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Kock, Ned; Davison, Robert

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DEALING WITH PLAGIARISM IN THE INFORMATION SYSTEMS RESEARCH COMMUNITY: A LOOK AT FACTORS THAT DRIVE PLAGIARISM AND WAYS TO ADDRESS THEM¹

By: Ned Kock

Department of MIS & Decision Science
College of Business Administration
Texas A&M International University
Laredo, Texas 78041-1900
U.S.A.
nedkock@tamiu.edu

Robert Davison

Department of Information Systems
City University of Hong Kong
83 Tat Chee Avenue, Kowloon Tong
HONG KONG SAR
isrobert@cityu.edu.hk

Abstract

Imagine yourself spending years conducting a research project and having it published as an article in a refereed journal, only to see a plagiarized copy of the article later published in another journal. Then imagine yourself being left to fight for your rights alone, and eventually finding out that it would be very difficult to hold the plagiarist accountable for what he or she did. The recent decision by the Association of Information Systems to create a standing committee on member misconduct suggests that while this type of situation may sound outrageous, it is likely to become uncomfortably frequent in the information systems research community if proper measures are not taken by a community-backed organization. In this article, we discuss factors that can drive plagiarism, as well as potential measures to prevent it. Our goal is to discuss alternative ways in which plagiarism can be prevented and dealt with when it arises. We hope to start a debate that provides the basis on which broader mechanisms to deal with plagiarism can be established, which we envision as being associated with and complementary to the committee created by the Association for Information Systems.

Keywords: Ethics, committees, community, plagiarism, information systems research

¹Allen Lee was the accepting senior editor for this paper.

Introduction

Imagine yourself in the following situation. As an information systems (IS) researcher, you plan and conduct a large research project that involves data collection and analysis over approximately four years. After a great deal of time and effort, you manage to prepare a paper that summarizes your work and submit the paper to a refereed journal. Even though your study is seen as providing interesting research insights, the paper has a number of small problems that need to be addressed. Because of that, the review process involves several revisions and resubmissions, taking about two years to be completed. Your article is eventually published. You are very proud of your contribution, which sets the stage for years of future research and, possibly, your career. However, a year later you see another article, published in a different refereed journal, which is virtually a copy of yours. You immediately contact the author of the other article and accuse him of plagiarism. He, in turn, accuses *you* of plagiarizing his work-in-progress and getting it published before he had the opportunity to do so. He also threatens to sue you for defamation. This situation may sound too outrageous to be true. Yet it resembles in many ways a real case of plagiarism reported by Kock (1999) and is not unlike many other cases of plagiarism that go unreported because the victims realize that the costs involved in holding the plagiarists accountable for their actions may exceed available resources.

At this juncture, it is useful to define what we mean by plagiarism, since this will help focus the rest of our discussion. The following is a working definition, which may be improved as the debate about plagiarism continues. It follows closely from the definition provided by the Oxford English Dictionary (Simpson 2002).

The wrongful appropriation, purloining, publishing, expressing, or taking as one's own the thoughts, writings, inventions, or ideas (literary, artistic, musical, mechanical, etc.) of another.

It is also important to clarify what we mean when we use the word *victim* in connection with plagiarism, since there are many potential victims. Certainly, the person whose work has been inappropriately copied, used, or misattributed is a direct victim of the plagiarism. However, we should recognize that key stakeholders such as journal editors and reviewers, as well as conference program chairs and conference reviewers, are also victims, since they have to spend their valuable time reviewing manuscripts and ideally identifying the fact that plagiarism has occurred, with all the consequent unpleasantness that may follow. Furthermore, the entire institution of original research—an institution premised on the basis of credit being due to those who deserve it through their original and creative work, and this includes all IS researchers—is likely to suffer if plagiarism occurs, as plagiarism is a form of affront to the institution and can undermine the values that most of the institution's stakeholders hold dear.

Given the various costs that may be imposed on the victims of plagiarism, we aim, among other things, to demonstrate that the creation of a community-backed group whose mandate involves the investigation and issuance of reports on cases of plagiarism is justified. The recent announcement by the Association for Information Systems (AIS) that it had decided to establish a standing committee on member misconduct (George et al. 2003; Munro 2002) is indicative of the importance of the issue. While this committee's mandate is broader in scope than that of one that focuses on plagiarism alone, given its remit to cover all academic instances of member misconduct, it nevertheless addresses directly and appropriately the need for a community-backed group to investigate and issue reports on cases of plagiarism. Indeed, given the role of AIS in promoting IS research, and given the fact that it has been argued that IS as a discipline is sufficiently well established for it to be a reference discipline for other disciplines (Baskerville and Myers 2002), it is appropriate that the IS discipline should have its own set of procedures for investigating acts of

questionable conduct, including plagiarism, rather than needing to rely on the mechanisms established in other disciplines.

However, it is important to realize that the mere existence of an ethics committee is unlikely to be effective in terms of addressing the issue of plagiarism in the absence of other initiatives, some of which may be educational in nature. Moreover, it is important to realize that an ethics committee may create problems of its own, particularly if its mission is misunderstood by members of the IS community. This could occur if the committee has a mandate that is too broad and unfocused, or if the role of the committee is likened to that of a policeman or guardian of moral values. One of the key goals of this article is to spark a debate on the quintessential issues that relate to plagiarism. This debate should stimulate a wide range of concerned stakeholders in the IS community to consider the importance of ethical issues in general and plagiarism in particular, and so provide a source of information that will be of value to the AIS standing committee on member misconduct as it seeks input from around the world and then initiates the process of drafting a code of ethical practice that will apply to AIS members.

This article starts with a discussion of factors that can drive plagiarism. We then briefly present and discuss a real case of plagiarism that has been published elsewhere (Kock 1999). The case, which eventually involved several individuals and institutions, and that was largely “swept under the rug,” illustrates the fact that, currently, IS researchers who are victims of plagiarism are likely to meet with systemic difficulties that obstruct support from public officials and the IS research community in their battle against the offenders. This is followed by a discussion of potential educational and enforcement measures that can be taken to prevent plagiarism. We conclude the article with a discussion of how a community-wide committee investigating plagiarism and other ethical issues may be perceived by members of the global IS community. We also examine the need for the committee to focus its

attention on cases that fulfill a set of narrow criteria as a way of both gaining support from the IS research community and ensuring fairness in the way it conducts its work.

