

Free for authors, free for readers, free from publisher, free formatting and free opinion: This is Free Neuropathology

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As reader, author, referee and editor I have often discussed and reflected upon the nature of the "perfect" journal -- what are the qualities that make up a great scientific journal? The following ingredients came to my mind:

- excellent science
- interesting and relevant content
- high visibility
- a high impact factor
- short turnaround times (from submission to first decision, from accept to online publication)
- fair reviews
- no unnecessary major revisions just to satisfy referees
- a responsive and supportive editorial office
- insightful editors
- no subscription rates for readers (open access)
- low (ideally no) article processing fees for authors
- a convenient and easy electronic submission system

- high technical standard (figures, copyediting, layout)
- a clear and informative website
- electronic tools for enabling interaction between authors and readers

I am not aware of a journal that fulfills all of these requirements. Since the great majority of established journals are published by commercial publishers, some of these features are out of control of the editor, such as quality of copyediting, layout design, time until online publication, charges for authors and/or readers, promotion, and appearance and content of the website. However, there is no need for these latter features to fall into the responsibility of the publisher. Should scientists be willing to perform these activities themselves, they are in principle well capable to found, shape and run a wonderful journal that fulfills the expectations of the scientific community. It was precisely this insight that sparked the development of Free Neuropathology.

Why is the new journal called Free Neuropathology? The word "free" bears various meanings. First, it means no cost, like in "free beer". Accordingly, the journal is free of cost for everyone. When discussing the name, a few colleagues expressed concern that "free" may have a connotation of

"poor quality", because something without price might be considered as having no value. I am not convinced of this argument, because some of our highest ethical values cannot be bought for money (and thus are for free), and because some Universities with the word "free" in their name are among the most distinguished academic institutions, such as Frije Universiteit Amsterdam and Freie Universität Berlin. Second, "free" means having the freedom to do something your own way. In fact, at Free Neuropathology we are able to decide on every aspect of the journal without having to obey non-scientific paper-shufflers, and we put much emphasis on freedom from unnecessary formalities and bureaucracy that increasingly abound in the publishing business. Third, we encourage authors to submit not only original papers, letters and reviews, but also opinion pieces, critiques and annotations, because we feel that frank views, open-minded discussion and critical analysis of prevailing approaches and trendy hypotheses are integral parts of science. In the end, the name of the journal reflects a mix of freebie, freedom and liberty.

Free for authors and free for readers

Most scientists, scientific organizations and politicians believe that publishing is expensive and that someone has to pay for the publication process, either the reader through subscription models or the author through open-access models. I believe that there is a third option if the activities of the publisher are rendered by scientists working in the field of the journal, i.e. by authors, referees and editors who have put the most time, energy and enthusiasm into the journal anyway. It is true that some technical infrastructure and manpower is necessary to keep a journal running and that this is not without cost, but compared to the time that scientists spend as voluntary referees and editors (let alone the work of authors), the additional time and expenses for taking over the publishers' classical activities are moderate and they can easily be covered by scientific institutions. Furthermore, while in past years handling of manuscripts, layout and printing of journals required considerable time, staff, technical skills and money, digital publishing has made these activities easier, increasingly automated and cheaper. At Free Neuropathology we

take advantage of the Open Journal Systems platform for the management of peer-reviewed academic journals. Many thanks to the developers of this open-source software and to my university library!

Green Open Access means self-archiving of the accepted version of the manuscript in the authors' format. In the Gold Open Access model, articles are made immediately and freely available, while authors must pay article processing fees. Diamond Open Access (also referred to as Platinum Open Access), as will be employed at Free Neuropathology, means that the whole process, including submission, handling by the editorial team, peer review, copyediting, layout and retrieving full text content, is completely free. These tasks are taken over by colleagues who provide high quality editorial, peer reviewing and publishing services. Free Neuropathology's Diamond Open Access model is based on the enthusiasm of volunteers who love to be engaged in the scientific publication process, thereby serving science and society. We also believe that volunteers will enjoy career benefits and recognition from institutions for doing the work. Our young members of the Layout/Copyediting board feel that this is a great opportunity to learn about publishing and a great way to expand personal networks.

