

Essays in Editing

Plagiarism: the emperor's new clothes

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Abstract Many researchers across the world believe that plagiarism is blatant dishonesty tantamount to theft. Plagiarism can be divided into plagiarism of ideas and plagiarism of words. While no one doubts that plagiarism of ideas is unethical, different authors have differing views on plagiarism of words. Among the many reasons for committing plagiarism, laziness might be the most common cause among native English speakers, but non-English speaking authors may be re-using previously published texts because they are disinclined to sacrifice accuracy and quality for want of linguistic expertise.

Keywords Plagiarism detection software; publication ethics; scientific misconduct; duplicate publication

The number of articles published after 2005 that have the term "plagiarism" in their titles exceeds the number published before 2004 (see figure). Why must editors be concerned about plagiarism? Many researchers across the world believe that plagiarism is blatant dishonesty tantamount to theft. Why should anyone risk their credibility to commit such misconduct? We give a bird's eye view of plagiarism and discuss a number of relevant issues.

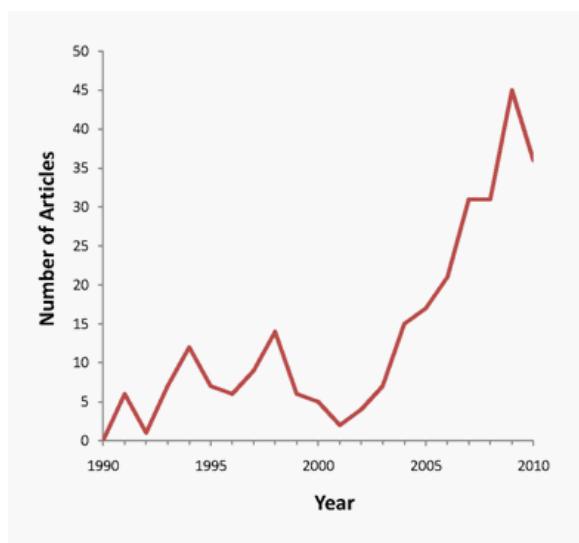
Various editorial organizations have defined plagiarism. The definition provided by the World Association of Medical Editors (WAME) is perhaps the most comprehensive:¹ "Plagiarism is the use of others' published and unpublished

ideas or words (or other intellectual property) without attribution or permission, and presenting them as new and original rather than derived from an existing source. The intent and effect of plagiarism is to mislead the reader as to the contributions of the plagiarizer. This applies whether the ideas or words are taken from abstracts, research grant applications, Institutional Review Board applications, or unpublished or published manuscripts in any publication format (print or electronic)."²

Plagiarism can be divided into two main categories – plagiarism of ideas and plagiarism of words (verbatim).³ While no one doubts that plagiarism of ideas is unethical, different authors have differing views on plagiarism of words. Some researchers consider it as an indefensible sin, whereas others think that it is a forgivable slip or even acceptable under certain circumstances.⁴⁻⁷

Currently, English is *de facto* the language of science. However, it has not always enjoyed its current position and previously this role had been played by other languages including Greek, Latin, Arabic, Persian, and French. This shift in the *lingua franca* of science reflects the shift in world scientific centers from the East to the West, hence the aphorism *ex oriente lux*. To reach the maximum audience, researchers would rather present their work in English, the language in which most of the world's prestigious mainstream journals are published. Although most of these quality journals are published in Western countries, where English is the native language, many journals published in countries where English is not the mother tongue are also published in English to gain more visibility.⁸⁻¹⁰

Writing a manuscript in a language other than your own is not simple, particularly if you want to present highly sophisticated scientific information. Therefore, while laziness might be the most common cause of committing plagiarism of words among native English speakers,¹¹ the main reason for reuse verbatim of previously published texts by non-English speaking authors may simply be their want of linguistic expertise: they are disinclined to sacrifice accuracy and quality. Many non-native speakers disclose that when they can read a passage that better describes what they have done more fluently than they could, it is difficult for them not to borrow the text.^{4,5} Furthermore, many authors, especially those trained and working outside the United States and western Europe, may plagiarize words because they are unaware that this is regarded as misconduct – they have never been taught that is the case. In many developing countries, plagiarism of words is



Number of articles per year with the word "plagiarism" in their titles, 1990–2010

not an uncommon practice among academics, mostly for lack of any clear declaration that this action is a form of dishonesty.⁴

Plagiarism in the digital era

With the introduction of the internet, easy access to scientific resources and full text articles became possible. The simple copy/paste functions of word processors made plagiarism of words easier in the digital era.¹² However, the same technology also brought the necessary means for counter-attacking such misconduct by developing software programs for detecting plagiarism.

