

Introduction

**ORI/AAAS CONFERENCE ON
PLAGIARISM AND THEFT OF IDEAS**

**SPONSORED BY THE
OFFICE OF RESEARCH INTEGRITY
AND THE
AMERICAN ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE:
AAAS COMMITTEE ON SCIENTIFIC FREEDOM
AND RESPONSIBILITY
AND
AAAS NATIONAL CONFERENCE OF
LAWYERS AND SCIENTISTS
IN ASSOCIATION WITH THE
AMERICAN BAR ASSOCIATION**

June 21-22, 1993

**National Institutes of Health
Lister Hill Auditorium
Bethesda, Maryland**

Introduction

ORGANIZING COMMITTEE FOR ORI/AAAS CONFERENCE

Office of Research Integrity

Dr. Alan Price, DRI
Dr. Lyle Bivens, ORI
Ms. Debra Parrish, Esq., OGC
Dr. Lawrence Rhoades, DPE
Dr. Clyde Watkins, DRI

American Association for the Advancement of Science

Dr. Mark Frankel
Dr. Albert Teich

Editor's Note

As an organizer of this Conference and editor of this summary report, I edited the talks and discussion for brevity and consistency, as well as to remove some comments that were irrelevant to the conference topic of plagiarism and theft of ideas or were relevant to ongoing, non-public investigations of scientific misconduct. It is the policy of the Office of Research Integrity (ORI) to maintain the confidentiality of its cases and to make public comments only when a finding of misconduct has been made or to respond to one of the principals who has already made his or her concerns a public matter. The views and opinions expressed in this report reflect those of the participants and do not necessarily express the position of ORI, the Public Health Service, or the Department of Health and Human Services.

The editorial assistance of Ms. Karen Gorirossi, DRI/ORI, in producing this report is gratefully acknowledged.

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Introduction

PURPOSE AND GOALS OF THE ORI/AAAS CONFERENCE

The Office of Research Integrity (ORI)/American Association for the Advancement of Science (AAAS) Conference on Plagiarism and Theft of Ideas addressed issues related to handling allegations of plagiarism and theft of ideas in scientific research. The day-and-one-half meeting in June 1993 offered a variety of perspectives on such topics as reviewing the intellectual and historical concepts of plagiarism, examining recent institutional inquiries and investigations of plagiarism, handling allegations of plagiarism and theft of ideas in peer review, and exploring the role of computers in cases of scientific misconduct. The conference attracted scientists from all disciplines, including university administrators and counsels, government officials, attorneys, scientific society officers, public policy makers, experienced whistleblowers, and students of the ethical dimensions of science.

Specific questions discussed included:

- What does and what does not constitute an allegation of plagiarism that would warrant an investigation of scientific misconduct?
- What are good examples of cases in which institutions have investigated allegations of plagiarism effectively? How can other institutions model the tools used in these cases in the handling of future cases of plagiarism?
- What are some of the difficulties and unusual occurrences that may arise in an inquiry or investigation of plagiarism? How should institutional officials, government review and program administrators, editors, and/or ORI handle such problems?
- What sanctions or administrative actions are appropriate for those found to have committed plagiarism? Should the sanctions be more severe for those whose plagiarism involves abuse of the peer review process or false counter allegations? Should findings and sanctions be publicized and shared with outside persons, institutions, and the press?
- Should allegations of copyright infringement or theft of intellectual property between former research colleagues who have had a falling out be considered as possible plagiarism, or should such disputes be handled through a different administrative process within institutions?

Introduction

ORI/AAAS PLAGIARISM CONFERENCE AGENDA

MONDAY, JUNE 21, 1993

A. Welcome, Introduction, and Review of Conference Agenda

1. Lyle Bivens, Ph.D.
Director, Office of Research Integrity
2. Mark Frankel, Ph.D.
Director, Scientific Freedom, Responsibility and Law Program
American Association for the Advancement of Science
3. Alan Price, Ph.D. (1)
Chief, Investigations Branch A, Division of Research Investigations
Office of Research Integrity

B. Session 1: Intellectual and Historical Content and Definition

This session focused on clarifying the nature of the issues, including the range of actions that may constitute plagiarism and theft of ideas, in an intellectual and historical context in literature and science, as well as a contemporary context for understanding the ethical, legal, and policy issues associated with plagiarism.

1. *Moderator:* Nicholas Steneck, Ph.D.
Professor of History and Director of the
Historical Center for the Health Sciences
University of Michigan; and
Chairman of the PHS Advisory Committee on Research Integrity
2. Marcel LaFollette, Ph.D.
Associate Research Professor
Center for International Science and Technology Policy
George Washington University

Introduction

3. Christina K. Gunsalas, Esq.
Research Standards Officer
University of Illinois, Urbana-Champaign
4. James Gardner, Ph.D.
Deputy Executive Director
American Historical Association
5. Discussion Session #1

C. **Session 2: Handling of Cases of Plagiarism and Theft of Ideas**

This session included presentations by institutional representatives who are involved in handling actual cases of allegations of plagiarism and theft of ideas for universities and research institutions.

1. *Moderator:* Alan Price, Ph.D.
Chief, Investigations Branch A
Division of Research Investigations
Office of Research Integrity
2. Mark Wiser, Ph.D. (and Sally Blakeley, Ph.D.)
Professors of Tropical Medicine (and Biostatistics and Epidemiology)
Member (and Chair) of the Grievance Committee
School of Public Health and Tropical Medicine
Tulane University
3. James Meeks, Esq.
Special Assistant to the Vice President for Research
Professor of Law
Ohio State University
4. R. Douglas Wilkerson, Ph.D.
Associate Vice President for Research
Medical College of Ohio
5. C.K. Gunsalus, Esq.
Research Standards Officer
University of Illinois, Urbana-Champaign
6. Discussion Session #2

Introduction

D. Session 3: Responses of Journal Editors and Funding Agencies in Dealing with Allegations of Plagiarism and Theft of Ideas in Peer Review

This session's speakers included an editor of a medical journal and a government administrator who are involved in handling the concerns that arise in the review of manuscripts or grant and fellowship applications and in dealing with problems and joint responsibilities with ORI.

1. *Moderator*: Clyde Watkins, Ph.D.
Acting Director, Division of Research Investigations
Office of Research Integrity
2. Drummond Rennie, M.D.
West Coast Editor, *Journal of the American Medical Association*
Professor, Institute for Health Policy Studies
University of California at San Francisco
3. Donald Luecke, Ph.D.
Deputy Director
Division of Research Grants
National Institutes of Health
4. Discussion Session #3

TUESDAY, JUNE 23, 1993

E. Session 4: The Computer Era and Its Impact on Protecting Words and Ideas and Resolving Cases of Plagiarism and Theft

In this session, editors and experts focused on the challenges of protecting preprints and ideas in the electronic media.

1. *Moderator*: Albert Teich, Ph.D.
Director, Science and Policy Programs
American Association for the Advancement of Science
2. Edward Huth, M.D.
Editor, *The Online Journal Current Clinical Trials*
Editor Emeritus, *Annals of Internal Medicine*
3. Lorrin Garson, Ph.D.

Introduction

Head, Advanced Technology Division
American Chemical Society

4. Paul Anderson, M.D.
Editor, *Journal of Histochemistry and Cytochemistry*
Professor of Neuropathology
Mt. Sinai School of Medicine
5. Discussion Session #4

F. Session 5: Lessons Learned and Next Steps

This session focused on perspectives on the issues in the sociology of science and on the multicultural diversity of scientists and students. The session also included a sharing of ideas on what constitutes plagiarism and theft of ideas and what does not (issues of possible *de minimis* levels of seriousness and significance, falling out among former collaborators, etc.), how problems should be handled, whether findings and sanctions imposed for plagiarism should be publicized, and relations between institutions, whistleblowers, and ORI in such cases.

1. *Moderator:* Lawrence Rhoades, Ph.D.
Director, Division of Policy and Education
Office of Research Integrity
2. Nelson Kiang, Ph.D.
Director, Eaton Peabody Laboratory
Massachusetts Eye and Ear Infirmary;
Professor and Chairman, Committee on Student Discipline
Massachusetts Institute of Technology
3. Mark Frankel, Ph.D.
Director, Scientific Freedom, Responsibility and Law Program
Directorate for Science and Policy Programs
American Association for the Advancement of Science

Introduction

4. Alan Price, Ph.D.
Chief, Investigations Branch A
Division of Research Investigations
Office of Research Integrity
5. Discussion Session #5

G. Adjournment of Conference

Lyle Bivens, Ph.D.
Director
Office of Research Integrity

Introduction

ORI/AAAS PLAGIARISM CONFERENCE SPEAKERS

Invited speakers in alphabetical order:

1. Paul Anderson, M.D., Editor, *Journal of Histochemistry and Cytochemistry*, and Professor of Neuropathology, Mt. Sinai School of Medicine, New York
2. Lyle Bivens, Ph.D., Director, Office of Research Integrity
3. Mark Frankel, Ph.D., Director, Scientific Freedom, Responsibility, and Law Program, American Association for the Advancement of Science
4. James Gardner, Ph.D., Deputy Executive Director, American Historical Association, Washington, D.C.
5. Lorrin Garson, Ph.D., Head, Advanced Technology Division, American Chemical Society
6. C.K. Gunsalus, Esq., Research Standards Officer, University of Illinois, Urbana-Champaign
7. Edward Huth, M.D., Editor, *The Online Journal of Current Clinical Trials*, and Editor Emeritus, *Annals of Internal Medicine*, Pennsylvania
8. Nelson Kiang, Ph.D., Director, Eaton Peabody Laboratory, Massachusetts Eye and Ear Infirmary, and Professor and Chairman, Committee on Student Discipline, Massachusetts Institute of Technology, Cambridge
9. Marcel LaFollette, Ph.D., Associate Research Professor, George Washington University, Washington, D.C.
10. Donald Luecke, Ph.D., Deputy Director, Division of Research Grants, National Institutes of Health
11. James Meeks, Esq., Special Assistant to the Vice President for Research, Professor of Law, Ohio State University
12. Alan Price, Ph.D., Chief, Investigations Branch A, Division of Research Investigations, Office of Research Integrity

Introduction

13. Drummond Rennie, M.D., West Coast Editor, *Journal of the American Medical Association*, and Professor, Institute for Health Policy Studies, University of California at San Francisco
14. Lawrence Rhoades, Ph.D., Director, Division of Policy and Education, Office of Research Integrity
15. Nicholas Steneck, Ph.D., Professor of History and Director of the Historical Center for the Health Sciences, University of Michigan, Ann Arbor, and Chairman of the PHS Advisory Committee on Research Ethics
16. Albert Teich, Ph.D., Director, Science and Policy Programs, American Association for the Advancement of Science
17. Clyde Watkins, Ph.D., Acting Director, Division of Research Investigations, Office of Research Integrity
18. R. Douglas Wilkerson, Ph.D., Associate Vice President for Research, Medical College of Ohio
19. Mark Wisner, Ph.D. (and Sally Blakely, Ph.D.), Professors of Tropical Medicine (or Biostatistics and Epidemiology), Member (and Chair) of the Grievance Committee, School of Public Health and Tropical Medicine, Tulane University

Other contributors (non-speakers)

1. Kell Julliard, M.F.A., Christine M. Kleinert Institute for Hand and Micro Surgery, Louisville, Kentucky
2. Frederick Newsome, M.D., M.Sc., Professor, Department of Medicine, Columbia College of Physicians and Surgeons, Harlem Hospital Center
3. Keith R. St. Onge, Professor Emeritus of Speech Pathology, Southern Illinois University, Edwardsville, Illinois

EXECUTIVE SUMMARY

ORI/AAAS CONFERENCE ON PLAGIARISM AND THEFT OF IDEAS

On June 21-22, 1993, the Office of Research Integrity (ORI) and the American Association for the Advancement of Science (AAAS) sponsored a "Conference on Plagiarism and Theft of Ideas" in the Lister Hill Auditorium at the National Institutes of Health (NIH) in Bethesda, Maryland. The Conference was open to the public, and it focused on the institutional handling of allegations of plagiarism and their societal context. Three advertisements in *Science* and 2,000 brochures mailed to research institutions and to individuals on the ORI and AAAS newsletter mailing lists led 150 people from around the country to attend. The Conference was opened by Dr. Lyle W. Bivens, Director, ORI, and the Conference's organizers: Dr. Alan R. Price, Chief, Investigations Branch A, Division of Research Investigations, ORI, and Dr. Mark S. Frankel, Director, Scientific Freedom, Responsibility and Law Program, Directorate for Science and Policy Programs, AAAS.

Session 1

The first session focused on the historical and institutional context of plagiarism. Dr. Nicholas Steneck, Professor of History and Director of the Historical Center for the Health Sciences, University of Michigan, chaired this session. Dr. Steneck noted that academics have become increasingly interested in the topic of plagiarism, both in terms of their own careers and in terms of the students they train. The speakers for this session included: Dr. Marcel LaFollette, Associate Research Professor of Science and Technology Policy, George Washington University; Ms. C.K. Gunsalus, Esq., Research Standards Officer, University of Illinois Urbana-Champaign; and Dr. James Gardner, Deputy Executive Director, American Historical Association.

Dr. LaFollette spoke on the intellectual context of plagiarism in literature and science. She cited two types of ethical violations, the theft or "kidnapping" of another's ideas and plagiarism, and she discussed the emotional and psychological reactions of those whose ideas or words have been stolen. She stated that theft of ideas is more difficult than plagiarism to prove because scientists commonly share their ideas openly. She also pointed out that every scholar needs to use the work of other people in the field to progress beyond it. However, the scholar must give appropriate credit to the original author. She concluded that the

"acceptance" of plagiarism as the "status quo" or as not being a problem because "everyone does it" with the denial of its moral importance would not only affect the self-identity of the plagiarized and the plagiarist, but it would also affect science's self-identity, its image of seeking for and speaking the truth.

Ms. Gunsalus discussed some of the difficulties in dealing with disputes over authorship and the attribution of credit and in handling of allegations of plagiarism. She gave examples of problems that arise when handling distraught complainants, and she discussed the need to have an institutional mechanism for resolving complainants' concerns appropriately and for documenting findings in cases of plagiarism. She also noted that a surprising number of plagiarism allegations turn out to be misunderstandings or disputes arising from a dereliction of mentoring and supervising responsibility. She pointed out that there is a great deal of ambiguity in such areas as standards for attribution, rules about ownership of jointly-authored works and grant proposals, and responsibility for words in a multi-authored document. Ms. Gunsalus also discussed her belief that proof of "intent" is totally irrelevant to the fact of plagiarism. However, she stressed that intent is very important for determining the appropriate sanction for such misconduct and for drawing the line between negligence, carelessness, incompetence, and "criminal negligence."

Dr. Gardner discussed the attempts of the American Historical Association (AHA) to develop and implement a policy statement within the broad historical profession to: (1) identify acts of plagiarism and (2) help historians resist the temptation to plagiarize through training, teaching appropriate work habits, and punishing plagiarists. In 1984, the AHA revised its general research ethics statement and developed a specific statement on plagiarism. This statement was adopted in 1986, and an addendum on policies and procedures (for review of allegations, not for investigation) was added in 1987. The statement specifically noted that one can plagiarize (a moral issue) without violating copyright and that one can violate copyright law without committing plagiarism. In five years, thirteen charges of plagiarism have led to ten findings of misconduct by the AHA.

