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Communicating Research in the Built Environment:
A Professional Guide to Publishing Journal Articles

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Abstract

The primary aim of this article is to document the process of turning research data into a peer review journal article in the built environment disciplines. This is necessary to educate prospective authors who wish to convert their research output into quality journal articles. It proceeds to do this by first explaining how to do the write up in a professional manner. The write up is made up of three key parts: preliminaries (title, abstract, key words), main body (introduction, literature review, methods, findings, discussion, conclusion, notes, and references) and appendage. Once the write up is complete, it guides the prospective author on dos and don'ts (or professional ethics of publishing) during the pre-submission and post-submission period. This practice would help lessen the burden on the peer review systems and facilitate the prospective author to achieve successful article publication in a peer review journal.

Keywords: Authorship, editorial policy, IMRAD genre, publishing ethics, publishing practice, scientific communication, writing standards

INTRODUCTION

This article is completely different in structure from the typology it describes. This is because it is a review piece that does not follow the standard process of empirical reporting. Written from an experiential point of view, its purpose is to create an understanding of the steps involved in successful article publishing in peer review journals. Peer review journals are outlets for unsolicited contribution; hence they treat prospective authors with less sympathies than would be outlets for solicited contributions such as for book chapters.

Being a publishing resource for unsolicited contribution disposes it to an open market outlet that is characterized by stiff competition. Further, stiff competition means that the journal editorial teams will settle for the best they can get or what meets their prescribed standards. It is important to note that there are journals that pretend to conduct peer review also known as predatory journals and there are those that conduct genuine and rigorous peer reviews also known as conventional or non-predatory journals. This paper is meant to address prospective authors who wish to publish in non-predatory journals.Predatory journals are largely open access publishing (OAP) journals that engage in fraudulent peer review process (Kakamad et al. 2019). Essentially, because their primary motive is to collect revenue in terms of article processing charges (APC), they do not reject any manuscript submitted for publication by a prospective author. On the contrary, for non-predatory journals, publishing OAP is optional where applicable. Some non-predatory journals have gone full open access. Where open access is applied the journals collect APC but there are two marked differences; the charges are higher than what predatory journals charge. Secondly, collection of charges is not the main motive of the publisher hence manuscripts undergo genuine peer review and substandard ones do get rejected. This article intends to give advice to prospective authors who wish to publish in conventional journals where rigorous peer review is central to the communication of quality scientific research. Peer review is a quality ascertainment process in academic writing that stands out as the major determinant of the differences between predatory and non-predatory journals. Peer reviewers essentially serve as the test audience for a paper being prepared for publication. The peers represent the scientific audience the prospective

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author is trying to communicate to. They help the author to know whether the material intended for communication meets the expectations or standards of the scientific community. Hence what passes peer review is suitable for communication and will contribute to scientific knowledge.

The success in any publishing endeavour will depend on how well a prospective author follow peer review requirements. This article lays out the standard practice that prospective authors should go through in their publishing journey that inevitably begins with the peer review process. The information would be beneficial to new researchers who are embarking on the academic journey where the mantra of 'publish or perish' still holds true. The article encompasses an evaluative process of journal publication to aid budding scholars. The guide is geared towards scholars in the built environment but may apply generally to other fields of study. It discusses how to prepare the manuscript in terms of its requisite contents and what to do when and after submitting the manuscript. A typical journal paper that reports empirical research findings has three main parts: the preliminaries, the body and appendages. These parts form the focus of this review.

ETHICS AND STANDARDS IN SCIENTIFIC COMMUNICATION

Scientific enterprise involves production (research) and communication (publication) of knowledge whose success wholly relies in honesty and integrity (Iphofen, 2017). According to (Milošević and Vučković-Dekić, 2005) lack of honesty and integrity in the scientific enterprise may harm the knowledge world by undermining the public confidence in scientists and science itself. From this ethical and wholistic perspective it can be inferred that scholars in every field are doing research with the intention of publishing especially in peer review journals (Bogdanović, 2003). Therefore, publishing in a peer review journal is the most ethical feat a scientist should aim to achieve. As opposed to other publishing outlets like books or book chapters, peer review journals form the quality mark in scientific communication (Olenoglu, 2011 and Bogdanović, 2003). In most cases, a journal paper is treated as unsolicited contribution, hence the editor is not obliged to act favourably to the contribution. The quality in the contribution will speak for itself. Whereas every journal has a page typically titled 'Instructions to authors' it is important to bring to the fore a standard publishing procedure that applies to any journal or any author in the context of 'Essentials of the Manuscript' and author's code of conduct.

