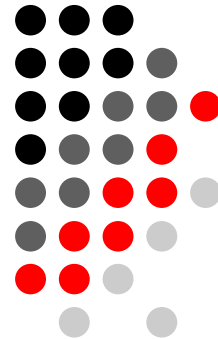




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Branding Scholarly Journals: Transmuting Symbolic Capital into Economic Capital

Mahdi Khelifaoui et Yves Gingras



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Transmuting Symbolic Capital into Economic
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Par

Mahdi Khelifaoui et Yves Gingras

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Résumé

Dans cet article, nous analysons une stratégie commerciale relativement récente adoptée par les grands éditeurs scientifiques, consistant à exploiter l'image de marque de leurs revues les plus prestigieuses. En utilisant le modèle de conversion des capitaux de Pierre Bourdieu, nous montrons comment les éditeurs transfèrent le capital symbolique d'une revue prestigieuse à des revues dérivées, qui captent une partie de ce prestige en portant la marque de la revue originale dans leurs titres, le transformant ainsi en nouveau capital économique. Comme le montrent leurs facteurs d'impact élevés, ces revues nouvellement créées sont rapidement adoptées par les chercheurs. Grâce à des mécanismes de transfert de manuscrits, les éditeurs utilisent également une partie des articles rejetés par leurs revues phares et hautement sélectives pour les recycler et les monétiser dans les revues dérivées à plus faible impact ou en libre accès de leur liste.

Abstract

In this paper, we analyze a relatively recent commercial strategy devised by large academic publishers, consisting in the branding of their most prestigious scientific journals. Using Pierre Bourdieu's model of capital conversion, we show how publishers transfer the symbolic capital of an already prestigious journal to derivative journals that capture part of the prestige of the original brand and transform it into new economic capital. As shown by their high impact factors, these new journals, bearing the mark of the original journal in their titles, are rapidly adopted by researchers. Through manuscript transfer mechanisms, publishers also use part of the papers rejected by their flagship and highly selective journals to recycle and monetize them in lower impact or open access derivative journals of their lists.

Keywords: scholarly journals, branding, symbolic capital, economic capital, academic publishers, manuscript transfer mechanisms

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Introduction

After the end of World War II, the economics of academic journal publishing was radically transformed to become an international oligopoly dominated by a handful of giant publishers.¹ Their commercial control of academic journals has even increased since the mid-1990s and the entry of the press industry in the digital era. In 2013, only five publishers (Elsevier, Wiley-Blackwell, Springer, Taylor & Francis, Sage Publications) accounted for more than 50% of published papers in all scientific disciplines.² This fundamental transformation of the economics of academic publishing had major consequences on the circulation of knowledge inside and outside scientific communities, especially those located in poor and developing countries. Henceforth, through their academic institutions, scientists have to pay huge amounts of money in order to access the scientific knowledge they themselves produced for free, most economic profits accruing to private publishers.

While the consequences of what can be considered a form of privatization of scientific knowledge have largely been documented,³ in this paper, we would like to focus our attention on a relatively recent commercial strategy consisting in the branding of the most prestigious scientific journals. In addition to being vehicles of knowledge, scholarly journals have become important economic assets owned by private companies. Thanks to the free work of scientists who write, evaluate and publish papers in their proprietary journals, publishers were used to generate huge profit margins. They now realize that in addition to this traditional source of profit, they can build on their most prestigious titles to translate that prestige, which according to the sociologist Pierre Bourdieu is a specific form of capital, namely a symbolic capital, into economic capital.⁴ Bourdieu's model of the relations between economic, social,

¹ Carol Tenopeer and Donald King, 'Trends in Scientific Scholarly Journal Publishing in the United States,' *Journal of Scholarly Publishing* 28, no. 3 (1997): 135-170.

² Vincent Larivière, Stefanie Haustein and Philippe Mongeon, 'The Oligopoly of Academic Publishers,' *PLOS One*, 2015, 0(6): e0127502.

³ Fei Shu et. al., 'Is It Such a Big Deal? On the Cost of Journal Use in the Digital Era,' *College & Research Libraries* 79, no. 6 (2018): 785-798; Carol Tenopeer and Donald King, *Towards Electronic Journals: Realities for Scientists, Librarians, and Publishers* (Washington D.C.: SLA Publishing, 2000).

⁴ Pierre Bourdieu, 'The Forms of Capital,' in *Handbook of Theory and Research for the Sociology of Education*, ed. John Richardson (New York: Greenwood, 1986), 241-258.

cultural and symbolic capital is thus useful to shed light on the recent trend that sees the multiplication of titles derived from prestigious journals like *Nature*, *Science* or *The Lancet*.

Instead of just creating new journals from scratch that would have to construct their credibility over time and thus accumulate symbolic capital, publishers can use an already prestigious brand and extend its value through derivative journals that keep visible the link to the symbolic value of the original brand. This constitutes a new manner of extracting additional economic value from existing assets, through the creation of a class of derivative assets based on the prestige already accumulated by a small number of existing journals. Being associated with the parent name, these new journals have more chances to be rapidly adopted by researchers, who will then pressure their academic institutions to subscribe to them.

The successful branding of a scholarly journal rests entirely on the capacity to transfer the prestige it has accumulated throughout its publication history to the newly created journals. The more a journal is recognized as a prestigious venue and benefits from an international readership, the easier it will be for its publisher to sell to university libraries subscriptions for its derivative journals. Indeed, publishing papers in so-called ‘high-level’ journals has become a *sine qua non* condition for scholars to land academic positions, promotions or get funding for their research projects.⁵ The journals derived from prestigious titles have more chances to gain the label of ‘high-level’ journals than entirely new ones, since they somehow inherit the established reputation of the original title. Trying to maximize their visibility, scientists will probably submit their papers to these new journals in the belief that, through a kind of ‘halo effect’, the new journal bears the prestigious mark of the parent journal.

