

Editorial

OPEN ACCESS, THE HUMANITIES, AND CONTEMPLATION THROUGH SCIENCE

OPEN ACCESS

I start this issue of *Zygon: Journal of Religion and Science* with the latest information on open access publishing and how this is relevant for the journal. Open access publishing (which makes content available to readers online for free) has the benefit of widening the reach of articles, also among nonacademics. The purpose of publishing the peer-reviewed academic journal *Zygon: Journal of Religion and Science* is not only to be read by academics—even though academics from a wide variety of academic disciplines are engaged in publishing, reviewing, and reading the articles. Actually, *Zygon* is already widely read among nonacademics. For instance, all members of one of the Zygon Journal Corporation's Member Organizations (i.e., the Institute for Religion in an Age of Science)—composed of both nonacademics and academics—receive access as part of their membership. With the sustained public relevance of the science–religion discussion, there is scope for further widening *Zygon's* reach via increased open access.¹ Most articles of *Zygon* can only be accessed via libraries that are subscribed or otherwise have licenses—in 2020, 6,693 institutions had paid access and another 6,696 developing country institutions had free or low-cost access to current content; in addition, Wiley's arrangement with EBSCO gave access to content older than one year to a further 3,978 institutions—, or via individual subscriptions.²

Since open access articles can be downloaded for free by anyone, this has an upward impact on downloads. Let me offer an illustration using some statistics obtained from Wiley. The average number of downloads per article published in *Zygon: Journal of Religion and Science* in 2020 was 320 in that year.³ Of the 10 most downloaded articles in 2020 (irrespective of their publication year), six (60%) had been published open access (see Table 1). This fraction is higher than the percentage of articles that are published open access (16 of 82 articles published in 2020, i.e., 20%, were open access), which confirms the obvious fact that articles that are free to download will have a larger readership than those that sit behind a paywall. The total number of article downloads per year was more than 180,000 in 2020; increased open access can be expected to lead to significant further growth in article downloads.

Table 1. Six most downloaded open access articles (among the 10 most downloaded articles overall) from *Zygon: Journal of Religion and Science* in 2020

Articles	Number of downloads
Taylor (2020)	1,535
Kaplick et al. (2019)	1,528
Norman and Reiss (2020)	1,451
Qureshi-Hurst and Pearson (2020)	1,118
Guo and Radder (2020)	880
Burdett (2020)	815

Making articles freely downloadable via “open access” can be done via one of three models: “green,” “gold,” or “diamond” open access. “Green” open access does not involve any cost for authors (nor any action from the publisher): authors can upload their final submitted version (thus *not* the published version) of their article to a freely accessible repository, for example, of their university. There are several drawbacks to this model, however: no copyediting and typesetting will have been done, which means the text and pages will be different from the published version, and there is a one-year delay: making articles available via green open access is only allowed after an embargo period of one year after original publication on the Wiley website.

The “gold” open access model allows for free access to articles in the final published form, from the moment that they are published. The cost for publishing in this model is borne by the authors (or their institutions or sponsors)—at present, this cost (also known as “author publication charge” or “author processing charge” [APC]) amounts to \$2,500 per article. *Zygon: Journal of Religion and Science* currently is a “hybrid” journal, where part of the income derives from subscriptions and part of the income comes from APCs; the latter category of income is increasing, since more and more articles in *Zygon* (20% in 2020, see below) are published under gold open access arrangements. Obviously, shifting the cost of publishing to authors raises a severe obstacle to the many authors who do not have their own institutions, research funders, or—as is increasingly the case in Europe—agreements between Wiley and national collectives of research institutions and funders behind them. Even if open access continues to grow (as seems likely), it may still take years until a large fraction of authors is covered by such arrangements. At present, though, most authors are individually confronted with the costs needed to make their article gold open access—and this is not really an option for them.

