Copyrights and Author Responsibilities

Harold S. Stone
IBM T.J. Watson Research Center

Although electronic processing can greatly enhance manuscript preparation, it also provides more chances to infringe copyright laws. This discussion takes a good look at what is proper and what is not.

Authors of technical manuscripts were among the first to benefit from the desktop publishing revolution. A side effect of this revolution, however, is the opportunity to reuse materials in many different contexts, some of which are improper. This article discusses the issues associated with reuse of material by examining a number of case studies.

Basic copyright law and the copyright transfer

Copyright law protects the expression of ideas. It does not protect the ideas themselves. Under this law, authors own the sequence of words used to express an idea. However, other writers are free to use different words in different ways to express the same idea. The law also establishes that a copyright is a form of property, and as such, that its rights can be licensed or sold in full or in part by an author. The current law is Title 17, Copyright Act of 1976, available in Johnston.4

An illuminating explanation of copyright law in lay terms appears in Fishman.5

The crucial portions of the current law are in Section 106, which gives the author certain exclusive rights, and in Section 107, which lets others make “fair use” of copyright-protected material. Both sections pertain to a variety of situations that frequently confront scientific authors, as shown here.

In the electronic age, prospective authors can gain access to documents in electronic form. Authors may become enamored with how some paragraph or section of a document makes a point so clearly that they can find no better way to express it. The ease of electronic cutting and pasting makes verbatim reuse very tempting. Suppose our author, Prof. John Doe, copies some words from a public repository in electronic form into a new paper. What are Prof. Doe’s obligations in using the material?

The ethical obligations require Prof. Doe to state the source of the material in all cases. If the material appears verbatim, Prof. Doe must indicate the start and end of the verbatim material, usually with quotation marks. Lengthier quotations must be set off from other material by spacing and indentation.

Beyond the ethical obligations are legal obligations. If the material also is protected by copyright, Section 106 gives the copyright owner the exclusive right to reproduce and distribute the material, and to use it to prepare derivative works
The 1976 Copyright Law

Exclusive rights granted by Section 106 (subject to modifications granted by Section 107 and other sections) include

- reproducing copies of the work;
- using the work in derivative works;
- distributing the work and obtaining revenues from the distribution through sale, lease, or transfer of ownership;
- performing the work as in the case of a play, musical composition, or choreographed dance; or
- publicly displaying the work as in the case of a video, motion picture, sculpture, or performance.

Fair use of copyright-protected works granted by Section 107 permits reproduction with limitations for purposes such as research, education, critique and review, and news dissemination. Multiple copies of reproduced materials are permitted for classroom use. Section 107 does not give specific boundaries between fair and unfair use. It uses the following criteria:

- Is the reproduction for non-profit educational purposes or is it for commercial or profit-motivated purposes?
- What is the form and substance of the work protected by copyright?
- Is a substantial part or some central aspect of the copyright-protected work reproduced? Is the reproduced portion a substantial part of the new work?
- Does the reproduction of the work limit the original work’s potential market?

Reusing your own material

Although most authors understand that reusing copyright-protected information requires permission and citation, many authors do not understand that there may be limitations on reusing their own words, and that misusing their prior words can run afoul of the copyright law.

Let’s return to the scenario in which Prof. Doe dips into an electronic repository for some words to use in a future paper. But the repository in this case contains the electronic versions of some of his past works. It is tantalizing to reuse paragraphs from an old paper in a new context when those old paragraphs fit the new context rather well and need little or no revision. Since the words are his own, Doe may feel no particular compulsion to cite the original source — or to point out in the text of the new paper that certain passages appear verbatim in his prior works.

December 1992
If Prof. Doe wants to use prior work and the copyright to that work was not transferred to a publisher, Prof. Doe is free to reuse the passages. Nevertheless, professional ethics dictate that the original source of the words be cited. There are some exceptions, however. For example, it is usual practice to write research results in the form of an internal report that is placed in limited circulation for comment prior to submission to a journal for publication. The published version of the article need not cite the internal report as a source because it is not a distinct and separate document.

