Free to Publish, Free to Read: How Volunteer Editors Can Demonetize Scholarly Journals in Nuclear Security

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December 2021

# Abstract

Focusing on nuclear security, I investigate the important, behind-the-scenes role that volunteer editors play in demonetizing scholarly research. Today, many open access (OA) journals that enforce article processing charges (APCs) can publish research online for free while still paying editors. However, APCs can exclude underprivileged authors and incentivize a weak review process. If, instead, the academic community shifts to a free-to-publish, free-to-read model—diamond OA—supporting underprivileged authors and deterring predatory publishing, then journals will require either outside funding or, realistically, volunteers. To ensure quality publication, every journal needs editors. Therefore, drawing from recent literature on open access and APCs, and from my experience as a volunteer editor for the *International Journal of Nuclear Security* (*IJNS*), I show how OA journals—especially in nuclear security—benefit from, and contend with, enlisting volunteer editors. Finally, I offer recommendations for succeeding in diamond OA editing.

**Keywords:** *IJNS*, nuclear security, volunteer editors, diamond open access, gift economy

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# Introduction

## Context for Author Charges in Open Access

How do open access (OA) journals, for-profit or non-profit, get money? Traditionally, to profit or to cover journal expenses, academic publishers put a price on knowledge by selling article access to institutions or readers **[*1*]**. The OA movement argues this scholarly research should be a public good, especially when tax-funded, and thus should be free—published online for all to read **[*1*]**. Now with the rise of open access—though traditional, pay-to-read journals still outnumber OA journals more than three to one **[*2*]**—many journals are transferring the financial burden from the readers (or universities) to the authors, imposing pre-publication fees: article processing charges (APCs) **[*3*]**. This pay-to-publish, read-for-free model is called *gold OA* **[*1*]**.

How much do gold OA journals charge authors? A simple search for nuclear-related, gold OA journals indexed in the Directory of Open Access Journals (DOAJ), an online OA database ([https://doaj.org](https://doaj.org/)), reveals APCs currently range from hundreds to even thousands of dollars. At the time of this study, out of the 17,063 total journals indexed in DOAJ, 29% use APCs—although, according to the most recent study **[*4*]**, journals in science and medicine are much more likely to require payment. To publish in one of these journals, an author must pay out of pocket, secure a grant, or, depending on the journal and the author’s circumstances, have the fee waived **[*3*]**.

By charging these fees, many gold OA journals, much like traditional journals, can afford to pay their editorial boards **[*5*]**. Of course, editorial boards can include not just managing editors and peer reviewers, but also regular editors[[1]](#footnote-1)—vital contributors to the review process **[*6*]**. For example, for the *International Journal of Nuclear Security* (*IJNS*), editors carry out essential roles such as copyediting, cite-checking, and formatting all accepted manuscripts. Having a skilled team of editors elevates the quality of scholarly publication and is, one could argue, well worth the cost.

## Problems with Author Charges in Open Access

Although APCs allow OA journals to employ editors, pre-publication fees create two new problems: suppression of underprivileged authors and incentives for weak review or, when intentional, for predatory publishing. Do APCs undermine the goals of the OA movement—to democratize scholarly research, to serve rather than sell, to see the world and humanity prosper? In the international community, especially for nuclear security, free, open, and reliable communication is critical to handling nuclear energy responsibly and protecting the world from nuclear threat.

In the gold OA model, however, the use of APCs can disadvantage scholars who cannot afford them **[*3*]**. Harsh critics of gold OA—such as Fuchs and Sandoval **[*6*]**, García et al. **[*5*]**, Poynder **[*7*]**, Meagher **[*8*]**, and Pourret et al. **[*9*]**—condemn the publishing practice as driven by corporate greed and colonialism, which widen the gap between rich, developed countries in the Global North and poor, developing countries in the Global South. As Poynder **[*7*]** explains, “… a publication wall could in fact be worse than a paywall, which can be more readily surmounted with the help of appropriate subsidies, or concessions from publishers.” In other words, APCs often fall on the “individuals,” rather than on the “organizations” **[*9*]**. On just the individual level, the careers of many scholars, such as professionals in nuclear security, depend on getting published in a peer-reviewed journal. As a result, these author charges can perpetuate economic disparities.

