








Key developments in global scholarly publishing: Negotiating a double-edged sword

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Abstract: Over the last few years, the publishing industry has experienced significant changes and developments, most of which have had a positive influence on scholarly publishing. For instance, the gradual popularity of open access publishing has contributed to the wider access and readership of published materials. Also, the recent development in the abilities of artificial intelligence (AI) tools to assist in the publication process is laudable for its potential. The gradual shift from print to online publication is also a commendable development in global publishing. Not without their own challenges, these developments, among others, have mostly impacted global publishing in a positive way. In the current study, the researchers' argument stems from the notion that although these developments are invaluable, there are accompanying impediments that publishing professionals as well as publishing outlets must consider. In response to these developments, role-players in the publishing industry must constantly reassess their publishing processes in order to carefully manage and negotiate what is termed by this study as a 'double-edged sword' (capable of having positive and negative consequences). This study reviews existing studies, draws views from publishing experts, and seeks opinions from scholars to establish methods of negotiating some of the key developments in global publishing.

Keywords: publishing professionals, scholarly publishing, transformation

INTRODUCTION

As with many other major industries of the world, global publishing has witnessed significant transformation in its publishing styles, models, processes, and standards. In fact, three decades ago, Lynch (1993) had already established that the system of scholarly communication was starting to change and that the rate of change would only accelerate as the networked information revolution took hold. Peters et al. (2016) also posited that

academic publishing, specifically the global journal knowledge system, was being wrought by a range of new digital technologies that heralded a third age of journals that was electronic, interactive, and used mixed media as a form of scientific communication. As much as these transformative technologies are relevant, concerns have also emerged over academic integrity, for example where authors and writers rely on technology (e.g., artificial intelligence [AI] tools), to produce their academic research with little to no personal input. For instance, in recent times, some

technological tools have become increasingly popular for their potential to produce academic content. The researchers of this study contend that academia and AI have become vastly intertwined, and as AI continues to advance, the future of academic research will be redefined. Scholars, such as Kenchakkanavar (2023), have argued that although academia has embraced the potential of AI tools, the same tools can also interfere with academic scholarship where such tools are utilized to corrupt academic integrity. While some of these tools can be considered useful in aiding academic research, the lack of control for their usage is also of scholarly concern.

One of the key developments in global publishing is the recent focus on Open Access (OA) publishing, which is a model that has vastly impacted scientific publications. This model of academic publishing has been perceived to improve research visibility, research transparency, scholarly citations, and researcher popularity. A major benefit of OA publishing that cannot be contested is its ability to make research accessible to users. Nguyen et al. (2022) establishes that despite its short history in science, OA has received support from major international institutions to improve accessibility to scientific knowledge by researchers and the public. As much as this model has its benefits, the associated costs can be particularly challenging for researchers from low-income countries. This situation has also been exploited by some publishers for financial gain, benefiting majorly from research publications, which has led to scholars connecting OA and predatory publishing. A point also conceded by Krawczyk and Kulczycki (2021) is that the overgeneralisation of the flaws of some OA journals to the entire OA movement has led to unjustified prejudices among the academic community towards OA.

Other transformations to scholarly publishing include the gradual shift from print to digital publishing; the gradual departure from monodisciplinary to multidisciplinary studies; the growth in the number of authors, scholars, and publishers; and the now harsh reality of the 'publish or perish' ideology. These and many more issues all have metamorphic consequences on global publishing, which is an industry in which professionals must always find ways to negotiate.