Professional ethics and standards in the publication process relate to what the actors should do or not do for an acceptably successful publishing enterprise. The International Committee of Medical Journal Editors (IMCJE) has identified the key actors with defined roles and responsibilities in the journal article publishing to include: authors, contributors, reviewers, editors, publishers, and owners . The ICMJE recommendations, popularly known as the 'Vancouver rules' have defined who contributors are in contradistinction with authors in the journal article publication exercise; a move that has not gone without criticism (Ali, 2021; Nelson and Petrova, 2022). According to the (ICMJE, 2022), authorship should be based on the following 4 criteria:

1. Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work.
2. Drafting the work or revising it critically for important intellectual content.
3. Final approval of the version to be published.
4. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Ethical responsibilities have been discussed by many scholars including (Hanson, 2018; Graf et al., 2015; Boff, 2012; Kapoor et al., 2011; Gardner and Heck, 2009; Schminke, 2009; Luey , 1996; Roberts, 1991). One of the point summaries given on this issue is by Arrison and Nerem (2018) as shown on **Table 1**.

Arrison and Nerem (2018) model recognizes that the author and the reviewer are one person who dons different hats at different times. That is why under stewardship, the researcher is supposed to give services to the disciple. These include peer review services.

Table 1
Scientific researcher/author's ethical attributes

Value	Ethical Attribute
Objectivity	This is fundamental to the scientific method. Researchers have a responsibility to design experiments so that it is possible for their hypotheses to be refuted. Researchers should seek to ensure that personal beliefs and motivations do not influence their work.
Honesty	This requires that researchers completely and accurately report what they have done. Researchers who are honest not only refrain from out and out fabrication or falsification of data but also avoid misrepresentation, nonreporting of phenomena, and inappropriately enhancing digital images.
Openness	This means being transparent and presenting all the information relevant to a decision or conclusion. It also means making the data and other information on which a result is based available to others so that they may reproduce and verify results or build on them.
Accountability	This means that researchers are responsible for and stand behind their work, statements, actions, and roles in the conduct of their work. At its core, accountability implies an obligation to explain and/or justify one's behavior.
Fairness	This comes into play in activities such as reviewing proposals for funding, reviewing articles for publication, and making hiring or promotion decisions. Being fair in these contexts means making professional judgments based on appropriate and announced criteria, including processes used to determine outcomes.
Stewardship	This describes the researcher's responsibility to colleagues and to the broader research enterprise. This involves being aware of and working to sustain healthy relationships within the lab and across the research enterprise, as well as performing service activities at the institutional or disciplinary levels.

Source: Arrison and Nerem 2018

Journals are typically owned by professional societies or academic institutions such as universities and hosted by a publisher. Every journal has an editorial board composed of the Editor-in-Chief, and other team members such as the Managing Editor, Reviews Editor, Regional Editor, Editorial Assistant and other board members; terminologies may differ from journal to journal. According to Vučković-Dekić (2002) it is the responsibility of the editorial team to:

1. Identify qualified reviewers according to the profile of the journal
2. Define the responsibilities of reviewers
3. Ensure that reviewers complete their work in a timely fashion
4. Find ways to reward the reviewers.

In identifying qualified reviewers, the editors should make their selection from among the most prominent scientists in the field (competence) who are knowledgeable about the subject of the manuscript and related literature, who are familiar with the journal to which manuscript is submitted and also with the needs of its audience. Additionally, the reviewers should not be related with either the actual work presented in the manuscript under evaluation, or with its authors (Vučković-Dekić, 2002). Vučković-Dekić (2002) reiterates that: "Providing adequate pool of reviewers is an important part of good editorial practice, without which no journal can reach the main goal of the scientific publishing to publish papers of internationally accepted

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quality standards". The main responsibilities of the reviewers are (Vučković-Dekić, 2002):

1. To determine the level of significance of the findings in relation to the mission of the journal
2. To guarantee that the process of identifying critical controls and analytical pitfalls has been carried out in a formal and considered manner