The “diamond” open access model differs from the gold open access model in that the cost of making articles freely accessible is not borne by,

or on behalf of, the authors, but is covered in other ways. At present, most of the estimated 29,000 diamond open access journals that are in existence are collaborative, community-driven journals fully run by academics, with the cost covered by scholarly societies, universities, or otherwise (Bosman et al. 2021). At the moment, Wiley does not yet operate any diamond open access journal, while they operate around 230 fully gold open access journals (this number doubles if Wiley's recent acquisition of open access publisher Hindawi is taken into account).

Given the benefits of *Zygon: Journal of Religion and Science* having a wider impact if the journal moves toward a gold or diamond open access publishing model—including making available for free all articles that have been published from the first issue in March 1966 and onward—the Board of Directors (or “Joint Publication Board”) of *Zygon: Journal of Religion and Science* NFP (which is the formal name of the not-for-profit *Zygon* Journal Corporation) will be exploring the options for “flipping” the journal to fully open access. The issue to be resolved for both open access publishing models is the funding. Since, as has been noted, for many authors of *Zygon* it is not to be expected that they have access to funds for publishing, under the gold open access model the *Zygon* Journal Corporation will have to have sufficient funds available to be able to support “waivers” for such authors. Together with Wiley, it will be studied under which financial conditions (e.g., with the *Zygon* Journal Corporation sponsoring a certain portion of waivers) a flip to gold access is feasible at some point in the coming years. It is highly likely that a fundraising campaign will be needed for the *Zygon* Journal Corporation to make this possible.⁴ We will keep the readership informed about developments and plans.

But I can already say this: please keep *Zygon: Journal of Religion and Science* in your thoughts in your gifts and estate planning. It would be great if we could together make it possible that the journal realizes its maximum potential reach. For more information about giving to *Zygon: Journal of Religion and Science* NFP, which is a public charity exempt from United States federal income tax under Internal Revenue Code Section 501(c)(3), please contact the Chicago Editorial Office.

WHAT ARE THE HUMANITIES FOR?

This issue of *Zygon: Journal of Religion and Science* contains a Book Symposium on former *Zygon* Editor Willem B. Drees's book *What Are the Humanities For?* (Drees 2021). In that book, Drees offers an accessible introduction to the humanities as a diverse but coherent domain of scholarship, and he demonstrates how to think more clearly, and with greater coherence, about the humanities. From my reading of the final draft of the book, I concluded that it could well serve as an introduction to the

importance of the contribution of the humanities to the science and religion discussion (both the academic discussion and the discussion within wider culture). And hence I took the decision to organize this Book Symposium and invited five critics, more and less known ones in the science and religion discussion.

In the Book Symposium, Peter Harrison addresses the ways in which, since the scientific revolution, the sciences and humanities have established their relevance and social legitimacy; he finds that for the sciences, considerations of practical utility came to displace the more traditional forms of justification in the nineteenth century, making it increasingly difficult for humanities disciplines—which are perhaps not as coherent as Drees suggests—to establish their legitimacy. Michael Ruse notes that although he is not sure that there is such a thing as “humanities,” it perhaps being “just a dump for things that do not seem to fit in anywhere,” he also think that the humanities can be of more help to the sciences than is argued for by Drees, particularly emphasizing the assistance that the philosophy of biology can offer to “biologists doing their job” in interpreting teleology vis-à-vis natural selection as an entirely law-bound process in a conventional scientific way. Douglas Ottati elaborates on Drees’s concept of “human humanities,” positioning theology among these, and highlighting that there is “no single entirely satisfactory solution to the question of how to give due attention to the intensely self-involving character of plural religions”; he argues that it is important to undertake theology, religious studies, and philosophy of religion in proximity to one another. Lisa Stenmark criticizes Drees for emphasizing issues concerning the humanities in the Western Academy, which she argues make the book less useful for those who want to work outside the West; she proposes that an examination of inherent biases in Western humanities is needed, as reflected in its history, structure, and content. Donald Drakeman reflects on the dedication to “value-free” scholarship and the continuing importance of the academic study of religion; he questions why religion has been excluded from policy debates involving the principal interface between science and religion in the twenty-first century: the creation of new medicines and their delivery to the billions of religious people around the world. Finally, concluding the Book Symposium, Drees offers a considered response to the five critics.

