Scientific Writing for the Non-English Speaker is the distillation of Lövei’s lecture notes and experience gathered over two decades; it is the coursebook many have been waiting for.

The book’s three main sections correspond with the three main stages of a paper’s journey from idea to print: planning, writing, and publishing. Within the book’s chapters, complex questions such as ‘How to write the introduction?’ or ‘How to submit a manuscript?’ are broken down into smaller, more manageable problems that are then discussed in a straightforward, conversational manner, providing an easy and enjoyable reading experience.

This volume stands out from its field by targeting scientists whose first language is not English. While also touching on masters of style and grammar, the book’s main goal is to advise on first principles of communication.

Scientific Writing for the Non-English Speaker is an excellent resource for any student or scientist wishing to learn more about the scientific publishing process and scientific communication. It will be especially useful to those coming from outside the English-speaking world and looking for a comprehensive guide for publishing their work in English.
Most people can think, talk and write best in their mother tongue. However, writing your manuscript in your native language, and later translating it (or having it translated) is strongly discouraged (unless you want to publish it in that language). Believe the words of a one-time translator: translating a scientific manuscript is a very long and frustrating process. The article will have to be virtually re-written, because the idiomatic expressions are different from language to language. Moreover, scientific English — still the dominant language of scientific publishing — is not very complicated. My advice is clear and unequivocal: it is much better to improve a manuscript written in imperfect English than to translate an impeccable manuscript written in a language other than English. Always write in English; it helps if your notebooks are also in English.

The writing sequence will not usually follow the sequence in which the paper is structured. As explained previously, the writing process, for practical reasons, should start with the Material and Methods section. The last sections to be written will be the Summary/Abstract and the final title. It is also advisable that one works on the Results section together with figures and tables — as these should be tightly integrated. Very probably the Introduction will be written earlier than the Discussion; the latter can rarely be written before the Results are finished.

The Reference List should be built gradually. Do not leave this until the end, because this is a time-consuming approach that is prone to error. Whenever you want to cite a paper, immediately insert the relevant bibliographic data into the list. After all, good citation practice requires that you see the original article, to make sure you know that you have cited the paper’s data correctly. It is very simple to add the bibliographic
Writing and Publishing Scientific Papers

details at this point. Learn to use an electronic bibliographic database, as previously discussed. These can be linked to your text document, making the inclusion and listing of the citations much easier.

Do not forget that you can use paper and pen. The “loose-leaf-technique” is often useful: make separate folders for the different sections of the manuscript, and write key words, fragments, ideas, etc. on pieces of paper. These can be stored in the folders, and will serve you well when the “proper” writing begins.

Writing, even writing scientific articles, is a creative activity. From time to time, scientists suffer from the same proverbial syndromes as poets, writers, painters, etc.: the dreaded “block”. You sit in front of your desk, or computer screen, and feel like nothing occurs to you and the paper will never be written. There are a few time-honoured tricks to overcome writer’s block.

Start as soon as practicable: even with those half-sentences, ideas, sketches, fragments. They can be expanded later. When something is, seemingly, not progressing, do not get upset and insistent about it. Leave it for a while — after some time, hours or days, when you re-start, often the block has cleared, as if by itself.

Do not intend to write the “final” version of anything at the first sitting. For titles, for example, go through the suggested “provisional title—draft title—final title” sequence. You can do the same with other sections.

When you do not know where to start, you can get underway with insignificant details, such as acknowledgements, key words, addresses. These must be written and, even if they do not utilise your highest intellectual capacities, this activity is often enough to get you started.

Citing, Paraphrasing, Plagiarism and Self-Plagiarism

In the various parts of the paper, you will write about other people’s ideas, results, theories. These should be acknowledged as such (i.e. the “intellectual property” of others) by citing the sources, in parentheses. The form of these citations has been discussed earlier. In the text describing these ideas, however, you should not, usually, use the discoverer’s sentences — you have to express the same idea with your own words; you will paraphrase. If you find it necessary, you can
The Writing Process: How to Write the First Version

18. The Writing Process: How to Write the First Version

*cite verbatim* — i.e. you present the idea as expressed by others, word-by-word. As the copyright of this text belongs to others, you must cite it with quote marks and the indication of the source, even if you only use a few sentences. The usual maximum that can be cited in this way without asking for specific permission is about three sentences — if the item is under traditional copyright. In a primary paper, it is customary not to cite *verbatim* even that much. Be careful because, if you do, you can be accused of plagiarism.

Plagiarism is when you use other people’s work in your own, using the same words, and do not indicate the source. Thus, the text and the ideas seem to be yours, when they are not. This is ethically as well as legally unacceptable. It is little better than stealing — stealing other people’s ideas and making them seem your own. The advice is clear and brief — don’t do it. Your reputation will suffer irreparable damage.

If a text is found to contain plagiarism, it renders the whole work invalid, and no journal will publish it. If it is published and plagiarism goes unnoticed, the repercussions are even more grave. The minimum consequence is that the journal will put the author team on its blacklist, never accepting any future manuscript from them for publication.

Today, several universities, as well as publishers, use various types of software to detect plagiarism. Perhaps it is a sign that plagiarism is more widespread than previously. Detected plagiarism carries a heavy penalty, and can cause great damage to you and your career. However, a further reason to avoid plagiarism is that it stunts your own intellectual growth. Instead of grappling with ideas and theories, understanding and expressing them in your own way, you would be making a shortcut that will prevent you from fully comprehending the ideas expressed. Remember — no two people use the same language when expressing the same idea. Strive for proper understanding — and this is demonstrated when you can write about the same idea, using your own words.