The reviewer's role is to assess the manuscript for publication in the journal to advise the author on how to improve the manuscript and to help the editor to judge and justify the acceptance/rejection of the paper. Vučković-Dekić (2002) has pointed out eight ethical qualities of reviewers; they should be:

1. Competent on the subject matter under review
2. Responsible and self-motivated scholars with key objective to advance knowledge
3. Fair in their assessment of manuscript by giving a balanced and evidence-based reviews
4. Prompt and not tardy in the delivery of their reviews
5. Protective of the confidentiality of the review process
6. Honest and disclose conflict of interest in the manuscript under review
7. Helpful to the author by focussing on offering useful advice to authors rather than giving summary of judgments to editors
8. Anonymous in the entire review process

The ethical responsibilities of the actors in the journal article publication process is a vast field. What has been re-enacted above is not comprehensive enough but may give a glimpse of what the debateable issues associated with ethics and standards.

METHOD AND SOURCES OF DATA

This study was undertaken using document analysis. The materials or sources of data weredigital documents in the websites of key built environment journals or their publishers. The publishers included Elsevier, Emerald Publishing, Sage, Springer, Taylor and Francis, and Wiley. The journals considered in the study are shown in **Table 2**. There are countless journals and many publishers of built environment research, and the ones included in the Table are indicative but in no way representative of the area. Journal/publisher websites contain a lot of information including aims and scope, instruction for authors, issues, and quality statements. This review relied on this information which was analysed through qualitative document analysis (ILT, 2013; Altheide, 1996; K'Akumu, 2022).

STANDARDS FOR THE PRELIMINARIES

Title

The preliminaries of a journal paper include the title, abstract and key words. The title is the most key component of a paper. It is the first thing a reader encounters about the paper and helps the reader to decide whether to read the paper or not. The title conveys the content of the paper because it is a one-line summary of what the paper is about. By reading the title, the reader evaluates the paper and immediately decides whether the paper could be of interest to him/her or not. For this reason, the title should be as informative as possible, and it must reflect the content of the article. There are many other qualities a title should possess. It should be as precise as possible and economical with words. It must not contain redundant words. Also, apart from articles, prepositions, and conjunctions, it is good practice if it does not contain repeated words. A title should not be long and winding. Journals limit the lengths of titles in terms of number of words or characters. Although a title may not be a complete sentence, it must follow English grammar and syntax for it to make sense to the reader. A title can be in two formats, singular or compound. A singular title contains only one part while a compound title contains the main title and a subtitle. The main title would convey the research idea while the subtitle would convey its specific area of application. Some journals use running titles. A running title is part of the title that would be repeated on every page of the article. When it fits within the word limit of running titles, it is commendable to use the main title as running title.

Abstract

While the title is a one-line summary, the abstract is a summary of many lines. Like the title, the abstract should be as informative as possible. It should tell the reader what the research is about. One or two sentences about the topic followed by statements of research question, objectives, or hypothesis. This should be followed by statement on methods used in the research. Notable findings should then be flagged up followed by a statement

on their implications. Implications should be for the scientific community in particular, and for society in general. Journals set word limits for abstracts. Typically the length of an abstract would be 100, 200, 250 or 300 words. Abstracts can be unstructured or structured depending on the publisher. Despite unstructured abstracts being common, structured abstracts are more detailed. For instance, Emerald Publishing Limited publishes journal articles with structured abstracts. The abstract can be structured as shown in **Table** 3. Due to the prominence of social media as platform for exchange of information, journals are looking ahead to harness the advantage it offers. To attract more readers, publishers are keen to advertise journal contents on social media platforms. Because visuals work better on social media, publishers are encouraging visual other than text abstract. One aspect of visuals that is well developed to date is graphic abstract. Elsevier's author tools and resources defines graphical abstract as 'a single, concise, pictorial and visual summary of the main findings of the article' [that] 'could either be the concluding

Table 2
Sample journals

Activity Area	Journals
Architecture	Architectural Science Review Architectural Engineering and Design Management Indoor and Built Environment
Building	Building Research and Information Building and Environment
Construction	Construction Management and Economics International Journal of Construction Education and Research International Journal of Construction Management
Housing	Habitat International Housing Studies Housing Theory and Society International Journal of Housing Policy
Real Estate	European Journal of Real Estate Research Pacific Rim Property Research Property Management
Urbanism	Environment and Urbanization International Journal of Urban and Regional Research Urban Forum Journal of Urban Management Urban Forum Urban Studies

Source: Compiled by author from journal websites 2023

Table 3
Typical structured abstract

Type	Contents
Mandatory	Purpose, Design/methodology/approach, Findings, Originality
Optional	Research limitations/implications, Practical Implications, Social Implications

Source: Compiled by author from Emerald Publishing website 2023

figure from the article or better still a figure that is specially designed for the purpose, which captures the content of the article for readers at a single glance'[1].