METHODOLOGY

This is a qualitative exploratory study that utilizes documentary sources as well as interviews in an attempt to investigate the double-edged nature of the key developments and transformations in global scholarly publishing. The researchers conducted a review of mostly recent scholarly works in order to establish a strong basis for the existence of noticeable transformations in scientific publishing. These studies further lend credence to the data gathered from interviews with scholars and scientific publishers. The interviews were conducted in the first quarter of 2023 with randomly selected members of the National Scholarly Editors' Forum in South Africa to derive an insider perspective on recent developments surrounding scientific publishing. Since the

Key points

- Global publishing has witnessed several transformations in its publishing styles, models, processes, and standards in the last few years.
- Although the transformations are noteworthy, there are also several concerns over academic integrity pertaining to the appropriate use of technology i.e., artificial intelligence (AI) in the publishing industry.
- The publishing industry is encouraged to assume more responsibility by distinguishing authentic publishers from rogue publishers in order to safeguard academic integrity.

intention was to delve into an area that has not been studied in depth in South Africa in particular, this study is based on a small exploratory sample of nine participants who are all from South Africa. As such, the findings cannot be generalized, although they provide a background for future studies. All interviewees provided informed consent and each interview lasted between 10 to 15 min. The study objectives as well as its purposes were made clear to all participants. Personal data of the participants were restricted to the researchers of this study and identifiable information of the participants was not used in the study. This is to ensure the anonymity of participants and confidentiality of their information.

The participants who are/were academics, editors of journals and publishers of journals revealed important information about how to negotiate the growing transformations in global scientific publishing. An unstructured interview strategy was adopted, as most of the questions were not predetermined; thus allowing the researcher to ask questions based on elicited responses. Generally, interviewees were asked to comment on their perception of developments within the publishing industry and how these developments positively or negatively affect the publishing world. From their responses, further questions were asked which led to responses that allowed the researchers to thematically group the findings. All the issues raised lead back to one overarching theme—the accompanying effects of global transformation in scholarly publishing. Verbatim quotations of selected statements from the interviewees are reported below and discussed vis-à-vis relevant scholarly literature. The interviews were transcribed, coded, and analysed inductively. The data were subjected to critical inductive analysis where the researchers conducted detailed readings of the interviewees' views and experiences to generate results for the current study. Once the raw data were transcribed and formatted, the researchers did a close reading of the data to generate patterns, which revealed the themes presented in this study. While some data fit into one category, there are also some overlaps. Nonetheless, the researchers have reported the data below under their closest category. Other information not strong enough to merit a whole theme is categorized under 'other emerging themes.'

The inductive analysis approach to data analysis is often commended for its ability to derive more general concepts through interpretation of raw textual data (Thomas, 2006). Hence, for this study, interviewees' responses clearly established that identified transformations in global scientific publishing are indeed laudable. However, publishing experts must also give these developments maximum attention in order to ensure that publishing standards are not compromised.

GLOBAL PUBLISHING IN THE ERA OF GROWING TRANSFORMATION: A REVIEW

The historical evolution of scholarly publishing has undergone notable changes over the centuries, driven by technological advancements, shifts in communication methods, and changes in the academic landscape. Technology has played an indisputable role in global publishing over time. This trend in the publishing industry has also unveiled remarkable innovative data insights and research procedures (Nusser, 2023), necessitating the establishment of new epistemic norms and ethical obligations (Kliestik, 2022). Consequently, the integration of technology into global publishing has provided a suite of analytical tools that not only exemplify the ethical responsibilities of the research process, but also delineate the transformation of publishers' roles from research facilitation to research workflow (Waithaka & Onyancha, 2021). Technology has had a profound impact on the dissemination of scholarly knowledge, revolutionizing the way research is conducted, published, and shared. Some of the ways in which it has transformed scholarly communication include, but are not limited to, access to information, OA publishing, collaborative publishing, and dissemination platforms, among others (Makarova et al., 2019).

The emergence of technology and the production of vast amounts of data has brought about a greater sense of responsibility for publishers, in the same way that many establishments and businesses have had to approach the emergence of new technologies. The publishing industry, especially OA publishing, has also faced new issues because of the advancement of technology, such as fraudulent publishing with AI in the form of manuscript generation (Altmäe et al., 2023) and anomalous referencing (Wren & Georgescu, 2022). All these accompanying trends are concerns for the integrity of scholarly publishers. Regarding ethics in publishing, the advent of AI and other innovative publishing tools necessitates publishers to elevate their standards for content verification and evaluation. This entails increased investment in tools and applications to ensure responsible publishing and combat fraudulent practices. Consequently, it is necessary to note that the future of scholarly publishing hinges on the ability of publishers to adopt innovative approaches in implementing AI solutions and technological tools within research workflows and publishing procedures.