Many such programs are now available for detecting text similarities.¹ eTBLAST (<http://etest.vbi.vt.edu/etblast3>) and CrossCheck (<http://www.crossref.org/crosscheck/index.html>) are among the most well-known that are freely and commercially available, respectively. Currently many editorial offices use a software program to check plagiarism of words in either all or a random sample of submitted manuscripts, or only in those accepted for publication. When they detect a substantial amount of plagiarism, their response depends on many factors. Several organizations suggested how to handle plagiarism. Probably the most appropriate and practical guidelines are those presented by the Committee on Publication Ethics (COPE; <http://www.publicationethics.org/resources/flowcharts>). According to its guidelines, when deciding what action to take, an editor should consider seniority of the author(s), the amount of the copied text, and explanations provided by the author(s) in response to the editor's enquiries. The action may vary from a request to paraphrase part of the manuscript to outright rejection of the submitted manuscript (if plagiarism is found prior to publication) or retraction of the published article (when plagiarism is detected after publication—usually following a complaint by a reader or the plagiarized author).¹³

Other perspectives on plagiarism

Apart from its ethical issues, plagiarism and re-use – even of your own previously published text – may have other drawbacks. Among the different forms of redundant publications, one is “duplicate publication”, which refers to publication of a paper with content that substantially overlaps that of an already published article.³ Duplicate publication may jeopardize the body of evidence, at the heart of which is meta-analysis of published data, because if duplication is not detected, the duplicate (or even multiply-published) similar results influence the pooled results of meta-analyses.¹⁴

Plagiarism of ideas is not controversial, and all researchers consider it as blatant inexcusable misconduct. Plagiarism of text and recycling of words are also unacceptable where novelty and the essence of the work are in the eloquence and the wording, for example in the humanities and literature.⁶ Originality of manuscripts in many other disciplines seriously depends on its content, regardless of how eloquently (or obscurely) it is presented. Therefore, while in many fields such as literature and humanities, it is important for authors to describe what they feel through

accurately selected words, the authors of a scientific article at best act as merely honest reporters who present their observations according to well-established standards. Textual eloquence is relevant only insofar as the text should be comprehensible to readers. Many authors ask themselves why, if the originality of their scientific article needs to be in its content rather than its wording, should they not borrow part of a well-written phrase or even a whole sentence (with appropriate citation of course) from another published article to better express what they want to say? The lack of linguistic expertise that may lead writers to re-use text is not necessarily a sign of “academic laziness”¹¹ Obviously, authors who re-use text should understand and interpret the original text correctly.¹⁵

In some cultures, plagiarism is not considered misconduct. This belief has a long history. We can find interesting instances of plagiarism that would be considered misconduct nowadays but resulted in great progress in antiquity. One example is the allegation, by Stephen of Antioch in the 12th century, that the famous Tunisian doctor Constantinus Africanus (1020–1087) was not the real author of the book *Liber Pantegni*, which had an influential effect on the flourishing of the first modern medical school in Western Europe – Schola Medica Salernitana. Soon after this allegation, it became known that the book was a translation of *Liber Regalis*, which was written by an Iranian physician, Ali Ibn Abbas Al Majoussi (Haly Abbas).¹⁶

Looking ahead

It seems that currently the language barrier may be an important cause of plagiarism of words among authors whose first language is not English. Although many initiatives such as the AuthorAID projects help non-English-speaking authors express themselves to some extent,¹⁷ the future may be completely different. Soon we will have machine translation good enough to be used for real-time translation of scientific texts. Introduction of those machine translations will change the face of our practice regarding plagiarism. Then, we will need to develop a new definition for plagiarism and new methods of detection and strategies to cope with it..

Competing interests HM is a native English speaker; FH is not. FH is Vice-President of the World Association of Medical Editors (WAME).

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Commentary: On plagiarism, laziness, and scholarship

Habibzadeh and Marcovitch¹ speculate that laziness is the most likely cause of plagiarism of words amongst authors who are native English speakers, whereas lack of linguistic expertise is likely the cause for non-native speakers. I suspect that many readers will agree with the authors' position. After all, how else might we explain the failure of a highly educated native speaker to generate original text in their own native language and, instead, choose to misappropriate the work of others? As a non-native English speaking college professor and as someone who has been interested in text plagiarism for many years, I have asked myself that very question each time I encounter plagiarism in the work of my native English speaking undergraduates. Frankly, there is no doubt in my mind that a certain degree of laziness plays a role.

As with many cases of plagiarism in biomedical journal articles, student plagiarism in North American academic institutions often involves a failure to properly paraphrase others' text. Many students end up passing off as their own writing relatively long strings of text from other sources with little or no modification and sometimes without attribution. When confronted about their plagiarism, many of these students will indicate that they didn't know that they had to thoroughly modify the original text even when the source of the original is acknowledged. Alternatively, they will also often complain that they could not find any other acceptable way of expressing the meaning of the original material or that there are just so many ways to express certain ideas or concepts. Perhaps not surprisingly, a similar set of excuses is sometimes offered by author-scientists who plagiarize.

