

Editorial

PUBLISHING IN A CHANGING WORLD

Our world is changing, so too has the landscape for “religion and science,” IRAS and *Zygon: Journal of Religion and Science* (see Hefner 2014; Peters 2014, 2015). Science develops and religion is transformed under the influence of social changes (e.g., Drees 2015, Fredericks and Schweitz 2015), while globalization works in many different ways (glocalization), but affects everything (e.g., Eaton 2014; Bagir 2015; Bauman 2015). Publishing a journal on religion and science thus has changed as well. This is a consequence of new technologies, either directly or indirectly, via social changes facilitated by technology. In this editorial, I will inform you as readers of *Zygon* about our review process, distribution, and subscription. In the second section, I will offer a preview of the contributions in this issue, with three new review articles (on language, quantum physics, and theories of myth), and seven articles on various facets of our understanding of the world we live in and of ourselves.

ZYGON: A JOURNAL IN A DIGITAL AGE

This is the fiftieth year of publication of *Zygon: Journal of Religion and Science*. Compared to the earliest issues, the appearance of our print version is still the same: the cover with the circle with the Z, with a different color for each of the four issues. Already in the first year, the months of publication were March, June, September, and December. We grew, from publishing 400 pages in 1966 to over 1,000 pages annually beginning in 2000. And we have added abstracts and keywords, as has become academic practice. In recent years there have been other changes, not so much in the print issues themselves but in the relevance of the paper copy. Digital technologies have made global collaboration and access feasible. This shows up in the review process and in the way we reach our readers, while we see yet another big change on the horizon, “open access.”

REVIEW PROCESS

In the 1990s I occasionally reviewed a submission. The abstract would be submitted first, by mail. If the abstract seemed sufficiently promising, the editor would invite the full article, again by mail. For the reviewer, the review process would start with a letter of invitation and the abstract. One would have to return a postcard to the office. One would then receive by mail a copy of the submitted article. And in the end, the copy would be

returned to the office, with the evaluation form, often filled in by hand. If invited reviewers failed to respond, they would need to receive reminders—again, by regular mail, perhaps after one or two months. Thus, it might take almost a year from the initial abstract until a decision had been reached and communicated to the submitting author.

We now live in a time of e-mail and Internet. If you don't respond to a message within a few days, if not quicker, people worry there might be something wrong with you. *Zygon* now has an online submission system (<https://mc.manuscriptcentral.com/zygon>). The author submits the article, prepared for anonymous review, along with an abstract and keywords. The staff in our office checks whether the material is as it should be, and makes it available to the editor. I make an initial decision, whether to have the article reviewed, or to reject it without further review as thematically or *qua* type of treatment not promising for *Zygon*. I also accept some articles; often those have been resubmitted after minor revisions, or have been reviewed already before being submitted officially through the system. For the review, I try to think of two or more colleagues competent to evaluate the quality and originality of the article. Many names are already in our database. An invitation with the abstract goes out as an e-mail. If the invited reviewer does not respond, a reminder follows, automatically. And another one, again a few days later. Once a reviewer has accepted, he or she has access to the article. There are friendly reminders before the deadline, becoming more urgent as time goes by. We seek to have the review in three weeks.

Thus, the process goes much more quickly, as cultural expectations have changed and reminders keep the promise alive. Of course, it still may be that someone does not deliver as quickly as expected – and the “someone” can also be me, the editor, when I fail to take action when it is my turn in the process. Occasionally I need to approach multiple reviewers before finding some willing to provide the service for us. Some loyal reviewers have helped out with multiple submissions. Usually we inform reviewers of the decision made, providing them also with the reviews provided by other reviewers. Annually, we acknowledge our reviewers at the end of each December issue. With quicker messages and prearranged reminders, we now have a decision on almost all submissions within two months from submission, even though crucial steps—editorial selection of reviewers, reviewing the submission, deciding on the basis of reviews submitted—are done by academics who do this as a labor of love, almost always in addition to having a busy job.

Of the manuscripts submitted in 2014, not counting book reviews and editorials, about 46 percent have been accepted, often after one or more revisions (see Table 1). Of unsolicited submissions, the acceptance rate is substantially lower. Most submissions that did not need review had a

Table 1. Decisions in 2014 on Submitted Articles and Average Number of Days from Submission to Decision; “Final Decision” Includes Decisions after One or More Revisions (By reporting on decisions in 2014, the two columns do not regard precisely the same set of articles)

	Initial decisions	Days	Final decision
Accept	29%	6	46%
Major revision	14%	39	n/a
Minor revision	10%	34	n/a
Reject after review	15%	35	17%
Reject without review	33%	6	36%

decision within 10 days. After a decision to accept an article, publication tends to follow within six months.

