

# How to write a terrible article?

Publish *and* perish

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Compliments  
of the authors



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## Two-, Three-, and Four-Atom Exchange Effects in bcc $^3\text{He}$

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We have made mean-field calculations with a Hamiltonian obtained from two-, three-, and four-atom exchange in bcc solid  $^3\text{He}$ . We are able to fit the high-temperature experiments as well as the phase diagram of Kummer *et al.* at low temperatures. We find two kinds of antiferromagnetic phases as suggested by Kummer's experiments.

## Don't think if you're ready, jump at it!

- Ask yourself whether you really want to publish the paper. Reflect on your motivation – you will need *a lot* of motivation while writing!
- Use a board to note down your motivation, goals and purpose of the paper. Revise, revise, revise!
- Make a reality check whether you really have a story to tell and who you would tell it to.
- Reflect on your data and research: do you trust it? Is it reliable? Did you check it more than twice?
- Ensure that you can carefully frame your work in context and that it fits the big picture and contribute to science as a whole.

## Do not be bothered with planning

- Careful planning is key: initially time consuming, eventually saves a lot of time which then you can dedicate to more worthwhile activities.
- Before writing your plan, think about the potential readership – consider their interests, how to address these with your paper, what is the potential impact of your paper?
- Consider potential deadlines, make a reality check whether you can meet these without a negative impact on the quality and your other work.
- Consider and reflect upon the structure of your paper: what is typically expected, what you would like to include and where. Revise, revise, revise!
- Ask your colleagues or friends for input! Don't be afraid to brainstorm.

## Do not search, do not read

- Literature study is the essential starting point of any worthy research activity, and should form the solid basis of every publication.
- Before considering their own research project, authors should first collect sources, read, study and reflect on them.
- Literature study allow you to carefully frame your research and locate it on the „map” of current knowledge. Only such a study can allow you to evaluate the scope and impact of your research.
- Reading allows you to improve your own writing skills: make yourself familiar with certain language phrases, commonly used in scientific writing.

***„Let me just pretend this paper didn't exist...”***

- Being selective in referencing previously published research is acceptable only if you are selecting relevant papers, painting the background for your research.
- Rejecting and avoiding citing previous studies with findings contradictory to yours is unethical and hampers scientific progress and may lead to financial losses.
- *A lie has no legs* – all knowledgeable reviewers know the field and do regularly literature studies and will quickly realize the literature study is incomplete and may reject a manuscript.

## ***„Let me just copy that...”***

- Plagiarism is a serious breach of publishing ethics and copyright infringement. It is also a very effective route to academic self-destruction.
- If you need to refer to someone else's work, always acknowledge their authorship - cite it.
- Most academic publishers have systems for detection of plagiarism and repercussions may be severe – including retraction of the paper and legal consequences.
- If you find that someone has stolen your work, notify the editors. You may also consult your legal advisor at your institution on what to do next.

## Excel in ambiguity and inconsistency

- A scientific article is not a novel: repetitions of terms are not unwelcomed. Do not seek synonyms and paraphrases.
- There should be no room for interpretation. The reader cannot read your mind, just the article.
- When using abbreviations or uncommon terms, ensure these are clearly explained in the beginning of the article.
- Ask a colleague or a friend from a related field to read through your paper and mark confusing terms and sentences.
- Average length of a sentence in a good article is 12-15 words.
- Avoid using complex sentences and make proper use of punctuation.
- Pay special attention to the title, abstract and keywords



## Be subjective, boast your great achievement

- Good PR is necessary but not in scientific papers: the true value of these lies in their content and it should speak for itself without any embellishments.
- Avoid using definite words like *never, all, everyone, always* etc.
- Statements in a scientific article are intended to communicate knowledge and information, which are best conveyed with unambiguity, consistency and objectivity.
- Subjective statements are not only imprecise and inappropriate but also lead to disagreements with reviewers and readers.