1. The uses of prestigious names

The transfer of symbolic capital from the original title to its derivative incarnations happens through a naming strategy, where a prestigious name is included in the names of the

⁵ Yves Gingras, ‘The Transformation of the Scientific Paper: From Knowledge to Accounting Unit,’ in *Gaming the Metrics. Misconduct and Manipulation in Academic Research*, ed. Mario Biagioli and Alexandra Lippman (Cambridge, Mass.: MIT Press), 43-55.

new journals. The kinship between the derivatives and the original journal is made visually even more obvious to the reader in the cover design of the branded journals, which mimic the original ones (same police characters and graphic design). In addition to the well-known *Nature*, we now have *Nature Chemistry*, *Nature Physics*, *Nature Microbiology*, *Nature Ecology and Evolution*, etc. Likewise, *The Lancet* has its own derivatives in *The Lancet Oncology*, *The Lancet Neurology*, *The Lancet Rheumatology*, etc. The eponymic proximity between the derivatives and their parent journal allows them, as we will show, to attain high impact factors in very short periods of time. Thus, they appear as attractive venues to researchers, who are nowadays being more and more evaluated by their academic institutions on the basis of the impact factors of the journals in which they publish and not on the inherent value and visibility of the paper itself.⁶ These quantitative evaluation standards have, moreover, been internalized by young and early-career researchers, who consider them to be part of the rules of the academic game.⁷

Of course, there are several past examples of renowned scientific journals that have given birth to a family of journals bearing the original name. For instance, in 1970, the American Physical Society's flagship journal, *Physical Review*, was split into four journals, *Physical Review A*, *B*, *C*, and *D*. Another example is that of *Studies in the History and Philosophy of Science*, which was divided into parts *A*, *B*, and *C* in 1998. These changes, however, were less motivated by commercial goals than by the increasing fragmentation of scientific disciplines into different specialties, as well as the rapid growth of scientific publications, which made it difficult for a single journal to handle increasingly diverse and specialized topics and manage the continuous increase of article submissions.

Moreover, journal title changes are not rare and can be motivated by several factors, such as a change in scope, geographic coverage, audience, language or frequency of publication.⁸ The form of derivative journal creation that we analyze here is, we think, quite different in nature and related to the use of marketing practices, first developed for consumer

⁶ Yves Gingras, *Bibliometrics and Research Evaluation. Uses and Abuses* (Cambridge, Mass: MIT Press, 2016).

⁷ David Nicholas et. al., 'Early-Career Researchers' Quest for Academic Reputation in the Digital Age,' *Journal of Scholarly Publishing* 49, no. 4 (2018): 375-396.

⁸ Mavis B. Molto, 'Characteristics of Serial Title Changes and Recognition of New Serial Works: Theoretical and Practical Implications,' *Serials Review* 37, no. 4 (2011):275-289.

goods, where a company constructs the brand of its new products around an original trademark that is already well known and popular among consumers. For instance, the famous food product multinational Nestlé has created several products named after its original trademark (Nesquick, Nestea, Nespresso, Nescafé, etc.).⁹

2. The symbolic capital of scholarly journals

As members of a scientific community, researchers strive to gain recognition, that is accumulate symbolic capital, in their field through making discoveries, winning prizes for the originality of their publications, being cited, or any other form of academic achievement that can bring them recognition from their peers.¹⁰ Like researchers and scientific institutions, scientific journals can also accumulate symbolic capital, and researchers will tend to submit their papers to the journals they consider the most prestigious in their fields. There thus exists, in any discipline and specialty, an implicit hierarchy of journals known to scientists through their research practices and interactions with their peers. For instance, *PNAS* and *Proceedings of the Royal Society A* and *B* derives most of their high reputation from the fact that they are the official journals of the National Academy of Sciences and the Royal Society of London. Longevity of a title can also add to its credit as does of course the history of its past publications considered seminal or revolutionary. That hierarchy also varies over time. In physics for instance, *Annalen der Physik* was the most prestigious at the beginning of the 20th century and published the revolutionary papers of Max Planck and Albert Einstein as well as the contributions of the many future Physics Nobel prizes of the time. After the 1930s, the prestige of *Physical Review*, an American journal created in 1893, came to surpass it and still remain the most central journal of the discipline.¹¹

⁹ Éric Delattre, 'Le succès des marques dérivées,' *Annales des mines* (June 1999): 70-75.

¹⁰ Warren Hagstrom, *The Scientific Community* (New York: Basic Books, 1965); Pierre Bourdieu, 'The Specificity of the Scientific Field and the Social Conditions for the Progress of Reason,' *Social Science Information* 14, no. 6 (1976): 19-47.

¹¹ Mahdi Khelifaoui and Yves Gingras, 'Physical Review: From the Periphery to the Center of Physics,' *Physics in Perspective* 21, no. 1 (2019): 23-42.

The symbolic hierarchy of journals can be measured using a proxy like the now well-known ‘Impact factor’ of journals, which happens to correlate well with the perceived prestige of journals. As a consequence, the value of the symbolic goods produced by researchers in the form of scientific articles now tends to be associated with the prestige of the journals in which they are published, despite the fact that the visibility of the papers, as measured by the real number of citations received, can be much less than the citations expected from the Impact factor of the journal itself.¹² The journal’s reputation even has a specific effect as it enhances the probability for a paper of being cited, independently of its ‘quality’. This ‘Matthew Effect’, first analyzed by the sociologist Robert K. Merton for the case of scientists who receive more recognition than they may deserve, simply because they were already recognized, thus also applies to scientific journals.¹³

3. Extracting added economic value from prestigious journals

Conscious of the existence of a symbolic hierarchy of journals, academic publishers have recently found a way to extract more value from their journals portfolio by selecting the most prestigious titles and creating derived journals extending the original brand. In this section, we document and explain the mechanics behind this strategy using the cases of the most prestigious scientific journals. It all started with *Nature* but was then followed by other competing prestigious generalist journals like *Science* as well as by medical, biological and chemical journals like *The Lancet*, *Journal of the American Medical Association*, *British Medical Journal*, *Cell* and *Journal of the American Chemical Society*.