Despite the ways in which the above factors have aided the dissemination of scholarly content, there are also accompanying

implications to consider. The ease of access to a vast number of resources online has led to concerns about information overload and the ability to discern credible sources. Also, the proliferation of online content has raised issues of quality control and peer review, with predatory and fake journals becoming increasingly prevalent. Undoubtedly, globalization has transformed the dissemination of scholarly knowledge by making it more accessible, collaborative, and varied. However, these transformations also come with challenges related to information quality and accessibility. Thus, the publishing industry must adapt to this changing landscape to ensure that scholarly knowledge remains a valuable and reliable resource for all. The following section discusses the view of participants regarding what transformation has brought into global publishing and how professional publishers should negotiate the so-called double-edge sword.

PERSPECTIVES ON SCHOLARLY PUBLISHING AND KEY TRANSFORMATIONS: FINDINGS AND DISCUSSIONS

This section captures the views and opinions of interviewees regarding their perceived feelings on the key developments in the field of scholarly publishing. By consulting recent literature, the researchers established that key transformations in scholarly publishing are indeed a double-edged sword; and just as the positives are significant, there are associated negatives, which must always be considered. The emerging themes from the discussion of findings include scholarly publishing in the era of technology, the OA model, publishing or perishing as a misconstrued mantra, as well as other emerging themes. The themes are discussed in detail below.

Scholarly publishing in the era of technology

A major recurring issue in the transformations around scholarly publishing emanates from the role of technology. Undoubtedly, technological developments have immensely contributed to the publishing industry in recent years. Many activities that would previously have been carried out manually are now automated. From online submissions to automations in the peer review process, and processes up to the publication stage, publishing outlets now rely heavily on technological advancements in their day-to-day operations. As observed by Mrva-Montoya (2015), the growth of communication technologies has redefined the space and time of communication and has also offered new ways of integrating content, sharing knowledge, and disseminating information in the publishing industry. Participants share their views regarding technological developments surrounding scholarly publishing. While some shared their opinion regarding aspects of AI, which is also a technological advancement, some also commented on the ease that technological developments have brought into publishing. Responses from the participants relating to technological advancements represent different facets as although the

advancements in technology were acknowledged, some also used the time to share their concerns regarding the developments that have occurred.

Participant 8 said that:

Technology has had a lot of impacts on the publishing world definitely. In my case, our entire publication process has become digitised compared to before when we used to receive and treat hundreds of submissions by email. It was hectic and things were getting lost in emails but now everything is streamlined which is one thing I really like. Also, I like that there are now several software that can assist in detecting plagiarism which I think is good. In the past, we were usually in the dark and I have been the editor of my journal since 1992, so I really understand the progression.

Participant 2 stated:

Technological inputs are significant in all spheres of life. The introduction of technology to publishing is important but it has its disadvantages. For example, the recent attention towards ChatGPT is a concern for we editors and publishers of journals as authors now rely on that tool to draft manuscripts and find a way to recycle the information so editors won't suspect a foul play.

Participant 4 shared similar views to Participant 2, by stating that:

With technology such as ChatGPT, we now have to be more concerned of academic dishonesty. Academic dishonesty has been present for so long and we have been finding ways to deal with them. But since ChatGPT became popular, we have been witnessing even higher rates of plagiarism in new submissions when we run the submissions on Turnitin. It is hard keeping track with these artificial intelligence tools because I have recently learnt of a new one used to reformulate information provided by ChatGPT called Quillbox or Quillbot... something like that.