That laziness is an operating factor in student plagiarism is suggested by research that seems to show that, in fact, most students know how to paraphrase correctly.² For example, when students in one study were given a short,

easy to read and understand paragraph to paraphrase, they tended to paraphrase it appropriately. However, when another group of students was given a paragraph that was more difficult to read, more of them tended to misappropriate text from the original paragraph, and the extent of their misappropriation was more extensive. To properly paraphrase the more difficult paragraph while preserving the meaning of the original would have cost the students more time and a considerable amount of additional mental effort. A more economical way of accomplishing the task is to simply re-use more of the original material, and that is precisely what these students end up doing. Interestingly, when the same study was carried out with a sample of college professors, a similar but less pronounced trend was observed in their data – that is, college professors, regardless of their discipline, tended to misappropriate words from the original paragraph when the text was more technical.³ My sense is that the misappropriation occurred, in part, because the professors, like the students, wanted to ensure the quality and accuracy of their paraphrases, but in a more economical way.

Struggling to generate good writing

It seems to me that the conditions under which non-native speakers find themselves when they attempt to write in English are analogous to those of the study participants who had to paraphrase a difficult to read paragraph. Both groups must struggle to generate good writing based on others' technical works that are difficult to process at a cognitive-linguistic level. If we assume that laziness is operating in those native-speaker study participants, is it not reasonable to assume that laziness is also operating in non-native speakers when they opt to misappropriate the words of others? In writing papers for publication, researchers who are non-native speakers of English experience a far

greater range of obstacles than do their native English speaking counterparts. Linguistically inexperienced, non-native speakers of English have not yet fully mastered the mechanics of English grammar and syntax, let alone the many unique technical expressions used in their disciplines to describe highly complex phenomena or novel processes. This deficiency alone incurs a greater amount of time, mental effort, and use of resources that native speakers do not need to tap.

Because non-native speaking authors who plagiarize probably vary in their levels of English proficiency and in their availability and accessibility of resources to help them write their journal articles, a number of questions arise. For example: could experienced non-native English speaking researchers with adequate proficiency in English misappropriate others' work out of levels of laziness similar to their less experienced native speaker counterparts? Consider how text plagiarism, whether by native or non-native speakers, occurs in journal articles. In many such cases the plagiarism is confined to sections of a manuscript rather than throughout the manuscript, and these are not always in the most technical areas (the Methods section). Given such patterns of plagiarism, how is it that these non-native authors have the skills to generate good English in most sections of a paper, but plagiarize other sections, some of which are perhaps not even the most challenging to write?

A difference in laziness?

Heitman and Litewka's observations notwithstanding,⁴ and as Habibzadeh and Marcovitch clearly show,¹ how is it possible that so many papers have now been written in the area of plagiarism, yet still authors continue to claim ignorance and engage in this type of misconduct? Given these considerations, not only am I not convinced that there is a difference in laziness between these linguistic groups, but I would expect that if laziness is a factor in most text plagiarism cases in the sciences, it probably occurs in roughly equal degrees in both groups, for there is no reason to believe that one linguistic group is any more driven, productive, or lazy than any other group.

I agree with Habibzadeh and Marcovitch that the originality of data or observations (that is, research integrity) should be the prime concern in the sciences.¹ However, while most textual plagiarism might not rise to the level of research misconduct, such behaviour often crosses the threshold of scholarly misconduct. After all, each time the words of others are used in a way that misleads the reader as to the true authorship of those words – even if a citation is provided – plagiarism has been committed, plain and simple. Such text plagiarism might be inconsequential for the integrity of the science reported, but it is a significant lapse in ethical scholarship. Most editors who wish to maintain high standards for their journals will insist not only on scientific originality but also on originality of scholarship and should, therefore, object to text plagiarism.

The rules of scholarship

While the rules of scholarship are largely universal across academic disciplines, the nature of scientific writing, especially in traditional research articles, may at times preclude the type of strict paraphrasing expected in the humanities. This is because a significant portion of the scientific terminology and some of the phraseology used are unique and in many cases cannot be substituted with synonyms or with equivalent expressions. Thus, in some sections of journal articles, particularly in methodology sections, the limited re-use of others' phrases that are part of highly technical descriptions might be inevitable and even desirable. That said, I admit to feeling very uncomfortable with the suggestion that the rules of scholarship in the sciences should be further relaxed with respect to re-use of text. Writing for me has never been easy as it takes me considerable time and effort to generate a half decent piece of written material. As such, I certainly would not appreciate seeing portions of my own writing misappropriated, particularly when the misappropriation is likely to have been driven by some degree of laziness.

In sum, Habibzadeh and Marcovitch make some very insightful points about plagiarism.¹ However, I have a clear difference of opinion with some of their positions. Most importantly, I much prefer to see a call for editors and others to use common sense and flexibility when dealing with non-native speaking authors, rather than suggesting a differential application of traditional rules of scholarship. Science is already losing credibility in the public's eye. Consequently, any effort at lowering of our scholarly standards does not strike me as being in our best interests.

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Competing interests MR is a non-native English speaker who now mostly uses that language. He is the author of *Avoiding plagiarism, self-plagiarism and other unethical writing practices*, available at <http://ori.dhhs.gov/education/products/plagiarism/>

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