Apart from the ethical requirement to cite published source material, Prof. Doe must have permission to reuse the material if the original material is protected by a copyright owned by another party. Since most scientific journals require authors to transfer their copyright rights to the publisher prior to publication of the journal article, Prof. Doe may find that the publisher, not Prof. Doe, now owns the rights to copy and distribute the material, and to prepare derivative works. So it does not matter that Prof. Doe was the original author of the passages to be reused. What matters is who owns the copyright. If the publisher owns it, Prof. Doe’s use without permission is limited to the rights delineated in the copyright transfer form he signed.

At this point, most readers who are prospective IEEE authors should ask themselves if they know what rights are returned to authors under IEEE copyright transfers. Basically, the author retains the patent, trademark, and other intellectual property rights to the ideas expressed. The author also retains the right to reuse the work for other works unless they are to be sold. If Prof. Doe exceeds fair-use doctrine in preparing a new work, and that new work is offered for sale (say by publication in a journal, conference proceedings, or textbook), Prof. Doe must seek permission for such publication from the IEEE. The IEEE will in nearly all cases grant permission without fee to Prof. Doe.

Other publishers follow this same philosophy, but copyright transfer forms usually differ in details. The American Physical Society returns to the author the rights to copy, distribute, and prepare derivative works of the material after its first publication. Hence, the author, in effect, transfers only the copyright for the first publication of material to the American Physical Society and retains the rights to subsequent use of the material. Nevertheless, the American Physical Society expects authors to notify the publisher of reuse in books and journals, and expects citation to the original source.

Generally speaking, scientific publishers grant authors permission to reuse their own work without charge. Others who seek permission to use material may have to pay a fee; but many publishers impose no fee for educational uses, and some publishers impose no fee at all.

If Prof. Doe chooses to reuse material verbatim or almost verbatim, he must indicate through quotation marks or other distinctive notation that the material is reproduced verbatim. He must also indicate that the material is reproduced with permission if it exceeds fair use. This is true whether Doe is the original author of the prior work or not. The new material must also cite the original source and copyright owner.

A new passage that is almost identical to a passage protected by copyright is a derivative work, and thus falls within the scope of Section 106. If such material exceeds fair use, permission is required, but the quotation marks are unnecessary because the passage was not copied verbatim. Prof. Doe should still clearly identify this material by means of a footnote or by remarks embedded in the text, such as, “The introduction and definitions in Section 3 are drawn from Doe [1999].” If Prof. Doe chooses to rewrite the passage substantially, it can qualify as a new work expressing an old idea, thereby eliminating the need to obtain permission for use and to identify the reused passage. But professional ethics still require citation to the original source of the idea.

Why is reusing a passage you wrote a problem? There are really two problems. One is the legal problem of taking someone else’s intellectual property. Prof. Doe no longer owns the passages in the original text. They belong to the publisher. Improper reuse of those passages is a copyright infringement.

But on another level, reusing the words without citation or permission is deceptive and fraudulent, whether or not a legal copyright is infringed. Prof. Doe is hiding the true source of the material from the reader, presenting material as if it were new when it is not. This is an act of plagiarism. The p-word seems a bit strong in this context, because, after all, Prof. Doe wrote the work in the first place. But the p-word is indeed the operative descriptive word. David Streifeld discussed a similar situation in the International Herald Tribune dated October 8, 1991. That situation involved a western novel that was published by two different publishers under different titles with different authorship. Apparently, a single author submitted the same manuscript to different publishers under different noms de plume, and both companies published it. The published versions were not verbatim copies of each other. The passages were essentially the same in content and sequence through the entire works, but differed in a few words per sentence throughout the text body.

But if the two works were that of a single author, is this actually a case of plagiarism? Does the author have the right to reuse material in this way? Streifeld quotes an authority on plagiarism, Thomas Mallon, as saying, "I would . . . call it plagiarism, since it involves written material that purports to be original but is in fact taken from written material already in existence.”

While Prof. Doe may fully appreciate the seriousness of plagiarism committed by one party’s stealing the words of another, Prof. Doe may not realize that the act of reusing one’s own words without proper attribution is also plagiarism. Prof. Doe may feel such conduct is acceptable, but it is not. For example, Michaelson, who calls this behavior self-plagiarism, writes, "simply regurgitating your old results in new contexts without proper citation is wholly unethical.”