Almost all the participants shared concerns relating to academic dishonesty as one of the negative impacts of AI on academic publishing. Although Participant 6 stated quickly that 'AI tools have benefits for universities and will help us redefine scientific research, but I must also say that I have seen a lot of students and academics use it wrongly. Some go as far as copying word for word and I can instantly see that something is wrong'. Eke (2023) also noted that academic honesty is at risk when users use ChatGPT to generate essays or other forms of written text that are then passed off as original work. This is, however, not the only concern posed by such AI tools. There is also the concern of lack of appropriate citations which Participant 1 noted

is 'an issue most people don't focus on with these ChatGPT matter is who to credit with the information that is supplied from those websites. I tried to understand how it works once and everything the system supplied to me was not referenced at all'. Cotton et al. (2023) noted that this matter undermines the very purpose of higher education, which is to challenge and educate. For them, academic writing is expected to accurately cite and reference the work of others, including in-text citations and a list of references at the end of the document. This helps to give credit to the original authors and to support the validity and reliability of the research. However, outputs from ChatGPT or other AI language models may not include proper referencing, as they may not have access to the same sources of information or may not be programmed to correctly format citations and references.

With the current impact of AI tools on scientific research, the publishing industry must also endeavour to respond, especially if scholarly publishing integrity is to be preserved. A fact that is now clear is that AI will continue to break boundaries. In years to come, AI tools even more advanced and technical than ChatGPT might surface that will cater for the deficiencies of ChatGPT, such as the lack of proper citations. An area in which the publishing industry must now direct their attention to is the introduction of more technical AI tools that can determine how and when tools such as ChatGPT are used. As challenging as this may sound, it is likely the most feasible option, as manual assessment cannot easily determine whether ChatGPT outputs have been incorporated. At present, existing plagiarism detection tools cannot cater for these advancements in academic writing caused by AI, given that most were created without consideration for tools such as ChatGPT. This is a point conceded by Neumann et al. (2023) when they discovered that the concerns surrounding the appropriate usage of ChatGPT have been reinforced by the fact that the plagiarism detectors licensed by universities could not identify the texts generated by the AI tool. Given this argument, where information is sought on ChatGPT and paraphrased through other AI tools, reports from plagiarism detection tools might also return inaccurate results.

Importantly, as aspects of scientific writing witness technological growth, the publishing industry must also technologically develop to cater for the growing demands of scientific writing. In the interim, publishing outlets must review and reevaluate their integrity policies to be clear on AI use and how they intend to tackle the resulting issues. These policies should also include advocacy for the responsible use of AI tools in academic writing. The publishing industry must officially acknowledge the existence of these tools and must encourage the appropriate use of these tools. When authors are found to be deliberately in contravention of these policies, more stringent measures must be taken to ensure that academic and publishing integrity is protected.

The open access model

Another development in the publishing industry is the move towards OA publishing. Although OA publishing is something that has been around for a while, it is becoming arguably more

popular on a daily basis. While OA has been credited for tackling the issue of restricted access, a new problem seems to have been born. Padmalochanan (2019) affirms that as the publishing of scholarly work is inevitable for the career growth of academics, the OA model inadvertently provides an opportunity for unscrupulous publishers with unethical practices to exploit the vulnerability of academics. As such, lines have also been drawn between the OA model and predatory publishing where the publishing industry has now been infiltrated by rogue publishers with the sole aim of making profit. This is a point alluded to by Participant 9:

Although I support the OA, I mean the journal I represent is OA anyway, the truth is I have to also admit that most of the predatory journals we identify here are OA journals and we can certainly see that the publishers are questionable. But somehow, many academics are carried away by wanting to publish open access papers due to wider reach whereas they end up falling into the trap of just submitting manuscripts to any journal publishing open access. That is the area we really need to do something.

One other main challenge of the OA model is that many authors/scholars from low- and middle-income countries are unable to afford OA publishing fees. Participant 2 shared that:

Open Access has really been helpful for many researchers to instantly access publications from anywhere in the world once they have internet access. In fact, we manage six journals and since we moved them to Open Access in 2016, readership and downloads have increased. Submissions have also increased as I think authors now target Open Access journals. My issue with the model is that we have to also think about the authors when we set our publication fees as many authors can't afford the fees. I mean this is Africa, some scholars from many African countries whom I have personally met who would like to publish can't simply afford page fees. We then give concessions and discounts to some but all of these come at cost. There must be a balance between the model, the publishers who also require the fees to run the publishing company if they are not sponsored, as well as the authors who struggle to pay these fees.

