A science editor's wish list

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One-sentence summary: This article presents an experience-based opinion on resources that would help author's editors working on scientific manuscripts perform their tasks more efficiently.

Before I stumbled into a career in science editing, I had not fully appreciated how multi-layered the task of an author's editor can be; I had barely even known that such a profession existed. I began to enjoy the challenges each manuscript presented and was naturally thrilled to discover how many resources the editing fraternity already had at its disposal—handbooks for editors, websites on academic writing, awe-inspiring style manuals, and of course, Google Scholar, to name a few. All the learning and research my job required appealed to my academic nature, and I was beginning to make the fatal mistake of treating my profession as a purely intellectual pursuit. But I learnt how to stay focused and work within constraints, time being the most important one. Over several years of experience editing within constraints and mentoring others to do so, I have drawn up a wish list of additional resources and tools, which I would like to present here.

- **A dictionary of scientific abbreviations, with notes on pronunciation and usage**
  How would someone who is not familiar with molecular biology easily determine whether MAP kinase should take an 'a' or 'an' before it, or verify if snRNPs is indeed pronounced 'snurps'?

- **A collocations dictionary for scientific terms**
  This will spare the non–subject-matter-expert the trouble of having to scour textbooks or published papers just to find out if a protein is recruited to the cell membrane or on it, or if a patient 'presents symptoms' or 'presents with symptoms'.

- **A resource on writing styles of and errors made by authors from different countries**
  I find that my reviews of trainee editors' work often carry annotations like how East Asian authors tend to overuse or incorrectly use transition phrases such as 'on the other hand', or use non-standard expressions like 'bilateral ears/eyes'. The results of online searches for such expressions can be misleading, because if they are common, an editor will be tempted to choose the safe option of leaving them untouched. Hence the need for some reliable reference that records experiences of editors working with geographically diverse authors.

- **A resource on peculiar field-specific usage and conventions that seem odd**
  This will prevent most non–subject-matter-experts from rushing to edit expressions like 'overweight is a common problem' or 'oldest old individuals', or from changing the telegraphic style conventionally used in taxonomic descriptions.

- **The mega-resource: an organized, searchable, online repository for editing, or an Editopedia, if you will**
  If this sounds like the simplistic wish of a lazy mind, let me elaborate. Most skilled editors will contrive to solve baffling problems by doing some research and seeking the help of electronic or paper resources. But would it not be helpful to have a one-stop-shop database that systematically guides users on various editing-related topics and directs them to reliable sources? I do not intend that a mega-resource should be the only place science editors need to look, but that it should be the first place they can look. This will reduce the time spent scurrying about looking for solutions to specific problems.

For example, if I wanted to know how human gene mutations should be represented, a search through Editopedia could direct me to the nomenclature page of the Human Genome Variation Society website. Many editors may want to explore automation options like a software program that helps format manuscripts according to a given set of instructions, or a spell-check program specially designed for the subject areas they work with. I definitely want one, because that will reduce the time I spend 'Ignoring' 500 instances of 'pyranose', 'bifidobacterium', 'rotavirus', and the like in a 5,000-word article (not to mention plural forms and differently cased instances of each term). A spell-check program for biology and medicine was on my original wish list until recently, when I discovered that such programs do exist. But editors may not find all of these easily through simple online searches. And before trying any of them, I would like to know how reliable, useful, and feasible each is and whether it can be regularly updated to include terms that are constantly being coined and accepted as valid. Editopedia can have

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a section listing such automation tools and their benefits and limitations.

There is another resource editors would consider most valuable—peers and seniors. Experienced editors have a wealth of practical knowledge that may not be comprehensively captured anywhere else. Learning directly from them is a privilege that not all editors enjoy, especially if they work as freelancers. And while listservs and discussion forums are useful, the information they have may not always be organized or easily accessible. Editopedia can help capture knowledge in an organized manner by allowing members to create and edit content topic-wise.

Science editing is a more established profession now than it was a couple of decades ago. This can mostly be attributed to the increase in the number of English-as-a-second-language (ESL) authors and is reflected in the advice many journals give authors to seek professional editing help. Science editors face many challenges ranging from handling diverse subject areas to resolving issues specific to papers written by ESL authors. The growth of the profession has to keep pace with changes in the publishing industry and will have to be supported by the development of resources that are most in demand.

So which resources do editors want the most? When I came up with my wish list, I was quite convinced that other editors had similar lists. I wrote to some fellow editors, sharing with them some of the items I've described above and asking them what they would add. Many replied saying that my ideas resonated with them. And I smiled in agreement when I saw their additions: a website on different MS Word functions that are useful for editors, a tool to edit PDF files by voice command, an online module-based tutorial, etc.

This only indicates that as rewarding as editing is, some aspects of our job can at times drive us up the wall. We work on tight deadlines and often find ourselves spending valuable time trying to determine how to resolve issues when we can channel our energy towards improving a paper further. I believe that one of the most important needs is to have resources made available online. Acquiring paper resources may not be feasible for many editors. Besides, an online resource is easier to browse, saves time, and allows the convenience of working from any location. The exercise of getting other editors' views also showed me the need for a better knowledge-sharing forum. Some of the things we want may already exist but we have just not found them.

I do not believe that the value of editors' work will diminish in any respect because of some extra tools that will help them do their job better. It will save time, reduce stress, help new editors learn faster, increase job satisfaction as well as client satisfaction, and facilitate knowledge-sharing so that we learn less from our mistakes and more from a peer's experience. Furthermore, I believe that some items on my list will be beneficial to authors themselves, especially those who cannot engage professional editing services. ESL authors, in particular, can learn to avoid specific language errors that can attract criticism from peer reviewers.

So while I carry on checking if it is actually possible to 'rescue embryonic lethality' and watch newer editors struggle to divine what an East Asian author means by 'PNA-rocked nucleic acid cramp', I hope that genies in the publishing world will take notice and be benevolent enough to grant me my wishes, though they be more than three.