Session 2

The second session concentrated on institutional experiences in the handling of cases of plagiarism and theft of ideas. Dr. Alan Price, ORI, chaired this session. He stated that plagiarism and failure to credit ideas is one of the most common allegations reviewed by Federal investigative offices and research institutions. He also noted that institutions have often found "no scientific misconduct" in such cases due to the following factors: (1) the cases were resolved based on the evidence before reaching the level of an investigation; (2) institutional committees had difficulty determining ownership of the words or ideas of people who had worked together as collaborators, student/mentor, or investigator/coinvestigator; or (3) the allegations involved such a minimal copying of words without quotation marks or complete citations that investigations were not warranted. Even in cases with significant allegations, many institutions have given reprimands without reaching findings of misconduct. However, in other

cases, findings of misconduct have been made and severe sanctions have been imposed by institutions and by the U.S. Public Health Service (PHS) or the National Science Foundation (NSF). The speakers for this session included: Dr. Mark Wiser, Professor, School of Public Health and Tropical Medicine, Tulane University; Dr. R. Douglas Wilkerson, Associate Vice President for Research, Medical College of Ohio; Mr. James Meeks, Esq., Professor of Law and Special Assistant to the Vice President for Research, Ohio State University; and Ms. C.K. Gunsalus, Esq., Research Standards Officer, University of Illinois, Urbana-Champaign.

Dr. Wiser described some detailed principles and procedures developed by a grievance committee to guide its investigation of alleged plagiarism (unrelated to any PHS grant). It may serve as a model for other institutions in handling plagiarism cases. First, the committee used the following criteria to evaluate the seriousness of the allegations: (1) the extent and frequency of the plagiarism, (2) the intent of the respondent, (3) previous admission of plagiarism by that person, (4) the rank and training level of the respondent, and (5) the nature of the source material. The committee consulted experts in the field and sent the material in question, without identifiers, to other professionals for their opinion on whether material was plagiarized. Finally, the committee held interviews with the coauthors and the principals. The committee recommended a finding of scientific misconduct for plagiarism and the initiation of tenure termination proceedings against the respondent.

Dr. Wilkerson outlined unexpected twists and turns taken in an investigation of plagiarism on the part of a senior faculty member. In this case, the respondent had been a member of a PHS study section that reviewed another scientist's grant application. The respondent kept a copy of that application and used some of its introductory text for postdoctoral fellowship applications and for his own grant application. This text was recognized during PHS review as having been copied from the other scientist's application. Rather than admitting to the plagiarism, which would likely have resulted in a minor sanction, the respondent denied it. He fabricated a document and claimed to have written it years earlier. Then he solicited support (unsuccessfully) from colleagues at other universities to verify the authenticity of the fabricated document. He also falsely accused the other scientist of plagiarizing his document. The issue was resolved by an analysis that demonstrated that material in this document could not have been known until years after it was claimed to have been written. Also, the other scientist proved that he had actually submitted the original text years earlier. As a result of the finding of misconduct, the professor resigned his tenured position. The PHS imposed a debarment from his receiving Federal funds for three years and a prohibition from service on PHS advisory committees for ten years for his act of plagiarism, which had been compounded by his abuse of the PHS peer review system and his false counter allegation and attempted coverup.

Mr. Meeks described another case of plagiarism in a grant application by a senior faculty member. In this case, the respondent had been a member of a PHS study section and had retained a copy of another scientist's application. Some of the background material, methods, and approach were later used in the respondent's own grant application. Initially, the respondent denied that any plagiarism had occurred. Later, he admitted that it had and that he was responsible. However, he

explained that he had shared grant applications that he was reviewing with postdoctoral fellows in his lab as an educational experience, asking them to write a report on the future direction they thought the research should take. The respondent claimed that, unbeknownst to him, one of his postdoctoral fellows had borrowed material from the other scientist's application; in turn, the professor had, unknowingly, used it in his own grant application. However, the respondent refused to identify the fellow to the university or to ORI, and he accepted full responsibility for the resulting plagiarism. The PHS imposed a ten-year requirement for certification of his future proposals for proper attribution of other sources and prohibited him from serving on any PHS advisory committees.

Mr. Meeks also outlined two other cases of plagiarism. He noted that some faculty believe that one cannot plagiarize something that has not been published and that plagiarism that occurs only in a grant application cannot be called "plagiarism." Mr. Meeks disagreed with both of these premises.

Ms. Gunsalus described the use of a computer program to evaluate the extent of plagiarism and to look for patterns in a given case by attempting to quantitate the extent of common use of phrases between questioned documents. Mr. Walter Stewart and Dr. Ned Feder developed the technology at NIH and ran documents for several of Ms. Gunsalus' cases (unrelated to PHS) through their program. Ms. Gunsalus said that the technology is useful in finding phrases that are pulled from distant parts of documents and rearranged dramatically so that they cannot be caught easily by eye/hand. She stressed that it is necessary for human beings to conduct further analysis and make judgments on the detected shared sequences to eliminate commonly-used names, phrases, quotations, or actual citations that do not constitute plagiarism.

Session 3

In the third session, a journal editor and a funding agency official discussed how allegations of plagiarism and theft of ideas are dealt with during peer review. Dr. Clyde A. Watkins, then Acting Director, Division of Research Investigations, ORI, chaired this session. Dr. Watkins noted that many reported incidents of plagiarism in the scientific community are detected by peer reviewers. The speakers for this session included: Dr. Drummond Rennie, West Coast Editor, *Journal of the American Medical Association*, and Professor, Health Policy Center, University of California at San Francisco; and Dr. Donald Luecke, Deputy Director, Division of Research Grants, NIH.

Dr. Rennie described the difficulties that journal editors have in handling allegations of plagiarism. He explained that a scientist seldom owns the copyright to a paper, so lawyers typically do not regard the actual author as having been harmed very much, if at all, by plagiarism. Thus, he suggested that scientists should not think in terms of the legal definitions of theft of intellectual property, but in terms of the ethics of proper attribution, acknowledgement, and recognition. He stated that biomedical editors agree that each author is accountable for everything in an article and is responsible for insuring that all statements are correctly attributed and that all important earlier work is correctly cited. He also noted that each revised chapter of a previously published edition of a book should clearly state its provenance; scientist authors and editors must have the courtesy and common sense to insure that the authors of previous versions are acknowledged freely in the revised text (even though they have signed away copyrights). He observed that, since editors generally strive to select reviewers closest to the subject, plagiarism is often caught by the original author. He noted that a finding of plagiarism of words is a "warning" that plagiarism of ideas, falsification, and fabrication may also have been committed. He believed that it is the duty of journals to publish retractions in a prominent place, not just a weak letter to the editor. He stressed that, although editors and journals are powerless to investigate when they receive reports of findings of misconduct, they must publish the results of investigations into the misconduct that affected their journal's pages as well as the appropriate retractions.

Dr. Luecke described the role of the peer review process in identifying possible cases of scientific misconduct. He reported that the Division of Research Grants (DRG) study sections review about 80% (35,000) of the grant applications sent to NIH each year; other kinds of initial review groups review the remainder of the grant applications for individual funding institutes or centers to determine their scientific and technical merit. In 1987-88, it was recognized that study sections have the capacity to alert NIH to possible misconduct. In a case in 1988, a study section observed that a manuscript submitted with a grant application contained some questionable controls, and the study section decided to defer the application; the publication was also questioned by the scientific community, and the information was found to have been falsified. When such cases arise now, scientific review administrators at DRG refer the potential problem to ORI. Then, the administrator must decide whether to have the study section proceed with the review of the scientific merit of the application or to defer the application. If there is a finding of no misconduct by the institution and ORI, then the applicant is given the opportunity to decide whether the finding should be relayed back to the study section members who made the allegation. In some cases, the applicants want the issue raised with the initial study section; in other cases, they do not. There is often the concern that a study section may dramatically reduce technical merit evaluations due to the existence of an allegation of misconduct, regardless of the findings of the institution or ORI. He also noted that, although potential plagiarism allegations are often raised by the person who was plagiarized, this is not always the case. When comparing similar applications, it is often not clear whether plagiarism has occurred and, if so, who plagiarized whom.

Session 4

The fourth session focused on the modern computer era and its impact on protecting words and ideas in research. Dr. Albert Teich, Director, Science and Policy Programs, AAAS, chaired this session. Dr. Teich noted that computer technology can create new opportunities for plagiarism and can make the detection and investigation of plagiarism even more difficult because computers can be used to manipulate graphics, images, and text and for electronic publication and information dissemination. The speakers for this session included:

Dr. Edward Huth, Editor, *The Online Journal of Current Clinical Trials*; Dr. Lorrin Garson, Head of the Advanced Technology Division, American Chemical Society; and Dr. Paul Anderson, Editor, *Journal of Histochemistry and Cytochemistry*, and Professor of Neuropathology, Mount Sinai School of Medicine.

Dr. Huth described electronic journal publishing as the issuance and continuing availability of methodologically structured fixed documents, such as formal reports of research, review articles, and meta-analyses, in electronic format. He noted that electronic publishing can facilitate the detection of "self-plagiarism" (duplicate publication), a special offense in scientific communication, because it obscures the relationship of papers to each other; for multiple reports on clinical trials, there may be serious ambiguities as to whether one, two, or three trials are being reported. He also pointed out that electronic publishing may increase the opportunities for plagiarism due to: (1) the relative invisibility or obscurity of electronically published documents versus physical journals; (2) the lack of constraints on space in electronic media versus paper; and (3) the potential failure to index formal electronic publishing. Finally, Dr. Huth discussed how electronic publishing may actually reduce plagiarism or facilitate its detection: (1) papers plagiarized in full can be more readily identified as such because they have an old, "stale" quality; (2) the shift from conventional review articles to meta analytic documents may make plagiarism of that kind of material more difficult; (3) there may be an increasing value of widely identified participation in certain kinds of research and a decreasing value being put on individual papers; and (4) the use of computers can facilitate the identification of prior research studies, as in a national or international registry of clinical trials.

Dr. Garson described some of the "threats" that electronic publishing offers. He reported that the American Chemical Society publishes 22 scientific journals containing about 100,000 composed pages each year; its electronic files and others represent six to eight percent of all the chemical information in the world. He noted that, because electronic information is easy to copy, electronic publishing may be viewed as an economic threat to publishers and as a threat to authors in terms of facilitating plagiarism. However, he explained that, although electronic publishing offers a certain degree of threat, it also offers methodology to counteract the threat. Using public software called "Messenger," he demonstrated how to search for terms within the same sentence, paragraph, or article, online in public files within a few seconds. This is a useful technique for detecting whether words have been copied. Using the UNIX sum utility, he also demonstrated how one can calculate a "hash total," both for text and graphics, as a numerical "fingerprint" for a particular file. Finally, he cited a publication proposing the use of an authenticating "electronic

watermark" for digital images, a weak bit-pattern underneath the image itself, which would be modified if a person deliberately tried to alter an image.

Dr. Anderson demonstrated technology for modifying and creating images for publication and cited the current dangers of computer-based plagiarism or falsification of images. He demonstrated how graphic images can be plagiarized by cropping, enlarging, reducing, reversing, or rotating 90 or 180 degrees a photograph from an earlier publication. He explained that old images can be modified or new images can be created simply by connecting to a computer via a scanner or connecting a camera directly to a computer. It is possible to make modifications down to a fraction of a pixel to produce a new, totally "seamless" and grainless illustration within ten minutes. He showed how computer scanners can prepare halftone images and easily manipulate them to adjust the color scale or the gray scale, thereby enhancing certain kinds of detail. He noted that such manipulations are virtually undetectable, and no record of the manipulations would exist. Lastly, he stated that he believes that authors, photographers, graphic artists, editors, publishers, and printers should be required to document the details of their image production so that the authenticity of the images can be demonstrated.

Session 5

Dr. Lawrence Rhoades, Director, Division of Policy and Education, ORI, chaired the final session on lessons learned and the next steps to take to handle plagiarism cases more effectively. Dr. Nelson Kiang, Director, Eaton Peabody Laboratory, Massachusetts Eye and Ear Infirmary, and Professor and Chairman, Committee on Student Discipline, Massachusetts Institute of Technology (MIT), was the primary speaker for this session.

Dr. Kiang shared his experiences with cases of plagiarism at MIT and at the Harvard Medical School. He raised difficult issues, such as (1) whether plagiarism can be condoned by the original author since, unlike copyright, the paper does not really "belong" to the original author; and (2) when a professor works with students on papers, whether one can determine the relative contribution of each author and whether the professor is entitled to use term papers or theses of students in his own writings. He also discussed how cultural backgrounds influence views of misconduct. He pointed out the need to educate foreign students that plagiarism and cheating are unacceptable, since their own cultures may have different norms. As examples of foreign perspectives, Dr. Kiang cited that (1) some Chinese have a tradition of learning by copying the works of the great masters until thoroughly absorbed; and (2) some Italian Europeans have a tradition that expects the best students to help and give answers to weaker students.

Dr. Frankel, AAAS, summarized the issues raised at the Conference. He observed that there is a great deal of "emotion" associated with allegations or definitive findings of plagiarism and theft of ideas. He believed that, morally speaking, plagiarism is the intellectual equivalent of thievery, whether or not any intent was present. He noted that it is important to respond effectively to plagiarism cases in order to: (1) redress individual grievances, (2) protect the integrity of science,

and (3) fulfill a central responsibility to those who seek self-governance for their work and an accountability to the larger society. He also observed that the range of sanctions used by institutions seems to be limited to reprimanding the plagiarist, dismissing him or her, or retracting tenure. He concluded that findings of plagiarism, within and outside the institution or the Federal agency, should be published to: (1) alert others to these violations by the perpetrator, (2) help others protect themselves from being subject to an allegation, and (3) send a message to the community about the integrity of the system used to detect and respond to allegations of plagiarism. He also stated that professional associations must be prepared to deal with the threat of lawsuits, rather than use the threat of lawsuits as an "excuse" for not making findings public. He stressed that the professional associations also have a responsibility to help those who have been falsely accused of misconduct to restore their reputations.

Dr. Frankel reiterated that universities and professional societies must educate students, postdoctoral fellows, and researchers, particularly those from foreign countries, about the norms of science and rules that govern research in the United States. He also stated that educators should not only point out where there is a consensus on the norms, but they should also be honest about where there is disagreement. He stressed that educators must discuss the role of personal responsibility in research ethics to help dispel the notion that individuals are controlled by the system. He stated that those who bring allegations of plagiarism must be convinced that their efforts to report such allegations will be received as an attempt to contribute to the quality of science, not as an act of betrayal, and that the system will follow up on their allegations. Finally, he asked that the scientific community be more sensitive to cultural differences and conduct good empirical research identifying specific kinds of multicultural differences and their influence on research behavior.

Dr. Price, ORI, reminded the conferees that everyone in the scientific community is responsible for scientific integrity. He outlined the order of responsibility for ensuring scientific integrity: (1) the individuals who conduct research and who serve as principal investigators, mentors, students, postdoctoral fellows, or members in any other capacity in the research program; (2) the institutions that are responsible for the research activities and submit the grant applications; (3) the professional associations that help to oversee the ethical responsibilities; (4) the granting agencies that give money for research, particularly the Federal Government; and (5) the investigative offices of the PHS, NSF, and other agencies of the Federal Government. Further, he pointed out that certain acts of scientific misconduct may fall outside the scope of Federal authority, because the acts do not fall within the Federal funding jurisdiction or within the Federal definition of scientific misconduct. However, such acts may still be unprofessional, inappropriate, and unethical. Thus, he concluded that there is a need to recognize the greater scientific community's responsibility in handling such matters.

Dr. Bivens, ORI, closed the Conference, thanking all for their attendance and participation.

WELCOME TO THE ORI/AAAS CONFERENCE

Dr. Lyle Bivens
ORI

Good morning. I would like to welcome all of you to this Office of Research Integrity (ORI) and American Association for the Advancement of Science (AAAS) Conference on Plagiarism and Theft of Ideas. This is the first conference that the Office of Research Integrity has sponsored since it was established in June 1992, and I'm really gratified by the response and by the large attendance today.