That the OA model is associated with publication fees is now a cause of concern for the publishing industry. On the one hand, academics with limited financial capacities tend to be disadvantaged when they cannot afford the publication fees. On the other hand, academics with financial capacities may find it easy to publish their papers in predatory publishers as long as the financial requirement is met, with no attention being given to quality since many such publishers are profit oriented. Participant 3 posited that:

The OA model is good, but I think it has now given birth to a lot of mushroom journals. I now see a lot of journals with shady websites, non-intellectual editorial board and zero value but with exorbitant publication fees. Surprisingly some of these journals even exist on some popular indices and I see some academics rushing there because they can easily get published once they have money for getting them predatory.

This view is akin to Dobusch and Heimstädt's (2019) that predatory journals have emerged as an unintended consequence of the OA paradigm as these journals accept manuscripts within days to obtain publication fees.

Dobusch and Heimstädt (2019) argue that academic publishing has become bent through the rise of predatory publishers whose only interests lie in profit-making rather than in forwarding academia. It is no doubt that predatory publishers have skyrocketed in the last decade since people can now exploit the attention given towards OA. The pressure to publish impactful and well-cited articles has also become a major reason why scholars are in the endless search for OA journals or outlets; especially since many academics believe that by publishing in OA journals, they receive wider readership, and as such, they are cited by more authors. It is within this context that Participant 4 also claimed that 'I think the problem is that many authors believe that when they publish OA, they will get more readers and get more cited by those readers. That is why some go all out for OA journals without paying detailed attention to the publishers.' As a result of this, unsuspecting and emerging authors have often fallen victim to predatory publishing in their search for OA platforms that can publish their research. Since research works produced with such publishing outlets need not be of good quality due to lack of appropriate peer review, untrustworthy and pretending academics have also found such outlets to be a haven.

'Publish or perish' as a misconstrued mantra

Closely connected to the issues of OA is the popular mantra 'publish or perish'. This is a common saying in academia aimed at encouraging academics to publish research work in order to attain successful academic careers. Participants who have themselves been in the world of academia and the publishing industry gave their views regarding this point. For instance, Participant 9 stated that:

I think the publish or perish saying has lost its credibility. I think the idea was to promote scholarly publishing but it doesn't say what type of scholarship we want to promote. Now we have researchers wanting to publish at all cost without considering the ethical implications. Many of them already know the kind of journals to target that will get their papers published in very quick succession and some of these journals are even international because they are

not based in South Africa. It is sickening but I don't like to say publish or perish because I think it puts pressure on people unnecessarily and for some people, it makes them do the wrong things.

According to Participant 9, the mantra seems to have lost its reputation as its purpose is now being misconstrued, especially in South Africa where some have repurposed the meaning to imply incessant publishing while neglecting quality. The pressure to publish for many academics has undoubtedly led to several unscrupulous practices in the South African context where the Department of Higher Education and Training (DHET) constantly cautions academics and institutions against predatory publishing, which is gradually becoming a pandemic in the country's academia. This is akin to Rawat and Meena's (2014) observation that the pressure to increase the number of publications has led to unethical practices and wasteful research. They state further that these interconnected conditions have led to a rise in unethical practices and dubious research practices such as salami slicing, plagiarism, duplicate publication, fraud, and the use of ghost authors, among other things. For many academic institutions, more attention is now given to research than teaching; exceptional research productivity is more rewarding than exceptional teaching as the latter is harder to measure. This factor has permeated several institutions of higher learning where research productivity is considered for promotion and perceived as a determining factor in the employment of academics.