What if Prof. Doe publishes a paper in an IEEE journal, reusing the material from another paper published in an
Simultaneous submissions

Some authors wish to shorten the process even further by submitting a paper simultaneously to a journal and a conference. Generally, this is not permitted because it places an undue burden on the refereeing process. Sequential submission allows the author to incorporate feedback from the first round of reviewing for conference acceptance into the paper before submitting it for a second round. The basic message of this section is to avoid reuse of material in the first place by publishing different papers in the conference and journal. But readers wishing to reuse material should do so by following legal and ethical guidelines, and informing the author of the reuse at the time of submission.

For a variety of reasons, some authors still submit their papers to multiple places concurrently without notifying the editors or conference organizers, and without indicating that the material may appear elsewhere. Many transgressions of this type are discovered accidentally in the refereeing process. The normal reaction is to have the author withdraw the material. Conference organizers and referees do not like to be surprised by the discovery of duplicate submissions. Michaelson labels duplicate journal submissions as a “questionable practice.” The author must inform the editors involved of an intention to have a paper submitted concurrently to more than one place. Although this practice is not condoned by most conferences and journals, it might be permitted in particular instances if done openly.

Case studies

Prof. B.C. Dee, a former student of Prof. P.S. Cript, submitted a paper whose introduction was taken verbatim from a conference paper published by Dee and Cript. There was no indication of the material’s source, and consequently, no permission notice of the copyright owner for such reproduction.

In this case, Prof. Dee is not only reusing Dee’s own work improperly but is also taking words whose original ownership was attributed to Dee and Cript. In fact, the words may have been writ-
Table 1. Rules for citations, quotations, and permissions.

<table>
<thead>
<tr>
<th>Material</th>
<th>Source</th>
<th>Citation required?</th>
<th>Mark passage with quotation marks or equivalent?</th>
<th>Permission required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anything</td>
<td>Internal report, unpublished, same author</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Ideas, totally reworded</td>
<td>Internal report, unpublished, different author</td>
<td>Yes</td>
<td>No, but credit specific ideas</td>
<td>No, but request author's permission as courtesy</td>
</tr>
<tr>
<td>Paraphrase or verbatim quote</td>
<td>Internal report, unpublished, different author</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, from author</td>
</tr>
<tr>
<td>(more than fair use)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ideas, totally reworded</td>
<td>Published source with copyright</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Short quote or paraphrase</td>
<td>Published source with copyright</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>(fair use)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Almost verbatim paraphrase</td>
<td>Published source with copyright</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>(more than fair use)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exact quote, figure, or table</td>
<td>Published source with copyright</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>(more than fair use)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A ten by Dee. But the original conference paper credits Crip with joint authorship of those words. The reuse of the words without credit to both Dee and Crip is a misuse of intellectual property originally co-owned by Crip. The paper should have been submitted with the reference to the original source to give Prof. Crip proper credit, plus the permission notice acknowledging the current copyright owner. Prof. Dee, the true author of the words in question, may have failed to see that Crip had become a co-owner of the words by being named as joint author of the conference paper.

Permission requirements are not limited to reuse of words. Tables, figures, photographs, and other original elements of a publication are also protected by copyright. This author wished to publish a photo of Alan Turing a number of years ago by using an excellent photo in the literature that was ideal for the purpose. The job of locating the copyright owner and obtaining permission was rather difficult, and was not accomplished in time for publication. To meet the need, an artist was hired to draw a likeness of Alan Turing based on the photograph. The likeness was now an original work, which was published without permission from the copyright owner of the photograph. But the source of the likeness was acknowledged. This is analogous to using an idea from another source and rewriting it in your own words so that permission is not required, and then acknowledging the source of the idea.

In another case, an author took liberties in reusing the words of others in a manuscript for a textbook. Extended examples containing equations and algorithms were reused with identical notation, and were identified as to the original source, but with no indication that they were copied verbatim. The fair-use doctrine permits reuse of notation and equations up to a point. However, the author exceeded fair use by a large margin and assumed that the citation to the source was sufficient. In this case, the author provided only a citation of the form “Smith and Jones [1985]” to the algorithm but made no mention that the algorithm was a verbatim copy of the work of Smith and Jones. Neither did the author mention that the surrounding textual and mathematical developments were drawn verbatim from the same source.