Created in 1869 as a weekly scientific magazine, *Nature* has been published by the London publishing house Macmillan for more than a century. In 1995, German media giant Holtzbrinck bought 71% of *Nature*’s historical publisher MacMillan and completed its purchase in 1999. That same year, The Nature Research group, then known as the Nature Publishing Group (NPG), was created from the merger between Stockton Press and MacMillan

¹² Manolis Antonoyiakinnis, ‘Impact Factor Volatility Due to a Single Paper: A Comprehensive Analysis,’ *Quantitative Science Studies* 1, no. 2 (2020): 639-663

¹³ Vincent Larivière and Yves Gingras, ‘The impact Factor's Matthew Effect: A Natural Experiment in Bibliometrics,’ *Journal of the American Society for Information Science and Technology* 61, no. 2 (2010): 424-427; Robert K. Merton, ‘The Matthew Effect in Science,’ *Science* 158, no. 3810 (1968): 56-63.

Magazines. In 2015, Holtzbrinck and Nature Research, merged with another giant publisher, Springer, leading to the creation of the giant Springer-Nature group.

In 1992, MacMillan launched *Nature*'s first derivative journal, *Nature Genetics*. Over the following two decades (from 1992 to 2011), eighteen *Nature*-branded research titles have been created. Figure 1 shows that this first wave of new journals was followed by five years of rest, a period of time perhaps used to evaluate the effects of these creations. A new period of growth began in 2015 with the creation of sixteen new branded journals in the following five years, for about three new titles per year. The accelerated pace of creation of *Nature*-branded journals since 2015 coincided with the merger of NPG with Springer that same year, indicating that a more aggressive journal-branding strategy of the *Nature* trademark has been instilled by the giant publisher since the flagship journal fell under its umbrella. In 2000, a year following its creation, NPG also started a suite of *Nature Reviews* journals, which concentrates on publishing synthetic literature reviews rather than original research articles. Fifteen such *Nature Reviews* were launched between 2000 and 2005. After the merger with Springer, six additional journals were added between 2015 and 2021, for a total of 21 *Nature Reviews* branded journals. As shown in Figure 1, *Nature*'s strategy of derived journals was original and its success important enough to see it adopted by other prestigious scientific journals.

The Lancet is, with the *New England Journal of Medicine*, among the most respected medical journal and also a venerable institution, since it was created in 1823. The journal was sold by The Lancet Publishing Group to Elsevier in 1991. Between 2000 and 2020, the giant private publisher created eighteen specialized *Lancet*-branded journals. Three derived journals (*The Lancet Oncology*, *The Lancet Infectious Diseases* and *The Lancet Neurology*), were created between 2000 and 2002. Then, starting in 2012, a new wave began, and fifteen new titles have been added. The latest in the Lancet family, *The Lancet Regional Health*, was launched in 2020, and it is itself divided into six sub-journals covering different geographic areas of the world. Two other central medical journals have followed the same strategy: the *British Medical Journal* created 24 *BMJ*-branded journals since 2008 and its competitor, the publisher of the *Journal of the American Medical Association (JAMA)*, followed suit with 12 new *JAMA*-branded journals since 2013.

The American Chemical Society (ACS), a private nonprofit organization, is the most important chemical society in the world with its 157,000 members. It is also among the top-5 academic publishers in the natural sciences, with more than 80 chemistry-related journals. The ACS is widely known for publishing, since 1879, its flagship journal, *Journal of the American Chemical Association (JACS)*.¹⁴ In 2006, building on its institutional prestige and that of the *JACS*, it launched its first ACS-branded journal, *ACS Chemical Biology*. Since then, 24 other ACS-branded journals have been added to the list, with a pace of approximately three new journals per year since 2014. ACS-branded journals explore, with a chemical lens, various scientific and technological subfields such as energy, electronics, photonics, materials, earth and space, biology or medicine, thus extending the range of topics covered by the portfolio of ACS journals, which were previously mainly focused on the traditional subdisciplines of chemistry (physical chemistry, organic chemistry, biological chemistry, engineering chemistry).

Cell, a journal covering multiple specialties of biology, is also considered among the most prestigious titles in its field. Established by the British geneticist Benjamin Llewellyn in 1974, it was published by the MIT Press until 1986, when Llewellyn bought the rights of the journal to publish it under its own private structure, Cell Press. The first *Cell*-branded journal, *Molecular Cell*, was launched in 1998, a year before the acquisition of Cell Press by Elsevier, which added five new derived titles between 1999 and 2007. Since 2012, five other titles have joined the *Cell* family, for a total of eleven. Finally, *Science*, property of the non-profit American Association for the Advancement of Science (AAAS), has also followed the branding trend, by creating four *Science*-related titles since 2007, after it had launched a first one (*Science Signaling*) in 1999. Overall, Figure 1 shows that the branding trend of prestigious journal has particularly accelerated since 2012. Over the past ten years, 93 branded journals have been launched, as compared to 57 journals during the twenty previous years.

¹⁴ Marianne Noel, 'La construction de la valeur économique d'une revue en chimie. Le cas du Journal of the American Chemical Society (1879-2010),' *Revue française des sciences de l'information et de la communication* 11 (2017), <https://doi.org/10.4000/rfsic.3281>.