As Rawat and Meena (2014) put it, scholars who publish infrequently or who focus on activities that do not result in publication, like instructing undergraduates, may find themselves out of contention for many teaching positions. Because of this, there is immense pressure to publish. In a communique released by DHET in South Africa, it was stated that:

Despite the significant growth in the volume and quantum of output due to the incentivisation framework for research produced from public universities, various studies over the past ten years have unfortunately also revealed that the policy has produced several unintended negative consequences as a minority of academics have begun to game the system through publications in predatory journals, listing of ghost affiliations and engaging in salami slicing to maximize the number of research outputs (DHET, 2023).

In this regard, Participant 5 intimated that:

As much as we put emphasis on publishing, we do not have critical measures in place. Attention is now on the number of papers an author publishes rather than the quality of their publications. I know of several academics who submit multiple papers every year to journals

half-baked. Most of these papers end up getting rejected while some get accepted after substantive corrections. Some of these academics do this just to gain promotions. But for us publishers, it reflects badly on us if we are pushing such bad research out and giving them publications so they can grow in their careers. I don't think it is right. We have to do something about it.

Getting published as an academic is a challenging process. A point also conceded by Hyland (2016) is that it is a long and difficult road that not only encompasses research skills and the ability to craft an argument for a professional audience, but also involves protracted and possibly bruising interactions with gatekeepers. There is existing pressure on academics brought about by the publication process. Then there is further pressure brought by the mantra 'publish or perish', which has contributed to several academics exploring the easy route, thus, resulting in predatory publication. Hyland (2023) also pontificates that one of the biggest driving forces in the expansion of academic publishing worldwide in recent years has been the career pressures and material incentives placed on academics by research assessment and reward policies. It is within this context that the researchers of this study argue that publishing integrity is at stake if predatory publishing continues to grow as a result of the loosely defined 'publish or perish' mantra. The publishing industry must begin to explore the possibility of a certification body that clearly distinguishes authentic publishing outlets from predatory ones. Such bodies, fundamentally different from already existing academic databases, must have stringent rules with clear advocacy for publishing integrity and certified publishers must be recognized to be leading publishers with a genuine scholarly agenda.

Other emerging themes

Other emerging themes from this study pertaining to key developments in global publishing involve digital publishing and the gradual departure from monodisciplinary to multidisciplinary studies. Participant 8 shared that:

One of the major developments in global publishing is how we have shifted majorly from print to online publishing. We don't need to waste papers and a lot of papers get published quicker than during the print era mainly. My only challenge with this is how people in rural areas who struggle with internet and power will be able to access such published information. Some people may not even be able to afford devices for these publications. I just feel like one cannot satisfy everyone. It is a major win that we can have a lot of people download our papers but I also feel like we are cutting some people off unknowingly.

The digital disruption of scholarly publishing is not a recent development, with many people regularly using the internet for

information. From a more theoretical perspective, Arbuckle (2021) argues that the emergence of the internet and its near-global reach has created a platform for knowledge sharing at unimaginable proportions. Thompson (2021), in his publication *Book Wars: The Digital Revolution in Publishing*, also admitted that the shift from print to digital publishing offers the possibility of a completely different way of handling the content that was at the heart of the publishing business. In essence, Thompson (2021) opines that the symbolic content of a book, for instance, is no longer tied to the physical print-on-paper object in which it was traditionally embedded. Thompson argues that the digital revolution did not kill publishing but instead gave it a new lease of life as information published digitally is easier to access as well as more economical for publishers who do not need to spend a fortune on printing. While there is no going back on this development which has in fact shown great potential for global publishing, the other side of the sword concerns readers in rural or local areas with limited access to internet or who are unable to afford access to the internet at all. Digital exclusion is a real concept, and one of the issues observed during the COVID-19 pandemic is how a large number of the world's population relied on the internet to carry on with their daily activities. Digital access is unequal across the world, and this will no doubt affect how certain demographics access digital information/research. Therefore, for scholarly publishers to continue to serve their wider communities, there must be some sensitivity shown towards digital access and digital disenfranchisement. In the current world, many students cannot afford uninterrupted internet access and several institutions of higher learning are still unable to provide free access to the internet for their users (students, researchers, and staff). An option to consider in the future would be for scholarly publishers to adopt zero-rating internet access for certain demographics of users affirmed to be digitally disenfranchised.

