APPS's Stance on Self-Plagiarism: Just Say No

Author: Culley, Theresa M.

Source: Applications in Plant Sciences, 2(7)

Published By: Botanical Society of America

URL: https://doi.org/10.3732/apps.1400055

Applications in Plant Sciences 2014 2(7): 1400055

EDITORIAL

APPS'S STANCE ON SELF-PLAGIARISM: JUST SAY NO[1]

THERESA M. CULLEY[2]

Editor-in-Chief, *Applications in Plant Sciences*
Department of Biological Sciences, University of Cincinnati, 614 Rieveschl Hall, Cincinnati, Ohio 45221-0006 USA

Should authors be able to reuse the same text in multiple papers without citing the earlier source? Known as self-plagiarism, this practice is strongly discouraged in *Applications in Plant Sciences* (*APPS*) because it violates professional standards, is potentially deceptive, and lacks originality. The most frequent form of self-plagiarism in *APPS* submissions is text recycling, which depending on the extent and location of copied text, has consequences ranging from authors being required to rewrite duplicated text or add citations, to automatic rejection of a manuscript without review. Ultimately, avoidance of self-plagiarism will result in original articles that improve upon, and do not simply replicate, the existing literature.

Key words: plagiarism; self-plagiarism; text duplication; text recycling.

Is it acceptable for authors to use the same text in multiple manuscripts they write? This seemingly simple question is one that the editorial board of *Applications in Plant Sciences* (*APPS*) has had to consider while reviewing manuscripts. While most scientists readily agree that presenting someone else's words or ideas as their own (i.e., plagiarism; Roig, 2006; Posner, 2007) is a major ethical violation, the issue of whether an author can plagiarize herself/himself is still debated. Known as "self-plagiarism," this is recognized to occur when an author reuses part or the entirety of her/his previously published work and presents it as though it were new, without citing the earlier source (Roig, 2006; American Psychological Association, 2010; Ithenticate, 2011). This practice is considered fraudulent if readers are deceived into believing that the new work is unique, when in fact, it had been published before (Posner, 2007). As described in Roig (2006), self-plagiarism can consist of the duplicate publication of an entire article in more than one journal, the unnecessary partitioning of one study into multiple publications (called "salami-slicing"), or text recycling. In some cases, it may involve copyright infringement (Posner, 2007).

Self-plagiarism is often considered a "gray area," largely because of uncertainty about its frequency, the varying degrees to which it can occur, and debate surrounding its legitimacy in academic publications. Those suggesting that self-plagiarism is acceptable argue that it is a normal part of the scientific process; after all, researchers may write multiple papers based on the same project and how many different ways can an author describe the same methods? In addition, authors should be able to build upon and refine their previous ideas (Posner, 2007). Furthermore, supporters argue that authors should be freely able to reuse their own words—this is not really plagiarism because they are not copying other authors. In contrast, opponents reject any use of recycled text on philosophical grounds as a violation of scientific ethics. They argue that copying previously published work without appropriate citation, regardless of the identity of the author, is not only improper but unethical (Zirkel, 2010) and deceptive (Posner, 2007). In addition, self-plagiarism can be perceived as making an author appear more productive than is the case (Zirkel, 2010; also called "redundant publication" by Wager, 2011), and it is often considered academic misconduct within a university setting (e.g., students cannot submit the same thesis for different degrees; Hexham, 1999). Self-plagiarism can also interfere with other researchers' abilities to efficiently conduct meta-analyses or reviews (Tilton, 2011). Ultimately, discovery of severe cases of self-plagiarism has the potential to lead to academic censure of researchers and retraction of published papers from scientific journals (e.g., Akst, 2010; Nature News Blog, 2012). These conflicting viewpoints leave some authors uncertain about whether or not recycling their text from one manuscript to the next is acceptable.