## ***„Grammar and spelling are for grammar geeks!”***

- Grammar and spelling are the backbone of each coherent statement; ignorance will lead to misunderstandings and inappropriate reception of your manuscript.
- In the day of electronic tools and with multiple spelling checking tools, not paying attention to grammar and spelling is disrespectful towards your readers.
- Read passages of your paper aloud and notice where punctuation marks should be.
- Ask your friend to proof-read your paper or make use of professional services. It is a worthy investment even if you're writing in your mother tongue.
- Pay special attention to the title, abstract and keywords

## Write all alone and don't ask for feedback

- No man is an island and we all need input from colleagues and fellow researchers to gain a wider perspective and reflect upon our work.
- Senior colleagues may support you in interpreting your results and in writing conclusions (key element of every paper!) – use their wisdom.
- Junior colleagues may help you in making the paper coherent and logical, especially if they are not very familiar with the research. They can identify incomplete stories.
- Welcome feedback and criticism as long as they are constructive: choose your advisors and co-authors wisely.
- Co-authors should be only the people who provided significant input in the paper – this is reserved for those who worked on the manuscript. Others can be thanked in Acknowledgements.

## Pick any journal, as long as it's with high parameters

- Check the list of journals you read most often – these will share the readership of your manuscript and thus may be suitable.
- Treat writing a manuscript as a long-term investment which you want to showcase and store in the best possible „bank”.
- Once you select potential journal(s) compare them. Always check who are the editorial board members.
- Always consult a basket of metrics and not a single parameter: Scopus offers a variety of indicators and features a special comparison tool.
- If you are still in doubt where to publish, consult senior colleagues and ask for their advise. Visit your library and consult with the librarian specilising in bibliometrics.

## ***„Guidelines for authors? Boring!”***

- Guidelines are not the most riveting lecture but they contain critical information allowing you to publish your manuscript smoothly, minimizing the risk of having a manuscript rejected due to non-fulfillment of technical requirements.
- Appropriate formatting of the manuscript speeds up the editorial process and will facilitate your submission.
- Guidelines will contain information about the structure of the articles: some sections are mandatory.
- Some journals will provide an article template, some have a more relaxed policy - „Your paper your way” (Elsevier).
- Make use of available tools to format citations and save your precious time (and nerves!) – Mendeley has several thousand citation styles that will match the journal of your dreams.

## Don't be bothered with the cover letter

- **Cover letter typically accompanies a manuscript submitted to the journal. Editor reads it to understand what is the paper about and to assess its potential value and your motivation behind journal choice.**
- **Mandatory statements:**
  - Manuscript not under review elsewhere
  - All authors approve submission and you're submitting the final draft
  - No conflict of interest to report OR clearly report the conflict of interest
- **It is best to avoid templates: editors know them by heart and will not be impressed.**
- **Be clear and explain why you think that your paper is ideal for this journal (not because of its bibliometrics parameters). Be modest and be honest.**
- **Pay careful attention to grammar and spelling! Messy cover letter may lead to rejection without even getting to the review stage.**

## Ignore editor and reviewer comments

- The purpose of the peer-review is to enrich your manuscript, so it does not contain errors, amiguities and makes a better impact.
- The editor and reviewers represent your future readers.
- Ignoring recommendations of the reviewers may lead to rejection of the manuscript.
- While you may argue with the comments, it is necessary to make a clear and logic arguments, while remaining polite.
- Editors ensure the reviews are objective: if you feel they are not, you may dispute it and bring it to the editor's attention.