Back in 1990, Dr. Lawrence Rhoades, my Deputy, said to me, "We need a conference on plagiarism." And I said, "Gee, what's the big deal? You've got words here and you've got words there, and you look at the two, and if the words are the same and they are written by different people, somebody is in trouble. What's the big deal about the concept of plagiarism? Do we really need a conference on it?" Well, subsequent events have shown that I was obviously wrong, and a number of other people in ORI have noted that. So here we are today.

Serious planning for this Conference really began about a year ago, driven in part by the fact that about 25 percent of our cases involved plagiarism, as well as our experience that different institutions seemed to define plagiarism in different ways. And I think we have chosen a very timely and important topic to discuss, and I'm eager to hear the various perspectives represented on the program.

The Office of Research Integrity is just over a year old now. We have accomplished a lot in that time, but we have a lot left to do. I would like to just to give you a very brief background on what we've done and what we have left to do.

On the accomplishment side, we have implemented a hearing procedure that brings a full measure of due process protection to scientific misconduct proceedings. We've closed a number of cases, and we have begun publishing our scientific misconduct findings in the *Federal Register* and in the *NIH Guide to Grants and Contracts*. The *Federal Register* of today will have a notice of 14 findings of misconduct that have been issued since ORI was set up last June. We have substantially expanded our scientific and investigative staff, and we proposed a number of very significant policy changes as a result of our work with the PHS Advisory Committee on Research Integrity.

On the remaining-to-be-done side, the NIH Revitalization Act recently passed by Congress requires that we establish a Commission on Research Integrity to develop a report to the Secretary of Health and Human Services and to the Congress on a number of important policy issues, including the definition of scientific misconduct. The Act also requires that a new regulation be developed to set standards for the protection of whistleblowers in scientific misconduct cases. We are also going to continue to work with the Office of Science and Technology Policy in developing a Government-wide model policy for scientific misconduct.

Throughout the development of Public Health Service (PHS) policy on scientific misconduct, we have always been attentive to the views and needs of the scientific and academic community, through formal mechanisms such as the advisory committee, in response to *Federal Register* notices of proposed policies, or through more informal contacts. This conference is a good example of the kind of informal interaction that we have found extremely valuable, and I hope you too will find something of value in these discussions.

Now I could give you a number of examples where we would like the views of the outside scientific community on the issue of plagiarism, but in the interest of time, I will give you only one. From the Public Health Service and the Office of Research Integrity perspective, we spent a lot of time discussing the proper bounds of plagiarism with which we should be concerned as a Government agency. One of our primary concerns is plagiarism in research grant applications to the Public Health Service, and there is not much argument that this is a proper concern. But we have discussed at great length whether we should consider excluding from the definition of scientific misconduct for our purposes in PHS the limited use of identical or nearly identical phrases to describe a commonly used research method or to describe previous research. If the words or phrases copied do not materially enhance the perception by the reader or the reviewer of the contribution of the author, should we, the Public Health Service, be concerned about it? Should the scientific community be concerned about it? There may be different answers. I expect this Conference to shed some light on this issue, as well as others.

I want to close by thanking Drs. Alan Price, Lawrence Rhoades, and Clyde Watkins from ORI, Debra Parrish from the Office of the General Counsel, and Drs. Mark Frankel and Al Teich from AAAS for all their work as the Planning Committee for this ORI/AAAS Conference. They have done a great job.

INTRODUCTION: AAAS

Dr. Mark Frankel
AAAS

In addition to my personal welcome, let me also welcome you on behalf of the two committees of the American Association for the Advancement of Science (AAAS) that are co-sponsoring this meeting. One is the Committee on Scientific Freedom and Responsibility, and the other is the AAAS/ABA National Conference of Lawyers and Scientists. I also want to welcome you on behalf of the Scientific Freedom, Responsibility and Law Program at AAAS, which works very closely with those two committees. We are all very pleased to be co-sponsoring this event and to see so many of you here today.

The AAAS Committee on Scientific Freedom and Responsibility was founded in 1976 in concert with an amendment to the AAAS constitution which added to the Association's mission the goal of fostering scientific freedom and responsibility. A year prior to that, a special AAAS *ad hoc* committee had issued a report on scientific freedom and responsibility, which prompted the Association to amend its constitution and to establish the Committee. The report declared, among other things, that the need to maintain uncorrupted standards in seeking and reporting new knowledge is central to the integrity of the scientific enterprise and that one of the basic responsibilities of scientists is to maintain the quality and integrity of the work of the scientific community.

Since its founding, the Committee has joined with many groups and organizations in efforts to define the norms of responsible scientific practice, to articulate proper standards of behavior in scientific research, and to develop educational strategies for transmitting those norms and standards to scientists and others concerned about the conduct and reporting of research. This Conference represents another extension of these efforts.

The National Conference of Lawyers and Scientists (NCLS) was established in 1974 as a joint AAAS committee with the American Bar Association (ABA). It works on issues at the nexus of science and law. Since 1986, it has developed a sustained effort to focus the attention of the scientific and legal communities on scientific misconduct. Through a series of workshops, conferences, seminars and symposia, the NCLS has provided a forum for exploring a host of issues related to scientific misconduct, and in some cases, for planting the seeds for the promulgation of policy recommendations in the public and private sectors. More recently,

the NCLS has sponsored a series of practicums. These are one-day tutorials intended to provide practical assistance to persons at research institutions who are responsible for handling allegations of research misconduct. So far, two have been convened, and a third is scheduled for later in 1993.

I anticipate that we are going to hear a great deal about plagiarism and the theft of ideas over the next day-and-a-half from people with considerable knowledge and firsthand experience in handling such matters, including many of you present in the audience. Purloining or shoplifting the words or ideas of others is a serious problem for all scholarship. In science, where publication is the currency of achievement, the chief source of recognition from one's peers, and the primary yardstick for establishing priority, thievery of someone else's work and reporting it as one's own has the effect of diminishing the originator's contribution. It also perpetuates a "fraud" or a deception on all those who believe that the work originated with the person who would deceive.

While I have seen no evidence indicating that plagiarism or the theft of ideas is increasing in science, there have been disturbing reports recently of a relatively high incidence of plagiarism among college students. This should deeply concern all of us. For me at least, it means that plagiarism and intellectual theft require a dual approach, involving education as well as sanctions.

The importance of education was forcefully, although inadvertently, made strikingly clear to me about two-and-a-half years ago. I had been asked to give a talk on science and ethics at a meeting of high school students in New York. These students had participated in a very competitive process to attend a special institute on science and society during the summer. During my talk, I said a few things about the role of replication of research in science and the value it might have in helping us to validate the earlier work of others, when a student stood up and said, "Well if replication in science is so important, why is it that my teacher this past year gave me an E on a paper in which I demonstrated replication in science?"

Needless to say, my response was somewhat tentative. First, I didn't know anything about the context of his work. And second, I didn't want to say anything that would adversely affect the credibility of his teacher in that setting. So I asked him whether or not in the paper he had demonstrated any discrepancies between what he had done and what the other person had done, and if so, whether he had tried to account for those? He said, "Oh, no. I was very careful. I replicated it word for word." Well, obviously someone has not communicated to him that "replicating" someone else's work is not copying it word-for-word.

I suspect we will learn more about that as this Conference proceeds. Again, welcome on behalf of AAAS and my counterpart at ORI, Dr. Alan Price, who has been very much responsible for organizing all of this.

INTRODUCTION TO THE CONFERENCE

Dr. Alan Price
ORI

Welcome to the Office of Research Integrity (ORI) and American Association for the Advancement of Science (AAAS) Conference on Plagiarism and Theft of Ideas.

As a former faculty member at the University of Michigan, it is a pleasure to have the opportunity to organize an intellectual conference and to have so many academicians and officials come together to talk about an issue of some principle and its application. Among the 135 registrants for this conference, there are 32 university officials, many of whom we at ORI deal with in misconduct cases. In addition, there are 19 professors and foundation or corporate officers acting as individuals; 19 association staff; 8 editors; 7 local persons; 25 staff of the National Institutes of Health (NIH), the National Science Foundation (NSF), and other Federal government agencies; and the ORI and AAAS staff who have organized this conference.

This is an open conference. Everybody is welcome here to listen, to talk, and to engage one another. It is particularly important that we have audience participation in this conference. We are tape recording the talks and the discussions; when you speak, if you are willing to do so, please identify yourself for the record. The case-related speakers were chosen because of our knowledge of their interest in particular cases of plagiarism and their handling, but we want to learn as much as we can from the audience, as you have ideas and concerns about the handling of cases of plagiarism.

Our focus here is not to "name" names and to "name" institutions in this context; instead, we want to share general experiences and principles. The experiences that are being shared here are ones of universities, professional associations, editors, and others. There are no speakers on the program from ORI or from the NSF Office of Inspector General discussing our cases, although many staff are here from these two Federal offices, and we are happy to hear this information and to comment on it as may be appropriate. Obviously the speakers here are representing their own views, not those necessarily shared by ORI or NSF or other aspects of the Federal government. Our focus here is as an intellectual community, sharing ideas on such issues. We want you to understand the scope of the issues that have been discussed and dealt with in the research institutions; we have no Federal position to present.

The focus of the conference is plagiarism, not necessarily the legal aspects of intellectual property copyright and patent infringement, although some of you, particularly the attorneys, may have some comments that you wish to make in this vein as to why in some cases it has been determined that copyright infringement is not equivalent to plagiarism.

Kell Julliard of the Christine Kleinert Institute in Louisville has brought a poster of some research that he has done, involving a survey of medical students, physicians, English faculty, and some non-medical editors, regarding their attitudes about whether some material would be "plagiarism" or not and how serious it is.

We also have some materials that were sent to us, unsolicited, by people who heard about the conference and asked us to distribute their materials. They include a section of quotations from a book called *Stolen Words* by Thomas Mallon, a former professor at Vassar who is now with *GQ* magazine. He was unfortunately not able to join us today, but he and the publisher permitted us to share some of his insights into the history of plagiarism in English literature. Mr. Mallon has an interesting analysis of the characteristics and motivations of plagiarists that he had seen in English literature.

Another book was sent to ORI from Southern Illinois University by Professor K.R. St. Onge, *The Melancholy Anatomy of Plagiarism*, which is an academic analysis in the context of language. It has some particularly helpful sections on the significance of plagiarism, the difficulty of trying to document the plagiarism of ideas versus words, and some common defenses used by those accused of plagiarism. Dr. St. Onge's institution also sent us a short article he wrote for *Perspectives on the Professions*, to be published in August 1993.

There is also a manuscript that was sent by Dr. Frederick Newsome of Columbia University on Pythagoras and the historical origins of plagiarism and theft of ideas in Western science. It details his analysis of the historical failure to give credit for the ideas on the origin of medicine and science that first arose in ancient Egypt by the original black physicians, their ideas being "stolen" by the Greeks and not given proper credit by the Romans in the writing of history.

We have also a statement from the American Historical Association that Dr. Gardner will be discussing later on plagiarism and related misuses of work of other authors. Finally, there is for your reference the U.S. Public Health Service regulations on scientific misconduct, 42 CFR Part 50 Subpart A.

INTRODUCTION TO SESSION #1:

**THE INTELLECTUAL AND HISTORICAL CONTENT
OF PLAGIARISM AND ITS DEFINITION**

**Dr. Nicholas Steneck
University of Michigan**

My response to plagiarism is similar to what Dr. Lyle Bivens expressed earlier. Plagiarism? So what? When I began teaching, I routinely assumed that my students knew that they should not commit plagiarism, and I did not do anything about it. I made no special point in my course syllabi of telling students that they should not plagiarize.

When the first case of plagiarism came along, it was interesting because the student had plagiarized from my own book. I decided I probably needed to say something, so I noted at the end of my syllabi: "You should follow the University's rules and regulations when handling words in papers."

A few years after that, when the next plagiarism case came along, I realized that the students did not know what the University's rules and regulations were or have any idea what I meant by my addendum. So I expanded my statement again to add what I thought were elegant descriptions of behavior such as "do your own work," and "if you use anyone else's words, work, ideas, or data, give due credit."

Three weeks ago I had a long conversation with four beginning students who did not have any idea what I meant by "do your own work" and thought that a simple listing of a few sources of at the end of their paper was all that they needed. When I told them that they had plagiarized, or at least they could be accused of that, their faces went white. When I put that together with the fact that these very same students at the University of Michigan could very likely go through the entire four years without ever having knowledge of what you should or should not do by way of citation, I realized that, as Dr. Mark Frankel just said, education is a vitally important tool.

I have also noticed more and more how the subject of plagiarism, which at one time I would have taken for granted, keeps cropping up again and again in things that I do. I am in the process now of trying to establish an electronic database for resources on the history of the health sciences. We are trying to integrate images into our database, one of the first such databases to do this. The very first question that came up as we started dealing with this was how to protect the images. How do we assure that people will not change them as they use them? How do we insure the integrity of the images? We were not discussing sharing data, but protecting it.

In a recent meeting, a colleague and I agreed that we no longer write any two words in a row without thinking about their origin, about who is going to look at them, and about who is going to review them. Plagiarism, therefore, is a subject that has come more and more to be on the minds of many of us in academics, both for what we do and for the students and the people whom we are training.

The purpose of the opening session of the ORI/AAAS Conference on Plagiarism and Theft of Ideas is to set some background for the later more detailed discussions and case studies. There is no better source for background information on plagiarism than the book, *Stealing into Print: Fraud, Plagiarism and Misconduct in Scientific Publication*, by our first speaker, Dr. Marcel LaFollette. She will set the historical and policy background for discussions of plagiarism.

THE HISTORICAL, CULTURAL, AND SOCIAL ASPECTS OF PLAGIARISM: THE IMPLICATIONS FOR SCIENTIFIC MISCONDUCT INVESTIGATIONS

Dr. Marcel LaFollette
Center for International Science and Technology Policy
The George Washington University

Preparing a lecture about plagiarism is like walking backwards and blindfolded into a room you hope you know well. You are suddenly aware of memory's weaknesses, hoping you have not forgotten where everything goes, have not dropped an attribution or been careless in citation. No one wants to describe *this* subject by example. The more one reads about plagiarism, in fact, the more sensitive one becomes to such problems. Writers of all types, in all walks of life, consciously and unconsciously, imitate and influence each other. As Rev. Charles Caleb Colton said in 1822, "There are many books that owe their success to two things, the good memory of those who write them, and the bad memory of those who read them."¹

In addition to memory and the serendipity of intellectual influence, another striking aspect of plagiarism is the level of emotion it provokes. The reaction to plagiarism can be almost visceral. Edgar Allen Poe described being "horror-stricken" at the plagiarist's "debasement propensity to pilfer."² Even the word's root reflects violence (*plagia* = "to snare," *plagiar[us]* = "kidnapper," and *plagi[um]* = "kidnapping") because, in plagiarism, the abduction of words or ideas takes place without the original author's consent.^{3,4,5}

¹Colton, C.C. (1822). *The lacon* (p. 142). London. Quoted in Redfern, W. (1989). *Cliches and coinages* (p. 68). London: Basil Blackwell.

²Poe, E.A. (1952). In A. Lindey (Ed.), *Plagiarism and originality* (p. 232). New York: Harper and Brothers.

³Redfern, W. (1989). *Cliches and coinages* (p. 67). London: Basil Blackwell.

⁴Mallon, T. (1989). *Stolen words: Forays into the origins and ravages of plagiarism* (p. 6). New York: Ticknor and Fields.

⁵Johnson, S. (1755). *Dictionary of the English language*. Defined plagiarism as "theft; literary adoption of the thoughts or works of another." Quoted in Mallon, T. (1989). *Stolen words: Forays into the origins and ravages of plagiarism* (p. 11). New York: Ticknor and Fields.