Graphical abstracts can be developed using infographics (West, Lindsay and Hart, 2020; Dallaghan et al., 2022) and circulated in through tweets or on Facebook accounts (Lasch and Heaton, 2022). Apart from graphic abstracts, journals also are moving to video abstracts where authors can curate their work to a visual audience. Publishers who accept graphic or video abstracts usually provide specifications under 'instructions for authors' on how they should be prepared. Ismail, Megahed and Eltarabily (2022) provide an insightful demonstration of graphical abstracting in the built environment research.

Key Words

Key words too are important abridgement texts that use single or group of words rather than phrases or sentences. They provide critical concepts or principal topics contained in the article that may have been missed in the title or abstract to elicit reader response. It is a common practice for authors to include the words appearing in the title as key words, but this makes key words redundant. Good practice require that the author does not repeat the words in the title as key words. In the information age, key words have become useful in enhancing journal article visibility through search engines.

STANDARDS FOR THE MAIN BODY

The IMRAD Structure

The common practice in reporting research in journal articles follows the Introduction, Methods, Results and Discussion (IMRAD) structure (Wolfe, Britt & Poe Alexander, 2011; Oriokot et al. ,2011; Bertin et al., 2016; Ribeiro, Yao & Rezende 2018; Ahmed & Afzal, 2020). IMRAD has been used in reporting research findings since the lastcentury (Teodosiu, 2010; Nair & Nair, 2014). It is recommended in many fields of scientific communication including in medical (Peh & Ng, 2008), biomedical (Mišak, Marušić & Marušić, 2005), agriculture and natural resources fields (Teodosiu, 2010; Nair & Nair, 2014). In this case, I recommend the IMRAD structure for communication of research in the built environment disciplines and proceed to flesh out details on its applications, according to the model shown in **Figure 1**. It is important to note that the basic structure is made up of four elements only: Introduction, Method, Results, Discussion. However, there are many variants of the structure that may include optional elements like study area, literature review, conclusion among others (Sharp , 2002; Wu, 2011) depending on the discipline and type of research; whether desk, field or lab work.

As shown in **Figure 1**, introduction answers the why question (Dube, 2015). Why was it necessary to do the research? Why is it necessary to report the results? The why answers identify the gap of knowledge and the contributions of the findings in informing the scientific community and society in general. In short articles, the literature review can be subsumed under the introduction. However, in articles with extensive literature review, a separate section on literature review can be included as an extension of the introduction before proceeding to the statement of methods as shown in **Figure 1**. If we were to invert **Figure 1**, the introduction would be like the ground floor of a building; literature review, where included separately, would be like the mezzanine floor; with method as the first floor. The conclusion would like a penthouse. The rest of the features will be explained in detail in the subsequent sub-sections.

Introduction

As already noted, the main body of a journal article is typically made of four mandatory parts; introduction, method, results, discussion, to which we can add references. There are other optional parts; literature review, study area, conclusion, and notes. The introduction of an article is a crucial component that should be worked to make the reader comfortable. Overall, it should be worked to make the reader know that the author has expert knowledge of the subject matter being addressed and that the subject matter is worth reading. Sometimes authors include a lot of generalities in the introduction, but this is not good practice. Include only what helps in advancing the central argument of the paper. A good introduction should include the following:

1. A sentence or two about the topic under which the subject matter of the study falls.
2. A sentence or two about the location of the study if it has a geographical dimension.
3. The subject matter of the research interest,