If you see a citation to Smith and Jones at the beginning of an algorithm, what do you believe has been reproduced? If there are no quotation marks or permission notice, do you believe that you are reading a paraphrase of the work of Smith and Jones? Or do you understand that the algorithm itself, and the surrounding text and equations, are actually taken verbatim from the other source? The citation was clearly insufficient in this case and served instead to reveal that a copyright had been infringed.

The correct approach is to make all verbatim use explicit. And with this comes the obligation to seek permission for reuse from the copyright owner if the passage exceeds fair use. In this case, no one would accuse the author of hiding the original source. But the failure to indicate verbatim reuse and obtain permission is a breach of copyright law.
Plagiarism and the profession

Having opened the issue of plagiarism, we should review how the profession treats it.

In professional articles, the author owns the original ideas, and the copyright owner owns the passages that express those ideas. Both parties have the right to be associated with the words and ideas when they are reused by others. Plagiarism is a theft of property—intangible intellectual property, but property nonetheless.

The profession deals with plagiarism rather swiftly when it is blatant and intentional. You read in the newspapers about professors, and sometimes deans or university presidents, whose reputations have been damaged by discoveries that they have tampered with the process of journal publication. Discovery of serious plagiarism normally results in dismissal. The message comes through loud and strong that the profession does not tolerate misrepresentation of information in a scientific publication. Mallon’s study of plagiarism in a more general context is illuminating reading.

When plagiarism is less blatant, possibly unintentional, it may not be treated so harshly yet may leave a blemish on the career. Textbook authors are particularly susceptible to charges of plagiarism because they inherently draw on many sources. It is very easy to forget to insert a citation to a particular work or obtain permission to use a particular figure.

In a recent incident, although an alleged act of plagiarism was settled amicably, the infringer suffered public embarrassment. The settlement was made by a belated “permissions” payment for using a number of figures that bore a strong resemblance to figures in the original work. The publisher then sent adopters of the book an erratum sheet that listed the figures that were reprinted without permission, thus making clear to the academic community that the original figures were printed without permission. Interested readers examined the new text and compared its figures to the figures indicated on the permissions list and immediately saw how the new figures were derived from the original source and that they lacked proper citation. Had the permissions been obtained before publication of the offending text, the infringing author would have suffered no embarrassment, and the permissions payment may have been waived.

Recall that reusing your own work without citation and permission may also be an act of plagiarism. Avoid improper reuse of your material to avoid the aura of deception and unethical behavior associated with it.

Table 1 summarizes the points made in this article. Note that unpublished, limited-distribution internal reports may be freely used by the same author, but that other parties should seek permission from the original author because unpublished material is protected by copyright even though it bears no copyright notice. When seeking to use ideas—not the expression of the ideas—from unpublished material, it is a matter of professional courtesy to consult with the author prior to publication.

In retrospect, the best advice to an author is to read the copyright transfer that must be signed when a paper is accepted for publication. The IEEE copyright transfer says that the author warrants the work to be original except possibly for passages for which the author has obtained permission to republish from the copyright owner. If the author truly adheres to this warranty, there will be no breach of ethics and no violation of the copyright law.

References


Harold S. Stone conducts research in computer architecture at the IBM T.J. Watson Research Center in Yorktown Heights, New York. He is currently on sabbatical from IBM and is teaching at Cornell University. His research contributions have been primarily in the fields of computer architecture and digital systems design.

Stone received the PhD in electrical engineering in 1963 from the University of California at Berkeley. He is the author, coauthor, or editor of seven textbooks and has produced over 60 technical publications. He has served as associate editor of Journal of the Association for Computing Machinery and Transactions on Parallel and Distributed Systems, and as technical editor of Computer. He is a fellow of the IEEE and chairs the IEEE Computer Society Publications Board.

Readers can contact the author at Cornell University, Electrical Engineering Department, Ithaca, NY 14853-3061.