What May Motivate Some IS Researchers to Resort to Plagiarism?

It seems reasonable to assume that plagiarism, as a facet of human behavior, is a complex phenomenon. However, if we are to address this phenomenon and provide solutions to the problems it generates, then it is useful to identify a finite number of factors that seem to be associated with individuals committing plagiarism. While we depart from the assumption that correcting those factors will cause plagiarism to disappear, we must also be careful not to assume that correcting those factors in a narrow and somewhat deterministic way would be a desirable approach to deal with the problem. Even though some of those factors, particularly pressures to produce scholarly work, may lead some individuals to plagiarize, they may also have the beneficial effect of pushing other individuals into honestly achieving more than they would in the absence of those factors.

To be more specific, the factors that are likely to be associated with plagiarism can arguably be summarized into three main types: (1) *informal and formal pressures* on IS researchers to publish in a select group of outlets (mostly top-tier journals), which may lead some of them to resort to plagiarism; (2) *limited knowledge* about what level of idea-borrowing is acceptable, and the appropriate ways in which it should be conducted, and the consequences of plagiarism for both the plagiarist and the victim; and (3) *systemic difficulties that hinder action against the perpetrators of plagiarism* that create formidable obstacles for the victims of plagiarism to hold the perpetrators accountable for what they have done. These are discussed in more detail below.

Informal and Formal Pressures

Informally, IS researchers who are consistently able to publish in a select group of influential and highly regarded journals characterized by both a rigorous review process and high rejection rates are seen by their peers as being more successful, respectable, and influential than researchers who are unable to publish in those journals. Consequently, the ability of an IS researcher to write papers that will eventually be published in these select journals is to some extent correlated with the status of that researcher in the IS field. This situation is likely to exert a powerful pressure on many IS researchers, particularly those who have not yet published in these select journals and who also value the influence, respect, kudos, or simply the personal satisfaction that publishing there may bring. Some methods that could be employed to achieve this kind of publication are honest, for example, coauthoring an article with an experienced researcher. Other methods are clearly dishonest, such as plagiarizing previously published articles, resorting to some degree of data fabrication to reduce similarities, and hoping that reviewers will not notice the similarities that still exist.

Formally, IS research pressure is often associated with the process whereby all academics at research-oriented universities (and many more academics at universities that focus on both teaching and research) need to publish their work in high-quality journals as a means of ensuring that they gain some measure of permanence in their employment contract. In North America, this is formalized through the so-called tenure clock, with the implication that a certain number of publications need to be achieved within a certain time frame, usually around five years. In other parts of the world, the terminology differs and indeed the permanence of a contract may vary widely, but the pressure to publish is often essentially the same. The pressure can be considerable, since failure to publish may well result in termination of employment and the consequent upheaval associated with finding a new job, relocating one's family, etc.

Limited Knowledge about Acceptable Forms of Idea-Borrowing and Consequences of Plagiarism

Limited knowledge may also have an influence on whether someone commits plagiarism, particularly limited knowledge about (1) what level of idea-borrowing is acceptable and how this idea-borrowing should be conducted and (2) the consequences of plagiarism for both the plagiarist and the victim.

The history of scientific discovery suggests that it would be unreasonable to assume that all ideas should be completely original to be considered publishable. Consequently, the IS field should not be seen as an exception in this respect. The research process involves building on previous knowledge and adding new insights to that knowledge. This is a process that can seldom be accomplished without borrowing, developing, and extending ideas previously proposed by other researchers. However, knowing how to borrow ideas and present them with the proper attribution in a publication can be tricky. Generally speaking, it would probably be safe to say that text, diagrams, and other elements found in a document (whether it is published as a journal article or through other means, such as a working paper or Web site with an indication of authorship or ownership) should not be used in another publication without clear reference to the original source. Use of ideas, even if restated in different ways, should follow the same rule of thumb. Nevertheless, these general rules of thumb may not be completely obvious to everyone in the IS research community.

Limited knowledge about the consequences of plagiarism, coupled with a certain degree of ignorance in connection with acceptable forms of idea-borrowing, may also influence whether or not one commits plagiarism. As with any action that may bring someone an advantage and, at the same time, hurt someone else, knowing the consequences of plagiarism for both its perpetrators and victims may have a strong impact on how often it is practiced, or whether it is practiced at all. It is quite possible that many individuals

who feel compelled to plagiarize are not actually aware of how the victims would feel. Moreover, those individuals may think that their act of plagiarizing is somewhat harmless to the research community of which they are part. Finally, those individuals may be inclined to think that there would be no serious consequences for them if they were caught “red-handed.”

Systemic Difficulties That Hinder Action Against Plagiarists

Let us assume that an IS researcher decides to plagiarize a journal article authored by another IS researcher, and that the plagiarist’s article eventually gets published. One could argue that the plagiarist’s action would be relatively harmless to the victim, having little effect beyond hurting the victim’s feelings. This argument is, in our view, wrong for at least one reason. Once the two articles are published, it may become difficult for someone who reads both of them to figure out who plagiarized whom, especially if the time lag between their publication is small. Moreover, the plagiarist, if confronted, may argue that the victim plagiarized his or her work-in-progress and managed to get it published before he or she could. That is, the victim can never be assured that he or she will be free from future negative personal repercussions, which may lead to continued stress and personal discomfort for many years.

This situation becomes even more complicated if the original author decides to write a follow-up article that builds on the previously published article (the one that was plagiarized). This is something that any author is perfectly entitled to do, and that is indeed done by many authors. Now, someone who reads the plagiarist’s article and the second article by the author may have the impression that the author has plagiarized the plagiarist’s article.

So, what is the victim to do in a situation like the one described above? The sad reality is that, currently, the victim has no obvious and effective path of action to clear his or her name. Legal

action may appear at first glance to be a good option, but the fact that the plagiarist has a lot more to lose than the victim cannot be ignored, since this may prompt the plagiarist to resort to rather unethical but perfectly legal mechanisms to prevent the victim from clearing his or her name. For example, if the victim mentions the plagiarism orally or in writing to any individual or group, the plagiarist can (in the United States and many other countries) immediately file a lawsuit against the victim for slander or libel, respectively. While it is quite possible that the victim would win such a lawsuit, the lawsuit itself and related costs (which cannot usually be recovered right away, even in the case of a legal victory) could nevertheless force the victim to forego any action.