What is it about the "false assumption of authorship," about "the taking [of] the product of another person's mind and presenting it as one's own," as Alexander Lindey has phrased it,^{6,7,8} that repulses us so? I see at least four reasons for the strong emotional reaction, all of them linked to feelings stimulated in the violated author (and felt empathetically by other authors): self-identify, fear, betrayal, and uncertainty.

First, the words we choose to express our thoughts and ideas are intimate parts of our selves. Language (not the eyes) offers a window to the subconscious; language choice reflects the details of personality. And so, an author may initially greet the knowledge that he or she has been plagiarized not as theft of a commodity (even though it may well be) but as theft of a possession far more personal.⁹ Walter Redfern argues that plagiarism provokes an identity crisis in *both* the plagiarized and the plagiarist (the latter having so little sense of self that he or she must speak in someone else's words).¹⁰ Michael Schneider observes that writers instinctively cling to their own ideas "as on to a thread connecting [them] to an uninhabitable environment. It is not like hanging on to something you possess, contain, or retain, but rather something that holds you, holds you together, keeps you alive."¹¹

A second element of the visceral reaction is fear. When authors learn they have been plagiarized, they often worry that the thief has not only stolen their words but has also stolen credit for those words. That is, other people will assume that the *plagiarist* (instead of the real author) wrote those words or first developed the ideas. This concern is especially deep in the sciences and social sciences, where because of delays associated with peer review or publishing procedures, a plagiarist who steals from a draft manuscript or proposal may well achieve publication of that text before the original author does.

Third, plagiarized authors also feel betrayed. Deception has taken place. The victims are angered, bewildered, dismayed by the surreptitious nature of the act: "How dare she plagiarize those paragraphs and pretend she wrote them?"

⁶Lindey, A. (1952). *Plagiarism and originality* (p. 2). New York: Harper and Brothers.

⁷Shaw, P. (1982, Summer). "Plagiary." *American Scholar* 51:327. Calls plagiarism "the wrongful taking of and representing as one's own the ideas, words, or inventions of another."

⁸For other thoughtful definitions, see: (1) Mallon, T. (1989). *Stolen words: Forays into the origins and ravages of plagiarism*. New York: Ticknor and Fields; or (2) St. Onge, K.R. (1988). *The melancholy anatomy of plagiarism*. Lanham, MD: The University Press of America.

⁹For discussion on this point, see: Redfern, W. (1989). *Cliches and coinages* (chapters 5 and 7). London: Basil Blackwell.

¹⁰*Ibid.*

¹¹Schneider, M. (1985). *Voleur do mots* (p. 239). Gallimard, Paris. As quoted and translated in Redfern, W. (1989). *Cliches and coinages*. London: Basil Blackwell.

And fourth, ambiguity in the definition of what exactly constitutes plagiarism, the wide variation among acceptable practices in fields, institutions, and groups, and a clash between the literary and legal definitions of plagiarism all combine to create uncertainty about how the victim should respond or who should take responsibility for action. Disputes over which (i.e., whose) standards should be applicable in a case at hand can quickly turn a situation that is already emotional into a lengthy and acrimonious battle. The route to an outcome acceptable to all parties then becomes very rocky indeed.

Defining plagiarism

There are many excellent definitions of plagiarism, legal and literary, light-hearted and serious. I will forego the standard humorous ones so as not to steal thunder from subsequent speakers. As Aelius Donatus cursed in the 4th century: "*Pereant illi qui, ante nos, nostra dixerunt.*" (A pox on those who got in first with our lines.)¹²

Like puns and jokes, the metaphors for plagiarism also roll easily off the tongue: "picking someone else's mind," "mining someone else's prose." There is a flock of ornithological metaphors: "borrowed plumes," "parroted prose," "hatching stolen eggs." Redfern points out that many of the common phrases exploit the same euphemism, i.e., "borrowing."¹³ It is, however, misleading. A plagiarist does not really borrow. He or she may *take* the words, but does so with no intention of giving them back and with every intention of permanently stealing credit. The difference in perception represented by the words chosen as substitutes for "plagiarism," e.g., regarding copying as a breach of etiquette (borrowing without permission) rather than as a serious crime (theft), in fact, reflects the differences in interpretation, which characterize many plagiarism disputes involving former colleagues, co-workers, or co-authors throughout the scientific community.

There are common elements to most serious definitions: (1) the use of another's words, text, ideas, or illustrations; (2) failure to credit the original ("real") author; (3) the implication statement that the plagiarist is the author; and (4) failure to seek the original author's consent.¹⁴ I believe that all four elements must be present (in proportions that may differ among research fields) for plagiarism to have taken place in the context of research communication in the sciences and social sciences.

¹²As quoted and translated in Redfern, W. (1989). *Cliches and coinages* (p. 93). London: Basil Blackwell.

¹³Redfern, W. (1989). *Cliches and coinages* (chapter 6). London: Basil Blackwell.

¹⁴For example, the 1992 "Statement on Plagiarism" issued by the American Historical Association defines plagiarism as: "The expropriation of another author's findings, interpretations, or text, presented thereafter as one's own creation without proper attribution to its actual source . . ." (p. 17).

None of these elements on its own constitutes misconduct, in fact. The act of simply using another's words or ideas is not plagiarism, and it may even be encouraged. Scientists and scholars want their ideas used and their words quoted. Those uses serve as measures of intellectual influence and underpin the rationale for citation analysis. Moreover, scientists and scholars must use one another's work, or at least they must be familiar with that work in order to avoid duplicating it or repeating common errors. Graduate students are encouraged to become familiar with the great writers and thinkers in their fields. Researchers are praised for being "creatively derivative," for moving in just the right direction, while relying on their predecessors' insights as guideposts to intellectual *terra incognita*. For those whose work is interdisciplinary, innovation may only come from being derivative of two (or more) fields, perhaps re-assembling insights not previously applied to the problem studied.

To obscure authorship is also not necessarily to commit plagiarism. Washington is full of people who earn an honest living by writing for others, who produce "works-for-hire" that are published without their names. In addition, it is acceptable practice in *some* circumstances (again, as in the case of a work for hire) for person A to even state or imply that A is the author, when he or she is not, if A has commissioned or sponsored the work.

And finally, failing to obtain a writer's consent to use his or her words is not necessarily unethical as long as one does not attempt to obscure authorship, as long as one gives appropriate credit. It is also not illegal as long as the legal boundaries of copyright and fair use are observed.

But if all four aspects are present--if there is use, a failure to credit, a deliberate false identification of authorship, and no consent by the real author--then plagiarism has occurred. (Whether these conditions also pertain in the case of corporate works written for hire--and, if so, how far one may stretch the boundaries of acceptable practice--is an issue that must be confronted in future policy discussions, for example, in the case of proposals written for commercial R&D firms by professional writers.) It is the deceptive aspect of plagiarism that has been condemned through the ages, therefore, not the use of another's insights or ideas.

Acceptable practice in research and scholarship encourages use of another's words or ideas as long as there is credit appropriate to the circumstances of use. What muddies the waters is that, in addition to being trained to know and assimilate other's insights or words, we are also trained and pressured to be original.

Originality

What do we mean by originality? Some find it easier to define the term by describing what it is not, that it is "a creative, not . . . a reproductive or technical activity."¹⁵ For example, the student who reproduces a famous experiment, step by step, is not considered to be engaged in original research. Alfred Lessing suggests two "necessary conditions" for creative or artistic originality: first, "particularity" (the work in question is "not identical with" any other work) and, second, "individuality" (the work "possesses a certain superficial individuality, which serves to distinguish it from other works" of its type).¹⁶

When literary analysts discuss plagiarism, they tend to apply the term "originality" to the *expression* of the idea, not necessarily to the idea itself. As Thomas Mallon observes, the thought, emotion, insight, or image may be shared by others, but this particular writer has . . . been able to put it into words . . . it is the configuration of the words themselves that counts."¹⁷ Within the world of scientific research, however, the reverse may be true. Many fields award highest status to ideas rather than to mere expression. They applaud intellectual linkages, insightful explanations, the ability to pose interesting questions, or the development of sophisticated new measures. The reports or journal articles eventually describing those ideas (i.e., expressing them in words) may even be dismissed as simply "write-ups," as another stage in the research process but not necessarily the most interesting or important (other than perhaps for establishing priority or archiving what everyone else already accepts as the author's innovation). This distinction between ideas and their expression helps in discriminating between two related types of scientific misconduct: (1) the theft of ideas (the "kidnapping" of another's thoughts and ideas), and (2) the other, the expression of that theft in words or diagrams (that is, what is commonly referred to as plagiarism).

The importance of the "configuration of words" expressing the idea (versus the importance of the ideas) varies considerably within research fields and subdisciplines. This variation significantly complicates the process of defining plagiarism in the context of scientific misconduct investigations, but a failure to distinguish altogether could jeopardize the fairness of such inquiries.

In mathematics, for example, a mathematician's principal result is often a proof, that is, a configuration of words and terms. The proof may represent his or her original contribution to the

¹⁵Lessing, A. (1983). "What is wrong with a forgery?" In D. Dutton (Ed.), *The forger's art: Forgery and the philosophy of art* (p. 68). Berkeley: University of California Press.

¹⁶*Ibid*, p. 88.

¹⁷Mallon, T. (1989). *Stolen words: Forays into the origins and ravages of plagiarism* (p. 8). New York: Ticknor and Fields.

field, and elegance of expression is highly valued. Steal my proof, and you steal both the idea *and* its expression.

In computer science research, the sequence of logic in a software program, the steps in a routine, rather than the individual instructions (or words) represent a researcher's "original" contribution. Researchers in other parts of computer science, however, such as artificial intelligence, expert systems, or computer learning, might make their major contributions through more traditional writing, in articles or books where they explain, expound on, and provide examples of their theories.

In fields such as physics, chemistry, biology, or astronomy, credit tends to focus on the ideas that stimulated the data collection, on path-breaking approaches, on innovative experiments, or on theoretical explanations of observed phenomena. Nobel prizes and other professional honors reward the ideas and innovations, not necessarily their expression in an article or book, no matter how elegant. Some of the most important articles in those disciplines have been brief, almost terse, in their explication.

When a research topic requires understanding of an historical context, as in paleontology, geology, cosmology, or archaeology, the gracefulness and clarity of exposition and explanation may help to put data or specimens in context and make the researcher's argument more convincing. The expression of ideas becomes far more important to each individual author.

And finally, for researchers in much of the social sciences, e.g., anthropology, sociology, psychology, the configuration of words, the expressions, are paramount for conveying ideas. We honor such thinkers as Mary Douglas or Robert K. Merton because of their writings, in which they articulate their theories or observations.

Now, this categorization should raise an obvious question: Does plagiarism matter in fields where rhetorical expression of an idea has less professional status than the idea? Yes, plagiarism still matters. Even if the texts have less status, plagiarism still violates professional norms by attempting to present a false front or to make (as Stephen Lock says) a scientist appear more original or productive than he or she really is.¹⁸ It is, however, my subjective impression (and this could be tested empirically) that in fields where ideas have higher status than words, there may be more theft of ideas from proposals (to gain such status) and more theft of entire articles (in order to give false impressions of productivity) than stealing paragraphs or parts of an article or book (which is what people commonly mean by the term "plagiarism"). Additional data on the frequency of occurrences of these types could provide guidance for improving prevention as well as detection.

¹⁸Lock, S. (1986). *A difficult balance: Editorial peer review in medicine*. Philadelphia: ISI Press.

In addition to variation within fields and contexts, definitions of plagiarism also evolve over time as professional standards themselves change. The author of one of the classic works on literary ethics, Harry M. Paull, notes "that practices once deemed innocent became gradually to be regarded as crimes as civilization advances . . . the standard of morality changes with the ages."¹⁹ Federal regulations, investigating procedures, and preventative measures should all be sensitive to these shifts as well as to the differences among fields.

The history of publishing, authorship, and plagiarism

Plagiarism was not always regarded as a violation of social or professional norms. Technological, economic, and social forces conspired to alter that perception in the 17th and 18th centuries.²⁰ Once the invention of printing made it easier to produce multiple copies of a work, then an unscrupulous printer could appropriate a literary work without having to steal the actual manuscript.²¹ Publishing, both honest and dishonest, soon became a lucrative business throughout Europe. The first copyright statutes were, in fact, initiated to protect those business interests, to protect English publishers and booksellers against pirated reprints, and to limit monopolies on publication.²² Until the latter half of the 17th century, however, copyright was also considered the sole property of publishers; that situation changed when the Act of Anne (1709) shifted legal ownership of a work in England from publisher to author.

As royal patronage for writers began to decline during that same period, writers turned to "public patronage, i.e., earnings from commercial publications . . ."²³ to supplement their income. And, once writing became a trade, a source of earned income for authors, then anything that threatened business became a concern,²⁴ including plagiarism. In consequence, copying and imitation that

¹⁹Paull, H. M. (1928). *Literary ethics: A study in the growth of the literary conscience* (p. 13). London: Thornton Butterworth Ltd.

²⁰Thorough and interesting accounts of the relationship between plagiarism and the history of publishing and copyright may be found in: (1) Haywood, I. (1987). *Faking it: Art and the politics of forgery*. London: The Harvester Press; and (2) Mallon, T. (1989). *Stolen words: Forays into the origins and ravages of plagiarism*. New York: Ticknor and Fields.

²¹Bonham-Carter, V. (1978). *Authors by profession* 1:11. Los Altos, CA: William Kaufmann, Inc.

²²As Thomas Mallon writes: ". . . the history of copyright actually has more to do with piracy than plagiarism. Laws are far more useful in protecting authors against wholesale pirating of their books by publishers with no rights to them than they are in stopping the dead-of-night authorial theft of a passage here and a paragraph there." Mallon, T. (1989). *Stolen words: Forays into the origins and ravages of plagiarism* (pp. 38-39). New York: Ticknor and Fields.

²³Bonham-Carter, V. (1978). *Authors by profession* 1:22. Los Altos, CA: William Kaufmann, Inc.

²⁴*Ibid*, p. 25.

had been, until then, considered tolerable now represented theft of a potentially lucrative commodity, a source of livelihood.²⁵

Literary historians tend to concentrate less on these economic aspects than on what they discern as subtle attitude shifts concurrently taking place among writers. It is not as if plagiarism was invented in the 17th century or that imitation was considered an acceptable literary tradition one day and reprehensible replication the next.²⁶ Jokes about literary theft go back to the Greeks. But as Thomas Mallon astutely observes, "plagiarism did not become a . . . sore point with writers until they thought of writing as their trade."²⁷ The development of a concept of authorship, which carried weight and economic import, also meant that a value could be perceived in a writer's reputation. Literary theft brought a double reward to the dishonest writer--a plagiarist could build a false reputation out of the hard work and clever words of others and do so with minimal investments of time.

Such incorrect or unethical publishing behavior was illegal, however, only inasmuch as it violated the emerging law of copyright. Such laws in the United States focus on who owns the intellectual property in question and who has a right to use or copy it (that is, who owns the copyright or has permission from that owner), not with the subtleties of such things as originality.²⁸ The courts seek to determine whether copyright law has been violated, but they only care about authorship insofar as it sheds light on ownership.^{29,30} And yet, to be copyrightable, material must pass a test of what is called "originality," in that the work must be original with the author and must be a new expression even if it is an old idea.³¹ This type of originality is not what Lessing had in mind, however, nor is it what scientists usually mean when they speak of originality. Because of these discrepancies in perception, the discussions surrounding plagiarism as a form of scientific misconduct should carefully distinguish among competing (and possibly conflicting) interpretations of originality, not only the differences between fields discussed earlier but also differences in how originality is defined by the law and by literary or scientific practice.