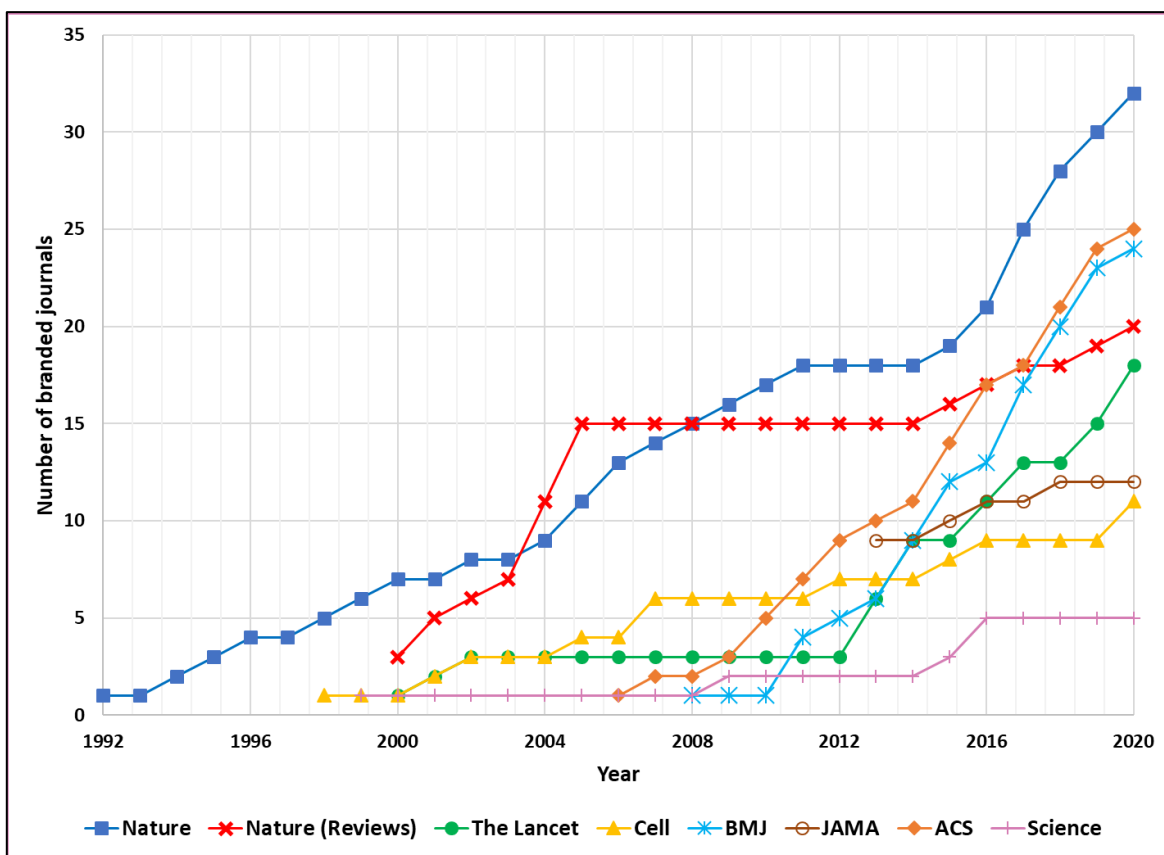


Figure 1 – Evolution of the number of prestigious branded journals

4. Inheriting the prestige of the parent journal

To get an idea of the rapidity at which the new journals do get recognition by the scientific communities they target, we can look at their rankings in their disciplines as measured by their Impact factors. Using the 2019 *Journals Citation Report (JCR)*, we find that 32 *Nature* or *Nature Reviews* branded journals, 6 *Lancet*-branded journals, 4 *Cell*-branded journals, 2 *JAMA*-branded journals, and 2 *Science*-branded journals are ranked among the top-100 journals, all disciplines combined. Thus, 46% of the top-100 journals ranked in the 2019 JCR, all disciplines combined, are branded titles. Moreover, all 28 *Nature*-branded research journals with an impact factor, all 18 *Lancet*-branded journals, 11 out of 12 *JAMA*-branded journals, 3 out of 5 *Science*-branded journals, were ranked in the top-10 of their scientific specialties in 2019. As shown in Table 1, all recent *Nature*, *Lancet*, *JAMA* and *Science* branded journals launched between 2015 and 2018, already figure among the top-5 or top-10

journals of their specialized fields according to the 2019 JCR. Most *Cell* and *ACS* branded journals that were launched between 2015 and 2018 are ranked between the 16th and 43rd positions.

Table 1 – 2019 JCR ranks of recently launched prestigious journals derivatives (2015-2018)

Journal Title	Launched in	Subject Category	2019 JCR Rank
<i>Nature Plants</i>	2015	Plant science	3
<i>Nature Energy</i>	2016	Energy and fuels	1
<i>Nature Microbiology</i>	2016	Microbiology	4
<i>Nature Astronomy</i>	2017	Astronomy and astrophysics	4
<i>Nature Biomed. Engineering</i>	2017	Biomedical engineering	1
<i>Nature Ecology & Evolution</i>	2017	Evolutionary biology	3
<i>Nature Human Behaviour</i>	2017	Neurosciences	11
<i>Nature Catalysis</i>	2018	Physical chemistry	2
<i>Nature Electronics</i>	2018	Engineering, electrical & electronic	1
<i>Nature Sustainability</i>	2018	Environmental studies	1
<i>Lancet Gastro. & Hepatol.</i>	2016	Gastroenterology & hepatology	5
<i>Lancet Public Health</i>	2016	Public, environmental health	2
<i>Lancet Child & Adolesc. Health</i>	2017	Pediatrics	2
<i>Science Advances</i>	2015	Multidisciplinary	4
<i>Science Robotics</i>	2016	Robotics	1
<i>Science Immunology</i>	2016	Immunology	7
<i>Cell Systems</i>	2015	Cell biology	27
<i>ACS Central Science</i>	2015	Multidisciplinary	16
<i>ACS Infectious Diseases</i>	2015	Infectious diseases	16
<i>ACS Energy Letters</i>	2016	Energy and fuels	6
<i>ACS Sensors</i>	2016	Nanoscience & nanotechnology	24
<i>ACS Earth and Space Chem.</i>	2017	Geochemistry and geophysics	21
<i>ACS Applied Bio Materials</i>	2018	Biomedical engineering	43
<i>ACS Applied Energy Mater.</i>	2018	Energy and fuels	39