Based on this discussion, it could be argued that the issue of plagiarism can be addressed in a variety of ways. One of these could be an easing of the informal and formal pressures on IS researchers to publish in top tier journals. Another could be community-backed curricular revisions aimed at educating current and future IS researchers about acceptable forms of idea-borrowing and the consequences of plagiarism for both the plagiarist and the victim. Finally, systemic mechanisms could be created that would allow members of the IS research community who felt that they were victims of plagiarism to report their cases and, if their allegations were found to be true, have action taken against the plagiarists with minimum cost to the victims. Before we discuss these alternatives in more detail, let us look at a real case of plagiarism, and try to understand it from the perspective of the factors discussed above.

Plagiarism Drivers: A Look at a Real Case of Plagiarism in IS

The case reported in this section involves a victim of plagiarism (Vic, one of the authors of this article) and a plagiarist (Plag). It is drawn from actual events that took place between 1997 and 2001. In 1997, both Vic and Plag were untenured

assistant professors at large and prestigious universities in the United States. Given that the story reported here was published in part elsewhere by one of the authors (Kock 1999), the description presented here focuses on exploring new evidence that was obtained by Vic after the case was published. Also, where the previous publication focused on details of the plagiarism case and its short-term consequences, this article focuses on broad implications of the case and its long-term consequences. The main goal of this section is to highlight evidence in connection with the factors that may drive plagiarism (discussed in the previous section).

The Case in a Nutshell

In early 1997, Vic found out that Plag had plagiarized a published research article where he (Vic) was the first author (see Kock et al. 1997). Vic found out about the plagiarism through one of his colleagues, who had been asked to serve as a reviewer for a submission by Plag. There was no doubt as to the plagiarism in Vic's mind, as the two papers were nearly identical. Moreover, since the journal did not employ a blind review process, Plag's name and contact information were conspicuously printed on the first page of the submission.

Vic contacted Plag directly, which proved to be a mistake, as Plag later threatened to sue Vic for defamation and/or libel. Vic also contacted several members of the IS research community about the case, as well as representatives of professional and academic associations, law enforcement authorities, and intellectual property attorneys. The resulting conclusion was that Vic would be in for a difficult battle, and that his case was not as clear-cut as he had thought. Eventually, due to some blatant mistakes committed by Plag while plagiarizing Vic's work, of which the most damning involved referencing publications written in a language that he could neither read nor speak, the situation was somewhat resolved. Plag's plagiarized submissions involving Vic's work were withdrawn and, to the best of Vic's

knowledge, most likely never published under Plag's name. Also, Plag was apparently asked to resign from his university position, which he seems to have done.

Informal and Formal Pressures

Did informal and formal pressures push Plag into plagiarizing Vic's work? This is a very difficult question to answer, since Plag's state of mind before the incident is unknown. Nevertheless, a tentative answer can be provided based on information that Vic collected about Plag after he found out about the plagiarism. That answer is yes.

Vic contacted several individuals who had interacted or collaborated with Plag in the past. It was interesting for Vic to find out that Plag was a relatively well-known IS researcher, who was by all appearances on his way to a successful IS career. Vic also collected a vast amount of information on Plag available on the Web—Plag himself had built a very detailed personal Web page with information about many of his private and professional activities.

All of the information obtained by Vic in connection with Plag pointed at three main conclusions: (1) Plag was determined to succeed as an IS researcher, and be seen as successful by his peers; (2) Plag seemed to believe that publishing was the key to his success as an IS researcher; and (3) Plag seemed to be an intelligent person (a reasonable inference based on Vic's knowledge of Plag's identity and credentials) who was capable of succeeding as an IS researcher without resorting to plagiarism.

Plag's determination to succeed as an IS researcher, and be seen as successful by his peers (which we believe is a quality that many successful and honest IS researchers have), were evident to his former colleagues as well as from his statements on his personal Web page. For example, Plag stated on his personal Web page the ambitious goal of integrating IS with other

areas of knowledge and bridging the “terrestrial gap” between the theory and application of IS. Plag also seemed to be very skillful at social networking, which is indicated by the fact that he had collaborated with several prominent IS researchers by the time of the incident involving Vic. Some of those collaborations had led to co-authored publications whose legitimacy seemed to be beyond question.

Plag’s belief that publishing was the key to his success as an IS researcher, perhaps in large quantities and with some publications appearing in select outlets, is evidenced from his publishing efforts prior to the plagiarism incident. In 1997, Plag listed seven journal articles published or forthcoming (some in journals that were considered top-tier in niche areas), starting with a 1995 date, which itself was an impressive record. It was his list of conference proceedings papers, however, that pointed most strongly at his intense determination to publish. From the 24 conference proceedings papers listed, 20 had Plag as the single author; the others listed coauthors. Their dates ranged from 1994 to 1997, and they covered 19 different topics—from business-oriented topics like reengineering, to more technical topics such as design of neural networks. We should point out that while Vic had no direct evidence that any of those conference proceedings publications were plagiarized, it seemed a little unusual for someone to single-author so many papers in connection with such a variety of topics during a relatively short period of time. Regardless of that perception, it seems that Plag was determined to publish, and publish extensively, as a means of succeeding as an IS researcher.

Several of Plag’s former colleagues seemed to believe that Plag was an intelligent person, perfectly capable of succeeding as an IS researcher without having to resort to plagiarism. Moreover, Plag had added a diagram, apparently created by him, to the text that he had plagiarized from Vic’s original article. The diagram was an interesting addition to the original text, and required a good understanding of the underlying material to be developed. The diagram also indi-

cated a certain degree of competence in connection with summarization of the research ideas.

The evidence suggests that Plag did indeed feel pressure to publish, a perception that must have been quite strong given the prolific output under his name, and the apparent evidence that he could achieve success as an IS researcher without resorting to plagiarism (which would arguably lead to a more modest publication output). Whether Plag was more concerned with informal or formal pressures is unknown, but it is unreasonable to assume that those pressures played a relatively minor role in his subsequent actions.

Limited Knowledge about Acceptable Forms of Idea-Borrowing and Consequences of Plagiarism

It is unlikely that Plag’s plagiarism of Vic’s work was an honest mistake, because, as mentioned before, Plag’s submission was nearly identical to Vic’s previously published article. However, it is quite possible that Plag did not know how Vic truly felt about the plagiarism, or the potential consequences of his actions, given Vic’s and other IS researchers’ potentially strong feelings about plagiarism.