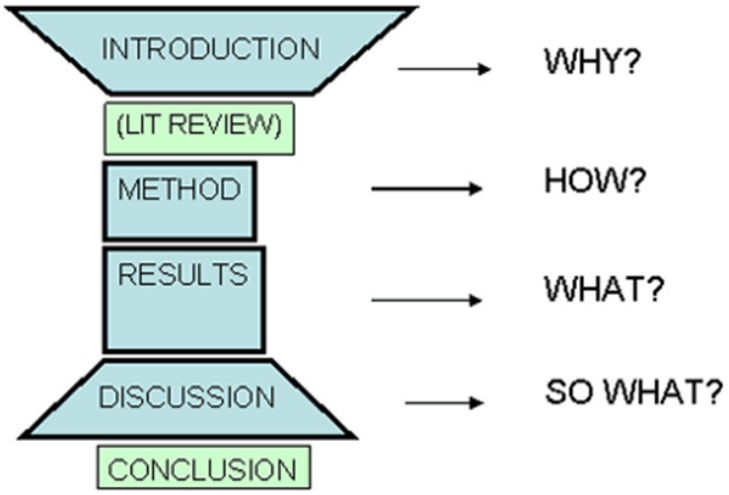

Figure 1
A basic IMRAD model
Source: Dube 2015

several sentences could be used to explain what the research is about and why—is it necessary to write the paper and why is it worthwhile for the reader to read it.
4. The central argument being communicated should be identified and elaborated.
5. A lead into the manuscript or article; what are its main features ?

All these should be done with the ultimate objective of making the reader get the idea that it is worthwhile to read the paper.

Literature Review
The introduction is then followed by a literature review. In the main study report a lot of literature could have been referred to but in developing the paper due care should be taken to include only what is necessary; only what contributes to the central argument of the paper. The paper may be just a small aspect of the entire study. The single objective of literature review is to indicate what has been done (to assess whether it is adequate or not) to identify what remains to be done (research gap) about the subject matter of research interest. In the review, it is important to include views of the founding scholars, the leading scholars and the most recent authors of the subject matter being reported on. Equally important is to include divergent opinions.

Since literature review is purposed to identify the research gap, it should help to identify the variables or themes of the study. To fill the research gap, what sort of information should be collected using which methods? Of course, these questions have been asked and answered in the main study, but this sequencing is necessary for developing the central argument of the paper. For quantitative studies, this leads to the conceptual framework that bridges to methods.

Research Methods
As shown in **Figure 1**, the method section answers the question: how? How was the research conducted? Several terminologies are used to describe methods. These include materials and methods, methodology, model specification, or research design. Whatever term is used it simply refers to the methods used to collect and analyse data. The challenge of the built environment is that it entails both natural and social systems. This means that studies may apply either qualitative or quantitative research strategies. Where necessary, these should be argued out in the justifications of methods used. It may start from the philosophy of the research level. Any report on research must include a statement of methods used explaining among others what they are and why they were chosen.

Results, Discussion and Conclusion
After the methods results would follow. In the main study there could be several results or findings.

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However, to make progress in the development of the article of communication, it is worthwhile only to report what contributes to the central argument of the article under development. To stay focussed, whatever is not contributing to this argument must not be included. The findings form the substance of the paper. If everything is done well but the findings are not apparent, the paper would not stand. Findings are necessary to fill the gap in knowledge. To demonstrate that the findings have filled the gap of knowledge it is necessary to discuss them in the context of literature reviewed. This forms the discussion part of the paper.

From the discussions the author can make a conclusion about the filling of the knowledge gap. The author should recall the central argument of the paper to elaborately answer the following questions. Does the argument stand? What are the implications of the answer for the scientific community and for the rest of society?

Notes and References

Notes and references form part of the main body of the paper because they are embedded thereinfrom introduction to conclusion. Notes may help with further clarifications or as further references. A list of references must always be included. These references must be cited in the text. There are many style manual to choose from, but the author must strive to comply with the reference style of the journal where the manuscript is to be submitted. The most common referencing style is available in style manuals as shown in **Table 4**.

Other style manuals may include Vancouver Reference Style (an author-number based system). Since the built environment is a multidisciplinary field involving social, legal and engineering sciences OSCOLA (the Oxford University Standard for Citation of Legal Authorities) and the IEEE (Institute of Electrical and Electronic Engineers) referencing styles may be used where applicable. An example of referencing in this case is this journal, *Africa Habitat Review*, that uses APA style manual.

Further, **Table 5** indicates, for most common styles, how an example reference would read in each case. The main message to the author is: Use uniform style and stick to the requirements of the target journal.