Free from publishers

Virtually everyone in science criticizes the high profit margins and pricing policies of commercial publishers. It has been estimated that the major fifty-seven academic publishers generate a combined revenue of 60 billion € per year, with profits in the range of 20 to 50%. Increases in subscription fees by 60% per year for individual journals are not unusual – the more prestigious the journal, the more impertinent the increase. While from an economical point of view this is understandable because shareholders and private equity must be satisfied; however, the excessive cash outflow endangers science. This scenario is even more absurd, because scientists working voluntarily as authors, referees and members of editorial boards do the bulk of the work, thereby serving as useful dupes for publishing houses and maximizing the profit of people who have zero interest in science per se.

The authors, who are largely funded by governments, even offer their work to publishers for free, who then sell it back to government-funded institutions at astronomical prices. Publishers are inventive in obfuscating their business models. The cash flow is often organized in a way so that the individual scientist does not see the problem, because subscription fees or article processing charges are covered by universities or funding agencies. Needless to say that, in the end, all scientists have to pay the bill because the money transferred to publishers needs to be detracted from personnel, infrastructure and funding of scientific institutions. Furthermore, publishers have invented a variety of new services that nobody needs, in order to justify their prices. Finally, publishers sell not only their few top journals but also bunches of hundreds of low-impact or irrelevant journals to large scientific organizations. Nobody is in need of these journals, but all scientists have to pay for them. Established publishers tend to condemn so-called predatory publishers because they rip off scientists, but do they mean themselves?

Let me relate to you a parable (it's a bit lengthy and needs pondering, so if you have little time feel free to skip to the next paragraph): An artist has created a painting after spending years of work, money, creativity, care and enthusiasm. Because this is the way it has always been, the artist does not try to sell the opus, but prefers to donate it to a company called JumpArtize, which is owned by private equity that operates amusement parks and museums. The businesspeople of JumpArtize do not understand art nor do they appreciate it, but they are very good at making the most money out of it. Artists must pay art processing charges (APC) for the art they donate, and they find this OK because JumpArtize builds and maintains museums, frames and dusts the paintings, employs staff (custodians, cleaners, clerks), and counts how often each piece of art is mentioned in newspaper articles and social media, resulting in the ArtificialFactor®. Alternatively, artists can commit to lifelong work for one week per year in one of JumpArtize's amusement parks as clowns or as animate figures in haunted houses (Open Joy Program). Many artists love to become famous and they try to endow their artwork to the most prestigious museums boasting the highest ArtificialFactor®. JumpArtize

asks several art historians to evaluate the offered paintings and to write up art critiques within two weeks for free, which they happily accept because they consider the invitation to be an honor. Admission fees for the museum are high at about 120 € and they rise by 30 % every year, but the public accepts this because art is considered to be high value and because prices for dusts have increased recently. The artists themselves must also pay admission fees to see their own works, but they are allowed to hang a low-quality poster of their paintings in their private rooms. Some museums of JumpArtize offer free entrance for everyone if artists are willing to defray the costs of running the museum and serve as building workers for JumpArtize's new 20-story headquarters building. Politicians and several national academies of fine arts are very proud of having successfully negotiated with JumpArtize that artists are allowed to terminate work in haunted houses by the age of 80 (Plan Artistique or in short Plan A). Meanwhile JumpArtize, including all fun parks, museums and artwork has been sold to another private equity investor for double the original price. If you find this scenario absurd or crazy, what does it mean for the behavior of scientists?

Scientists, librarians and politicians complain about costs of journals but at the same time they continue to support commercial publishers. Science politicians have been very proud of negotiations or declarations such as Plan S or DEAL, whereby article processing charges are limited or somewhat reduced, but in the end they have surrendered. Financially supporting journals by national or international funding organizations (such as Gates Open Research) is also not helpful, because funding is usually restricted to a limited period of time, so that permanent structures which are mandatory for scientific journals are endangered. At first glance, journals that are owned by scientific societies and published by commercial publishers may be in a more comfortable position, because societies can replace the publisher in case of disagreement or disservice. However, the problem is that scientific societies usually develop dollar signs in their eyes as soon as the publisher offers sharing part of the profit. This corrupts science. I am deeply convinced that the purpose of scientific journals is

publishing science, ideally the best science, but definitely not making money, for whomsoever.