The high rankings obtained by recently launched branded journals confirm that the transfer of symbolic capital from the original journals to their derivatives is very efficient and takes place in a very short period of time. For instance, based on the JCR, all *Nature*-branded research journals (except the most recent ones that are still waiting to be ranked) were among the top-10, and mostly top-5, of their subject categories as soon as they were attributed an impact factor, and have since kept these rankings. Publishers even use these ‘performances’ to promote their newly created journals. For instance, in 2016, just two years after the launch of *ACS Photonics*, the ACS issued a press release on its website stating that:¹⁵

New ACS journals that were eligible for review by Thomson Reuters for the first time received strongly competitive inaugural Impact Factors, illustrating the value ACS adds to the dissemination of quality research in new or emerging fields of science. *ACS Photonics* achieved an impressive Impact Factor of 5.404, ranking as one of the top 10 journals in the Optics category.

The strategy used by the American Medical Association for extracting added value from the symbolic capital of the *Journal of the American Medical Association (JAMA)* provides a striking example of how branding can be a powerful tool for transferring prestige from a parent journal to its derivatives. *JAMA* is considered one of the most prestigious titles in the field of medicine. The AMA also publishes highly respected specialized journals in different medical specialties, some of which dating back to the beginning of the 20th century. In 2013, the Association started building what it called the *JAMA* network of journals. Nine were launched in 2013 and that number raised to twelve different journals in 2020.

However, in contrast to other publishers who created entirely new journals, AMA choose to *rename* nine existing titles of its portfolio using the *JAMA* brand. Thus, the suite of exiting titles ‘*Archives of*’ (such as *Archives of Psychiatry*, *Archives of Neurology*, *Archives of Dermatology*, etc.), became ‘*JAMA*’ followed by the topics: *JAMA Psychiatry*, *JAMA Neurology*, *JAMA Dermatology*, etc. This original strategy provides us with a kind of “natural experiment” to measure the specific effect of branding on the visibility of already existing journals, since we can compare their prestige before and after they saw their titles

¹⁵ ACS Press release, 14 June 2016, <https://www.acs.org/content/acs/en/pressroom/news-releases/2016/june/acs-journals-are-again-among-the-most-cited-in-chemistry-flagship-journal-achieves-best-impact-factor-ever.html>

branded with the ‘JAMA’ prefix, using their changing ranking in the JCR. While some journals were already highly ranked in their medical specialties and have kept similar positions after their being explicitly knighted ‘JAMA’ (*JAMA Internal Medicine*, *JAMA Ophthalmology*), Figure 2 shows that the rebranding strategy had a striking effect on five JAMA-branded journals. Within three years after their renaming, these journals improved their rankings to the very top positions of their specialized medical fields, which shows that their rebranding not only resulted in attracting more high-quality papers, but probably also in generating more citations from authors, who are influenced in their citations practices by the prestige of the cited journal. Interestingly, such a positive impact of rebranding, is not observed for standard journals that change their names. In those cases, one can even observe a decline in ranking, since it usually takes some years for authors to recognize a title change and start citing the journal with its new name.¹⁶