Submitted articles are checked through “iThenticate,” a program that scans for overlap with texts available elsewhere. Quotes that are properly acknowledged are, of course, not an issue, nor are references and standard phrases. Thus, some overlap is to be expected. Rarely have we had cases where the overlap was sufficient reason not to accept an article. Through our publishing agent, Wiley, we are also a member of COPE, the Committee on Publication Ethics, which provides guidance for editors and publishers of peer-reviewed journals.

Reaching readers. In 1999, the average print run was 2,700 copies, as reported in the December issue of that year (34(4), 745). Our print run is now about 20 percent of that amount, but we reach many more readers. People access articles online. Universities often have our journal as part of a total package of journals they acquire from Wiley. Academics may often access the journal through their library, from behind their own computer. Thus, in 2014, an article was downloaded over 100,000 times from the Wiley Online Library ([http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1467-9744](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1467-9744)), excluding downloads by programs that scan the web, so-called crawlers (see Table 2).

Another way to have a sense of access is the so-called “impact factor.” This is a figure calculated by Thomson Reuters, the largest provider of information on scientific publishing. It notices how many articles from *Zygon* have been cited. The standard impact factor looks at the impact within the two years following publication. Thus, the impact factor published in June 2015 (listed here as the impact factor 2014) looks at citations of articles in 2014 of articles published in *Zygon* in 2012 and 2013. If we published 120 articles in those two years as “citable items,” and 80 of those have been cited in 2014 one time each, the impact factor would be 80/120, or

Table 2. Some Figures on Distribution and Downloads of *Zygon: Journal of Religion and Science*

	2005	2013	2014
Print run	1,825	683	572
Institutional online access	2,454	3,703	3,886
EBSCO (access to articles after one year)		4,609	4,491
Free or low-cost access (Wiley's philanthropic initiatives)		5,217	4,586
Downloads of full articles (crawlers included)	57,420	113,749	
Downloads (human usage; crawlers excluded)		105,000	106,490

Table 3. Two-Year Impact Factor for *Zygon*, as Published by Thomson Reuters in June Each Year

Year	2007	2008	2009	2010	2011	2012	2013	2014
Impact factor	0.175	0.521	0.215	0.368	0.274	0.488	0.833	0.400

0.667. If only one article had been cited 80 times, and no further articles received citations, the impact factor would also be $80/120$, 0.667. In the humanities, people tend to cite more books than articles. Besides, having an article cited within two years may be fairly quick. Thus, the value of the impact factor to measure our significance is modest. However, it is nice to see it rising in recent years, though not in 2014 (see Table 3).

Still, an impact factor below 1.0 implies that not every published article is cited. Over 50 percent are not cited at all in the journals covered by Thomson Reuters, within those two years. A concern is also that about two of three citations tend to be in *Zygon*, including citations in editorials. Thus, visibility and significance in the larger academic world is a concern.

There are such an overwhelming number of books and articles that publications are easily overlooked. The most important advocates of the articles can be their authors, who may distribute a pdf to colleagues, write in a blog or tweet, or otherwise promote their own article via social media. There is a new score, "Altmetrics," that tracks each article to see whether it is visible and discussed on social media. Those scores can be seen with the title of each contribution in the Wiley Online Library.

Wiley Online Library not only presents articles as PDF, but also in an attractive html-format, the "Anywhere Article"; references to other articles

within the Wiley Library are active links. The first issue of the current year is always freely accessible, for those who want to explore the nature of the journal. Online distribution has changed the nature of publishing significantly. However, at least for now we will also produce the print issues. Like the gold in the bank that used to provide stability to currency, the idea that there is a print copy still is important to give stability and reality to the articles, even for those who access it online. Online distribution may be expected to change the business model even further.

Open access—author pays—or hybrid? “Open access” sounds great. Published scholarly articles will be made available for free, via the Internet, not just for those who have a subscription or who have access via their university, but for all. More and more funding agencies require “open access” publications as the outcome of funded research.