Not everyone sees plagiarism in the same way, as evidenced by the following quote from an article by Julie Hilden (a *FindLaw.com* columnist and a graduate of Yale Law School), which looked at plagiarism from a legal perspective, and which professes a view that is arguably at least a bit more benign than Vic’s:

The anger someone feels at having his words stolen is akin, I believe, to the anger he might feel if a friend copied his unique clothing style, or appropriated his love poem, written for his girlfriend, to read to another woman. (Hilden 2002, p. 2)

In one of his e-mails to Vic, sent after Vic confronted Plag about his actions, Plag did not seem

to understand Vic's frustration and anger (which had reached high levels by then). In that e-mail, Plag told Vic that since he and Vic seemed to "share common research interests," Plag believed that they could collaborate on future research projects. Plag sent that e-mail to Vic at a moment when he probably felt that he would face no consequences for his act of plagiarism, but also at a moment in which it was unlikely that he wanted to anger Vic more than he already had. That is, Plag was apparently matter-of-fact about his behavior, and probably did not think it was such a big deal after all.

Also, given that Plag was apparently an intelligent person, quite possibly capable of succeeding as an IS researcher without having to resort to plagiarism, it seems reasonable to believe that he would not have resorted to plagiarism had he known the likely consequences of his behavior. Vic discussed his case with several IS researchers, and rumors about the case reached some of Plag's colleagues. Some influential individuals in the IS research community were informed about what Plag had done. Later Vic found out that Plag seemed to have used a work-in-progress argument when confronted by some of his colleagues about the case. That is, Plag apparently argued that Vic had plagiarized Plag's work-in-progress, and that Vic published it before Plag had the opportunity to do so.

Since Vic was originally from Brazil and had published there before he came to the United States, he had cited works in Portuguese, his native language, in his original article, which Plag left in the plagiarized document. Plag could not read or speak Portuguese, which made his work-in-progress argument unsustainable. Soon, an e-mail was circulated to several people by Plag's department chair, including some of Vic's colleagues who had heard about the case, stating that Plag had resigned from his assistant professor position due to "family reasons."

The consequences for Plag were substantial. At best, Plag lost the opportunity to pursue an academic career as an IS researcher and professor at a prestigious university in the United

States. At worst, Plag lost the opportunity to pursue an academic career as an IS researcher and professor anywhere, something that he seemed to personally want very much. It seems that Plag did not realize that plagiarism is akin to theft—in this case, theft of intellectual property. Intellectual property arguably requires a great deal of time and effort to develop, which makes plagiarism particularly repugnant to most researchers, not only those who are direct victims of plagiarism.

Systemic Difficulties That Hinder Action Against Plagiarists

When confronted by Vic, Plag initially apologized for his "mistake," but when asked for a signed and unambiguous letter of apology, threatened to sue Vic for defamation. The situation escalated as Vic found out that his case was not as clear-cut as it seemed, and that if Plag's submission was eventually published, Vic could be in for a difficult, and probably expensive, legal battle. One of the lawyers with whom Vic discussed his case explained to Vic that Plag could use what we have referred to in this article as a work-in-progress argument, which can be summarized as follows: even though Vic's paper had been published before, Plag could argue that Vic had plagiarized Plag's work-in-progress before Plag had the opportunity to publish it, thereby turning the whole case around as though he was the victim and Vic was the plagiarist. This argument would explain, from a legal perspective, why Vic had published the paper before Plag did. To make matters even more difficult for Vic, he could be compelled to defend himself from an eventual lawsuit from Plag in Plag's home state, since Plag's place of residence and work was in a different state in the U.S. than Vic's. That could add substantially to Vic's legal defense expenses, which would in large part be unrecoverable.

Vic had three main paths that he could pursue, and he pursued all of them. The first path was to contact several academic organizations in the fields of computer science and information sys-

tems and explain his situation. Vic also told several of his colleagues in the IS field about the case. The second path was to contact law enforcement officers at the city, state, and federal levels. The third path was to contact attorneys who might be interested in taking on the case. All of these attempts at resolution were unsuccessful.

Representatives of academic organizations were invariably outraged with the case, and were quick to condemn Plag's behavior. After their initial outrage, each of them said that they would investigate the matter further and find out what actions their organizations could take against Plag. Each of them later told Vic that they could not do anything because they had either no appropriate committee in place to handle plagiarism, or no clear procedure in place to follow, or no legal counsel (or budget for such) to represent the organization in the matter.

Law enforcement officers in general showed little interest in the matter, giving Vic in several cases the impression that they saw it as rather frivolous. Some admitted that Plag's actions were of the type that could be prosecuted under white-collar crime statutes (since plagiarism could be seen as fraud aimed at obtaining financial advantage through university promotion), but then added that their departments were too understaffed to deal with this type of matter, which did not seem to be as important to them as some of the cases they were routinely assigned to (e.g., white-collar crimes that involved the theft of substantial sums of money). Others thought that the matter was a civil one (as opposed to a criminal matter), and that Vic should pursue it through an attorney in a civil court.

Vic contacted several lawyers, some of whom suggested that Vic try to directly resolve the matter amicably with Plag, but most of whom argued that Vic would have to sue Plag (for theft of intellectual property, copyright violation, or some related issue) to bring closure to the incident. According to those lawyers, the best way to hold Plag accountable for his actions would be to make him pay financially for what he had done—the more, the better. A few lawyers

pointed out that copyright violation carries heavy fines, and that the victim is entitled to as much as \$100,000 in statutory damages, i.e., damages that do not have to be proven, or be based on concrete evidence of losses incurred as a result of the copyright violation. However, as several lawyers warned, Vic should be prepared for a long legal battle, because Plag would most likely countersue to try to either buy himself some time (perhaps until he received tenure) or to try to force Vic to agree to settle the case due to mounting legal expenses. If Plag countersued, some lawyers pointed out, he would probably use the work-in-progress argument discussed earlier.

In spite of their recommendations, only one lawyer showed interest in legally representing Vic on a contingency basis. The key reason for the lack of interest of most of the lawyers was reflected in the comments of one of them, who pointed out that in his opinion there was not enough money involved to make him interested in taking the case on a contingency basis; in that lawyer's opinion, the situation would look more promising if Vic had a case against a large company, for example.