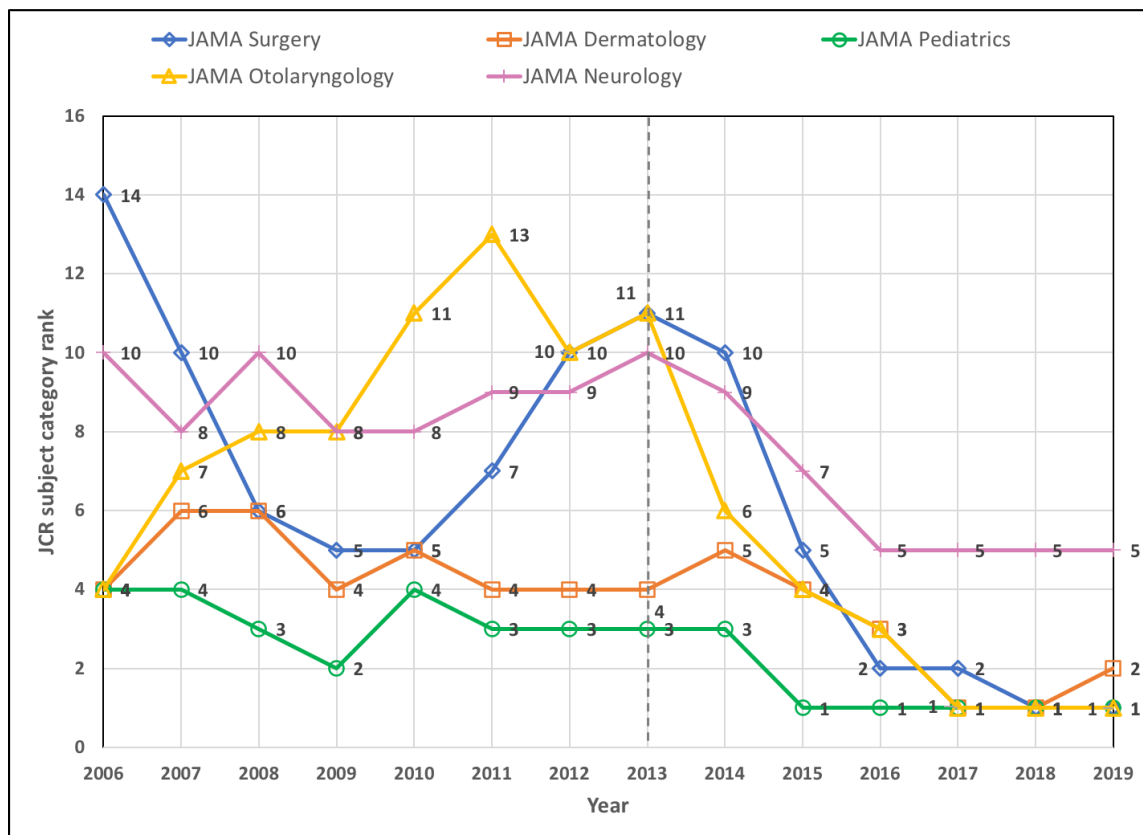


Figure 2 – Evolution of five JAMA-branded journals JCR ranks (2006-2013)

¹⁶ David Tempest, ‘The Effect of Journal Title Changes on Impact Factors,’ *Learned Publishing* 18, no. 1 (2005): 57-62.

5. Redirecting rejected papers towards less prestigious journals of the same Publisher

Prestigious journals such as those analyzed in this paper are known for their very high standards of selectivity, since they reject about 90% of papers submitted. For instance, 80% of papers sent to *Nature* don't even go through peer review process and are desk rejected. *The Lancet* and *JAMA* have acceptance rates of only 5% and 6%. Prestigious journals usually receive a high number of submissions, approximately 10,000 for *Nature* and *Science* each year, and *JAMA* received 7,400 in 2019. A good proportion of these rejected papers are still considered by these publishers to be of interest. They are often rejected only because they do not address 'hot topics' or simply because of space limitations. Publishers do not necessarily want to 'waste' these papers to journals owned by rival publishers, especially those in which the company has invested some resources through the peer review process. Consequently, a way to monetize them is to ask their authors to redirect them to derivative journals, or to other less selective open access journals owned by the same publisher. This proposition is attractive since the original reviewers' reports are used by the second-choice journal, which accelerates the new reviewing and editing process.¹⁷

Through this process, articles rejected by prestigious journals but recycled in less visible (often open-accessed) journals from the same publisher, are thus still money-makers. Manuscript-transfer options are offered to authors by all publishers discussed in this paper. In the case of *Science*, willing authors are asked to select a transfer destination even before first submitting to the journal. On the Scirev.org website, which gathers authors experiences of peer review in various scientific journals, a scientist posted a *Science* rejection letter that gives a clear description of such manuscript-transfer operations from *Science* to *Science Advances*, which is published in open access since 2015 and applies article processing charges (APC) of 4,500 \$:¹⁸

During submission, you requested transfer to *Science Advances* should *Science* decide not to proceed with your manuscript. We are pleased that you are choosing to transfer

¹⁷ See for instance authors guideline on *Science*'s website: <https://www.sciencemag.org/authors/science-information-authors>

¹⁸ Letter from the editors to the authors reproduced in: <https://scirev.org/reviews/science/>

to our high-level, interdisciplinary, open access journal. Please use the link below to confirm the transfer.

In March 2018, Elsevier's Cell Press launched an interdisciplinary open access journal called *iScience* (note the proximity with the *Science* journal), which charges a 3,000\$ APC. For its first year of operation, *iScience* received 59% of its submissions through manuscript transfers from other Elsevier journals.¹⁹ One can suppose that these transfers came in part from the Cell Press more prestigious titles, including *Cell*-branded journals and other high standing Cell Press titles from different disciplines, such as *Chem*, *Med*, *Immunity* or *Joule*. In collaboration with Cell Press, Elsevier also set a transfer mechanism from any Cell Press or *Lancet*-branded journal to another new open access journal, *eBioMedicine*. The journal's website informs authors who have submitted papers to *Lancet* or *Cell*-branded journals that they could 'receive a decision that includes an invitation to move (their) submission to eBioMedicine', which charges a 3,200\$ APC. ACS has also set up a manuscript transfer mechanism from its journal with the highest symbolic capital, *JACS*, to its specialized ACS-branded journals. The BMJ Publishing group and the AMA have done the same thing with their flagship medical journals and their branded titles.

The manuscript-transfer mechanism rests on the symbolic hierarchy of branded journals owned by a given publisher. It is well illustrated by a pyramidal structure shown by a Nature Research marketing team during a promotional presentation (reproduced in Figure 3).²⁰ *Nature*, with the highest symbolic capital of its family of journals, is at the top of the pyramid. Manuscripts that are rejected by *Nature* can be transferred to the second level of the pyramid, represented by the *Nature*-branded research journals which, although less prestigious than the original, are still very attractive venues with high impact factors and low acceptance rates, often below 10%. At the third level of the pyramid, the multidisciplinary open access journal *Nature Communications*, with a 5,380\$ APC, is another alternative for manuscript transfers. It is less selective than *Nature* and the other *Nature*-branded research journals, with an acceptance rate of 50%. At the bottom level of the pyramid, *Scientific Reports*, Nature Research's open access mega-journal, an equivalent as well as competitor to

¹⁹ Information available on: <https://www.elsevier.com/connect/editors-update/helping-authors-find-the-best-home-for-their-article>

²⁰ See: http://eisz.mtak.hu/images/2016_infonapok/prez/0519_SpringerNature_Editorial.pdf

PLOS One, is the last transfer option. It has a 1,870 \$ APC and 75% acceptance rate. The further down the pyramid an author goes, the more the prestige of the journals decreases, and the author must pay to be published. Note also that the page charge also diminishes with the symbolic capital of the journal, as could be expected from Bourdieu's model of the relationship between symbolic and economic capital.