On top of inequity, APCs can also encourage weak review—that is, quantity over quality. This phenomenon is well studied. According to critics such as Fuchs and Sandoval **[*6*]**, Sorokowski et al. **[*10*]**, Bagues et al. **[*11*]**, Björk et al. **[*12*]**, and Dell’Anno et al. **[*13*]**, APCs frequently lead to circulation of dubious science, where “predatory journals” rush poor submissions, through a shoddy (or nonexistent) review stage, to publication—in order to collect as many author fees as possible. Because profit comes from charging “the producers,” not “the final users,” journals are incentivized not to vet what they publish **[*13*]**. Profit overrides precision.

## Solution to Author Charges in Open Access

How can the academic community alleviate international disparities and stamp out predatory publishing while still making research freely accessible to everyone? Fully demonetize scholarly research. Take down not just paywalls, but also publication walls. Adopt the diamond OA model **[*6*]**. If OA means “free to read,” and gold OA means “free to read but not free to publish,” then diamond OA means “free to read *and* free to publish.” Breaking down all financial barriers in scholarly publication opens up opportunities for disadvantaged authors **[*8*]** and closes opportunities for profiteering **[*6*, *8*]**. And although Dell’Anno et al. **[*13*]** conclude that the traditional, pay-to-read model erases journals’ incentive to “exploit the APC scheme to increase their profits,” because traditional journals do not need an APC scheme, the publish-for-free, read-for-free model also eliminates this perverse incentive **[*6*]**. The only caveat? Unless externally funded, journals must, as the editors for *Geoforum* point out, run on “substantial uncompensated investment of time and labour from a few selfless individuals” **[*14*]**.

Thus, editors—like most peer reviewers—must work unpaid. Why would editors work for free? Professional experience. Run entirely by a volunteer board of editors, *IJNS*—a nonprofit, peer-reviewed journal—recruits the language expertise of college undergraduates and graduates, most of whom have taken senior-level courses in technical writing or editing. As editors, they understand that their contributions to the review process are both professionally rewarding and necessary for the effectiveness and clarity of all content published by the journal—a win-win.

## Focus of this Study

As this brief literature review has shown, diamond OA is the ideal model. Although gold OA journals can compensate their editors by shifting costs from the readers to the authors—often to the detriment of poor, underprivileged researchers and the review process’s integrity—diamond OA journals can best bridge the gap between free, open access and fair, honest publication. To sustain this model, journals need volunteer editors, just as they need volunteer peer reviewers.

In this study, I address the benefits and challenges of this model’s use of editors, primarily in the context of nuclear security. Throughout the study, I apply the theory of the gift economy—that is, an economy built on serving rather than selling. I consider my primary audience to be editorial boards of gold OA journals and my secondary audience editorial boards of diamond OA journals. As scholarly literature on volunteer editors is limited, I draw extensively from how the volunteer-based model has worked for *IJNS[[2]](#footnote-2)* and from my experience as a volunteer editor for the journal. Exploring this behind-the-scenes, editorial role in demonetizing scholarly research sheds light on how the academic community can, ultimately, better serve the world and humanity. To conclude, I share recommendations for succeeding in diamond OA editing.

# Benefits of Volunteer Editing

What diamond OA does best is ripping the price tag off of knowledge. The publishing world, after all, is often in the business of producing, appraising, and selling the valuable good that is knowledge. In their chapter on “Decentring academic text production and evaluation practices,” Lillis and Curry **[*15*]** deconstruct this traditional approach to publishing—the burdensome product of an Anglophone-centered market economy. In its place, the authors propose the gift economy **[*15*]**. The gift economy shifts focus away from the cost and toward the intrinsic reward.

Within an academic context, diamond OA is the gift economy. Diamond OA journals publish not for money but for the public good. As one of these journals, *IJNS*’s mission is to promote international scholarly discourse on nuclear security issues that serves to educate, protect, and advance society. If freely publishing an academic article aids researchers, policymakers, practitioners, or other professionals in safeguarding the world from nuclear harm or in harnessing nuclear energy for safe, peaceful uses, then the journal has accomplished its mission.