What about your own text, from earlier papers? You retain copyright — is it possible, legal, and appropriate to use this again? No, it is not — *self-plagiarism* is no better than plagiarism itself. The copyright of your own work may even have been signed away to a publisher. In any case, originality is important in science — and repeating yourself, word-for-word, is not allowed; you should avoid self-plagiarism. This may not seem sensible advice but, if you feel you have to use the same text in the
introduction of three or more of your papers, you are probably trying
to publish the least publishable parts — and will frequently fail to reach
the publishing threshold.

Above all, be careful: the joke that “Stealing from one is plagiarism,
stealing from many is research” is, emphatically, not true.

Completed? Not Finished

When you complete the writing, you are not yet finished. Never submit
the first, freshly-completed version of your manuscript. The chances
are that the manuscript contains some of the common errors listed in
Box 13. First: read it yourself, from the beginning to the end. You have
spent a lot of time on different parts, working on them in odd sequences,
leaving and returning. Be your own first reader. Does it read fluently?
Can you spot errors, omissions, inconsistencies? Are all parts complete?
Have you referred to all figures and tables, and are they numbered in
the sequence in which they occur? Are all references mentioned in the
text on the reference list and vice versa?

Box 13. The most common mistakes in a newly completed manuscript

1. Haste

When the manuscript is completed, the author usually feels almost fed up
with it, and wants to see it off her desk, submitted immediately. Premature
submission is one common mistake. Solution: wait. Send the manuscript to
one or two more colleagues and wait until they return the manuscript with
their comments. Never send the manuscript until all such comments came
back (or the colleague told you she cannot comment on it) and you carefully
evaluated them; this will usually result in revising your manuscript. The end
results will be an improved manuscript.

2. Confusing finish

Also towards the end of the writing process, the clarity of argument decreases;
the argument is getting muddled. This is a sign of tiredness. This is when
results sneak into Discussion, methods into Results, and non-written result
statements into summaries. I think this also arises because the authors “see
the light at the end of the tunnel” and this makes them rush. Solution: make
a little graphical representation of the flow of your argument to help you to
evaluate its effectiveness and clarity. Does one point indeed follow from the
other one? Is the structure consistent?
3 Inconsistent sequence/structure

This results from the (otherwise natural) writing of different bits at different times. Experiments should be described, and their results presented and discussed in the same sequence, even though the different parts (hypothesis, methods, results, significance) belong to different sections of the paper. However, details of experiment 1 should always precede those of experiment 2 in all the major parts. Solution: again, make a little diagram and check: are all parts of all experiments presented in the respective parts of the manuscript? Is the sequence consistent?

4. Not enough detail

This occurs mainly in the methods. Omission of elementary information—is because it is common in the lab, and is a basic method in the field. Nevertheless, it still needs to be written in detail (or referenced). Solution: give the Ms to a colleague and ask if she could repeat the experiments on the basis of your description? This often brings out omissions that you can then correct.

Important detail may also be missing because the writer has no clear concept of her future reader, and thus information that would be helpful is not presented. Solution: always write for a precisely identified journal, and familiarise yourself with the circle of readership. Give enough information for her to understand your new results.

5. Lack of clarity concerning in-text quotations/references:

This includes writing WHO did something and not WHAT was done. Evaluating other people’s work (XX’s brilliant experiments, ZZ’s pathbreaking approach, etc.). Solution: always write WHY a publication is cited, but restrict the statement to facts.

6. Data-poor, badly designed figures

The figure is there because “a proper paper has figures”. Solution: critically revise figures, first asking: is the figure necessary? The most important further question should be when revising figures: can the data : ink ratio be improved?

7. Errors in references

Omission of a reference, no total overlap between cited references and the list, incomplete references with parts (initials, volume or page numbers) missing. Solution: learn to use a literature database (Reference Manager, EndNote, Zotero, etc.), and use it in conjunction of your writing program. Generating the reference list can then be automated, dramatically reducing the number of errors in the manuscript.
8. Formatting errors/mistakes in the manuscript.

This also occurs due to haste to complete and submit. Needless to say this hinders, not speeds up publication: the first check on a new manuscript is on its format, and if this is not as required, the manuscript will be returned without evaluation.

When your manuscript has passed your own first test, it is a good idea to show it to others before submission. This “pre-submission peer review” could include three kinds of readers. Show it to a friend, who is at least somewhat familiar with the area. We rarely cherish criticism, and we often take this more readily if coming from a friend. If possible, also show it to a colleague. If you write for a more general readership, it is wise to show it to someone who is not closely familiar with the area, maybe from another profession.

There are no rules here — you can show your manuscript to as many people as you want. This counts for nothing at the journal when you submit. Nevertheless, the manuscript will benefit from such independent, and usually benevolent, advice. You can also send it to a colleague, whom you have not met before. It is polite to ask first, though.

Exposing your manuscript to such “unofficial review” is also a good way to improve your writing skills — especially if you have a patient, experienced colleague who can go through your manuscript and explain the points she criticised.

Collect the comments and revise your manuscript. You do not have to accept any advice — the work will be published under your name, after all. However, most of the advice will be given with an intent to help and, very likely, at least some of the assistance will be worth accepting. When this revision is done, put the manuscript aside to “mature”. Authors are, naturally, very impatient at this stage. However, I suggest that you do not rush; a few days’ rest can mature the paper.