²⁵*Ibid*, pp. 15-16.

²⁶Mallon, T. (1989). *Stolen words: Forays into the origins and ravages of plagiarism* (p. 3-4). New York: Ticknor and Fields.

²⁷*Ibid*.

²⁸For a summary of current law on copyright, see: Strong, W.S. (1990). *The copyright book: A practical guide*, 3rd edition. Cambridge, The MIT Press.

²⁹Lindley, A. (1952). *Plagiarism and originality* (p. 232). New York: Harper and Brothers.

³⁰Mallon, T. (1989). *Stolen words: Forays into the origins and ravages of plagiarism* (p. 24). New York: Ticknor and Fields.

³¹Strong, W.S. (1990). *The copyright book: A practical guide*, 3rd edition. Cambridge: The MIT Press.

Another problem that arises when plagiarism is considered a matter of law (not just a violation of scholarly or scientific practice) is that the law tends to make no judgment of the essential worth, usefulness, or even completeness of a text, even though to scientists the distinction may be significant. In most fields, the copying of text describing innovative conclusions receives a different degree of professional censure than the copying of standard descriptions of techniques, equipment, or routines. In theory, the law views each text as the same. Applying a strict legal standard, therefore, might result in condemnation of practices that the research field finds acceptable and ethical. All of which raises the question of whether and how federal investigations should focus on plagiarism, from the literary perspective, the legal perspective, or both.

Types of plagiarism

Predictably, disputes about what is or is not plagiarism tend to lurk in the grey areas, somewhere between indisputable word-for-word, line-by-line copying of large amounts of text (what Redfern calls "looting") and the artful and unattributed interweaving of choice phrases from other works into one's own new text (what Redfern calls "winnowing"). Since there is always a distinctly moral tone to discussions of plagiarism, I will succumb to the temptation, too, and classify the three primary types as "theft in thought, word, or deed."

1. *Theft in thought* (theft of ideas, or presentation of another's innovations or inventions as one's own) is the most problematic. It poses the greatest potential loss to an author and yet is the hardest theft to prove. The difficulty is compounded by the persistence of attitudes that often consider "stealing ideas" to be a far lesser ethical violation than "stealing the expression of ideas" because ideas are merely "raw material" for the taking, while the manufactured product (the text) represents a precious commodity over which its writer has labored long and hard.³² As I argued above, researchers in the sciences and social sciences may award text and ideas the opposite value.

Problems also stem from the nature of science as a social activity. To be a scientist today is to communicate constantly with one's colleagues. Researchers frequently describe "work in progress" or communicate their ideas (to continue the ornithological metaphor) as they are hatching. Proposals and uncompleted (draft) manuscripts are continually reviewed by others as part of the normal social system of science. Moreover, researchers and academics tend to be very chatty people, expected to interact with each other, to give seminars, to present papers, and to participate in a rapid and uncontrolled "flow" of ideas. The border between your thought and mine becomes blurred, especially when we engage in energetic debate, completing one another's sentences. To quote the Spanish proverb, "*Lo mio mio, y lo tuyo de entrambos*" (What is mine is mine, and what is yours belongs to both of us). Without a record of who first "thought" the thought, this type of theft is very difficult to prove.

³²Redfern, W. (1989). *Cliches and coinages* (p. 94). London: Basil Blackwell.

2. *Theft in word* (theft of text). Theft of text tends to focus on the copying of not one but multiple words; however, once the multiple exceeds two, there is wide disagreement over how much text may be "appropriated" without quotation or citation. And once the plagiarized text is intermingled with original text, detection becomes harder. In "pastiche plagiarism," a writer mixes original text, verbatim copies, and rephrasing, perhaps with some attribution, but with no quotation marks, and with the clear (and false) implication that all interpretations are the plagiarist's own.

A subset of theft of text includes the copying of graphic representations of ideas--for example, plagiarism of engineering drawings, illustrations, tabular presentations, or diagrams. When, for example, are illustrations or diagrammatic representations of natural processes considered to be an author's original contribution, and when are they part of common knowledge? Copying substantial portions of someone else's citations or bibliography without proper attribution also violates acceptable practice in most fields.³³

3. *Theft of deeds*. I include in this category the appropriation of texts and illustrations and the theft of ideas whose value or importance extends beyond a particular representation (for example, outlines for textbooks, experimental approaches, or the combining of disciplinary approaches, methodologies, or insights in interdisciplinary research).

Two other types that do not easily fall into the first three groups, or which fall into more than one, include:

- a. *Plagiarism by translation* ("interlingual plagiarism")--that is, verbatim, unacknowledged translation, with no attribution (or perhaps perfunctory acknowledgement) given to the original author. Translators may claim credit for the effort and felicity of translation, of course, but not for "authorship" of the resulting text.

³³Another related problem involves the copying of the sequence or the major themes in textbooks, especially in managed-texts (i.e., books that are "written and designed by a team of authors under the general direction and control of a publishing house"). Coser, L.A., Kadushin, C., & Powell, W.W. (1982). *The culture and commerce of publishing* (p. 269). New York: Basic Books. Elsewhere in their book, they describe a classic example of that problem from developmental psychology (pp. 278-279).

- b. In computer science, *copying software programs or key routines* poses special problems for establishment of standards, as well as for detection. Two programmers who have examined the problem describe unethical practices that range from verbatim, line-by-line copying of code to stylistic and syntactic changes of another's program and more complex semantic changes, such as "changing an iterative process to a recursive process."³⁴

Modes of detection

A plagiarist need not confine his or her activities to only one of these types. Many plagiarists have committed more than one type of plagiarism, and there is, for example, usually not just one questionable passage per work but several.^{35,36,37,38} Unfortunately, the techniques for detecting plagiarism are not yet as sophisticated as those the plagiarist may exploit. The most frequent mode of detection is probably still serendipity: that is, a reader familiar with the original text happens to read the plagiarist's text and, having access to the original, compares the two.³⁹ A second mode might be called "prudent skepticism," which looks suspiciously at a group of documents by many different authors, just as professors do with the first group of papers in a course. This approach assumes that there is potential (and perhaps incentive) for plagiarism, and so the texts are reviewed skeptically. Computers can assist the latter approach by routinizing massive comparisons of texts. But all these modes of detection require that, before analysis begins, there be a strong suspicion, if not an assumption, of plagiarism.

³⁴For example, see the approach described in Faidhi, J.A.W. & Robinson, S.K. (1987). "An empirical approach for detecting program similarity and plagiarism within a university programming environment." *Computers and Education* 11:11.

³⁵Mallon, T. (1989). *Stolen words: Forays into the origins and ravages of plagiarism*. New York: Ticknor and Fields.

³⁶Redfern, W. (1989). *Cliches and coinages*. London: Basil Blackwell.

³⁷Shaw, P. (1982, Summer). "Plagiary." *American Scholar* 51.

³⁸St. Onge, K. R. (1988). *The melancholy anatomy of plagiarism*. Lanham, MD: The University Press of America.

³⁹To the best of my knowledge, no quantitative data exists on the frequency of types of plagiarism and modes of detection among researchers in the sciences and social sciences; this might now be possible to compile, however, for the cases investigated by NIH and NSF.

Hundreds of years ago, Samuel Johnson supplied the rationale for an alternative approach, which combines use of internal and external evidence and allows an investigation to assume innocence and prove guilt, rather than the reverse. The technique would adopt methods developed by literary scholars to establish authorship for unattributed works, examining prose style, grammar, word choice, and parallel structure or order.⁴⁰ As Dr. Johnson wrote of plagiarism, there is often "a concurrence of more resemblances than can be imagined to have happened by chance; as where the same ideas are conjoined without any natural series or necessary coherence, or where not only the thought but the words are copied."⁴¹ Thus, the investigator compares "not the matter but the manner" of presentation. By comparing the manner of the work in question (allegedly written by person A) to the manner of other works known to have been written solely by A, that is, to A's natural or normal style, this approach might be successful in proving whether a passage is "pastiche plagiarism" or merely an innocent and accidental coincidence of terms.

Conclusion

The excuses given for plagiarism would fill another lecture. For example, one might explore such common statements as:

1. It is not plagiarism if you take base metal and turn it into gold as you massage the text and improve it.
2. It is not plagiarism if you copy only part of an article, not all of it.
3. The best writers do it.
4. It is part of the scientific process, necessary to the "cycle of creation."⁴²

⁴⁰For example, see discussions in D.V. Erdman & E.G. Fogel (Eds.), *Evidence for authorship: Essays on problems of attribution*. (1966). Ithaca: Cornell University Press.

⁴¹Johnson, S. *The rambler* (pp. 143, 399). Quoted in Mallon, T. (1989). *Stolen words: Forays into the origins and ravages of plagiarism* (p. 10). New York: Ticknor and Fields.

⁴²Mallon, T. (1989). *Stolen words: Forays into the origins and ravages of plagiarism* (p. 26). New York: Ticknor and Fields.

5. Some writers just unconsciously record others' words or ideas in their heads and can just as unconsciously write them out verbatim without intending to deceive--that is, they experience "cryptomnesia."^{43,44,45}

This last excuse poses the greatest challenge because it touches on weaknesses common to us all. If we are well-read and conversant in our field, then we can easily be, at one time or another, convicted by memories that are simultaneously too accurate and too faulty. Mallon says, "To some extent every writer's desk is like a Ouija board, his pen pushed across it by whatever literary ghosts he is just entertained."⁴⁶ Developing a legally acceptable, fair, and just definition of plagiarism for use in the framework of scientific misconduct investigations will require extraordinary sensitivity both to the research culture that sanctions the first four excuses and to the human failings represented by the fifth.

Plagiarism is probably not economically damaging to the research system as a whole (even though it may represent a significant economic loss to an individual or institution). From the standpoint of national science policy, plagiarism has little demonstrated effect on productivity or scientific progress, one way or the other. It does not distort the intellectual picture of a field (as do fake data or forged artifacts). But the acceptance of plagiarism as "status quo" or as "not a problem because everyone does it," that is, the denial of its moral significance, can and will affect science in a far more significant way. Plagiarism erodes not just the self-identity of plagiarist and the plagiarized, but it can also affect *science's* self-identity, its belief in the importance of seeking for and speaking the truth and in the strengthening of that belief throughout higher education and the workplace.

⁴³Robert K. Merton discussed this phenomenon in science three decades ago; see *European Journal of Sociology* 4:277, (1963).

⁴⁴Daniels, G. H. (1972, January 14). "Acknowledgment." *Science*, pp. 124-125. This was the plea of a historian whose book included extensive verbatim quotations from other books, without quotation marks, but often with a later cite to the original work: "an extraordinary ability to remember material when I wanted to, but I have never before realized that I did it unconsciously."

⁴⁵In a letter written after the plagiarism was uncovered, he mentions that he had inadvertently used that colleague's ideas in a recent presentation: "Either our minds run in the same channels or I unconsciously absorb ideas from you . . ." George Daniels to Nathan Reingold. (1971, November 19). Smithsonian Institution Archives, Nathan Reingold Collection, General Correspondence, Box 2, Folder 10:D (Daniels). But he had also said something similar in correspondence to the same person long before the plagiarism was discovered.

⁴⁶Mallon, T. (1989). *Stolen words: Forays into the origins and ravages of plagiarism* (p. 3). Mallon then quotes Virginia Woolf: "Reading Yeats turns my sentences one way; reading Sterne turns them another."

AN INSTITUTIONAL OFFICIAL'S PERSPECTIVE ON HANDLING ALLEGATIONS OF PLAGIARISM

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As the Research Standards Officer at the University of Illinois at Urbana-Champaign, I am responsible for the administration of our misconduct policy and procedures. I serve as the entry point for questions and concerns about behavior related to research, where the questions are usually: "Is this okay?" or "How do I handle the problem I am encountering?" or "Can you advise me about." More than half, in fact almost 70%, of the concerns brought to me involve issues of authorship or attribution of credit, including plagiarism. So you can see that I spend a good deal of time on these issues. Why does my university pay someone like me to worry about problems like this? Primarily because such problems strike at the heart of the institution's integrity and of the values upon which it rests. Who gets credit for what work is central to the quality and integrity of the university and is the "coin" of the academic realm.

What is plagiarism? As you have already heard, this is not as straight-forward a question as it might first appear. Ultimately, plagiarism is using the words or ideas of another as your own. If Person A takes words written by Person B and puts them verbatim into his or her own work, most of us would call that plagiarism. But what if the words in A's work came from material that A and B earlier authored together? Suppose A and B have a falling-out on personal grounds (as happens more often than you would guess), and then each re-uses language from the proposal in their subsequent work. Most often (but not always) the proposal in question was not funded, each party has the text on his word processor, and each regards it as his own work. In such a case the words were not exactly "published" the first time around, and there may or may not have been clear "authorship" of individual sections of the proposal. In the hardest cases, the product was a joint effort upon which each person worked extensively, and thus each feels entitled to use that work again. As Murphy's Law would dictate, A's use of joint material is most likely to be discovered when B is a reader or reviewer of A's "offending" work. Is it plagiarism, or is it not?

The compact with the reader should be the guiding issue in resolving all questions related to plagiarism: what does the reader expect about the words before him or her? In an article reporting findings of research, the reader expects the information being presented to be a report of novel research, performed by the authors, and the writing to be original. Anything that deviates from these expectations should be flagged for the reader.

The copyright versus the moral right argument arises all the time in cases of plagiarism. You have heard this argument: "It does not violate copyright law, so it cannot be plagiarism." This

argument misses the point, totally, about the importance of originality and priority in academic circles. If conduct violates academic norms and standards, it does not really matter if it is legal.

Academic norms require that a joint author, who was willing, after all, to take all the glory that would accrue from a paper, also take the responsibility for a paper that has problems. While a joint author may have been blameless in committing the plagiarism, that author must take responsibility because his or her name is on the paper and must participate in the withdrawal of the paper or whatever other redress is appropriate.

The questions next presented in plagiarism cases, after the definition question, are operational ones, in my experience. The central question in a university's plagiarism proceeding is whether you have one hideous mistake or a pattern of a plagiarist. Assessing this question, which could involve a massive publication history, may be prohibitively difficult without use of some sort of technology that can detect overlapping strings of text. Later in this Conference, I will discuss some technology that has been developed for this purpose.

The first response of a person who has been found to have incorporated text or ideas from another source into his or her own writing is, "I did not mean to--so you cannot punish me for plagiarism." This misses the point that intent is irrelevant to the fact that plagiarism did or did not occur. If someone else's words or thoughts are represented as the author's own, plagiarism has occurred. Intent does matter, but only when fashioning an appropriate sanction. (See Rennie, Drummond & Gunsalus, C. Kristina. (1993). "Scientific misconduct. New definition, procedures, and office--perhaps a new leaf." *Journal of the American Medical Association* 269(7):915-917.)

A second defense is usually some variation of "the system made me do it." This typically incorporates copious references to the "publish or perish imperative," the number of simultaneous commitments that the person was attempting to balance, and so on. In general, my personal response to this is that one is responsible for one's own actions.

A third defense is, "I did not have anything to do with the paper (or that part of the paper)." This exposes the problems with the practice described by Stewart and Feder as "honorary authorship" and invokes the response described above: if a person is willing to accept glory for being associated with the paper, that person must also accept responsibility for it if something should be found amiss.

One solution we have used on my campus for thinking about appropriate responses to incidents of plagiarism is to discern what our student code of conduct would prescribe for the behavior in question. Faculty members should be held to no lesser standard than what we establish for our students, and quite possibly, should be held to a higher standard. Thus, if a student would be expelled for a particular instance of plagiarism, the institution must consider dismissing a faculty member who commits the same act. In general, student codes of conduct are very clear and quite useful in a number of respects when considering plagiarism charges. They usually incorporate not

only a written definition (very unusual for faculty codes of conduct), but often they also include examples of permissible and impermissible paraphrasing and citation practices. My campus' code contains such examples. The library at the University of Michigan puts out another that is very clear and helpful.