A point raised by Participant 7 is that the publishing industry is also witnessing a greater influx of interdisciplinary and multidisciplinary research. While this is commendable, there are also some concerns associated with it. The participant stated that:

As a publisher, my major issue with the interdisciplinary research trend is how to source for reviewers. Even for discipline-specific journals, some elements of other disciplines find their way into the submissions we receive and we constantly have to find ways to expand our reviewer database. It makes the reviewing of papers complex and time-consuming. But I don't think there is anything we can do about this than to live with it and adapt accordingly.

Carvajal and Sanchez (2023) recognized that the field of academic publishing has undergone rapid transformation in recent times and one of the prominent trends that has gained traction is the expansion of interdisciplinary research. For instance, Leahey et al. (2017) noted that researchers engaging in interdisciplinary research tend to be more frequently cited than those more

focused on single disciplinary endeavours. This, and the fact that scholars such as de Bakker et al. (2019) argue that current social problems require more interdisciplinary approaches are some of the reasons why interdisciplinary research has become highly popular. This is also a key development that scholarly publishers must prepare for and respond to. Generally, the expansion of interdisciplinary research is also an indication that publishers must extend their reach and scope in order to cater for multidisciplinary perspectives. This, however, brings to the fore more responsibilities for the publishing industry who now need to source more experts or reviewers with specific disciplinary knowledge or interdisciplinary backgrounds. A necessary response for the publishing industry is the global acknowledgment of interdisciplinary research and publishers must begin to accommodate interdisciplinary views in their publishing scope. In essence, publishers must also endeavour to accommodate papers that demonstrate interdisciplinary scopes in ways that provide solutions to local and global problems.

CONCLUSION

To conclude, scientific publications are extremely impactful to social development and transformations and developments are natural expectations for the publishing industry. From an academic point of view, publishing holds the key to career progression for many academics as well as the key to institutional reputation for many higher learning institutions. These facts have no doubt contributed heavily to the relentless efforts of scholars and institutions to encourage scholarly publication. This is also a fact that has been exploited in some areas by unscrupulous predatory publishers. Thus, an amalgamation of these factors has contributed to transformational changes in global publishing and professionals in the publishing industry must remain cognisant of these issues. Just as these changes are significant, constantly redefining and reassessing publishing procedures is equally significant. For instance, the adoption of the OA model has allowed scientific studies to be freely available for readers. Despite this positive observation, this study has also observed how the model is being exploited for the wrong purposes. Also, while the use of AI tools for academic purposes can be considered a technological breakthrough, the illicit deployment of such tools also threatens the scholarly community and the publishing world.

Through a review of existing studies along with consideration of expert perspectives, this study attempted a bidirectional investigation of the key developments in global publishing. It was established that although key transformations in global publishing are significant and mostly commendable, the second edge of the sword should not and cannot be ignored if integrity of publishing is to be preserved. As new developments continue to surface, efforts must be made to ensure their utilisation in the most productive and legitimate ways. Therefore, it is recommended that the publishing industry assumes more responsibility by distinguishing authentic publishers from rogue publishers. In so doing, the publishing world will be serving an important role of

preventing academics from falling prey to predatory publishing. Such a database supported and verified by authentic established publishing outlets, will significantly assist in reducing the inadvertent effects of recent developments in scholarly publishing. Also, as AI tools are becoming useful for academic writing, the publishing industry must equally respond by investing in other technological AI systems specifically designed to counter the corrupt usage of AI tools by authors. Importantly, publishing outlets must recognize the expertise of AI tools and, in so doing, must make provision for and speak to their appropriate usage in their publication policies.

AUTHOR CONTRIBUTIONS

Kunle Oparinde and Vaneshree Govender conceptualized the idea and conducted the analysis and discussion in this study. Theophilus Adedokun and Lolu Agbede sourced relevant literature for the study and wrote the literature review section. Sithabile Thungo conducted and transcribed the interviews alongside the draft of the methodology section.

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The authors declare no conflict of interest.

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The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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