The one lawyer who was interested in taking on the case suggested a new line of action: to sue the employer, that is, the university that employed Plag. The lawyer's rationale was that the university would want to settle quickly to avoid the bad publicity that the case could bring to it as an institution, and then the university would most likely take administrative action against Plag, which meant that Vic would eventually accomplish his goal, although indirectly. Moreover, the lawyer reasoned, the university would have some form of professional liability insurance that would cover legal fees and settlement expenses. However, Vic did not think it would be appropriate to sue the employer, particularly because it was quite possible that the employer knew nothing about Plag's actions and, if it did, would not have endorsed them. There was also a chance that the employer would be persuaded to countersue Vic if information about the case leaked to the media before they could settle the case amicably. Therefore, Vic decided against this new line of action.

Is Plagiarism Rare? ██████████

While this case highlights some serious problems that need to be addressed, it is important that we consider the possibility that it is so rare that any community-based action may be either unnecessary or excessive. In our experience, that possibility is likely to be in the minds of many IS researchers, perhaps the majority of them, which could lead to opposition and resentment against AIS and the members of its recently created committee.

A panel discussion on IS research ethics, chaired by one of the authors and having the other author as a panelist, was conducted at the 21st International Conference on Information Systems (Kock et al. 2000a, 2000b). During that panel discussion, a hypothetical case of plagiarism was presented for the sake of discussion. The case incorporated some of the elements of the real case described here. The reaction of several members of the audience suggested that they thought that the case was not really relevant because, in the approximate words of one participant, "This is too outrageous! These types of things don't happen in the real world." This type of reaction is representative of the majority of the comments Vic heard about the likelihood that other cases like Plag's would happen again in the field of IS. However, Vic's experience suggests otherwise, particularly his experience after he published the incident.

As mentioned earlier, Vic published an article describing the plagiarism case in detail (Kock 1999) with additional discussion of implications for Internet publishing, since Plag had apparently plagiarized Vic's work based on electronic copies of previously published articles posted on Vic's Web page. Within approximately two months of the publication of the article, Vic received over 300 unsolicited e-mails and many letters from readers, several of which described similar cases of plagiarism. Most of the e-mails received by Vic were sent by IS and computer science instructors and researchers. While these readers were from all over the world, the majority were based in North

America, Europe, and Australasia. Several of the reported cases involved students, junior academics or researchers who had had their work plagiarized by others. Often the plagiarists were other students and junior academics or researchers, and, in some cases, senior academics or researchers. A few reported cases involved senior academics plagiarizing other senior academics. These often involved copying parts of published books into other books where the authors did not provide any citation or reference for the material reproduced (in two cases, as much as an entire chapter was allegedly copied). Some cases involved the translation of research publications by different authors into languages other than the ones in which the publications were originally published. At least two reported cases involved serial plagiarists who were known to have published many plagiarized papers before they became so notorious that editors and conference organizers began rejecting their submissions outright. Most of these cases were eventually dropped, after much frustration, by the victims, who often felt that it would be too difficult to hold the plagiarists accountable for their actions. The quote below (which has been disguised to protect the sender's privacy), taken from one of the e-mails received by Vic, is illustrative of the type of situation described in many of the e-mails and letters received by Vic in connection with his article on plagiarism.

I read your...article with great interest
I am also tenure-track, 4 years after completing my Ph.D., whose part of the Ph.D. work published in a prestigious journal was plagiarized—verbatim copy of important sections (although not as extensive as in your case). My initial experience is very much the same to yours. Her university did not even respond to the letter of my dean and the provost office....I did not contact the person directly and I let the dean and provost office write letters to...the dean at the other university. However, she [the plagiarist] contacted me by email asking to have a phone conversation

with her. I did not reply. She found my number on the Web and she just called. Similar as in your case, full of apologies—her mother is sick, we should start fresh in a new millennium, etc. She wanted to “bribe” me by offering an opportunity to write a chapter to a widely read publication....I agree with you that all of us should do more to stop this. We punish students who plagiarize much more harshly than professors.

To this day, Vic continues to receive correspondence in connection with his article on plagiarism. Very recently, three authors of articles published in top-tier IS journals contacted Vic and went to considerable trouble to show Vic evidence about plagiarism against them. In one of these cases, an author presented virtually irrefutable evidence to Vic in connection with someone who had plagiarized his work not once but twice. The author in question had contacted the plagiarist when he first saw his (i.e., the author's) work published in the proceedings of a large conference under the plagiarist's name. After apologizing to the author, and stating that he should have cited the author's work, the plagiarist apparently decided to take his actions one step further and publish a revised version of the proceedings paper in a journal (the plagiarized manuscript underwent the normal review process for the journal). While the author was very distressed, some of the e-mails he received from the plagiarist indicated an apparent sense of impunity and a matter-of-fact view of plagiarism. Similarly to Plag, the plagiarist seemed to think that what he was doing was no big deal. The author eventually decided to take no direct action against the plagiarist due to fear of legal reprisals.

Even though the evidence above is anecdotal, it suggests that plagiarism is not a rare phenomenon. Given the problems faced by Vic, and the fact that most of the correspondence received by Vic referred to cases that went unpunished and were eventually forgotten, it is fair to assume that while plagiarism is indeed more common than many believe, it is rarely brought to the public's attention.

What Should the IS Research Community Do? ██████████

This discussion sets the stage for answering the following question: What should the IS research community do in connection with plagiarism? There are, in our view, three options: (1) nothing; (2) address some of the factors driving plagiarism, discussed earlier in this article—i.e., informal and formal pressures, limited knowledge, and systemic difficulties; or (3) address all of the factors driving plagiarism. In our view, the best option is the second. We will argue that one of the factors (informal and formal pressures) cannot be properly addressed.

Let us first consider option (1), that is, doing nothing (or very little) to change the status quo. The problem with this option is that, as suggested above, plagiarism will probably continue and perhaps even increase. The reason it may increase is that the cost of doing legitimate research and publishing it through existing channels is, in the absence of deterrence mechanisms, much higher than the cost of plagiarizing. Even if we take lightly the impact that plagiarism has on its immediate victims, we cannot ignore the potential impact of plagiarism on the IS community as a whole. Currently, the field of IS faces many criticisms, including that of producing research that is largely irrelevant to industry practitioners (Davenport and Markus 1999; Kock et al. 2002). While the field of IS seems to be surviving those criticisms, in our view it is unlikely that it will survive well-founded criticisms regarding the honesty of the research results it produces. Currently, the relevance of some research may be questionable, but at least there is a general perception that it is generated based on an honest process of academic discovery. That perception allows IS researchers, particularly those who publish in top-tier journals, to claim that their findings are at least indirectly relevant to practitioners (Kock et al. 2002). Unfortunately, if plagiarism is seen as commonplace in IS research, then it is reasonable to assume that the general perception about the results of IS research will be one of complete distrust. If that happens, one could safely argue

that the value of IS research would take a quantum fall, possibly approaching zero.

