doesn't happen.

Thus, many associations have not as many members as would be feasible.

Thus, many associations try to encourage membership by using a pay wall for their publications.

For example, as a teacher of mathematics and researcher in mathematics education, I discovered that "Euclides" (journal of NVvW) and "Pedagogische Studiën" (journal of VOR) are behind pay walls. PM. Currently I am between jobs and apparently cannot reclaim membership dues at an employer. (I use my situation as example, not as motivation to write to you.)

Solution: Create a closed shop, so that the employer pays the membership due for an association that the employee chooses. For some professions like teacher of mathematics there

¹ <https://openaccess.mpg.de/2365/en>

² <http://oa2020.org/roadmap>

³ <http://www.vsnu.nl/openaccess>

⁴ <https://boycottholland.wordpress.com/2014/07/18/the-medical-school-as-a-model-for-education>

⁵ http://www.belastingdienst.nl/bibliotheek/handboeken/html/boeken/HL/stappenplan-stap_8_eindheffing_werkkostenregeling_berekenen.html or https://www.fnv.nl/site/dossiers/or_en_pvt/sub_or_en_arbeidsvoorwaarden/nieuws/or-brochure-werkkostenregeling

can be default associations like NVvW, but with the option to change this. An employee might have the option not to be a member, but then would not get a higher net income. The difference with the current situation is that the payment is by default instead of non-payment as default.

Corrollary: There would be no need to create pay walls for the journals. Members would get printed copies (if they like) and non-members would have open access online only.

Corrollary: Members of one association could easily join up with other organisations, e.g. for voting rights and so on. For example, NVvW and VOR might agree that members of NVvW might also apply for membership of VOR for free, or at a low rate. It would be up to CAO bargaining whether employers would agree to finance more memberships.

Corrollary: Potential members without an employer, like retired teachers, might join up for free or at a low rate, since the basic costs have already been covered.

(2) Repositories or archives

Employees of Dutch universities can already submit working papers or preprints to repositories at their libraries.

Problem: There are non-academic institutes that still produce research or applications. For example there is the Central Planning Bureau (CPB) or there are teacher associations where teachers can submit articles to their journals. This kind of work doesn't have repositories like those of VSNU. For example, CPB regards its working papers as "publications" themselves, and there are no preprints for those, even though there can be very interesting versions (with online comments). Or a paper might be rejected by Euclides but still be of interest (potentially to the surprise of the editors). Euclides has a monopoly position on this kind of papers (namely in Dutch for the Dutch system), and an author might put the paper on his or her own website, but then it would not be indexed and such.

Solution: Let each institute of higher education (HE) create a repository for its alumni. When an institute grants a degree, then the institute accepts that the graduate can perform work at a certain level, and let the institute then also support the archiving of this work. An alumnus doesn't have to use this repository, but its availability would be useful.

In Holland, the institutes of higher education are basically financed by the government. In other countries, either the government would finance the repositories, or employers would regard these as another form of membership dues. The problem is rather not finance. The problem rather is that external repositories like arXiv.org have the problem of screening for quality. The graduating institution however has accepted the quality by granting the degree.

For example, an employee of CPB might put versions of a paper at the repository of the graduating university, and perhaps eventually publish as an "official CPB working paper".

Corrollary: Publication costs for journals would drop dramatically.

(3) Journal editing costs

The idea of editing is that (a) comments from others might improve the quality of the final version, (b) a journal signals to the readership what would be interesting to read, (c) a journal helps to signal the "research base" of "commonly accepted knowledge". Thus journals and their editors have a role in "forum theory" proposed by methodologist A.D. de Groot. His text at KNAW should be translated into English.⁶ Still, once a researcher has established a sound reputation, one might as well look at the author's repository, since comments by editors might not always be so useful.

Problem: Some media have editors that require additional payment. For example, *Nature* has a commercial publisher (MacMillan / Springer Nature) and a staff of professional editors.⁷ Teacher journals for larger associations may also have (parttime) professional staff, e.g. when a teacher gets a day off from school and is paid by the association to edit the teacher journal. (This is apart from the printing run.)

⁶ <https://www.know.nl/nl/actueel/publicaties/het-forumwaarmed-merk-van-wetenschap>

⁷ <http://www.nature.com/nature/about/index.html>

Solution: The academia already accept that a major part of research itself is to comment on work of others. Thus editing costs for academia are basically covered by the academia.

For teachers, there is the suggestion of academic schools. Part of this is to accept that editing papers on research on education would be part of this kind of work.

Editors would mainly harvest papers from the archives, editorial comments might be regarded as submissions too, and a "published version" is also included in the repository at the institute of HE (or only with a link to an open access location elsewhere).