Rather than tax authors for their crucial work, diamond OA journals can still operate administratively on a volunteer basis. Volunteer editors are key. By volunteering, *IJNS* editors not only help the journal succeed in its mission, but also help implement the gift economy in the academic world. Thus, several benefits arise from editors’ volunteer work in preparing manuscripts for publication.

## Free Labor

One obvious benefit from enlisting volunteer editors is that journals can shed the financial burden of payroll. Free labor from editors is like that of peer reviewers: In *IJNS*, neither editors nor peer reviewers collect paychecks for their work. Without this free labor, the journal would be unable to sustain its gift-economy–centered model. Although published by the University of Tennessee (UT) Institute for Nuclear Security and partnered with the UT Libraries, *IJNS* currently receives no funding for its operations. Thus, itcannot afford to hire and pay staff.

Having volunteers, however, keeps the journal going without a source of revenue. Journals like *IJNS* prove that academic journals in nuclear security, despite widespread use of APCs, need not charge authors or turn a profit to maintain the free flow of scholarly discourse. Volunteer editors help make that free exchange of knowledge possible.

## Professional Experience

Volunteer editing benefits not only the journal by fulfilling its free labor needs, but also the editors themselves. A major reason someone would work in a journal without pay is professional experience. This invaluable opportunity draws many college students to offer up their services.

Pursuit of experience, however, does not mean lack of editing abilities. *IJNS*’s board of editors largely consists of UT undergraduates or graduates who have taken senior-level courses in technical writing or editing. They have educational training and language expertise. They just need the opportunity to apply that learning to real, professional work.

As many entry-level jobs call for prior experience, how can a college student gain this experience without an entry-level job? Volunteering for a journal is an excellent option. Like most of the *IJNS* editorial board, I have used my time as an editor to review and clean up submissions for publication, write articles for the journal newsletter, and make connections with nuclear security professionals involved in the journal. This experience makes college students like me more marketable and better prepared for the workplace.

## Quality Publication

Finally, unpaid editors help provide quality assurance. Whereas peer reviewers check manuscripts for accuracy and suitability for the journal, editors check manuscripts for a wide variety of language issues, such as grammar, syntax, word choice, clarity, tone, logic, consistency, organization, and citations. Editors turn rough drafts into polished papers. Without language experts to shepherd and groom submissions for publication, readers are likely to get confused, grow weary of burdensome prose, and form unsavory opinions about the journal. The journal’s ethos depends on editors.

To ensure quality publication, *IJNS* brings in editors who have a strong command of the style and usage of standard American English. As a journal that mostly publishes underprivileged, nonnative users of English, *IJNS* exemplifies the gift economy. However, to serve international scholars who sometimes struggle with English grammar, syntax, or word choice, the journal must rely more heavily on its wordsmiths.

Still, native or nonnative, every author counts on the sharp, trained eye of an editor. Until fully scrutinized and revised, all manuscripts are, after all, rough drafts. Consider, for example, the following transformation.

*Before:*

Indeed, the provision of negative security assurances to Parties to nuclear weapon free zones by nuclear weapons States constitutes one of the pillars of NWFZ treaties.

*After:*

Indeed, one of the pillars of NWFZ treaties is the assurance by NWSs not to use nuclear weapons against NWFZ Parties.

Here, the author makes no grammatical errors or typos. However, the original sentence suffers from a lack of clarity and conciseness. An *IJNS* editor, thus, diagnoses the stylistic issues afflicting the sentence and prescribes the proper linguistic remedy. The result is a tighter, stronger sentence. (Note that if the author had not established the acronyms NWFZ and NWS earlier in the paper, the revision would have clarified those terms.)

Maybe the original sentence seems manageable enough. But compounded over several pages, these writing issues become exponential and unsustainable, draining the reader’s mental energy and the author’s rhetorical power. Without sacrificing the intended meaning or nuance, editors help authors find the right words to convey their important ideas. The value that volunteer editors bring to diamond OA journals, therefore, is irreplaceable.