Appendage

Appendage is used here to refer to any clarifications to be included in the paper but without which the paper would still make complete sense, as summarized in **Table 6**. The most common of these are the appendices and acknowledgement. Appendices are extra information that the author may include at the end of the paper for further reference by the reader e.g. the data collection schedule. The author may also wish to acknowledge any help that led to the actualization of the article under acknowledgement.

Apart from the appendage volunteered by the author, publishing houses have several appendages they expect the author to include in the manuscript. These form the bulk of publishing standards and ethics. Different publishers have different requirements but the list of them include author biography, ORCID (Open Researcher and Contributor Identifier) Number, declaration of funding, declaration of interest, declaration of author roles, declaration of conflict of interest, data availability statement, supplemental material.

All these are intended to make authorship more professional and ethically responsible. ORCID Number is a globally based professional identification number that authors should register for, for ease of online identification in cases where names could be similar. If the research was funded the author must make this declaration. Similarly, if the author has financial or non-financial interest in publishing the article, this should be declared.

It is also important, in co-authorship, to declare roles played by each author in the development of the manuscript. Only those who made substantial contribution in writing the article should be included as co-authors, the rest should be in the acknowledgement or be included in the contributorship statement whichever is applicable to a journal under consideration.

A contributorship statement should include, other than the writers, any person or entity that contributed to the realization of the manuscript in any way. Apart from declaration of interest, some journals require the author, where it exists, to declare conflict of interest so that the editor may know what to do about it.

Table 4
Style Manuals

Abridged Name	Name in full
AMA	American Medical Association Manual of Style
APA	American Psychological Association Style Reference
Chicago	The Chicago Manual of Style (also known as Turabian Style)
MLA	The Modern Language Association Style Manual
Harvard	Harvard Referencing Style GuideZ

Source: Compiled by author 2023

Table 5
Examples of referencing styles

Style	Example of Reference
AMA	K'Akumu OA, Gateri CW. Evaluation of the Nairobi-Thika Road Improvement Project in the Context of Inclusive Development. Journal of Asian and African Studies. April 2022. doi:10.1177/00219096221084254
APA	K'Akumu, O. A., & Gateri, C. W. (2022). Evaluation of the Nairobi-Thika Road Improvement Project in the Context of Inclusive Development. Journal of Asian and African Studies. https://doi.org/10.1177/00219096221084254
Chicago	K'Akumu, Owiti A., and Catherine W. Gateri. "Evaluation of the Nairobi-Thika Road Improvement Project in the Context of Inclusive Development." Journal of Asian and African Studies, (April 2022). https://doi.org/10.1177/00219096221084254.
MLA	K'Akumu, Owiti A., and Catherine W. Gateri. "Evaluation of the Nairobi-Thika Road Improvement Project in the Context of Inclusive Development." Journal of Asian and African Studies, Apr. 2022, doi:10.1177/00219096221084254.
Harvard	K'Akumu, O. A. and Gateri, C. W. (2022) 'Evaluation of the Nairobi-Thika Road Improvement Project in the Context of Inclusive Development', Journal of Asian and African Studies. doi: 10.1177/00219096221084254.

Source: Compiled by author from Google Scholar website 2023

Table 6
Appendages to be included

Type	Examples
Optional to author	Acknowledgements, appendix (or appendices)
Required by publisher	Author biography, ORCID Number, declaration of funding, declaration of interest, authorship statement (declaration of author roles), contributorship statement, conflict of interest statement (declaration of conflict of interest), data availability statement, supplemental material.

Source: Compiled by author from journal websites 2023

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Further, a declaration of data availability may be required. This is necessary so that the reader can refer to and even authenticate the scholarly basis of the data that was used to produce the article. Where data is available it is necessary for the author to provide a link to the database. Another strategy for making a published article more discoverable is the inclusion of supplemental material. Supplemental material can be anything related to the research and may include 'tables to presentations, video to audio files'2. Supplemental materials will be deposited in figshare3.

It is important to note that most peer review journal publishers subscribe to the guidelines of the Committee on Publication Ethics (COPE), a non-profit organization dedicated to promotion of integrity in the publication of scholarly works. Its code of conduct is summed up in ten 'Core Practices' that include: Authorship and contributorship, Conflicts of interest/Competing interest, Ethical oversight, and Peer review processes2. Additionally, the author is expected to have obtained permission for use of copyright materials and adhered to research ethics where these are concerned. Some of these appendages, it is important to note, can be automatically included as checks during the online submissions.