The key function for journals is software to support the editing process, and this can be available as open source too.⁸ Articles and books can be printing on demand. The role of University Presses is to reduce costs by volume printing if there is high demand. A reader should have the option to compose his or her own selection of articles from various sources that one wishes to receive in print as well, rather than that editors at various journals make that selection. Thus the costs of printing and mail can be reduced for a personalised collection, printed nearby.

For associations supporting their publications, the issue of membership dues has been solved under (1) above, and there is no problem with subscriptions for those kinds of journals.

For journals like *Nature* it actually is the question how many of those journals exist. For *Nature* it might be an option that some research associations adopt the journal so that costs are covered by membership dues. In the past, associations have turned over their journals to commercial publishers, but it is better to resolve the issue of membership dues as under (1).

Corollary: There is no real need anymore for commercial companies that support scientific publishing. However, it is a useful instrument to have a market place, and commerce can be useful if it helps to keeps costs low.

A discussion is at: <https://boycottholland.wordpress.com/2016/10/09/let-higher-education-he-create-working-paper-archives-wpa-for-alumni>

For example: Timothy Gowers has the new journal of "Discrete Analysis", that harvests articles from arXiv.org and uses the commercial <https://scholasticahq.com> platform to actually create the journal. Obviously, there is no arXiv.org for all disciplines, like e.g. for teachers who are not at academia but who still write about didactics. See however section (2) above. Scholastica can be compared to the platform provided by say Springer for Nature, but here competition sets in.

(4) Forum function, supply and demand, though with public funding

The VSNU brochure⁹ presents the situation as a choice between **golden or green** type of open access. Again, the question is how the costs of journal editing and distribution are covered.

Golden would be a pay wall for the supplier (author submitting a paper, retaining copyrights).

Green would be a pay wall on the demand side (reader, with the author transferring copyrights, and a distinction between preprint and "published version" otherwise there is no need for a subscription).

Problem: I might misunderstand, but VSNU seems caught in the psychological framing of the commercial publishing industry. There is also the heritage that libraries receive funds to manage subscriptions, and that those funds are not consolidated with submission fees.¹⁰

Solution: Drop this framing and look at the price / quality comparison.

Above, we saw that costs can be low: (a) archives at the institutes of HE, (b) editing at HE, (c) open access software like PressForward or low cost providers like Scholastica. With such low costs, it really doesn't matter much how the journal is financed, *but the characteristics matter*: best is the golden model with open access of the "published version" (and retention of copyrights for the author).

⁸ <http://pressforward.org>

⁹ <http://vsnu.nl/files/documenten/Domeinen/Onderzoek/Open%20access/Ezine-OpenAccess-mrt2016.pdf>

¹⁰ <http://oa2020.org/roadmap>

Employers would pay the (low) submission fee (for use of a commercial platform like Scholastica). Retired or other persons without an employer might either be exempt or be subsidized by government or their own institute of HE, also depending upon journal policy.

Subsequently, the real issue is to create a competitive market for platforms so that upstarts like Scholastica (and so on) can compete with big companies like Elsevier or Springer (and so on).

If a commercial product like *Nature* still manages to offer high quality for fair price, potentially scientists might be willing to pay that price, but obviously under the golden condition, since libraries would no longer agree to use subscriptions for publicly funded research.

Why did VSNU get caught in this framing of opposing the golden vs the green model ? Part will be the need to convince faculties and libraries and their fund allocators that financial flows must be consolidated and decisions co-ordinated.

VSNU also managed to get agreements with Elsevier, Sage, Wiley and Springer. In itself this is important for the short term while such commercial companies still exist. The result might be interesting perhaps for Holland with its large publishing industry as well.

However, it is more useful to look at this from the angle of improving the quality of the Forum, as suggested by A.D. de Groot.

For publicly funded research I suggest:

- accept the golden model as an axiom, but accept only low submission fees, since costs for editors and archives have already been covered
- regard the green model as a problem of membership dues and not of subscriptions (payment without conferences, committees, forums, and voting rights)
- focus on the price / quality comparison, which means a drive towards open access software like PressForward and low cost providers like Scholastica.

Problem: Commercial publishers have accumulated copyrights for their databases. In the past, the publicly funded research community has been short sighted and has allowed the transfer of those copyrights.

Solution: Let the government create a law that these can be nationalised at a fair price.

Public functions require public management. In the past, railways have been nationalised. Recently in the financial crisis some banks have been nationalised. When events have developed in the wrong direction with monopolies (and research data or copyrights can be unique so that its owner has a monopoly on those) then the law can step in.

One should recognise this as an issue of public economics, and not restrict one's scope to negotiating within the current system that essentially leaves those monopolies intact.