# Challenges of Volunteer Editing

Nevertheless, volunteer editing comes with some downsides. In a gift economy, nothing is truly free. Rather, someone must give up *something*. For volunteer editors, that something is time and effort. Journals that rely on volunteer editing, then, must keep the following challenges in mind.

## Time Commitment

First, volunteer editors must commit substantial time to the journal, despite receiving no monetary compensation. Their only compensation, after all, is professional experience. In *IJNS*, editors are often busy college students. On top of college classes and assignments, they may also juggle part-time work. Because of these other commitments, time is limited.

As a result, maintaining consistent volunteering is a challenge. Unless tied to an unpaid internship for college credit, editing roles in *IJNS* are fully volunteer-based. Although we expect editors to remain actively involved in the journal, we do not formally assign editing tasks. Volunteer editors can choose to accept tasks depending on their availability. When nearly the entire editorial board has little time to spare, however, this volunteer-based approach is especially straining on the journal’s efficiency and productivity.

The *IJNS* Davis Editorial Fellow—an unpaid associate editor who leads biweekly meetings; communicates with authors, reviewers, and board members; coordinates task assignment, task completion, and issue publication; and keeps the journal’s gears churning—works hard to ensure the journal meets its time objectives. But one person cannot do it alone. They need a team behind them who can contribute consistently.

In the academic world of publishing, a gift economy depends on reliable commitment from editors. The same is true for peer reviewers. Having more volunteers means less responsibility; having few volunteers means more responsibility. *IJNS* is no stranger to the latter scenario.

## High Turnover

One other consequence of the volunteer-based model is high turnover. For *IJNS*, which thrives on undergraduate and graduate labor, it is not uncommon for volunteer editors to graduate, find a full-time job, and leave the journal. And naturally, they tend to depart around the same time—at the end of Fall or Spring semesters.

Leaving the journal, of course, is nothing to feel guilty about. Rather, the journal celebrates the success of the dedicated individuals who move into the job market, apply the experience they earned throughout their months or years of service, and prosper in their new roles. Still, these frequent departures do make it difficult to maintain steady, consistent volunteering.

## Volunteer Recruitment

The final challenge is finding people to replace departing editors and avoiding a rocky transfer of responsibilities. How can the journal ensure a smooth transition? How can the journal entice new editors to join? Who can spearhead the marketing campaign and recruitment process? Every journal runs differently, so what may work for one journal may not work for another. Nevertheless, for the long-term sustainability of diamond OA editing—and, by extension, the gift economy—editorial boards should consider ways to acquire new talent and keep the journal going.

# Conclusion and Recommendations

As this study has shown by delving into the example set by *IJNS*, volunteer editors make diamond OA publishing possible. Even if a journal lacks the resources and funding needed to pay its editorial board, volunteers, via their time, can fill this gap. With a dedicated team of volunteer editors to handle essentially everything but volunteer peer reviews—primarily editing—journals can finally abandon harmful paywalls and APCs.

Whereas paywalls can deny access to poor readers and institutions, APCs can deny publication to poor authors, especially those in developing countries, or reward shady review processes. Neither paywalls nor APCs serve the best interests of the international community when those charges silence disadvantaged voices or—in the case of predatory journals that exploit the APC scheme—disseminate unsound science to maximize profit. In the nuclear sector, especially, such publication practices are unfair and reckless.

The ethical and socioeconomic fallout from both the traditional, pay-to-read method and the gold OA, pay-to-publish method means more journals should turn to diamond OA publishing. In the academic world, this free-to-publish, free-to-read model is the embodiment of the gift economy. Diamond OA decentralizes the almighty dollar and focuses instead on the needs of underserved communities. *IJNS* and many other journals have proven that the diamond OA model works.

Of course, volunteer editors are essential to the movement. They enable journals to shed the financial burden of publishing. In return, editors receive professional experience, which leads to paid jobs down the road. Moreover, they elevate the quality of publication for a scholarly, peer-reviewed journal—in itself a rewarding experience.