## Once published, put it in a drawer and forget

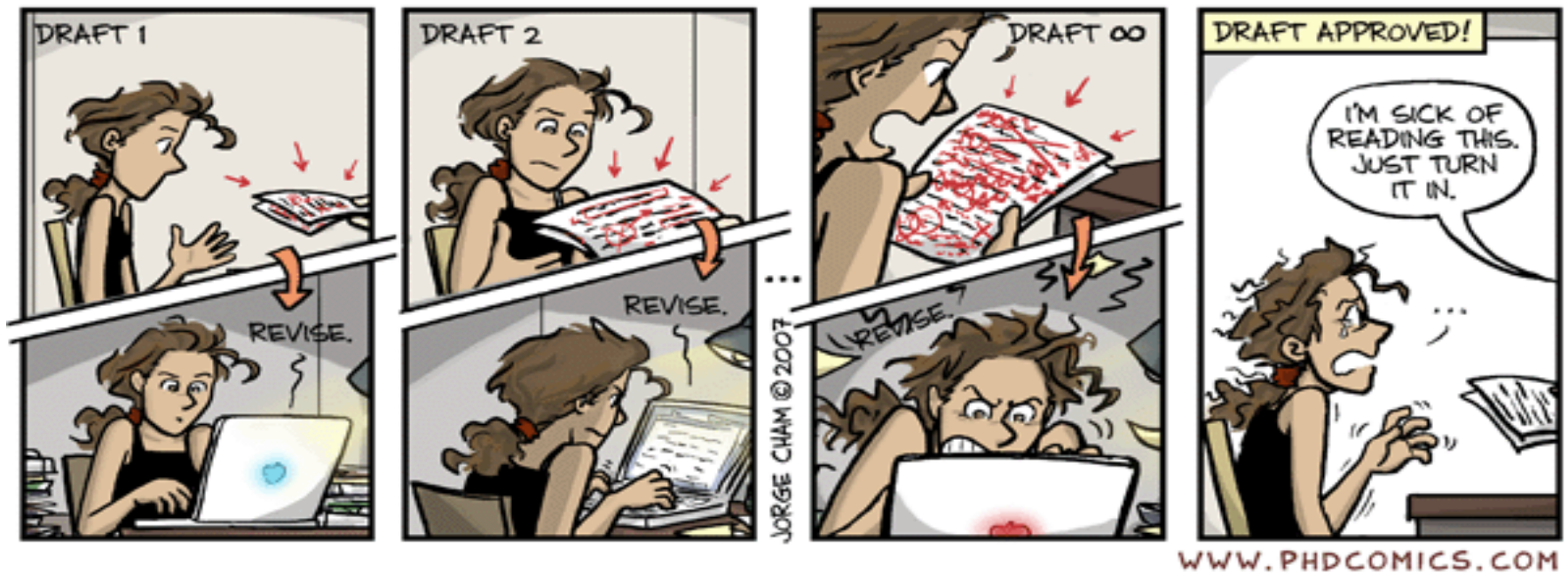
- First of all: celebrate it!
- Publishing a paper – especially the first one – is an achievement which you should cherish and share with your colleagues.
- Ensure your paper is visible: post links to its official source (i.e. publisher's or journal's platform), share copies with your colleagues etc.
- Set up and ORCID ID and link it to Scopus and Mendeley: ensure the paper is visible there.
- Always check your copyright agreement and do not breach it when sharing your paper!



## Final remarks

- Read, read and read – within and outside your field of expertise
- Scholarly publishing is highly competitive and can be stressful
- Nobody can write a perfect paper – all have flaws
- Grow thick skin: science is the business of being wrong and being able to admit it
- Better to work long and hard on a paper you're proud of than publish quickly and...be embarrassed
- Always put quality above quantity
- Use proper tools – Mendeley, Scopus, ScienceDirect, ORCiD
- „Revise and resubmit” is every researcher's motto...

## Revise, (re)submit!



# Thank you very much!

Any questions?

## Further reading and resources

- Elsevier's Publishing Campus - [www.publishingcampus.com](http://www.publishingcampus.com)
- Elsevier's Journal Finder - [journalfinder.elsevier.com](http://journalfinder.elsevier.com)
- Information about publishing in journals - [www.elsevier.com/authors](http://www.elsevier.com/authors)
- Contact me: [k.gaca@elsevier.com](mailto:k.gaca@elsevier.com)