To complicate matters further, some cases of self-plagiarism involve a violation of copyright (see Posner, 2007). If an author cedes the copyright to a publisher as a condition of publication, but then uses that same text in another paper without proper citation, this would clearly be a copyright infringement against the publisher. In other words, the author no longer owns the intellectual right to the text. However, increasing numbers of journals (including *APPS*) now offer Creative Commons licensing arrangements in which authors retain the copyright. In these cases, self-plagiarism may not involve copyright law but, at best, it still creates unoriginal and uncreative work (called "intellectual laziness"; Roig, 2006), and at worst, it remains an ethical violation of professional standards. As stated in the *Style Manual of the American Psychological Association* (American Psychological Association, 2010), "the core of the new document must constitute an original contribution to knowledge, and only the amount of previously published material necessary to understand that contribution should be included, primarily in the discussion of theory and methodology." This emphasis on originality, which acknowledges that minor replication may be necessary but extensive self-plagiarism should be avoided, is often used as the guiding principle for publication of new papers.

[1]Manuscript received 23 June 2014; manuscript accepted 27 June 2014.
The author thanks B. Parada, A. McPherson, and members of the *APPS* editorial board for their suggestions and comments on this paper.
[2]Email: theresa.culley@uc.edu

doi:10.3732/apps.1400055

How then do editors determine what is self-plagiarism? Text recycling is usually of greatest concern, so we typically focus on (1) the extent of copied text and (2) where it occurs within the manuscript. Is it a single sentence, a paragraph, an entire section, or the complete paper itself? At *APPS*, self-plagiarism involving primer studies can be particularly problematic. We have seen self-plagiarism ranging from replication of a few sentences in the methods section to duplication of a previously published paper with only numerical values and/or species names and descriptions changed. In the most serious case, a submitted paper was found to be nearly identical to four previous publications by the same laboratory group. As might be expected, repetition of an entire paper or a section is considered much more egregious than if only a sentence or two was repeated across papers. We recognize that the methods section of Primer Notes is particularly vulnerable to self-plagiarism; after all, there are only so many different ways to describe specific steps of a procedure, such as thermocycler running conditions or PCR reactions. Although we are somewhat tolerant of limited duplication in the methods when clearly appropriate, we do require authors to rewrite other recycled text in this section (see Tilton, 2011), especially if an earlier publication was used as a template for this section (i.e., cut-and-pasted with only slight changes). In cases where a few sentences of nonmethods text from a previous publication may have been included, quotations with appropriate citations may be acceptable (American Psychological Association, 2010). In contrast, extensive self-plagiarism of larger sections, especially involving the introduction and/or conclusions, is considered severe and these papers are immediately rejected without review (Tilton, 2011).

What are journals doing about self-plagiarism? While increasing numbers of publishers use text-matching software (e.g., CrossCheck or Ithenticate; Tilton, 2011), many journals rarely check for self-plagiarism because they do not have the resources or the time, relying instead on the integrity of their authors or chance discovery by a reviewer or editor. When informally asked, most editors suggested that extensive self-plagiarism is rare but that manuscripts are automatically rejected if such cases are detected by their journal. However, self-plagiarism may occur more frequently than assumed. For example, three separate self-plagiarized papers from the same laboratory group were printed in a journal in which the editor noted that self-plagiarism was rare. And we cannot ignore the possibility that self-plagiarism has occurred in *APPS* and the *American Journal of Botany*'s Primer Notes and Protocols in the Plant Sciences (the forerunner of *APPS*) before we began to screen for it. Because we have now identified several cases of self-plagiarism during the submission process at *APPS*, we now require authors of Primer Note manuscripts during the initial submission to provide PDFs of all their primer studies (regardless of organism) published within the last three years. Our editors then screen the papers for self-plagiarism before manuscripts are sent out for review. We may also do a literature search to look for other similar papers by the same authors or laboratory group, if they are not provided by the authors. We now have an ethical standards policy, available in our Instructions for Authors (see http://www.botany.org/APPS/APPS_Author_Instructions.html#7Copyright), that explicitly prohibits self-plagiarism.