Let us now consider options (2) and (3): addressing some or all, respectively, of the factors driving plagiarism, previously discussed in this article (i.e., informal and formal pressures, limited knowledge, and systemic difficulties). In summary, we believe that option (2) should be taken, and that the IS research community should address the factors in connection with limited knowledge and systemic difficulties. Moreover, we believe that those factors should be addressed in an integrated way. Finally, we do not think that the issue of informal and formal pressures can be properly addressed. We explain our position in more detail below.

Why Can't Informal and Formal Pressures Be Properly Addressed?

It is difficult to ignore the potential lack of fairness of current approaches used to reward IS researchers for their productivity, which arguably incorporate many informal and formal rules of thumb. While those approaches are complex, and build on many elements, one of the key rules of thumb used can be summarized by what some have dubbed the *publish-or-perish* perspective (Lichtenberg 1997; Zivney and Bertin 1992). That is, if one publishes regularly in a select group of publication outlets, then one's IS research career moves forward; if one does not, then one's career is in jeopardy.

Usually, the select group of publication outlets mentioned above is a group of refereed journals that reject the vast majority of manuscripts they receive. There are many articles that provide rankings of these journals based on surveys of IS researchers (e.g., Mylonopoulos and Theoharakis 2001), but few that give a clear idea of how difficult it may be to publish in these journals. A survey study reported by Athey and Plotnicki (2000) is particularly informative in this respect.

The study surveyed articles published between 1992 and 1996 in 10 journals considered to be premier outlets for IS research. One of the key conclusions of the study was that the vast majority of researchers who published in those 10 journals published less than one article in five years, when an adjusted count approach was used that reduced the author's count of articles with co-authors. When the adjusted count approach was not used, the study found that 45 authors (only 1.1% of the authors listed on the journals surveyed) had their names on five or more articles in five years.

Athey and Plotnicki (p. 13) argue that the results of their survey study "[clearly speak] to the need to accept other outlets in making tenure and promotion decisions." While that argument is a valid one, particularly in connection with tenure and promotion, it is not unreasonable to assume that selective journals are useful to the community because the ability to publish in them is a good indicator of fitness in terms of IS research. We are using the term *fitness* in its traditional Darwinian sense, and thus a biological analogy may be helpful to clarify what we mean. One of the key processes through which animals evolve is by interactions with other animals, often of the same species, based on fitness indicators—observable characteristics that indicate fitness (Plotkin 1998; Wilson 2000). One of the best examples of a fitness indicator is the peacock's tail. Since male peacocks need to be healthy in order to grow big and bright tails, only those with big and bright tails are selected for mating by females. Fitness indicators are not only used in nature for mate selection; some may play different roles, such as increasing the likelihood of an individual being accepted into a group within a social species. However, nearly all fitness indicators satisfy a criterion proposed by Zahavi and Zahavi (1997) known as the *handicap principle*. This principle suggests that a fitness indicator needs to be costly if it is to be useful for selection purposes. That is, if a fitness indicator is not difficult to achieve, then it is not very useful in selection, simply because too many individuals will be able to achieve it.

While the biological analogy above may be seen as a stretch, it is not unreasonable to assume that publications in a select group of journals are seen by the IS research community as fitness indicators, especially since publishing in them is rather difficult to achieve, which fits well with Zahavi and Zahavi's handicap principle. Also, we cannot forget that we humans are also animals, and thus are likely to have the propensity to behave in general accordance with the handicap principle when we assess other people's abilities. This would explain a fact presented by Michael Myers in a panel discussion at the 22nd International Conference on Information Systems (reported in Kock et al. 2002). Myers pointed out that some of the most prestigious journals in the IS field have become even more prestigious recently, in spite of the fact that they have also increasingly moved toward publication of research that generally seems to be of little relevance to industry practitioners. These journals have increased their prestige because prestige leads to increases in submissions, which in turn leads to higher rejection rates, which leads to more prestige (since it becomes even more difficult to publish in those journals), and so on. For IS researchers, publishing in those journals increases their status in the community, and thus increases their chances of succeeding in their career. For male peacocks, this would be analogous to growing big and bright tails.

We believe that the IS community will continue to use the same type of key fitness indicators, of which the most important seems to be publication in refereed journals that reject the vast majority of the manuscripts they receive. The reason for this belief in connection with refereed journals is that IS researchers are usually housed in schools of business, and those schools have traditionally used publications in refereed journals as fitness indicators (rather than other indicators, such as external research grants, for example). Moreover, since fitness indicators are ineffective if they are not hard to achieve, strong informal and formal pressures will continue to exist in connection with publication in journals with high rejection rates, regardless of how many new IS journals are

created. Myers' observation in connection with the most prestigious journals in the IS field will probably hold true for the foreseeable future, as long as those journals continue to reject a large number of the manuscripts submitted for publication.

Addressing Limited Knowledge about Acceptable Forms of Idea-Borrowing and Consequences of Plagiarism

Issues involving limited knowledge, when looked at in isolation, suggest the need to impart the necessary knowledge to those who do not have it. This is usually done through educational approaches. We argue that while the implementation of educational approaches in connection with plagiarism is advisable, without some form of enforcement, plagiarism is unlikely to be effectively prevented. In a sense, it is perhaps education regarding plagiarism based on cases of enforcement that may hold the most promise.

Educational approaches to addressing plagiarism would involve the education of future researchers about plagiarism and its consequences. At the undergraduate level, such material is commonly slotted in at the end of course syllabi, and given very little attention in the curriculum beyond strict admonishments. The exception to this comes in a final year capstone course on ethical and professional issues, which one occasionally sees in a mainstream IS undergraduate degree program. Such a course may cover a wide range of ethical issues, of which plagiarism may or may not be one. For graduate students, and particularly doctoral students, the perils of plagiarism are likely to be spelled out in greater detail early on, with reference to student handbooks, rules, and regulations. Research advisors and supervisors may or may not reinforce this information, depending on how much importance they place on the issue of plagiarism. Educational approaches should also involve current researchers with reminders about plagiarism and its consequences. Potent examples can involve real cases of individuals who were found guilty of plagiarism.