Let me not suggest that this is simple. See the ramifications at WIPO.¹¹

(5) Privately funded research

Problem: For privately funded research, like foundations for research or retired scientists and so on, one can imagine that the funding doesn't quite cover all effort, so that compensation or an additional reward would be reasonable. There still is the phenomenon of a scientist or teacher whose wage stands for about 40 hours per week for a total of 1659 hours per year,¹² who decides to put in personal hours after work to write an article or book. Apart from the satisfaction of seeing one's work appreciated by an editor, there would be royalties so that one can take the family on a trip to make up for lost time. Thus libraries would have a point that subscriptions might still be needed to cover this type of compensation.

Solution: Use *evidence based* grants.

This actually uses an approach that I have been thinking about for another problem, namely contract research.

¹¹ <http://www.wipo.int/about-ip/en>

¹² http://www.vo-raad.nl/userfiles/bestanden/CAO/VOR_CAO_2016_WEB.pdf page 18

NWO is the Dutch organisation for contract research, and now uses a **promise based** model with calls, tenders, selection and verification whether the grants have been applied for the stated promise. There is a large overhead (academics judging each other), and funds tend to go to winners who already have ample funds.

Instead, an evidence based system works as follows. It starts with trust. A researcher entering the system (e.g. a graduate) receives a free stipendium with no strings attached, but with the suggestion to produce a decent result at the end of a year. Subsequently, all researchers can apply for grants or scholarships *for work already done*. A researcher only needs to show what has been the effort and what has been the result. One might do fine work but without a "result". Or the effort might be minimal but the outcome be of great value. The decision on grants now is easier since one doesn't have to compare targets (promises) and accomplishments, but one only has to look at accomplishments. Having received a grant for the work done, the researcher can proceed with trying to produce something else for the next round. There can also be those rejected a grant, those given a warning but the benefit of the doubt, and those who are offered closer supervision.

In principle, commercial consultants already work in this fashion, i.e. that income from past work covers the costs for working being done.

This evidence based system might work better for much of NWO, and it may also be applied for privately funded research, which was the problem mentioned above. Again, think of an author who writes a book and who might submit it to a science foundation to receive a grant on it, whereupon it would become either open access or available at a much lower price.

This suggestion doesn't mean that I would think that all research should be done in this evidence based manner. For a principal like NWO who provides the grants, there still is value in setting targets and formulating work packages. However, this would be the job of the principal and not the applicants. When the principal has set targets and defined the work packages then agents might apply for doing the actual work. The current system that applicants must do a lot of work in conceiving promises and plans of execution causes a lot of waste, namely for proposals turned down. This manner of allocation doesn't deal well with the property of research that one cannot tell ahead whether it generates the results that one hopes for.

Likely it would be best to have different formats. A researcher who applies for a grant on work already done and sees this rejected, might perhaps have a second chance by creating a promise and see this accepted.

(6) Concluding

As said, my experience on this is limited, but the above seem to be ideas that I have not quite seen in the material that I have looked at. I noticed that Finland in 2014 had the goal to be the leading country for openness in science and research by 2017.¹³ I appreciate their final section on "threats", where they advise: "Seek synergies within and between organisations." (p26) I will alert them to this letter too, and I look forward to the competition between Holland and Finland.

Kind regards,

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Scheveningen

<http://thomascool.eu>

¹³ <http://openscience.fi/documents/14273/0/Open+Science+and+Research+Roadmap+2014-2017/e8eb7704-8ea7-48bb-92e6-c6c954d4a2f2>

Appendix: Sent by separate mail on October 17 2016

A spreadsheet example with rough data for mathematics education in Holland is:

<http://thomascool.eu/Papers/Math/2016-10-16-Membership-and-Open-access.xls>

It would cost school employers an *additional* EUR 50 per mathematics teacher to compensate teachers for membership of NVvW (the Dutch association of mathematics teachers) and turn Euclides (its journal) into an open access journal.

Employers have already agreed to compensation. It is just that (mainly 2nd degree) teachers do not join up.

For publishers, schools already have contracts for access, such that a teacher only has to activate the account. Similarly, schools might see it as a contract with NVvW, and teachers only have to activate their membership. (NVvW thinks of itself as an association only and not as a publisher too.)

Employers cannot say what association their teachers should join. The closed shop should not be with a particular association but with a default association. The individual teacher decides whether to join an association and which one. The decision to join is only made easier via "complementary subscription" and the "activation of membership".

Above letter is also presented at:

<https://boycottholland.wordpress.com/2016/10/12/letter-to-vsnu-and-others-on-membership-dues-and-open-access-publishing>