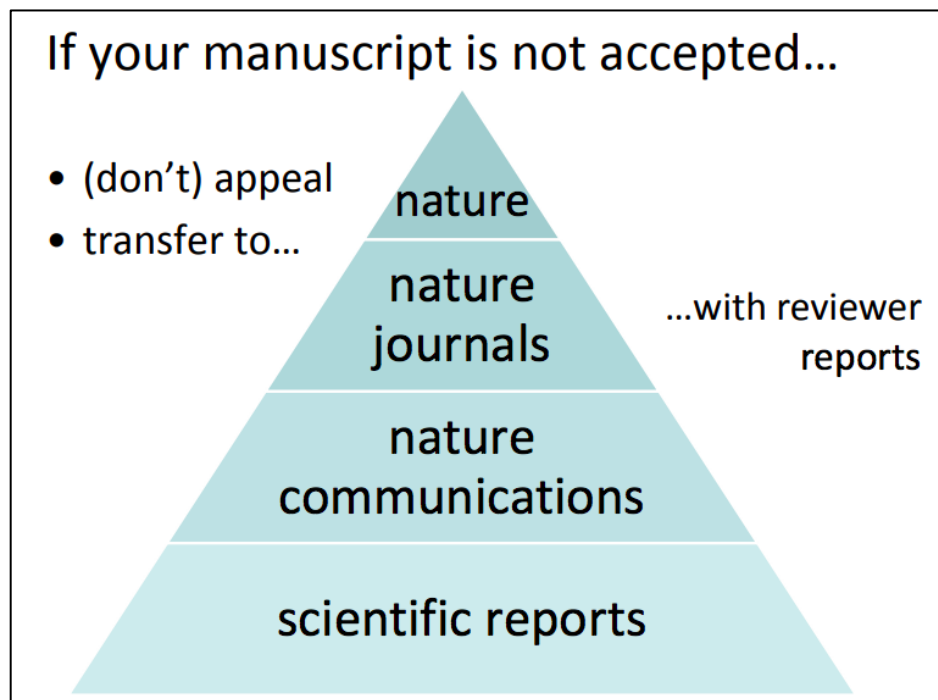


Figure 3 – *Nature*'s Manuscript Transfer Pyramid Structure

6. The partner journals series: Selling symbolic capital to academic institutions

In 2014, Nature Research also started the *Nature* Partner Journals (NPJ) series. This commercial initiative consisted in launching a new derived brand of *Nature* open access journals in partnership with academic institutions, research non-profit organizations, philanthropic foundations or membership associations. This brand is recognizable by the addition of the *npj* acronym before the subject-specific title of the journals (for example: *npj Quantum Information*, *npj Breast Cancer*, *npj Precision Oncology*). As shown in Table 2, since 2014, Nature Research has launched 24 open access and independently peer-reviewed *npj* journals.

NPJ partners, or rather costumers, benefit from several services, including ‘access to a dedicated publishing team that oversees daily journal activities, providing guidance and publishing insights to maximize exposure for both (the partner institution) and (the) journal’. In addition, Nature Research’s editorial office offers to manage the peer review process, the typesetting, copyediting and proofing process of articles. Finally, it also provides ‘strategic support on areas including manuscript transfer and content commissioning’.²¹ Thus, *npj* branded journals constitute another stage of the pyramid, which allows manuscript-transfer from more to less prestigious journals of the *Nature* journals family.

Table 2 – List of the 24 Nature Research Partner Journals and the Partner Institutions

Nature partner journal	Launched in	Partner institution	Country
npj Primary Care Respirat. Medicine	2014	Primary Care Respiratory Society	UK
npj Quantum Information	2015	University of New South Wales	Australia
npj Biofilms and Microbiomes	2015	Nanyang Technological University	China
npj Computational Materials	2015	Shanghai Institute of Ceramics	China
npj Aging & Mechanisms of Disease	2015	Jap. Society of Anti-Aging Medicine	Japan
npj Breast Cancer	2015	Breast Cancer Research Foundation	USA
npj Systems Biology & Applications	2015	Systems Biology Institute	USA
npj Microgravity	2015	NASA	USA
npj Schizophrenia	2015	Schizophrenia Int. Research Society	USA
npj Parkinson’s Disease	2015	Parkinson’s Foundation	USA
npj Regenerative Medicine	2016	Monash University	Australia
npj Science of Learning	2016	University of Queensland	Australia
npj Quantum Materials	2016	Nanjing University	China
npj Genomic Medicine	2016	King Abdulaziz University	Saudi Arabia
npj Vaccines	2016	University of Texas Medical Branch	USA
npj Flexible Electronics	2017	Nanjing Tech University	China
npj Materials Degradation	2017	University of Sci. and Tech. Beijing	China
npj Science of Food	2017	Beijing Tech. and Business University	China
npj 2d Materials and Applications	2017	FCT da Universidade Nova de Lisboa	Portugal
npj Precision Oncology	2017	University of Minnesota	USA
npj Clean Water	2018	King Fahd University	Saudi Arabia
npj Climate & Atmospheric Science	2018	King Abdulaziz University	Saudi Arabia
npj Digital Medicine	2018	Seoul Nat. Univ. Bundang Hospital	South Korea
npj Urban Sustainability	2020	RMIT University	Australia

²¹ See the description of the NPJ program on *Nature*’s website: <https://www.nature.com/nature-research/open-access/nature-partner-journals>