However, the effectiveness of these examples will be strongly influenced by the nature of the consequences: a situation where the culprit received a mild slap on the wrist sends quite a different message than one where the plagiarist lost his or her job.

Proponents of educational approaches may present them as effective in combating plagiarism and, accordingly, blame recent cases of plagiarism on the notorious lack of emphasis on ethics as a course topic in curricula of most schools and universities. However, it is difficult to believe that education alone will prevent the problem from happening at any level. For example, in a recent high-profile case involving the Piper School in Kansas (Trotter 2002), where 10th grade students were accused of plagiarism, it was established that not only had the students been taught about plagiarism, but that they also had read and signed a class syllabus defining the word plagiarism and stating the penalty for engaging in it (which was similar to the penalty for cheating described in the Piper School's student handbook). Nevertheless, 28 students admittedly plagiarized from botany books and received a zero grade for their actions, a decision that was later overturned by the township's education board based on a petition filed by the students who had committed plagiarism.

The evidence in connection with the real IS plagiarism case discussed in this article, which is closer to home for IS researchers, does not allow for direct conclusions regarding the impact of educational approaches on plagiarism in connection with IS research. The evidence obtained by Vic after he published the plagiarism case does suggest, however, that those approaches may be helpful only when used in conjunction with enforcement. One reason for this, although not the only one, is that many IS researchers are too far down their career paths for educational approaches to have any significant effect on them—and, as was demonstrated in the previous section where we discussed whether or not plagiarism is rare, there is at least anecdotal evidence to suggest that senior researchers may also commit plagiarism, sometimes even against their own students and other junior researchers.

Addressing Systemic Difficulties That Hinder Action Against Plagiarists

Plagiarism is not only illegal in many jurisdictions, but it is arguably also an example of unethical behavior. Ethical behavior, in turn, is seldom encouraged in a very formal and codified fashion in our society. The function of the religious police in some countries may be given as one example of enforcement—and enforcement can certainly be a powerful motivating factor for behavior that is deemed to be ethical within the social norms of a particular society. This amounts to a code of conduct, with enforcement included and penalties for those who fail to comply. Codes of conduct are widely employed in organizational contexts, but it is difficult to gauge the extent to which they are rigorously enforced, since cases are seldom reported. As guides to approved behavior, therefore, their effectiveness may be doubted. Once again, enforcement will make them more effective.

If we assume that an instance of plagiarism occurs, that the perpetrator is identified and that the victim wishes to achieve some form of redress, then a number of issues arise. First, it is essential that an appropriate quasi-legal structure exist within which the relevant issues and information can be discussed. Such a structure might be framed by a code of ethics, of which one component would refer to acts of plagiarism. In our view, this code would need to be established by an international association, such as the AIS, and it would then apply to members of the association. However, there is an apparent problem in connection with this approach: it is most unlikely that the association would be able to implement effective action against non-members. The focus on AIS members and AIS publications is highlighted in Munro's (2002, p. 1) report to AIS members regarding the creation of the AIS committee on member misconduct:

There have been a couple of recent instances of alleged plagiarism among the AIS-related conference proceedings ... We are examining such issues as the need for a code of ethics, behavioral guidelines for parties involved in plagia-

rism situations, and possible sanctions for offending members.

How can we deal with the above problem? The key here is perhaps to question whether the AIS committee on member misconduct should restrict its attention to AIS publications and whether the committee should shy away from addressing plagiarism cases in which the offender is not a member of the AIS (especially when the *victim* is a member of the AIS). As shown in the discussion of the real case of plagiarism provided in this article, one of the main obstacles that victims of plagiarism may face is that they may be sued for slander or libel if they decide to discuss their case openly with other individuals. A code enforced by an association such as the AIS, if properly established (which might also necessitate the establishment of a formal anti-plagiarism subcommittee), would provide a legal buffer against the types of nuisance lawsuits filed by plagiarists against their accusers (which are often such a nuisance for the defendants that, although very likely to be lost by the plaintiffs, they are usually settled before they go to trial). Without such a buffer, the victims may end up being coerced to drop the plagiarism cases, particularly since there is a major imbalance between what can be gained and lost by victims and offenders as a result of the case becoming known to the community. While the victims have little to gain, the offenders have a lot to lose if information about the plagiarism is made available to the IS research community.

Thus, an enforcement structure tied to an association such as the AIS could shield members who are victims of plagiarism from nuisance lawsuits and, at the same time, lead to action being taken later against the offenders by other groups or organizations—e.g., a university, upon finding from a report issued by an anti-plagiarism subcommittee that one of its faculty members had been found to have committed plagiarism, may decide to launch an internal investigation that could eventually lead to the plagiarist being dismissed altogether. Is such an enforcement structure preferable to lobbying for changes in the law to create more deterrents against plagiarism? Given the difficulties associated with creating or

changing laws (sometimes many years of lobbying are needed to change a single piece of law) and the legal systems of the many countries in which IS research is conducted, an ethics code and some enforcement structure seem to provide a reasonable alternative. This, in turn, could provide the basis and critical mass for future lobbying for creating or changing laws in connection with plagiarism.

However, while a committee tied to AIS could shield members who are victims of plagiarism from nuisance lawsuits, this does not mean that such lawsuits would not be filed. The members of the committee and AIS itself could become targets of lawsuits, whose effective defense could cost, in the United States, for example, between \$10,000 and \$50,000 per case in unrecoverable legal fees (assuming that the lawsuits are eventually dismissed). Needless to say, AIS would need to provide funds in its budget to cover those types of expenses. In this respect, it could also be helpful if its office was relocated to Britain, Australia, or any other location where the “English rule” of lawsuits is observed (i.e., the loser is required to pay the legal expenses of the winner in a lawsuit). In the United States, only a few states adopt the English rule, most notably the state of Alaska.