However, academics, skilled in critical thinking, should not be misled by nice language. “Open access” often means “author pays.” Preparing an article for distribution, setting up articles in appropriate layout at servers with sufficient capacity, tied to the right indexing services—all such services imply costs. Our office expenses are also paid with some of the money received for subscriptions and licenses. “Open access” means that rather than the subscriber covering those costs, the author (or someone else) has to cover them. In many cases, that will in the end be the same institution, the university—though it may shift the burden from the library budget (licenses) to departments where researchers are employed.

Zygon: Journal of Religion and Science is currently a hybrid journal. Most access is on the basis of subscriptions and licenses (see above). But open access has been made possible by Wiley, for an author’s fee of US\$3,000. In 2014, we had the first two articles appearing open access (Devine 2014; Petersen 2014), one from New Zealand and one covered by University College London.

I expect that open access, or hybrid arrangements that include open access, will become a customary business model in the future, with universities or consortia of universities negotiating with Wiley and other major publishers a package that covers subscriptions and author fees for all their employees. A concern for the universities is “double dipping”: universities paying author fees, but also subscription fees. The arrangement now seems to become that the amount received in fees in one year will be deducted the year thereafter from the licenses. Substantial negotiations are going on, with the major publishers of academic journals (Wiley being one of the top five) and consortia of universities in various parts of the world.

Open access will be a challenge for authors who are not part of a major university, or whose research budget does not allow such expenses. If we have a scientist contributing to a symposium on religious interpretation of the science, would that be covered by the research budget in his department?

If a retired scholar offers reflections on the human values and meanings involved in his profession, would his former employer cover the open access fee? Open access sounds nice, accessible to the developing world, but it may make publishing more difficult for academics from less wealthy areas or those not embedded in academic research groups. Thus, I expect that as an interdisciplinary journal that seeks to involve scholars and scientists also “outside” their immediate research area, *Zygon* will need to keep a hybrid character, at least for some years while this develops. How the mix of subscriptions and open access submissions will develop, and how this will affect our business model, is not clear yet.

I am concerned that open access may provide a wrong incentive to editors. I currently see my role as serving the readers; they should receive articles that are up to our standards. However, if the author pays, rather than the reader, it may be in the editor’s interest to accept articles that are perhaps somewhat below standard, if these weak articles bring in extra money. The stimulus does not work to promote quality.

I assume that given this risk, reputation—by historical record, by composition of the editorial board, by reliable review procedures, by evidence of quality via impact, by service provided to authors and visibility of the articles in good forms, or in some other way—will become even more important for those journals that seek to attract good articles. In the digital age, having an article published is easy, but getting it published in a journal of high standing should still remain a deserved sign of quality. *Zygon*, with a respectable history, a strong editorial advisory board, a great group of academics willing to review articles, and a very respectable publishing agent, Wiley, should be able to remain on the side of quality.

Currently, with the rise of open access we see the emergence of many journals that seek to collect author fees, with minimal quality in the review process and online publication. Jeffrey Beall, Librarian at the University of Colorado, started a list of dubious journals and publishers in 2011, with 18 publishers listed. By January 2015, the list had 693 publishers (see <https://scholarlyoa.com/2015/01/02/bealls-list-of-predatory-publishers-2015/>). One publisher, with the respectable sounding name “Academic and Scientific Publishing,” launched a “fleet” of over 300 new journals a few years ago. If one knows how demanding it is to have a careful review process, building upon a reputation and loyalties, one might wonder how they can handle the review process for such a fleet. There is also a Directory of Open Access Journals (<https://doaj.org>) that lists the respectable ones, and is maintained by major university libraries and academic publishers. At this moment, it does not include hybrid journals such as *Zygon*.

The world changes, and so does the process of publishing *Zygon*. With Wiley we have an excellent partner to strengthen our global presence and

distribution and navigate the transitions that are coming. We remain as committed to quality and relevance as we have always been.

THIS ISSUE OF ZYGMON

A new topic: Big data. This issue opens with an article on the impact of a related technological revolution, “big data.” By scanning all search terms used for internet searches via Google, for instance, one might learn that more people are checking for flu-like symptoms, and hence that a flu epidemic is rising, well before this has become noticeable by more traditional means. Michael Fuller considers the relevance of these developments for our reflections on technology, science, and religion. He points out that new issues of interpretation arise, and hence opportunities for a dialogue on hermeneutical and ethical issues.

Relevance of the classic tradition. Joshua Schooping draws on a classical tradition, especially the thought of the fourth-century theologian Gregory of Nyssa, relating his thought on the fundamental character of matter to the ontological and epistemological ideas of the twentieth-century quantum physicist David Bohm. Bohm is known among specialists for an interpretation of quantum reality that differs from the more customary ones, at first by introducing hidden variables, and later with a book titled *Wholeness and the Implicate Order* (1980).