In exchange of paying for these services, the partner institutions benefit from a scientific journal that contains the symbolically attractive *Nature* trademark and does not give the impression to be coming from the institution itself. As one could expect, these associations do not really attract the already most recognized institutions, which don't need such symbolic boosting, but are attractive for those that are in search of such recognition and have the economic resources to buy some symbolic capital by being associated with prestigious organizations. As shown in Table 2, most academic partnerships come from countries known to work actively to raise their international scientific profile. China come first with 6 partnerships, followed (more surprisingly) by Australia (4 partnerships) and the more predictable Saudi Arabia (3 partnerships), a country known to entice highly visible scientists to accept "affiliations" to their universities, thus boosting their positions in international academic rankings.²² Although seven partner institutions are based in the USA, five of them are non-profit organizations or philanthropic foundations rather than universities. From the perspective of Nature Research, *npj* branded journals could be considered as second or even third-class category of assets, compared to the research *Nature*-branded journals. The journals' APCs, which vary between 2500\$ and 3500\$ per research article, depends on the *npj* title. From the perspective of the academic partner, mostly middle-ranged academic institutions, *npj* branded journals are still interesting investments, since they allow them to rapidly gain symbolic capital and academic prestige through being associated to the journal *Nature* through the brand of the "Nature Group". Indeed, most of the *npj* journals are ranked in the first quartile, between the 10th and 56th positions of their JCR subject categories, some of them ranking even higher. This shows that, although diluted in the *npj* acronym, *Nature*'s symbolic capital is still efficiently transferred in the *npj* branded journals.

In 2018, the AAAS launched its own *Science* Partner Journals (SPJ) program with the open access journal *Research*, thus joining the trend established four years earlier by Nature Research. AAAS' *Research* journal is a partnership with its Chinese equivalent, the China Association of Science and Technology (CAST). Since then, six other open access electronic-only SPJ have been launched, all of them through partnerships with Chinese universities or

²² Yves Gingras, 'How to Boost your University up the Rankings', *University World News*, 18 July 2014, <https://www.universityworldnews.com/post.php?story=20140715142345754>.

research institutions. In the SPJ program, the AAAS acts as ‘contractual publisher and service provider for that partner organization [...] providing editorial training, platform access, and marketing services.’ Since the partner institutions remain ‘editorially independent and responsible for the content published in each journal’,²³ the AAAS seems to let its symbolic capital be used by the partner in exchange of economic value. A similar strategy of trying to be associated with a prestigious organization was used by the bank of Sweden when it created in 1968 its ‘Prize in Economic Sciences in Honor of Alfred Nobel’ and asked the Nobel Foundation to manage the operations, thus giving the erroneous perception that there was indeed a “Nobel Prize in Economics” and that this discipline was thus on a par with Physics, Chemistry or Physiology and Medicine, the only sciences associated with a ‘Nobel prize’ and whose winners are often considered by the media and the general public as ‘geniuses’ in their disciplines.²⁴

Conclusion

The scholarly publishing landscape has been radically transformed since the end of the 1990s in close relation with the emergence of the internet and the concentration of scientific publishing among a small number of private groups, some of them (such as Elsevier) valued on the stock market. Among their strategies to maximize profits from their assets of journals, we have seen that in addition to the more traditional approach of creating new journals, publishers who had the most prestigious titles in their collections found a way to create derived products from these flagships titles, thus extracting more revenues simply by branding new journals using the title of the most prestigious ones. Conscious that only about 10% of the submitted papers could be used to create profit, they also found a way to keep in their group the largest possible part of the rejected articles by redirecting them to the branded journals or to the less prestigious but still quite profitable open access titles of their catalogue.

²³ See *Science*’s website: <https://spj.sciencemag.org/become-partner/>

²⁴ Yves Gingras, ‘Beautiful Mind, Non-Existent Prize: The Bank of Sweden Prize in Economic Sciences,’ in *Real World Economics: A Post-autistic Economics Reader*, ed. Edward Fullbrook (London: Anthem Press, 2007), 71-75.

This option was facilitated by the larger transformation of the scientific field and the management of research evaluation, which pushes researchers and institutions to maximize their number of papers as well as their visibility.

Scientists being not only the producers but in fact the consumers of journals, the best strategy for the publishers is to offer them diversified services to facilitate their work of writing papers. Thus, publishers nowadays not only publish scientific papers produced freely by scientists but also offer them seminars on how to write papers, where to submit them in order to maximize their visibility or how to write a good research grant. Even the process of evaluation is part of the global strategy of publishers. The Nature Index, created in 2014, ranks an institution according to the number of papers its faculty have published in the Nature Research group's journals.²⁵ In this way, subtly encourages researchers and their institutions to try publishing in a journal of its group in order to improve their ranking.

In the end, all aspects of the knowledge production process are ultimately controlled by the major publishers, while the very actors who produce all that value work for free as editors, reviewers and authors. Despite the apparent irrationality of a system sucking economic resources that could rather be reinvested in research, it does endure because individual scientists believe they can themselves transform the symbolic capital of their best papers into economic capital through getting grants or better academic positions. This seems to create a 'win-win' situation from the point of view of the individual scientist, though it appears dysfunctional at the level of the research system, as shown by the systemic problems confronting academic libraries that are unable to pay for the escalating costs of scientific journals since the end of the 1990s.²⁶

²⁵ Yves Gingras, *Bibliometrics and Research Evaluation*, 50.

²⁶ Glenn S. McGuigan and Robert D. Russell, 'The Business of Academic Publishing: A Strategic Analysis of the Academic Journal Publishing Industry and its Impact on the Future of Scholarly Publishing,' *Electronic Journal of Academic and Special Librarianship* 9, vol. 3 (2008). <https://digitalcommons.unl.edu/ejasljournal/105/>



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