Plagiarism has a simple enough definition in theory, but when actually put into practice in the field of scholarly publishing, its rules become much more nuanced. At the CSE 2019 meeting, the session “Plagiarism: Premeditated or Involuntary?” provided insight into this complicated issue, giving editors the tools to combat plagiarism in all its forms and authors the ability to avoid plagiarizing in the first place.

Nancy R Gough, a freelance editor who was formerly the Editor of Science Signaling, explained the nuances of plagiarism in the world of scholarly publishing. Not only is it important for authors not to use others’ work without citing it, but authors must also be careful not to use their own past papers without proper citation. Because the rights of a paper often transfer from author to publisher after publication, the author no longer holds the copyright or has granted an exclusive license to the publisher and must be aware of that fact when using his or her own work in any subsequent papers.

Gough outlined steps she took when encountering suspected plagiarism. When an editor suspects self-plagiarism, or plagiarism of any kind, she recommended the following steps. First, a complete copy of the suspected article should be compared against the previously published work, with special attention to the overall organization of the articles, the organization of individual sections, and the order and number of references in the paper. Once these elements are analyzed and plagiarism has been detected, the editor must flag the issues in the manuscript tracking software. Whether the plagiarism is egregious enough to reject the paper outright or it is simply an indication of a misunderstanding is up to the editor, but either way, full documentation of the investigation of the plagiarism is crucial. Correspondence between editor and author, along with reports on the plagiarized percentage of the work, must be documented for later reference.

Gough also described some warning flags that could indicate plagiarism, such as mismatched writing styles; introduction of new names or abbreviations for terms that are written out elsewhere in the document; statements with citations that do not have appropriate context or interpretation; and an inability of authors to rephrase when requested to do so. In addition to this list of warning flags, Gough also highlighted a more insidious problem: sometimes authors lift segments from abstracts that are freely available without reading the full text. While this may not be plagiarism if it is cited, it could indicate a deeper problem with the article, especially in the context of a review article.

After Gough’s presentation, Kasey Hayes of AAAS/Science Advances took the floor. His presentation spoke to authors and how they can avoid plagiarizing their own work and the work of others. Hayes highlights a particular problem in self-plagiarism called “salami slicing,” where authors take “slices” or small sections of larger works and try to publish them in a variety of journals in order to get more publications from a
single study. At AAAS, Hayes explained, Science Advances prefers to publish a whole study rather than parts of one, so this practice of salami slicing is looked down on.

Hayes went on to describe the different levels at which an author can plagiarize—at the syntax level, at the word level, and at the meaning level. Some ideas are common knowledge (such as the fact that plants are fertilized by pollen) and cannot be copyrighted at the meaning level, but the specific words used to explain them may be subject to copyright depending on the context. Therefore, authors must carefully check any information they take from another source, and when in doubt, cite it or use a direct quote.

At the conclusion of these presentations, audience members engaged in a lively discussion on the nuances of plagiarism and the abilities of plagiarism-detecting software. One question that was raised pertained to the percentage of a document that would trigger plagiarism-detection software: What percent of similarity in a paper will issue a flag when using plagiarism-detecting software? (The answer is that different publishers and journals use different thresholds to trigger plagiarism flags. According to Kasey Hayes, the percentage for Science Advances is 25%, and that percentage excludes quotes, bibliography, abstract, and materials and methods.)

Several people expressed concern that many papers are plagiarized because many scientists and experts who write scholarly papers are not trained to paraphrase or even to write very well—because they cannot paraphrase and cite, they plagiarize and cite. There was also discussion of what should constitute self-plagiarism and what should not—both presenters and many attendees agreed that the methods section is often replicated, so with proper citation, a heavily lifted methods section is not cause for concern. On the other hand, more unique sections like the abstract and discussion should be carefully searched for these issues.

Lastly, audience members discussed the timing of running papers through plagiarism-detecting software. Since it can be expensive to use, many journals do not run papers until after they have been accepted and have gone through revisions. There is still variability, however, in the ways that many journals approach the use of plagiarism-detecting software. Although plagiarism-detecting software is an undeniably valuable tool, editorial efforts to rectify these issues are also of key importance. Avoiding plagiarism in all forms improves the world of scholarly publishing, one properly-cited paper at a time.