Chance and change. In the third contribution, Josh Reeves traces changes in the understanding of a core concept in science, chance, from a context when it was loaded with religious presuppositions if not denied on theological grounds (stressing providence, divine determination) to modern, quantifiable, and secularized understanding of chance and the discovery of statistical rules. This development separates Christians today from their predecessors. Augustine, Aquinas, and John Calvin figure as examples of the classic tradition; the modern conception starts to emerge in the seventeenth century with Blaise Pascal as one of the early representatives.

Cognitive science of religion. David Nikkel analyzes assumptions behind attempts to explain religion by understanding the cognitive mechanisms of the human mind (see in *Zygon*, among others, also Van Slyke 2014; McCauley 2014). In doing so, Nikkel first describes as a position a mind-body dualism that is hardly defended nowadays. However, he makes clear how in the cognitive science of religion (CSR) truncated versions of this dualism still play a role, passing by lived experience. Nikkel argues that CSR suffers from a disembodied understanding of thought that is indebted to more classical forms of dualism.

Theodicy and time. Mark Robson argues that C. D. Broad's understanding of time as a "growing block" may well be a fertile model that would help us soften the problem of evil (that is, the tension between God's goodness and power and the reality of evil; see also Southgate 2014). As the past does not disappear, one can envisage a future in which events turn out to be significant and in which the way they are woven together may be considered beautiful, even if the original events were of a terrifying kind.

Evitability. Another attempt to speak of significance in the context of an evolutionary understanding of reality is the emphasis on evitability, on events that might have come out differently. Gary Keogh argues that such evitability is a condition for significance. That I stay with my partner is more significant if it is not forced, but freely chosen at each moment. I could have done otherwise, but I chose to stay. He also argues that evolutionary reality has plenty of evitable events.

Lonergan and Piaget. Chris Friel argues that one might understand the philosophical theologian Bernard Lonergan as offering, mostly implicitly, a philosophy of biology. This philosophical outlook on organisms may be understood with the help of Jean Piaget's structuralism. Piaget is mostly known for his contributions on child development and education, but he drew on broader knowledge of biological development, drawing for that on the biologist Conrad Waddington. Friel thus comes to conclude that a "process structuralism" with an emphasis on "emergent probabilities" inspired by Lonergan might be a viable alternative to modern evolutionary theory, or, I would suggest, at least might offer an acceptable interpretation and development of evolutionary theory.

Review articles. While the two previous issues had sets of review articles on religion and science in different geographic contexts, this issue offers three review articles on quite different disciplinary contexts. Bert Hodges writes on "Language as a Values-Realizing Activity," a very well-informed and sophisticated psychological analysis of language and human practice. Language is not considered as a system of sounds and rules, but rather considered in the context of psychology, of the ways we are present and act in the world. Value is thus not an issue to be considered once science has completed its description of the world. To the contrary, science itself is a values-realizing activity.

Claudia Vanney returns to the topic of quantum physics, and especially the question whether *quantum indeterminacy* allows for a theological interpretation, as in the quest for a "noninterventionist understanding of objective divine action," advocated by Robert John Russell. Her title poses the question whether quantum indeterminism is real. She reviews various

interpretations, and concludes that there is a plurality of possible interpretations, a plurality that undermines any attempt to build theological conclusions on quantum physics. To the defense of Robert John Russell, I would say that I don't think he seeks to build the theology upon the science but, more modestly, seeks to offer a possible scientific model that is consistent with the theology he seeks to articulate and defend (Russell 2001, 2008).

Robert Segal offers a review of ideas of *myth*, from the nineteenth century (James Frazer, Edward Burnett Tylor) and the twentieth (Bronislaw Malinowski, Mircea Eliade, Rudolf Bultmann, Hans Jonas, Albert Camus, Sigmund Freud, and Carl Gustav Jung). He suggests that there have been shifts in the understanding of myth, from myth as a primitive science of nature to myth as serving nonscientific ends, returning to myth as a science, for instance a science of the unconscious. A helpful survey on a concept that is often used too loosely.

As the articles in this issue testify, many themes, topics, and questions return in new and old forms, even though the digital world of publishing differs from the earlier time of print. The contributions, many by younger scholars, testify to the continuing reflection on issues of importance to human existence and human understanding.

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