There are other good reasons for proceeding without publishers. We, the scientists and developers of a journal, will be in a position to decide on website, layout, copyediting and promotion, and we no longer depend on publishers' decisions which are led by financial considerations. For example, publishers tend to decline suggestions of modifying individual journal websites because, for economical or branding reasons, they want the websites of their hundreds or thousands of journals to appear identical. Publishers promote journals at commercial exhibitions at scientific meetings (often largely unnoticed by scientists), while scientists know their field, their colleagues and the appropriate communication channels better than publishers do. Scientists therefore could perform more efficiently and more cost-effectively in undertaking these classical publishers' activities. It is true that publishers have much more experience because at least the handful of oligopolistic publishers have published thousands of journals before. But we will learn and we will learn fast. And yes, we may be somewhat naïve, we will make mistakes and some technical issues will not work perfectly right from the start, but in my experience scientists work more efficiently and creatively than publishers' staff, and in the end our approach will be successful.

Publishers like to talk about ethics. They request from authors disclosures of potential conflicts of interest such as shareholding of family members in relevant companies, they ask for reference numbers of ethical committees, they request statements of author contributions, and they analyze papers using software for detecting plagiarism and manipulation of figures. While these activities may be considered to be measures for increasing quality and transparency (as well as subscription rates and article processing fees), publishers play the role of science police, thereby undermining the general credibility of scientists and considering them as potential cheaters and criminals. To be clear, I find that ethical standards and guidelines are important, but they should be developed and released by scientific societies and not by individual publishers who just try to increase sales and the prestige of their products. Publishers stress the

highest ethical standards, but in the end they are interested in nothing more than profit and they harness scientists in their dull business. Commercial publishers have had a detrimental effect on science. Publishing scientific work together with commercial publishers should be discontinued for reasons of economy, quality and ethics.

Free formatting

Many scientists are concerned and annoyed by the increasing number of formal requirements when submitting papers, such as rigid regulations on references, tables, figures, organization of manuscript, font type/size, abbreviations and nomenclature. We believe that most of these regulations are unnecessary and they detract from the gist of the purpose, i.e. prompt publication of good science. At Free Neuropathology authors can format their paper as they like, as long as formatting is consistent within the paper and the paper has been well written and carefully prepared.

Free opinion

Controversial discussion and deviating views represent an integral part of science, which is often somewhat neglected for technical, psychological and political reasons. At Free Neuropathology we have implemented features so that authors and readers can take part in scientific discussion. We encourage the submission of "Opinion Pieces" which are in a separate category of papers in this journal. This is a channel for expressing personal but scientifically founded views on hypotheses, terminology, key papers, opinion making, politics or anything else related to neuropathology. In addition, and in order to stimulate discussion on papers published in Free Neuropathology, we use the open-source software Hypothesis which basically introduces an annotation layer over any paper. After signing-in and clicking the arrow on the right side of the browser window, the Hypothesis sidebar will appear and you will be able to provide sentence-level comments, add critique, share information and engage in discussion. Finally, even the editor can express frank views in editorials or social media channels -- this cannot be taken for granted under other circumstances.

Feel free to join

If you support our concept and share our spirit: feel free to join the movement. When you have interesting data in the fields of human or experimental neuropathology: submit an Original Paper to Free Neuropathology. When you have concisely written up something as a letter: consider Free Neuropathology for prompt publication. When you

have strong views about a controversial issue or if you disagree with anything in the field: send us an Opinion Piece. If you like grassroots movements and soft revolutions: support and recommend Free Neuropathology. If you would like to become actively involved in our editorial activities, if you are willing to share your technical skills, or if you have comments, questions, critique, ideas or stimulating suggestions: send me a note.