Of course, circumstances do arise in which allegations of plagiarism turn out to be groundless. As I have handled such cases, I have been surprised by both the sheer numbers of allegations and the number of those allegations that turn out, after examination, to have no foundation.

Documentation of the writing process can play a pivotal role, especially when the allegation involves the appropriation of the work of a student, as many that come to me do. The faculty member who can lay hands on drafts of a work or otherwise document the development process is yards ahead of those who cannot. A very large number of unsubstantiated allegations nonetheless involve carelessness, sloppiness, and just poor quality. These are issues that ought to matter to academic institutions, although they need not be examined in the misconduct process. With pattern plagiarists, in fact, one can often trace through their earlier works the path that they have followed down the proverbial "slippery slope," where sloppy attribution is often followed by fewer and fewer uses of quotation marks and, eventually, by outright plagiarism.

The first step in any university review of an allegation of plagiarism--it will seem obvious and trite to state this, but it is astonishing how many reviews seem to skip this step--is whether the same words or ideas are present in both documents. If so, how much overlap is there? Quantification is very helpful, whether expressed in the number of words, sentences, paragraphs, and pages, or as a percentage of the whole works (both source and derivative work).

Just as intent is irrelevant to the existence of plagiarism, the motive of the person who brings the charge is irrelevant if the charge is true. As in many cases involving misconduct, these problems are fraught with all the complications that exist when the parties have power imbalances. It is extremely difficult to bring allegations against a person with more power than oneself; the person who brings the allegations may well appear distraught, unstable, or non-credible by the time the allegations are lodged. Because the truth of plagiarism charges rarely turns on the personal credibility of any of the players, an institution ought not let questions be turned away just because the person who raised them does not seem "solid."

Finally, when an institution encounters and documents a serious case or pattern of plagiarism, it is absolutely critical that the institution make public that the conduct occurred and what it did about it. One of the lessons from actual cases of plagiarism is that plagiarists tend to be recidivists. If the institution covers it up and helps the offender quietly off to another institution, he or she is likely to do it again there. That is unfair, it is wrong, and it undermines the values and the integrity of the entire system.

In sum, a number of thorny issues can arise in reviewing plagiarism allegations. The question of whether particular conduct constitutes plagiarism is fuzzy at the margins, and it is often complicated by personality issues, misperceptions, and even carelessness or outright

incompetence. Navigating these rocky waters requires sorting out the facts from the feelings and misperceptions. Finally, when plagiarism is found, the individual should be held responsible for his or her actions, and the institution should make those actions and the institution's response appropriately public.

THE DEVELOPMENT AND APPLICATION OF A PROFESSIONAL ASSOCIATION STATEMENT ON PLAGIARISM

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American Historical Association

I am sure that many of you have heard through various news accounts of the American Historical Association (AHA) efforts to deal with charges of plagiarism within the historical profession. While you may hope for some newsworthy revelation from me this morning, let me make clear on the front end that I will not discuss or comment on *any* specific case, past or present. Rather I will address the development and application of a professional association statement on plagiarism.

Background

First of all, let me provide briefly the institutional context for the AHA's work in this area. Founded in 1884 and chartered by the U.S. Congress in 1889, the AHA is the nation's largest and oldest professional association for historians. While there are numerous other historical organizations, professional and otherwise, AHA is the only one that brings together historians from all geographical, chronological, and topical specializations and all work contexts, reflecting the breadth and variety of activity in the profession today. Our network includes over 15,000 individual members, nearly 5,000 institutions, and 100 affiliated societies with a combined membership exceeding 90,000. In short, we function as the umbrella organization for the history profession, serving the profession in ways that more specialized organizations cannot. One of those ways is in developing profession-wide ethical standards.

The Association's Congressional charter authorizes it to act "in the interest of American history, and of history in America," a charge that encompasses its work as a learned society focused on scholarly research and as a professional organization with broad responsibilities for conduct and practice among historians.⁴⁷ The Association did not really focus on the

⁴⁷"Act of incorporation." (1992). *American Historical Association annual report, 1991*. Washington, DC: Smithsonian Institution Press.

latter, however, until the 1970s, when its Council, its governing board, appointed an *ad hoc* committee to investigate problems of academic freedom and "draw up recommendations as to specific policies and practices the Association can consider for adoption."⁴⁸

Meeting from 1971 through 1974, this five-person Ad Hoc Committee on the Rights of Historians sought the input of members through queries in the Association's newsletter, questionnaires mailed to a sample of the membership, an open session at the annual meeting, and other means.⁴⁹ Its 36-page report was adopted by the AHA Council in 1974 and published early the next year. Dubbed the "Hackney report" in reference to the committee's chair, Sheldon Hackney, then on the faculty at Princeton University, the report provided a "Statement of Professional Standards" and some recommendations for implementation. The seventeen standards in the statement focused largely on rights and academic freedom, with relatively few references to ethical responsibilities. Research ethics was handled in two sentences: "Integrity in scholarship requires a readiness to follow sound method and analysis wherever they may lead, an awareness of one's own bias, and acknowledging one's debt to others. Indifference to error, or efforts to ignore or conceal it, should stand to the professional discredit of a historian."⁵⁰

The committee maintained that this list would increase "the profession's level of awareness of the rights and duties of a historian" and clarify "the principles which ought to guide professional conduct."⁵¹ While proposing that the Association provide mediating and referral services, the committee advised against any "elaborate, permanent machinery" for enforcement, citing "the expense, the availability of American Association of University Professors (AAUP) services, the difficulties of securing evidence, and the uncertainty of achieving significant results."⁵²

At the same time that the Hackney committee was going about its work, another committee, the Review Board, was conducting a larger assessment of the Association's activities. The Review Board's 1973 report led to the adoption in 1974 of a new constitution and bylaws and the establishment of the current governing structure. Central to the restructuring was the creation of three divisions, one each on research, teaching, and the profession, each chaired by an elected vice-president and composed of four additional members, three elected from the membership and one representing the Council. While the idea behind the creation of the Professional Division was to provide a vehicle for tracking job opportunities and ensuring equal opportunity, the Division's agenda expanded over the next decade to include the rights and responsibilities of historians.

⁴⁸*Final report, Ad hoc committee on the rights of historians* (p. 1). (1975). Washington, DC: American Historical Association.

⁴⁹*Ibid.*

⁵⁰*Ibid*, p. 15.

⁵¹*Ibid*, p. 3.

⁵²*Ibid*, p. 2.

Up until the mid-eighties, the Professional Division handled complaints of unethical conduct on an *ad hoc* basis, restricting its activities to referral and mediation, often with the assistance of AAUP. Then in 1984, the Division's experience with two well-publicized complaints, one regarding plagiarism, convinced both the Division and the Council of the need to revise the statement published in the Hackney report and to develop a specific statement on plagiarism.⁵³

The latter was written and adopted first, in 1986, with the broader "Statement on Standards of Professional Conduct" adopted the following year. Later in 1987, an "Addendum on Policies and Procedures" was adopted as well. These three documents along with subsequent addenda and revisions provide the context within which the Professional Division now reviews complaints of unprofessional conduct, including not only plagiarism but also abridgement of academic freedom, sexual harassment, age discrimination, unfair hiring practices, violation of the contractual rights of a historian as an author, falsification of credentials, and a myriad of other charges. In the five-and-a-half years since the adoption of these core documents (1988 through April 1993), the Professional Division has reviewed 32 formal complaints. Of those, 13 involved charges of plagiarism, with findings of plagiarism or misuse made in 10 of the 13 cases.⁵⁴

Policies and procedures

Before discussing the details of the plagiarism statement, let me first sketch out our policies and procedures for handling complaints brought to the Professional Division. As I indicated earlier, the AHA was reluctant at first to go beyond *ad hoc* review of complaints. But once the new statements were adopted, the Professional Division concluded that more systematic procedures for review of complaints were necessary. Based on review of other organizations' procedures and with advice from AAUP, the Division drafted and adopted an "Addendum on Policies and Procedures" in 1987, followed by relatively minor revisions in 1989. Basically, the "Addendum" establishes procedures for processing complaints and notifying the parties involved, establishes a timetable for processing and review, and delineates seven possible courses of action, ranging from dismissal of a case to public disclosure.⁵⁵

Without going into the details of the procedures, I would like to emphasize several key points from the Association's perspective.

1. The policies and procedures make no reference to AHA membership, in terms of either who can lodge a complaint or who is subject to the standards. This was intentional. The

⁵³*American Historical Association annual report, 1984* (p. 111). (1985). Washington, DC: Smithsonian Institution Press.

⁵⁴For further details on these cases, see: *Perspectives* (1990, September), pp. 4, 6; *Perspectives* (1991, May/June), p. 8; *Perspectives* (1992, April), p. 6; *Perspectives* (1993, May/June), pp. 22-23, 25.

⁵⁵"Addendum on policies and procedures." (1993). *Statement on standards of professional conduct* (pp. 9-11). Washington, DC: American Historical Association.

Association felt strongly that these are not standards for members only, but indeed for the whole profession. No other historical organization has a comparable statement or a means of handling complaints, and the Association viewed this as part of its "umbrella" function for the profession rather than a membership-related activity. Also, no one wanted a situation where all someone being accused of unethical conduct had to do to avoid charges was drop his or her AHA membership.

2. As for what complaints would be reviewed, the decision was that *all* would be processed according to the stated procedures, and *all* would be reviewed by the Professional Division. Thus, while the staff handles complaints, we make no decisions about probable merit. *All* complaints are treated seriously, and *all* go forward for review and action. The only restriction imposed is that the Division will not accept for review any dispute under litigation in the courts.
3. In establishing the AHA procedures, care was taken to ensure appropriate attention to due process. Thus, we impose a 90-day response period, even when it means delaying the review on a case for several more months. We do not take anonymous complaints. We refuse to accept any material that cannot be shared with all parties to a case. We insist on confidentiality while a complaint is being considered.
4. The Professional Division does *not* act as an investigatory body, but rather as a *review* body. Its role is to review complaints brought to it. It *never* solicits complaints, nor does it ever extend a complaint beyond the one submitted by the complainant. While the policies and procedures allow the Division to direct inquiries to the parties to a case as part of its review process, the Division does not conduct any independent investigation.
5. The Professional Division does not impose sanctions. It normally reaches a finding, which is then conveyed only to the parties directly involved in the case. The Division can ask the Association's Council for permission to disclose a finding publicly, but that requires another round of notification followed by review by the Council. The point is to make sure that there is no rush into print regarding matters that could very well damage individuals' careers.

To date, the Association has not discussed publicly the finding from *any* complaint reviewed by the Division. All press accounts have been based on outside sources. The Association is not involved in ethics and professional standards to punish anyone, but in an effort to foster more responsible conduct and practice. Toward that end, the Division publishes in our newsletter an annual report that summarizes the number and kinds of cases reviewed and findings reached. Then it provides case studies, without names or other identifying details, to illustrate the kinds of issues that have come before the Division and to stimulate more discussion of and attention to issues of ethical conduct. The Association also is involved in efforts to develop models for teaching about ethics within graduate education and has distributed copies of its "Statement on Standards of Professional Conduct" to all graduate history departments in the United States.

Statement on plagiarism

The "Statement on Plagiarism" adopted by the AHA Council in 1986 was written for the Professional Division by two historians, John Higham, Johns Hopkins University, and Robert L. Zangrando, University of Akron. The former had himself been a victim of plagiarism, and the latter served in the Professional Division.

The Statement on Plagiarism consisted of two parts, one on identifying plagiarism and one on resisting plagiarism. In developing a definition, the authors assumed a distinction between plagiarism as a moral or ethical issue and as a copyright violation, a legal problem of a very different nature. They defined plagiarism broadly as the "expropriation of another author's findings, interpretation, or text, presented thereafter as one's own creation without proper attribution to its actual source . . ."

The following sentence in the statement added one qualifier: plagiarism involves "an intent to deceive." The statement recognized that plagiarism "takes many forms and appears in varying degrees," providing examples that range from blatant to subtle, but it also made clear that the historian is always obligated, whether in academic or popular publishing, to acknowledge his or her sources.⁵⁶ To resist plagiarism, the statement urged more attention to ethics in graduate training, the formation of better work habits, and the investigation and punishment of scholarly misconduct.

Four years after the adoption of the statement, the Professional Division, having reviewed a number of plagiarism cases, proposed to the Council that the statement be amended to eliminate the reference in the opening paragraph to "an intent to deceive."⁵⁷ The Division simply concluded that it could not establish motive. In any case, the issue was not why an individual plagiarized, but that he or she did it. The Division had faced too many pleas of "inadvertent plagiarism" and

⁵⁶"Statement on plagiarism." (1986, October). *Perspectives*, pp. 7-8.

⁵⁷"Statement on plagiarism." (1990). *Statement on standards of professional conduct* (pp. 17-22). Washington, DC: American Historical Association.

too many claims of sloppy notetaking. In short, the Division decided that excuse had to be eliminated, and the Council concurred.

With the exception of that amendment, the plagiarism statement remained as adopted until May of this year (1993), when the Council adopted a substantially revised statement developed by the Professional Division. While many of the changes are simply stylistic, others are substantive, reflecting the determination of the Division to clarify the Association's position on plagiarism, to shift the focus of cases away from evasive debates over definition of terms, and to concentrate on the extent of the unprofessional conduct alleged. Basically, the Division has developed a more limited definition of plagiarism, while at the same time broadening the statement to include misuse as equally problematic and unprofessional.

Thus, plagiarism is now narrowed to the "expropriation of another author's text, and the presentation of it as one's own . . ." Note that this definition does not require that the expropriated text be of a specific length; i.e., a sentence, a paragraph, or a page. Misuse, on the other hand, is defined as "the limited borrowing, without attribution, of another historian's distinctive and significant research findings, hypotheses, theories, rhetorical strategies, or interpretations, or an extended borrowing even with attribution." The new document is entitled "Statement on Plagiarism and Related Misuses of the Work of Other Authors."⁵⁸

Both the content of the statement and the Division's enforcement have come under considerable criticism. The plagiarism statement has been critiqued as being both too broad and too narrow. One critic focused on the statement's emphasis on attribution; he maintained that it constitutes a "loophole," allowing the inappropriate use of another author's words as long as there is a proper footnote. Another questioned the discussion of legal penalties, insisting that plagiarism is an ethical or moral problem and not a legal one and that discussion of civil action confuses the issue. The Professional Division acted on that critique and deleted those references from the statement in the latest reworking.

But the harshest criticism has focused on enforcement and specifically on the Association's refusal thus far to go public with a finding. Critics maintain that the Association's emphasis on confidentiality works to the plagiarist's advantage; the plagiarist benefits from the Association's silence. This becomes particularly clear in the case of recidivism, which is far too common.

Various alternative procedures have been proposed. One historian proposed that, rather than reviewing complaints, the Association simply publish in our newsletter all charges and responses, leaving it up to the readers to decide guilt or innocence. Less radical proposals have included publishing the findings with names and other specifics, notifying the plagiarist's employer, and

⁵⁸"Statement on plagiarism and related misuse of the work of other authors." (1990). *Statement on standards of professional conduct* (pp. 13-16). Washington, DC: American Historical Association.

establishing a clearinghouse for publishers to insure that manuscripts so identified do not continue to circulate for publication.⁵⁹

The Division members share the critics' concerns about the effect of its silence, but they have also had to deal with mitigating factors. For example, in one otherwise clear-cut finding of plagiarism, the Division decided not to go public because the work in question was an unpublished manuscript; the author claimed that it was still a work in progress and that appropriate revisions would be made. In another case, the finality of the work was not in question, but the plagiarist was a secondary school teacher. The Division felt that going public for the first time with that case rather than one involving a college or university faculty member would send out the wrong signals.