From the forgoing discussions, the complete article format will take shape as summed up in **Table 7**.

CONFORMING WITH EDITORIAL STANDARDS

Once everything is prepared as described above it is important to do a plagiarism test also known as the similarity index test too identify. This would enable the author to identify all the plagiarism and eliminate them. Plagiarism is an unprofessional and unethical act in publishing and mainstream journals do not tolerate plagiarized work. It may be the reason a manuscript would be turned down during initial screening, without any further considerations. One of the common computer program that can be user as plagiarism checker is Turnitin. Alternatively, there are many online checkers available for free in the internet.

Thereafter, where to submit the manuscript should be a matter of careful decision making. To start with, the author should ensure that the journal in consideration is within the discipline of the research being reported. Secondly every journal has its aims and scope statement. The author should read this to ensure that the manuscript fits within the aims and scope statement.

Table 7
Summary of the complete article format

Section	Purpose
Preliminaries	Title: What the paper is about Authors: Names and affiliations of authors Keywords: Words other than those in title that best describe the paper Abstract: A stand-alone, short narrative of the paper
Main body	Introduction: Why this paper? The problem, what is not known, the objective of the study Materials and methods: How was the study done? Results: What did you find? Discussion: What does it mean? What next? Interpretation of results and future directions Conclusion: Possible implications References: Details of papers cited Acknowledgments: Who helped and how; what was the funding source?
Appendices	Supplementary materials

Source: Nair and Nair 2014

A journal's scope is determined by many factors including conceptual, methodological, regional.

Some journals are national or regional in scope while others are continental or global. There are many journals too that are ideological in orientation i.e. they dedicated to publication of scholarship that is aligned to a particular ideology e.g. Marxism or anti-Marxism in the social sciences. There are journals dedicated to qualitative research, quantitative research, or mixed methods. Scope also concerns the depth of engagement with a particular research issue. Journals are not the same where academic quality of what they publish is concerned. The quality of the articles a journal publishes in turn defines the journal's quality mark. The common quality indicator for journals is the impact factor (IF) measured in terms of the ratio of the total number of articles citing the journal to the number of articles published in the journal in a particular year or in a period of five years (Moed 2010a). It is known, also, as cites core by one of the citations indexing data base. The higher the ratio the higher the ranking of the journal in terms of prestige or quality. There are other scientometric indexes, apart from IF, applied by various bibliographic databases as shown on **Table 8**. These include Ranking, H-Index and SJR. The databases are Web of Science (WOS), google scholar and Scopus which is hosted by one of the journal publishers, Elsevier of Netherlands.

From the Table, it becomes apparent that IF is measured by WOS and Scopus while Ranking is measured by WOS only. Ranking refers to the rank of the journal in its scientific area e.g. real estate which is attained by number of citations received in a particular year. The journal with the highest number of citations is ranked first. Scopus has modified this index by computing SJR (SCImago Journal Ranking) that factor in the prestige of the citing journals. The h-Index relates the highest number of papers a journal has published with the highest number of times they have been cited. For instance, an h-index of 10 means that 10 papers have been cited at least 10 times.

The Source Normalized Impact per Paper (SNIP), 'is a ratio of two measures: it divides the number of times a journal's articles are cited – i.e., its raw impact per paper – to the frequency at which papers in the journal' subject field cite other materials – the subfield' s citation potential. In other words, it measures a journal's citation rate per cited reference in – or per citation given in – documents in the journal's subject field' (Moed, 2010). Generally, journals with high rankings accept only high-quality papers. It is useful for a prospective author to measure a manuscript against the quality mark of the target journal. Journals have sample issues that are free to read that can help a prospective author to peer measure against.

Once an author has decided on a journal, the next step is to ensure that the manuscript aligns with the journal's house style and other requirements. Every journal has a page on instructions to author where guidelines are provided on submission requirements. These include formatting issues such as font size or type, word spacing, graphics, English (whether American or British) and many others. The instructions also include guidelines on word limits and anonymization of the manuscript. Anonymization or blinding means that the author must not include his name or leave any other clue on the peer review manuscript that can enable the reviewer to crack his/her identity. This is meant to achieve double blind peer review and avoid biases. In case the author may not adapt the manuscript

Table 8
Data bases and scientometrics

Data Base	Impact Factor	Ranking	H-Index	SNIP
Web of Science (WOS)	√		√	
Google Scholar			√	
Scopus	√	√	√	√

Source: Compiled by author from data base websites 2023

to conform to some of these guidelines like say word limits, then the search for the appropriate journal may continue. Otherwise, it is time to follow the instructions and submit the paper. In case the author follows the advice as given here it highly unlikely that the paper will fail the first step of preliminary screening.