CONTEMPLATION THROUGH SCIENCE

In the thematic section dedicated to the Boyle Lecture 2021, which was held online on February 3, 2021, we have collected not only the lecture that was held by Tom McLeish (entitled “The Re-Discovery of Contemplation through Science”) and the response by Rowan Williams. We also have been able to capture, due to the additional work done by Fraser Watts and Tom McLeish, the richness of the panel discussion and questions and

suggestions posed by the online participants; this has been done by including summaries and reflections. McLeish, in his lecture, rebuts four processes that have led science away from a contemplative stance: (1) a turn from an immersed subject to the pretense of a pure objectivity; (2) a turn from imagination as a legitimate pathway to knowledge; (3) a turn from shared and participative science to a restricted professionalism, and (4) an overprosaic reading of the metaphor of the “Book of Nature.” He emphasizes the imperative to consider reading nature as poetry and to examine the entanglements between poetry and theoretical science, and proposes a “theology of science.”

OTHER ARTICLES

The Articles section contains six articles. The first article in the Articles section is by Alister McGrath; he analyzes Stephen Jay Gould’s use of the notion of “consilience of equal regard,” which highlights both the autonomy of science and religion and the importance of constructive dialogue. In the second article, William Lane aims to offer evidential support for a form of pandeism called “living God pandeism”; the reasoning is that our Universe includes as much reality as is possible consistent with retaining God’s unsurpassable attributes. In the third article, R. T. Mullins and Emanuela Sani supply arguments from risk management that can be used to further develop “open theism,” that is, a theism that denies that God has definite exhaustive foreknowledge, and that affirms that God takes certain risks when creating the universe. In the fourth article, Marcio Antonio Campos presents results from a survey of Brazilian Catholic Seminarians on evolution; he observes a correlation (though cannot establish causation) between the awareness of papal statements and acceptance of evolution. In the fifth article, Aku Olavi Visala addresses the challenge from those who invoke the neurosciences and the cognitive sciences to argue that humans lack the kind of conscious control and awareness required for moral responsibility; he examines accounts of conscious control resistant to the skeptical challenge and shows how they can ground everyday practices of responsibility. Finally, in the sixth article, Daniel Capper reflects on the social and moral dimensions of biosignature science, focusing on a recent report on the presence of phosphine in the atmosphere of Venus and asking why it is that as a result Venus became so fashionable so quickly; he contends that the answer lies in Venus becoming moral.

The issue ends with three book reviews. Samuel Vincenzo Jonathan reviews Gregory Dawes’s *Deprovincializing Science and Religion*, Jonathan Chappell reviews Sarah Lane Ritchie’s *Divine Action and the Human Mind*, and Lluís Oviedo reviews T. M. Luhrmann’s *How God Becomes Real: Kindling the Presence of Invisible Others*.

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NOTES

1. The previous Editor, Willem B. Drees, wrote several Editorials in which he assessed the meaning of open access publishing for *Zygon: Journal of Religion and Science* (Drees 2015, 2017).
2. Since not all university libraries have access, this means that while the number of institutions with access is large (17,367 in 2020) not all academics have access to *Zygon: Journal of Religion and Science* articles.
3. Across all journals that Wiley publishes in the same subject area as *Zygon: Journal of Religion and Science*, the average number of downloads per article published in 2020 was 73 in that year.
4. Note that the financial pressure on the Zygon Journal Corporation would become even larger in the diamond open access model, in which no APCs are charged to any of the authors, even to those who would have institutions behind them that are able and willing to pay. Only a large, successful fundraising campaign that leads to an endowment of several million dollars would make a flip to diamond open access possible.

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