Editing manuscripts from around the world, for a journal like *IJNS*, gives underprivileged, nonnative authors a chance to succeed in academia. Many international scholars who lack the funds or who struggle to write effective English, the primary language for scholarly publication, could not otherwise find a scholarly outlet that can serve their needs. Volunteer editors allow journals to offer free editorial support to these authors and, indirectly, free distribution of their vital research.

Demonetizing scholarly research does not come without challenges, especially if a journal receives no external funding. As the saying goes, there is no free lunch. The hard work of volunteer editors fuels the gift economy of diamond OA publishing. As a result, diamond OA journals should expect challenges to arise from time commitment, high turnover, and volunteer recruitment. For over six years since its founding, *IJNS* has faced these same obstacles. Yet, through its dedicated team of volunteers, the journal has overcome them, continuing to serve nuclear security professionals, policymakers, and scholars around the world.

To conclude, I recommend the following methods for journals looking to address some challenges associated with diamond OA publishing.

## Connect the Journal with the College Classroom

How can a diamond OA journal handle a high volume of submissions, even when volunteer editors cannot keep up with editing demands? Connect the journal with the college classroom. If the journal can partner with a capable college class, allowing the professor to distribute editing assignments among students—as part of their coursework and grades—the journal can diffuse its editorial burden.

This strategy has been much easier for *IJNS*. Its managing editor has taught senior-level college classes in technical communication at the University of Tennessee, Knoxville (UTK). In these classes, he has allowed his students to partake in the journal’s gift economy by involving them in real editing work for real authors. Rather than assign “fake” work, he delegated to teams of students real documents in need of language improvements, such as clarity, organization, and grammar. Imbued with his doctrines of plain language—that is, clean, concise communication—students were already well versed in effective writing and editing. They just needed the opportunity to apply their knowledge.

This sort of marriage between the journal and the college classroom serves everyone well. Students gain unique experience as professional wordsmiths. Volunteer editors acquire much-needed assistance. The journal draws in new volunteer editors. (Classroom editing is the ultimate promotional tool.) And finally, authors are grateful for the careful attention to their writing.

If a journal does not yet have teams of student editors at its disposal, then it should certainly consider reaching out to departments or professors who may be able to lend their students’ talents.

## Develop Marketing Materials

A diamond OA journal should also consider developing marketing materials to promote its volunteer editing roles. Again, this strategy may prove more effective in a college environment, where students seek such opportunities. To entice new editors, volunteer editors can design materials such as flyers for hanging up on campus bulletin boards and for handing out to students.

When fishing for editors, keep in mind, however, the target audience and location for these materials. English and communications students are more likely to bite on the flyers. Buildings for the arts and humanities are probably among the best places to hang the flyers up. As a student in a senior-level writing course at UTK, I got permission from my professor to introduce my classmates to *IJNS* and to pass around flyers. To increase exposure, I also hung up the flyers on bulletin boards in our Humanities and Social Sciences building.

The flyer itself should highlight the perks of volunteering. In the flyer I designed, I pointed to students’ opportunities not only to edit, but also to write articles published in the newsletter and to network with valued contributors to the journal. Punctuating the flyer is a clear, firm call to action. Students need to know how to get involved, and any marketing material should make that information as straightforward as possible.



*Figure 1: IJNS Flyer for Recruiting Volunteer Editors*

## Acquire Funding, If Possible

Finally, if a diamond OA journal can obtain financial support from a willing university or other reputable institution, the journal may be able to offer a paid job or fellowship. This position, likely filled by an associate editor, could provide more consistency to the day-to-day and long-term operations of the journal. Of course, finding the funds is easier said than done. If possible, though, having someone on staff would give the journal much-needed breathing room.

As *IJNS* has proven, volunteer editors can keep a journal afloat, or even thriving, without financial backing—but honest funding is still better than nothing.

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1. For simplicity, I refer to assistant and associate editors as simply “editors”—not to be confused with managing editors. [↑](#footnote-ref-1)
2. I refer to *IJNS* as a diamond open access journal. Although *IJNS* accepts payment from authors publishing in the journal, payment is voluntary and, thus, almost never received. [↑](#footnote-ref-2)