What should authors do? First, self-plagiarism should be strenuously avoided and cut-and-paste templates should never be used. Although there are situations where acceptable levels of limited duplicated text may occur in the methods of Primer Note papers (such as with thermocycler running conditions), any extensive use of published text must be properly referenced so that readers have a clear understanding of any previous dissemination (American Psychological Association, 2010). For example, when a previous protocol has been followed, it is often appropriate to cite the study, followed by a brief summary (e.g., "...following Smith et al. [2011], which used a modification of the CTAB extraction procedure."). Ultimately, there needs to be a balance between self-plagiarism and making information readily accessible from earlier studies so readers do not need to locate multiple papers to follow a single protocol. Some authors may also be concerned about inadvertently plagiarizing themselves. For example, Scanlon (2007) notes that authors may subconsciously reuse their previously published words: "The more we write, the more likely we will reuse something—imagery, phrasing, a sentence, an anecdote, an entire argument—that has served us well in the past and which has become a part of our writing vocabulary." Although this type of inadvertent duplication may sometimes occur, it is not as significant as when large amounts of recycled text are used; this may be more indicative of the purposeful intent of an author to deceive the reader (Hexham, 1999).

Ultimately the goal of *APPS* is to publish original, method-driven articles that are of high quality and will be of use to a number of other researchers. Consequently, we are fully invested in discouraging self-plagiarism and preventing it from occurring within the journal. If authors have any questions as to what constitutes self-plagiarism, they can be proactive and contact the *APPS* editors or editorial office for assistance. The various fields of the plant sciences represented by *APPS* can only advance if authors, reviewers, and editors all strive to publish the best, most original articles that are clear improvements, not simply duplications, of previously published research.

LITERATURE CITED

Akst, J. 2010. When is self-plagiarism OK? *The Scientist* [published online 9 September 2010]. Website http://www.the-scientist.com/?articles.view/articleNo/29245/title/When-is-self-plagiarism-ok-/ [accessed 20 June 2014].

American Psychological Association. 2010. Publication manual of the American Psychological Association, 6th ed. American Psychological Association, Washington D.C., USA.

Hexham, I. 1999. The plague of plagiarism. Department of Religious Studies, The University of Calgary. Retrieved from: http://c.web.umkc.edu/cowande/plague.htm [accessed 15 June 2014].

Ithenticate. 2011. The ethics of self-plagiarism. Ithenticate White Paper. Website http://www.ithenticate.com/resources/papers/ethics-of-self-plagiarism [accessed 15 June 2014].

Nature News Blog. 2012. Eminent chemist denies self-plagiarism in 'space dinosaurs' paper. Nature News Blog [published 25 April 2012]. Website http://blogs.nature.com/news/2012/04/eminent-chemist-denies-self-plagiarism-in-space-dinosaurs-paper.html [accessed 20 June 2014].

Posner, R. A. 2007. The little book of plagiarism. Pantheon Books, New York, New York, USA.

Roig, M. 2006. Avoiding plagiarism, self-plagiarism, and other questionable writing practices: A guide to ethical writing. Website http://ori.hhs.gov/sites/default/files/plagiarism.pdf [accessed 15 June 2014].

Scanlon, P. M. 2007. Song from myself: An anatomy of self-plagiarism. *Plagiary: Cross-Disciplinary Studies in Plagiarism, Fabrication, and Falsification* 2: 57–66.

Tilton, D. 2011. Plagiarism. *Science Editor* 34: 59–60. Website http://www.councilscienceeditors.org/wp-content/uploads/v34n2p59-60.pdf [accessed 15 June 2014].

Wager, W. 2011. How should editors respond to plagiarism? [online]. Committee on Publication Ethics. Website http://publicationethics.org/files/Discussion%20document.pdf [accessed 15 June 2014].

Zirkel, P. A. 2010. A study of self-plagiarism [online]. Website http://www.insidehighered.com/views/2010/12/03/zirkel#sthash.V9M9ag5F.dpbs [accessed 15 June 2014].