Indeed the Division is concerned that its critics do not understand the complexity of the issues and cases that have come before it, and the Division plans to publish a piece in our newsletter this fall on this subject. It will also sponsor at our 1994 annual meeting a session on "Academic Larceny: Plagiarism, Misuse, and Derivation in Historical Scholarship," which will explore the issues addressed in the new statement.

Conclusion

The AHA has been under fire from all sides over the past year regarding its handling of ethics cases. Both the Professional Division and the Council have concluded that it is time to evaluate where the AHA is and where it should be in regards to the promulgation and enforcement of ethical standards. What exactly is it that the AHA hopes to achieve in this area? Is enforcement necessary to achieve that goal, or should the Association focus more on educating the profession? How does the Council balance its commitment to principles--upholding ethical standards, protecting the credibility of historical inquiry--with its fiduciary obligation to protect the Association from legal liability? None of these questions are new. All have been raised and discussed at length within the Association over the past two decades. But they do not yield to easy or definitive answers and doubtless will (and should) remain on the Association's agenda as it continues with its efforts to provide leadership on issues of professional standards and conduct.

⁵⁹For a summary of some of the criticism, see: Zangrando, R.L. (1991/92, Winter). "Historians' procedures for handling plagiarism." *Publishing Research Quarterly*, pp. 57-63.

**STATEMENT ON STANDARDS
OF PROFESSIONAL CONDUCT**

1993

AMERICAN HISTORICAL ASSOCIATION

INTRODUCTION TO THE 1993 REVISED EDITION

Under its 1889 charter from the U.S. Congress, which specifically authorizes the Association to act "in the interest of American history, and of history in America," the AHA bears a special obligation to address principles of conduct and practice among historians. Hence in 1974, the Association established the Professional Division, the profession's only elected body specifically charged with responsibility for ethical concerns. As such, the Division has developed the following statement and addenda, superseding the 1974 report of the AHA's Ad Hoc Committee on the Rights of Historians. While enforcement of these standards is part of its work, the Division hopes that policing activities will diminish as historians become more cognizant of their professional responsibilities. Toward that end, the Professional Division urges you to share this document with your students and colleagues, whether by ordering additional copies of photocopying.

Readers should also take note of more specialized guidelines developed and adopted by other professional organizations. These include statements by three of the AHA's affiliated societies: The National Council on Public History's *Ethical Guidelines for the Historian*, the Oral History Association's *Goals and Guidelines* and *Oral History Evaluation Guidelines*, and the Society for History in the Federal Government's *Principles and Standards for Federal Historical Programs*. Copies of these publications are available through the headquarters of the respective organizations.

This edition of the *Statement on Standards of Professional Conduct* includes a substantially revised "Statement on Plagiarism and Related Misuses," adopted by the AHA Council in May 1993. Also, in December 1992, the Council agreed to include as an addendum its "Statement on Diversity in History Teaching," adopted in May 1991.

ADDENDUM ON POLICIES AND PROCEDURES

*(Adopted December 1987;
amended December 1989)*

The Professional Division, elected by the AHA membership, shall have primary responsibility for the interpretation of the AHA Statement on Standards of Professional Conduct and any addenda, for the investigation of complaints brought under it, and for recommendations to Council pertinent to such complaints. Review of a case by the Professional Division cannot and should not, however, be viewed as a substitute for legal action.

All complaints of violation(s) of the AHA Statement on Standards of Professional Conduct should be directed in writing to the Executive Director of the Association, who shall acknowledge receipt of the complaint, send a copy of the Statement and these procedures, and, where necessary, advise the complainant that a formal complaint must include specification of the time, place, persons, and events constituting the alleged violation and cite the section(s) of the Statement alleged to be violated. The Executive Director shall communicate the entire complaint to the other party or parties, together with a copy of the Statement and these procedures (by registered mail with return receipt requested) and request a response within ninety days.

After acknowledgement of the complaint and the receipt of a response from the accused or after the lapse of ninety days without response, the Executive Director shall send copies of the complaint, responses, and supporting documents to all members of the Professional Division and to the complainant and the other party or parties involved. While a case is being considered, the Division shall treat it with confidentiality. After reviewing materials submitted by the parties involved, the Division shall decide by majority vote whether:

1. the case should not be pursued further,
2. further information is needed,
3. the case should be referred to other organizations for formal arbitration or resolution,
4. mediation should be attempted,
5. final disposition should be made,
6. an advisory opinion should be issued, or
7. other action should be recommended to the Council.

If the Division:

1. **decides there should be no further pursuit of the case**, the Vice-President shall communicate the decision and the reasons therefor to the Executive Director, who shall notify all parties. The Division will not normally pursue a case if the dispute has been submitted to litigation in the courts.
2. **decides that further investigation of the case is necessary**, it may direct inquires through the Executive Director to either the complainant or the other party, with copies of the request and responses thereto in every instance to the other party. All parties involved are under an obligation to respond to such requests. The Division may also secure the services of independent experts.
3. **decides to refer the case to another organization**, the Vice-President shall communicate the decision to the Executive Director, who shall notify all parties and, with the consent of the complainant, forward to the appropriate organization copies of the complaint, responses, and supporting documents together with a request for arbitration or resolution.
4. **decides to attempt mediation**, it shall appoint a mediator from among members of the Association, acceptable to both parties. The mediator shall in due course notify the Division that the matter has been resolved by written agreement of the parties, or if no such resolution has been achieved, the mediator may (a) recommend that the matter be dropped, or (b) recommend further action.
5. **makes a final disposition of a case**, it shall convey its findings to all parties involved.
6. **decides that an individual case is indicative of a larger problem**, it may issue an advisory opinion or guideline, which shall be published in Perspectives and become an addendum to the Statement.
7. **decides that other action is needed such as a full public disclosure of an individual case**, it may direct the Vice-President to seek approval for that action from the Council. The Executive Director shall notify all parties of the Division's recommendation, and the subject of the complaint shall have thirty days to comment in writing before the recommendation is forwarded to the Council. The Council, after examination of the Division's recommendation and comments thereto, shall make a final determination of the case on behalf of the Association, and either dismiss the case or take the recommended action. The Executive Director shall notify all parties of the Council's action.

Inasmuch as the Division is a part of the constitutional structure of the Association, appeals from or criticism of its action should go before the Council.

STATEMENT ON PLAGIARISM AND RELATED MISUSES OF THE WORK OF OTHER AUTHORS

(Adopted May 1986;
amended May 1990 and May 1993⁶⁰)

Identifying plagiarism and other misuses

The word plagiarism derives from Latin roots: *plagiarius*, an abductor, and *plagiare*, to steal. The expropriation of another author's text, and the presentation of it as one's own, constitutes plagiarism, and is a serious violation of the ethics of scholarship. It undermines the credibility of historical inquiry.

In addition to the harm that plagiarism does to the pursuit of truth, it is also an offense against the literary rights of the original author and the property rights of the copyright owner. Detection can therefore result not only in academic sanctions (such as dismissal from a graduate program, termination of a faculty contract, denial of promotion or tenure) but also civil or criminal prosecution. As a practical matter, plagiarism between scholars rarely gets into court. Publishers are eager to avoid adverse publicity, and an injured scholar is unlikely to seek material compensation for misappropriation of what he or she gave gladly to the world. The real penalty for plagiarism is the abhorrence of the community of scholars.

The *misuse* of the writings of another author, even when one does not borrow the exact wording, can be as unfair, as unethical, and as unprofessional as plagiarism. Such misuse includes the limited borrowing, without attribution, of another historian's distinctive and significant research findings, hypotheses, theories, rhetorical strategies, or interpretations, or an extended borrowing even with attribution. Of course, historical knowledge is cumulative, and thus in some contexts, such as textbooks, encyclopedia articles, or broad syntheses, the form of attribution, and the permissible extent of dependence on prior scholarship, will be different than in more limited monographs. As knowledge is disseminated to a wide public, it loses some of its personal reference. What belongs to whom becomes less distinct. But even in textbooks a historian should acknowledge the sources of recent or distinctive findings and interpretations, those not yet a part of the common understanding of the profession, and should never simply borrow and rephrase the findings of other scholars.

⁶⁰This statement is based on an earlier version prepared by John Higham, Johns Hopkins University, and Robert L. Zangrando, University of Akron.

Both plagiarism and the misuse of the findings and interpretations of other scholars take many forms. The clearest abuse is the use of another's language without quotation marks and citation. More subtle abuses include the appropriation of concepts, data, or notes all disguised in newly crafted sentences, or reference to a borrowed work in an early note and then extensive further use without attribution. All such tactics reflect an unworthy disregard for the contributions of others.

Resisting plagiarism and misuse

All who participate in the community of inquiry, as amateurs or as professionals, as students or as established historians, have an obligation to oppose deception. This obligation bears with special weight on the directors of graduate seminars. They are critical in shaping a young historian's perception of the ethics of scholarship. It is therefore incumbent on graduate teachers to seek opportunities for making the seminar also a workshop in scholarly integrity. After leaving graduate school, every historian will have to depend primarily on vigilant self-criticism. Throughout our lives none of us can cease to question the claims our work makes and the sort of credit it grants to others.

But just as important as the self-criticism that guards us from self-deception is the formation of work habits that protect a scholar from plagiarism or misuse. The plagiarist's standard defense--that he or she was misled by hastily taken and imperfect notes--is plausible only in the context of a wider tolerance of shoddy work. A basic rule of good notetaking requires every researcher to distinguish scrupulously between exact quotation and paraphrase. A basic rule of good writing warns us against following our own paraphrased notes slavishly. When a historian simply links one paraphrase to the next, even if the sources are cited, a kind of structural misuse takes place; the writer is implicitly claiming a shaping intelligence that actually belonged to the sources. Faced with charges of failing to acknowledge dependence on certain sources, a historian usually pleads that the lapse was inadvertent. This excuse will be easily disposed of if scholars take seriously the injunction to check their manuscripts against the underlying texts prior to publication. Historians have a right to expect of one another a standard of workmanship that deprives plagiarism or misuses of their usual extenuations.

The second line of defense against plagiarism or misuse is organized and punitive. Every institution that includes or represents a body of scholars has an obligation to establish procedures designed to clarify and uphold their ethical standards. Every institution that employs historians bears an especially critical responsibility to maintain the integrity and reputation of its staff. This applies to government agencies, corporations, publishing firms, and public service organizations like museums and archives, as surely it does to educational facilities. Usually, it is the employing institution that is expected to investigate charges of plagiarism or misuse promptly and impartially and to invoke appropriate sanctions when the charges are sustained.

Many learned professions are just beginning to think seriously about the need for general policies on fraudulent research and writing. Usually, employing institutions tend to respond to each case in an ad hoc manner, with responses ranging from extreme indulgence to uncompromising

severity. Penalties for scholarly misconduct should vary according to the seriousness of the offense. A persistent pattern of deception justifies termination of an academic career; some scattered misappropriations may warrant only a public disclosure. What is troubling is not the variation in responses but rather the reluctance of many scholars to speak out about the possible offenses that come to their notice. No one advocates hasty or ill-founded accusations, and the protections of due process should always apply. If, however, charges of plagiarism or gross misuse are sustained by an investigating committee, its findings should ordinarily be made public. When appraising manuscripts for publication, reviewing books, or evaluating peers for placement, promotion, and tenure, the trustworthiness of the historian should never be overlooked. After all, scholarship flourishes in an atmosphere of openness and candor, which should, in our opinion, include the scrutiny and discussion of academic deception.

DISCUSSION SESSION #1

Dr. Jane Rosen (New York): Dr. LaFollette just made a statement that plagiarism might not be economically important; I take one exception to that. When people do plagiarize work and then take that data or ideas and put it into grant proposals, which then create more of an importance to their reputation because the grants are then funded, there is a tremendous economic advantage to these situations.

Dr. Marcel LaFollette (G.W.U.): Right, it is economically important to the individual in that case. You are correct. I was thinking more in terms of economics for science as a whole. That has been one of the arguments, that we should not "care" about this, because it does not affect the "general economics" of the research system. But you are exactly correct.

Dr. Joann Delnick (CT): It is also economically important to the institution, because they get a percent of the overhead for the grant that is funded.

Dr. Jerome Rosenberg (Univ. Pittsburgh): I have a definitional question, based on a real case. With a scientific review article, which has been organized along exactly the same lines as a previously published review article, you have a catalog of excuses given. One that may not be an excuse, but a real justification that I have heard expressed, is that there is a limited number of ways of reviewing a particular field defined by the charge from the editor. This may not be a case of copying word-for-word, but of copying the total organization.

Dr. LaFollette: I think that there are numbers of practices as to the style of the journal and the presumed style of review article that can make it easier for someone who was inclined to obscure or to deceive to do it. It would be much easier when I am writing articles to make the words of others seem like my own, as opposed to the very clumsy practice of -- and you notice I am having to do that in this speech--saying that so and so said this. And in the text for this speech, there are many quotation marks. I think that editorial practices and the practices of journals play a role in this, which I think is part of the point you are making on review articles.

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Dr. Victor Herbert (Mt. Sinai): Dr. Gardner, why would AHA not hear a case that is in court? Any case that is in court is going to be there for six years. By then the victim of the plagiarism will be forgotten. And when it is recognized that it is plagiarism, he will no longer matter.

Dr. James Gardner (AHA): Well, a case that obviously is going to court is probably really more of a copyright issue than it is a plagiarism case. So it is not an ethical issue so much as it is a literary property issue. I did not make this decision; I am trying to figure out what is behind it. And it may be a somewhat arbitrary decision. It has to do, I suspect, with a sense of the financial limits to which the Association can be involved in these sorts of things. And if indeed the Association becomes involved in a case in litigation, then that requires legal fees. It escalates our involvement in ways that we simply cannot handle. The Professional Division and the Council's division position was that we should be involved in these cases, again, in order to review complaints, to deal with disputes among individuals. If those individuals have chosen to take it to a different venue, fine; the Association will let others handle them. But it is a somewhat arbitrary matter.

Dr. Herbert: But you can deal with just the moral issue without dealing with the legal issue. There are two moral issues in intellectual property. One is "paternity," the moral right of the author to be named as the author of what he/she authored. The other moral right is the right to integrity, the right of the creator not to have his/her creation changed without approval and consent. Now those are not court issues. Those are moral issues. Why can you deal not with those while the case is in court?

Dr. Gardner: I guess the other side for the Professional Division was a perception that what the AHA can do is not a lot. We are a professional association. You are voluntarily a member. If you are not a member, you are just not a member. It is not like you are out of the profession if you are not a member of the AHA; there are limits to what we can do as an organization. If you are in the courts, you are doing more than we are likely to be able to do. We have been involved in cases in which we have first dealt with the moral and ethical aspects, and then it has gone into litigation. And that is the way we would prefer to handle it, to get involved early in the dispute, deal with those aspects that we can deal with, and then, if there is not satisfaction, for the parties to move forward. Another thing that our statement says is that we are not a substitute for legal action. There are moral rights. But there is a big distinction between plagiarism and copyright violation. One can respect the rights of authors and violate copyright and actually be far more vulnerable than the plagiarist would be to legal action.

Dr. Jonathan Knight (A.A.U.P.): Ms. Gunsalus, if you had a case of plagiarism and it was proven, you would publicize that fact in some fashion on the campus. Over the past five years, how many cases of alleged plagiarism has your office has investigated, and how many cases that resulted in a finding of plagiarism have you publicized?