Managing Challenges in the Peer Review Process
After submission the manuscript would be checked by a journal administrator or editorial assistant to check if it has followed the checklist in the instructions for authors. Further scrutiny will involve checking if the paper fits into the aims and scope of the journal and its quality standards. Again, if the advice given above is strictly followed then the manuscript would sail through to peer review. Journals follow the double-blind peer review system in which the author does not know the peer reviewer and the peer reviewer does not know the author. This is done to eliminate bias and enhance quality of the review.

On the other hand, if the manuscript does not sail to the next stage of peer review, it would be rejected for failing to meet the quality standards it would be rejected without referral, but if it fails to sail through because it is outside the remit of the journal, but it is of good quality, then it would be rejected with referral. The publishing journey is usually long but a manuscript proceeding to peer review can be counted as a great success. The peer reviewers will review the paper to reach a verdict of: accept, minor revision, major revision, reject and resubmit, reject. The first decision is rare, but all these decisions are good for the author because the reviewers will give reasons to back any of these decisions. The author should take any criticism positively and use it to improve the manuscript to acceptable standard. Where no resubmission is recommended, the author may improve the manuscript and submit afresh to another journal.

The author should approach the process with a lot of patience. Competitive journals receive hundreds of papers in one month and the editor and team must go through all of them. For manuscripts that qualify for peer reviewer, the editor must approach the reviewer and request for consent to review. Reviewers do voluntary work, so they may not give priority to reviews hence the editors must chase them to deliver a review. Sometimes the process can take long. What the author should not do is to submit the manuscript to another journal because a review has delayed. This would be dishonest and unprofessional.

Once a manuscript has been approved for peer review, the editor will shop around for an expert in the area of research the manuscript is based. Because reviewers are specialized in certain areas, it is possible that the second submission could be sent to the same reviewer the first one was sent to. Hence, through reviewers, the editors might get to know. In which case both editors would reject the manuscript and the author would have wasted time by having to start all over again. This would also overburden the review systems. It is the author's manuscript, but it is good also to exercise the right to submit elsewhere only after withdrawing the previous submission.

Nevertheless. It is important to note that the review process can be long and frustrating to an enthusiastic prospective author and even more disappointing when the outcome is eventually an absolute negative. This is the underbelly of valid peer review publishing, and it is what gives advantage to the predatory journals. They come in with the very attractive packages that directly challenge the conventional journals. These include a review process that takes a few days and, in most cases, a zero-rejection rate. The guidelines in this article would tackle the issue of rejection rates but the delay in the peer review process is what the editorial teams could address in their policy objectives.

Indeed, some of the conventional journals may not get away with this. Whereas many journals accord amiable reception to the authors, some of them are lacking in hospitality. For some, after submission, the author may wait even up to four or more months before any attention is given to the manuscript. Upon submitting the manuscript, the author gets an automatic acknowledgement. From this point things can go silent for months before the status is updated to 'with editor', the stage where the manuscript is evaluated by the editorial team to determine whether it can go for peer review or not. And there can even be more waiting before a status update to 'rejected' or 'under review'/'out for review'.

CONCLUSION

This article may not entail the normal conclusion because it is not dealing with a synthetic analysis of a problem but an explanatory evaluation of a process. This review has documented the process authors undergo to turn the results of their research into academic articles in peer review journals. The review has presented the standard practice in the preparation of an article for acceptable research communication. What goes into the body of the article and what the prospective author should do after completing the write up has been explained.

This would be useful for authors especially those who are just beginning their careers in the challenging world of authorship that has been complicated by the rise of the predatory publisher. The explanations, if followed by the prospective authors, would lessen the burden of peer review process on the publishers and increase the chances of prospective authors getting published. Although the article is intended to inform scholars of the built environment where the author is academically domiciled, its general principles can apply to scholars in other disciplines.

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