

Editorial—Recycling paper vs recycling papers

Recycling of materials, including paper, has been a very positive recent response by society to counterbalance increasingly consumerist and wasteful lifestyles. It is always good to save energy and natural resources (e.g. trees for pulp and paper), and using recycled paper can be interpreted as a pursuit of sustainable development. In this respect, one can formulate three commandments: (i) do not print unnecessarily (is it really necessary to print the material I see on the screen?); (ii) use scrap paper (whose one side has been printed already) to make notes by hand and to print draft documents; and (iii) use recycled paper wherever possible, e.g. when printing final documents. In *Hydrological Sciences Journal (HSJ)* we try to reduce our environmental impact by promoting the electronic version over the print version; for the latter, *HSJ* is currently printed on sustainably-sourced chlorine-free paper.

While applauding the recycling of paper, we are strongly against “recycling” of scientific papers, behaviour which we view as the extension of greed and consumerism to the realm of scientific ethics. Unfortunately, we have had to handle several cases recently in which parts of manuscripts submitted to *HSJ* were, in fact, “recycled” pieces originating from other papers. Sometimes, such cases were reported early by the reviewers, but other cases (perhaps not all) were discovered by us in the phase before publication. We feel the need to report this practice publicly because it seems that it has become increasingly common. The publish-or-perish syndrome is boosting the number of publications, while the condition of originality is treated in a somewhat relaxed way (Kundzewicz & Koutsoyiannis, 2005, 2006; Koutsoyiannis & Kundzewicz, 2007). Furthermore, plagiarism has become a plague in the electronic era. The technology has helped plagiarism grow (via the ubiquitous access to Internet resources and the ease of the copy-and-paste practice). However, Internet technologies also provide means to help detect the practice of plagiarism. Indeed sophisticated tools are available to fully automate the confirmation of originality or the detection of plagiarism (e.g. <http://www.turnitin.com>; see also http://www.google.com/Top/Reference/Education/Educators/Academic_Dishonesty/Plagiarism/Detection/).

In Kundzewicz & Koutsoyiannis (2005) we stated: “Another utility of the Internet relates to the more ethical aspects of scientific publishing. The detection of plagiarism is greatly facilitated, as search engines can easily locate multiple appearances of a certain phrase. This concerns not only present and future publications, that will be available on-line, but also past publications, as more journals put their backfiles on-line, extending in some cases more than a hundred years ago. This should discourage plagiarism.” In Kundzewicz & Koutsoyiannis (2006) we generalized this statement to other types of scientific fraud stating “The positive message of the story is that fraud was (and will be) eventually uncovered and, thanks to the Internet, today this can be done faster than ever; thus, the story may discourage research misconduct in the future.”

The growing problem of plagiarism is well recognized. Useful relevant information can be found in a dedicated web portal <http://www.plagiarism.org/> where a taxonomy of different guises of plagiarism is proposed, among which the following types are highlighted:

“turning in someone else’s work as [one’s] own;
 copying words or ideas from someone else without giving credit;
 failing to put a quotation in quotation marks;
 giving incorrect information about the source of quotation [not all cases qualify as plagiarism; sometimes it can be negligence, quoting from memory, etc. – comment added];
 changing words but copying the sentence structure without giving credit [also changing words and sentence structure but retaining the message without giving credit – comment added];
 copying so many words or ideas from a source that it makes up the majority of [one’s] work, whether [one gives] credit or not”

(http://www.plagiarism.org/learning_center/what_is_plagiarism.html accessed 13 January 2009).

One can observe all such types of misbehaviour when running a journal such as *HSJ*. Often authors present a theoretical part of a paper having copied it from one or more sources, *verbatim*, or with alterations (especially smoothing at interfaces between “loans” from different sources). Then they present a case study, probably original. However, a casual reviewer may be misled into believing that the paper is a complete theoretical and empirical study, while it is in fact just a case study, which, if the theoretical part were absent, would likely be rejected. Such a situation is frequent in hydroinformatics papers, where the theoretical part is often imported in its entirety—without any change or added value—from publications in the fields of informatics and systems science. Sometimes, in addition to copies of mathematical equations and *verbatim* reproduction of major parts of text, figures are scanned from the original publications, frequently without reference to the source, which in most of the cases is under copyright. We have seen cases where the *verbatim* reproduction of text includes *errata* that were present in the original source material, which sadly were not spotted and rectified by the authors.

In addition to recycling somebody else’s papers, authors sometimes copy large parts of their own texts, previously published elsewhere. Such behaviour has also been met several times in *HSJ*—and is equally unacceptable. We aim to publish original and novel contributions and to promote immaculate scientific ethics. This is expected by the international hydrological community. Authors who do not respect these ethical rules harm *HSJ* and its prestige, cause significant delays in the processing of papers and create possible future legal problems related to copyright violation. These authors’ misbehaviour impacts on Editors, Associate Editors and reviewers, whose roles are to assess the quality of the scientific content of a paper and to help the authors to improve it, rather than to act as detectives policing the process to identify whether substantial parts of the submitted paper are recycled or not. But, above all, these authors harm themselves because, sooner or later, as explained above, the fraud is very likely to be unveiled.

We conclude with a plea to *HSJ* readers and contributors to discuss these important ethical issues among colleagues. We appeal to all our authors to renounce the practice of plagiarism, and to our Associate Editors and reviewers to be vigilant. We should all collaborate to eliminate bad behaviour, to improve scientific ethics and to serve the science in general and our discipline, hydrological sciences, in particular.

On a more optimistic note, one can avoid plagiarism essentially by being confident in the originality and novelty of the work in its entirety and technically by being more careful in citing sources. When reporting very common knowledge, citing is often not necessary (unless a *verbatim* “loan” is made). In review papers, one should clearly indicate sources of material, either by using quotation marks when citing *verbatim* (as in the present editorial), or by summarizing the relevant findings, with appropriate references to sources.

Acknowledgements We thank Cate Gardner and Frances Watkins for their comments, suggestions and corrections.

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