Ms. C.K. Gunsalus (Illinois): I can go back three or four years. I get 20 to 40 people a year who come to me with questions about academic conduct: "Is it proper or is it not?" Of them, we conduct two to four inquiries a year under the Federal regulations. We do one investigation about every other year. Of the 20 to 40 questions that come to me in a year, 60 to 70 percent involve questions of authorship and attribution. Most of those we resolve by sitting down with the parties, looking at the situation, and figuring it out. We have had one case in those years that has

gone through the inquiry/investigation process that resulted in a finding of plagiarism, about which the University released public information. I cannot tell you that tomorrow we are not going to have something that is going to cause us to rethink it. All I can tell you is where we are right now. And I think there are issues of institutional integrity, issues that go to the heart of the academic enterprise. If you have a documented, substantiated finding of plagiarism, for all of the reasons that I described, including the issues of recidivism, of fairness to the community, of corrections to the archival literature so it is appropriate and substantiated, that is the position that we are in right now.

Our position in general has been to make findings of misconduct public, and we have used a variety of mechanisms. In one circumstance, we negotiated a public statement that was available to the news media. In several other circumstances we have developed things. There is a difference between standing up and saying, you all come and read it, versus having something available if somebody asks you for it. And there are fine lines in the world of news in how you deal with it. Some of it you make public by writing to the journals and saying that there has been a problem with these articles, and they need to be corrected. Despite how certain I sound, there is no one magic way to do it. There are a variety of ways to do it. The issue is not to hide what happened.

Dr. Gardner: In one case that the AHA was involved in before we had this system in place, there was actually a public admission by the individual in a statement published in both our journal and another journal of his misuse of another scholar's work. The problem is that no one saw it, not even his dissertation adviser. There is a certain problem about burying in journals these statements of admission. It is not always that useful, but there is public notice.

Ms. Gunsalus: It depends on the journal. It depends on the work that you are talking about. You do have to adapt the mechanism that you adopt to the particular circumstances. Some are appropriate in some circumstances, and others are not.

Dr. Nelson Kiang (MIT): I wanted to follow-up on the previous question about the matter of court involvement. Is there anything to prevent the Association from taking a position in an *amicus curiae* brief to the court?

Dr. Gardner: Not while I have been at AHA have we even been asked to do that. It is possible that we will do it in one case coming up. That is not something that would come under the policies and procedures. We are more likely to do it if we have gone through our procedures and have reached a finding in a particular complaint. Then if we are asked to file some sort of statement on behalf of a party, we might very well do so. The one prohibition is about AHA becoming involved in a case that is already in litigation.

Ms. Gunsalus: Could I revert a question to the gentleman from the AAUP? The purpose of making a case public, when you get to that point, is not the humiliation of the individual involved. The purpose, indeed, has to do with the literature.

Dr. Knight: Perhaps I took your words too literally. Plainly the AAUP for over three decades has published reports that identify individuals, administrators, or boards of trustees who have departed from standards, and AAUP holds them up for potential sanction. I thought Dr. Gardner's remarks suggested a degree of nuance and complexity that one might want to weigh in the consideration of these judgments.

Dr. Delnick: I wanted to follow up on the first question about not getting involved once it goes to court. It seems like your group could be a good repository for any sort of documents generated in the course of legal proceeding, and if they could file some or all documents related to that, you could serve as a repository and some sort of an archival thing. And if it was deemed at some point that a bibliography, for example, needed to be corrected, the archive would just provide the data to go ahead and do something like that.

Dr. Gardner: It is a possibility, certainly.

Dr. Mirilee Pearl (NIH): I would like to follow up on the observation that Ms. Gunsalus made that people frequently say either the system made them do it or that you very often find shoddy work. I think there is a relationship in there. In the case of the distinguished professor who gave shoddy work in terms of the mentoring capacity for the graduate student, is it not the case that the system has been developed so that mentoring is not a valued aspect of that research professor's profession and that his curriculum vitae does not rest, in any way, on his mentoring capability. Moreover, he may have been trained to believe that the system allows him to use his student's work in this way.

Ms. Gunsalus: I think that it is a question of personal honor, personal professionalism, and what you bring to it. At my institution I know there are legions of faculty who take it very seriously, do a fine job, and see it as a central part of their responsibilities. Yes, you can always say that somebody else is influencing me one way or the other, but it comes down to what are you doing and what is your job.

Even if you have a finding of no misconduct, but you have a finding of dereliction of duty in some fashion, the institution still has a responsibility. It does not have to be "scientific misconduct" for

it still to be something that the institution should address and should care about. The counseling that I referred to with this faculty member involved our saying that we thought that he had fallen down on the job in terms of an important portion of his responsibilities, and it needed to be addressed. And it is being addressed, and I believe that there is some change.

Dr. LaFollette: I wanted to reinforce that the issue of ethical mentoring is critical. I commend to you to read Carl Djerassi's piece in *Chemical and Engineering News* in October/November 1992 on ethical mentoring. A recent 1993 issue of *The New England Journal of Medicine* has a wonderful editorial by Jerome Kassirer calling for more honesty in looking at these issues, and he also alludes, I think very gracefully, to this particular issue.

Dr. Joseph Kestner (Univ. of Tulsa): Dr. LaFollette's remarks about bibliography were very interesting. What about publishers requiring authors to submit a list of works cited only as opposed to works consulted and cited? Is there a distinction there that publishers ought to be observing?

Dr. LaFollette: I agree. I think publishers and editors can do much better on most of these points. But the ultimate responsibility of course, rests with the author, because you know what has influenced you. And one way we all deal with it if we have the room as you do in a book, is to add a selected bibliography or something like that. If you ask the editor for a little more space, you might well get it. If you say it is important for the integrity of scholarship, it is going to be hard for the editor to turn you down.

Dr. Michael Burlingame (Conn. Coll.): I teach history, and I would like to say that the AHA deserves a lot of credit. It has been very progressive in establishing a strong statement, and it has been very progressive in having a sophisticated mechanism for investigating complaints. But where I and other people have difficulty with the organization is that it seems to lack "nerve" in following through. And one of the reasons that has been offered as an explanation for this, by a former president of the organization, C. Van Woodward, is the fear of lawsuits. Is it possible to shield yourself against that potential threat of lawsuit by buying insurance at a relatively modest sum, so that would not be a problem in the future?

Dr. Gardner: We have insurance. There is some concern that it needs to be doubled. The threat is such that at one point one officer was transferring all assets in fear that they would be lost in court. It remains a threat to some people and not to others. There is some real concern about an organization like the AHA, which has limited assets that could easily be wiped out in one lawsuit if things did not go well. That remains a threat. On the other hand, for some people it is a challenge, and it really depends on the individuals that are serving in office at the particular time. The council that served at a time when the Association would not go public for fear of lawsuit is not the Council we have now. There are elected officers and Council members of the Association, and it depends upon their own individual perception of what is going on and to what extent they feel that the principles are such that they are willing to take that risk. We have

insurance, but we also have legal counsel that advises at times to do one thing. Historians are not risk takers in a lot of cases.

Dr. Burlingame: I agree with you. That applies not only to the organization, but also to individuals. Some people who have filed complaints of plagiarism have been threatened with lawsuits in the hope that would intimidate them, and it has not turned out to have that affect.

Dr. Gardner: And that is one of the difficult things; no one likes to admit to being intimidated.

Dr. Knight (AAUP): The AAUP has been threatened on occasion with litigation by administrators, who are concerned that we will publish a report that will hold them up in a very bad light, but we have always gone forward. I think one thing that distinguishes AAUP from AHA and other professional associations is that we "got our feet wet" back in 1915. And up until the 1950s and into the 1960s, the notion of an individual going into court and suing a professional organization for something that organization did was "rarer than hen's teeth." The courts did not have that armory of law by which you could have judged these kinds of disputes. So the Association itself has developed this deep experience, and we are very confident in how we proceed. For organizations just getting into this process, in a context in which we are being an even more litigious society, it can be a daunting prospect, especially when you have insurance, as we do. If the deductible is \$10,000 or \$20,000, that is a big chunk of money for a professional association. So the new concerns about litigation are very real and can be, appropriately in some respects, dissuading to organizations to move into this area, facing the real threat of litigation that did not exist at the beginning of the century and into the 1960s.

Dr. Gardner: One of the issues for AHA is that we did not go public initially with some of the complaints. Now we are at a point where, if we go public, there would be a question of why we went public with this one. What is behind it? Is it to get back at someone who made a threat against us? So we are now trying to deal with this whole issue of how do we emerge from no publicity into a situation in which we do discuss some cases publicly and do not discuss others. But there is sort of threshold there, and we have to get over that.

Mr. Leonard Minsky (NCUPI): We at the National Coalition of Universities in the Public Interest hear often about the change in the ethical atmosphere, the advent what we consider to be an oxymoron, "intellectual property." Things have changed in the very recent past. The cases that we have reveal that a lot of situations that were remediable under previous professional, ethical practices are not remediable now because money is involved. The universities have been transformed since 1980 and the Biden Act; the universities have since then been adjured to become profit making institutions. That means that the institutions become involved in the issue in a way that they have not been before, and most of the discussions are focusing on individual problems, without sort of extending that discussion to the institutional context of the institutional response. Ms. Gunsalus works in one institution that apparently does it extremely well, and obviously that is because of her skills. Our experience is that other institutions do not do it so well and that the institutional involvement is a problem.

Dr. LaFollette: One of my reasons for telling the story of the history of plagiarism was also to make that point about the perception of something as a commodity. The perception that something that you write as something that has a value makes plagiarism something that you, therefore, are concerned about. I think it is the reality of an economic value or the perception of an economic value, whether there is real value or not, that has often led to both the pursuit of the unacceptable conduct and the pursuit of the accused.

Ms. Gunsalus: I think that it is true that there is a sea change underway in terms of what is a university and what is the role of a university in this society. I think that in part it is because of the increase in the number of universities and the money in the system. It is in part because, as a society, we are changing so much. Universities have gone from being an unquestioned "public good" to being just another "special interest." And the regulatory climate has changed, and the accountability climate has changed. Part of the trick when there is so much change going on is to create an environment in which the right questions are asked, so people can keep their eye on the right issues.

Dr. Richard Broadwell (Univ. Maryland): Ms. Gunsalus, you had alluded to the point of dual authorship and who was responsible. If the person who is being charged with misconduct is a young investigator or a young author and a senior co-author on the paper has received the Federal funding, is the latter individual also "at risk" in your interpretation? How many times have we seen that it is the young person who has to "pay the penalty?"

Ms. Gunsalus: If your name is on a paper with which something has gone seriously wrong, you are at risk. Now what is going to happen, what is the risk, and what penalty does that risk carry are separate questions. But if your name is on a paper and there is something wrong with the paper, you are at risk if you are an author. Authorship carries responsibilities, as well as privileges, and that is one of them.

Actually, your point about the "young person paying the penalty" has not been my experience in my particular setting. I know that one can look at some of the national cases and draw a different conclusion. It is an interesting question that deserves more discussion. But yes, if you put your name on a piece of work, then you have to stand up when something goes wrong with it.

Dr. George Kanoti (Cleveland Clinic): Ms. Gunsalus, you made a very provocative statement that "intent" is "totally irrelevant" to plagiarism. And I wonder, irrelevant to what? To the response to plagiarism? To the offense of the plagiarism?

Ms. Gunsalus: No. Intent is irrelevant as to whether or not plagiarism occurred. Intent is irrelevant to the fact of plagiarism. Intent is incredibly relevant and, in fact, the central point when you go on to say what is the appropriate sanction. But it does not affect whether plagiarism did or did not occur. And that is a trap that you find people getting into. In one institution, the panel went through this exercise and said, "Yes, there were 27 paragraphs in this document from the other document. But the guy says he did not intend to do it, and because he says that and because plagiarism requires deception, which requires intent, therefore it is not plagiarism--case closed." That is wrong.

Dr. Kanoti: I understand the logic of the argument. But you also mentioned there are moral concerns, and my understanding of moral concerns is that it involves the issue of intent in addition to action. So I need you to expose that a little more. Your logic is impeccable.

Ms. Gunsalus: Well, all I am saying is that it is a two part process, a way of thinking about it that I have found very helpful. First you establish the objective facts. Are the words there? Do the data exist? What are the facts? Then once you have established that the 27 paragraphs are present, are not attributed, have been used without permission, and there is a sort of attempt at passing them off as one's own occurring here--without the attribution, without the citation, without the permission, and without the quote marks, so it gives the clear impression to the reader that they are the original work of the person whose name appears at the top--then the question is, what is the appropriate response? So then you look at all the other facts and the intent, the young versus the old, who is in charge, and what were the circumstances? And then you decide what is the appropriate response, what is the sanction that should apply?

Intent matters a lot to us as a society. It is why we have so many gradations of murder, negligence, justifiable homicide, and such things. But first you have to establish that you have the dead body. Then you decide where it is on the spectrum. Is it first degree murder? Is it justifiable homicide? Is it negligence? Is it manslaughter? But you have to separate those issues, I think, in order to really get to it.

Dr. Heidi Weissmann: Some of the focus of presentation and the question was on the responsibility that one assumes by having your name on a work, even for something that you did not necessarily write part of, et cetera. I would like to raise as sort of an equal concern another issue about coauthorship, particularly "gratuitous coauthorship," which often occurs in these settings. I hear it called sort of a lesser crime, a lesser misdemeanor, mildly unethical. But to me, it is sort of like you are pregnant or you are not. Either you are ethical, or you are not.

Ms. Gunsalus: I think it is a harder question than that, when you get right down to it in practice. In theory I agree with you, but in practice I think it is harder than that, whether you are ethical or you are not. I do.

Dr. Weissmann: Yes, well, for another time. But you were mentioning abuse of power. The use of gratuitous coauthorship, in instances in my own experience and those that I have become aware of subsequently, actually becomes a "foot in the door" for someone who is senior and may have a propensity to being unethical, to lay claim to someone else's ideas or work, particularly that of a junior person. I just want to raise the issue that the coauthorship is not just a matter of "will I be blamed if I add my name to something that someone has written that part, and maybe it turns out to be bad or wrong?" There is another part to gratuitous coauthorship, which is its being used as a way to subsequently try to legitimize outright plagiarism.

Ms. Gunsalus: Sure. That is one of the issues that I got into, that you do get people who sort of feel entitled, and it encroaches on a lot of things.

Dr. Leonard Saxe (City Univ. of New York): Do you ever get or do you know of instances where there is pressure from high level administrators at a university, because of the possibility of bad publicity, loss of grant funds, or loss of a valued faculty member, to deal differently with cases of misconduct, i.e., not to pursue them, to pursue them quietly, to let a faculty member go to another institution, et cetera?

Ms. Gunsalus: Well, I think that anywhere in this world, you can find people who lose track of the essential values and of what the focus ought to be. All I can tell you is about my own experience, which is that in my institution I have not ever encountered that. Now there will be people in this room who will tell you that that is an anomalous experience. I do not know. I can only speak about my experience.

I can also tell you that one of the lessons that we have learned is that when you have a problem, and you deal with it forthrightly, and then you make an announcement that says we had a problem, this is what happened, and here is how we dealt with it, it is not "news." Nobody cares when you take responsibility, and you step up and do it right. So a lot of the fear of the bad publicity and "we are going to get smeared" with this, I think is misplaced. I spend a lot of time going around and telling people that I think it is misplaced. I think that there is a lot of experience that shows that when you say, "we made a mistake (not just passive, but a mistake occurred in our institution); this is what we did," you can actually look better for having said, "we detected it, we dealt with it, here is the sanction, now we are going on, and here is what we are doing to our systems to keep it from happening again." It is a lesson that is counterintuitive, but that is the lesson that obtains in that case.