AIS would need to purchase some form of legal liability insurance covering for monetary losses in the event that one or more committee members inadvertently act in an unlawful manner, without which AIS could literally go bankrupt as a result of one single lawsuit where punitive damages were awarded to a plaintiff. The likelihood and impact of such actions could be minimized by AIS ensuring that it adheres to due process provisions, such as those stated in the 14th Amendment to the United States Constitution (see Appendix A). A code of ethics in general, and guidelines on how to handle plagiarism in particular, should be administered with due regard for fair legal processes, with channels for appeal and without preconceived bias for or against perpetrator or victim.

Creating a code of IS research ethics will be a lengthy and complex procedure if all relevant

stakeholders across all member countries/territories are to be consulted. Thus, addressing the issue of plagiarism alone could be a good start, especially if plagiarism is defined in no uncertain terms. The working definition of plagiarism based on the Oxford English Dictionary (Simpson 2002), provided at the start of the article and repeated here, is

The wrongful appropriation, purloining, publishing, expressing, or taking as one's own the thoughts, writings, inventions, or ideas (literary, artistic, musical, mechanical, etc.) of another.

In the working definition above, the form of publication or expression of the original source by the true author should not matter. In fact, it is possible for someone to plagiarize unpublished material, such as a manuscript submission to a conference or journal. If published material is plagiarized, the original source may be a journal article, a conference paper, a technical paper, or a document published through other means, such as a Web site with an indication of authorship. In all cases, the authorship of conceptual or theoretical models, text, diagrams, and other similar elements should be respected and explicitly recognized.

While an individual may be a member of the AIS, for example, and while membership confers certain privileges, membership of the association may not be mandatory as a job requirement (as in professional associations of lawyers, medical doctors, and engineers). In this sense, the association is a voluntary one. One privilege of membership, however, could be the right to submit articles for consideration of publication in various journals or conferences that recognize the authority of the association. Presumably black-listed individuals (whether members or non-members) would be ineligible to submit—and so loss of membership privileges as a result of an enforcement action for proven plagiarism could erect significant hurdles to publication.

A number of other enforcement actions might be appropriate, the least of which could involve a

public apology. Particularly recalcitrant individuals might reasonably be expected to resist actions against them, not only by denying charges and refusing to accept the authority of the association—loss of membership would render such arguments more reasonable still—but could further reregister under aliases, change their names by deed poll, or otherwise use pseudonyms to bypass formal restrictions on their right to publish. Certainly there are limitations to enforcement that cannot easily be overcome, the more so in a world where multiple identities may become commonplace. Furthermore, there would be significant costs involved in operating a plagiarism investigation mechanism within an association such as the AIS.

One might ask at this point whether or not plagiarists can be held accountable through the legal system, as it is today, through prosecution and lawsuits. Unfortunately, it seems that the answer to this question is no. We hope that this is clear from the discussion of the real case of plagiarism presented earlier in this article. This state of affairs seems to be motivated by a combination of two main factors that, we believe, are unlikely to change in the near future. The first is the general lack of interest in the legal system in connection with plagiarism, which appears to be seen as a minor offense not worthy of attention from understaffed law enforcement departments and agencies, much less from public prosecutors. This virtually prevents plagiarism from being handled as a criminal matter, relegating it to the relatively benign realm of civil matters. The second is that the prospect of obtaining enough compensation to convince private attorneys to take on plagiarism cases on a contingency basis is very low, which makes it difficult for plagiarism to be handled through the legal system as a civil matter.

Will an Ethics Committee Find Support from the IS Research Community?

It is reasonable to believe that the thought of an ethics committee addressing IS research issues

such as plagiarism is unlikely to elicit joy from most researchers in the field of IS. As we suggested earlier, such a committee may be viewed as little more than an institutional policeman, created in reaction to a small spate of well-publicized cases of real or suspected plagiarism, that nevertheless has the authority to protect and uphold moral values across the broad IS community. In short, such a committee may be seen as a classic case of overkill.

In order to test the above assumption, as co-editors of the ISWorld Professional Ethics Section, we recently solicited the ISWorld list members for their opinions on the matter (see Appendix B). The response—a total of 11 replies from IS researchers in the United States, Canada, Australia, and Israel—seemed distinctly underwhelming, given that there were some 3,000 subscribers to the ISWorld list at the time. Nevertheless, this is a fairly typical response rate for ISWorld. Of these 11 replies, three were clearly in favor of the establishment of an ethics committee, while the other eight presented opinions that varied from mild interest in a discussion of the need for the creation of a committee to the perception that creating such a committee was unnecessary. Those who were in favor of the establishment of an IS research ethics committee seemed to be particularly concerned with plagiarism and the lack of community mechanisms to stop it. The quote below illustrates this.

I think we need an ethics committee. Over the last year or so I've seen an increasing number of cases involving copying of Web pages into papers and reports without giving proper credit. My impression is that this is not considered unethical by many.

Those who thought that the establishment of an IS research ethics committee was unnecessary or unwelcome provided two main reasons for their opinions. One of the reasons was that other mechanisms were already in place that could prevent unethical behavior such as plagiarism. The other reason provided was that there was no evidence that plagiarism and other forms of

unethical behavior were frequent enough in the IS field to warrant the establishment of a committee to deal specifically with them. The quotes below illustrate both points of view.

Our university has strict research ethics guidelines that are appropriate for all research with human subjects, such as in interviewing. This could be regarded as transcending any professional codes as the sanctions available from the employer are applicable to all staff, regardless of profession. IS researchers thus face the same ethical standards as all others....The issue of fabrication (or theft) of data is not covered by our ethics committee but could be a different disciplinary matter. Officially it is peer review and publication that is supposed to uncover these....All this means that an ethics code from a professional body is not going to be accepted at this university, and probably not anywhere else in Australia.

The implicit motivation, that other professions have such committees, is weak. IS isn't a profession and, for a variety of reasons, it is unlikely to ever achieve that kind of status. Consequently, an ethics committee is unlikely to ever achieve the status that it does in law or dentistry. Also, we haven't seen the dramatic motivating cases. Where is the example of the evil IS professor or practitioner who has gone unpunished and is still practicing after molesting his student, stealing money, or selling passwords?

However, the case described in this article provides what we believe to be strong evidence in support of the need for an anti-plagiarism committee or a similar mechanism to deal with plagiarism (although we cannot think of one that could be both as fair and as effective as a committee), which in turn suggests that the decision by AIS to create its own committee on member misconduct was a sensible one. As suggested in the first of the two quotes above, we

do believe that university ethics committees can play a role in plagiarism prevention. However, we do not think that those local committees alone are the solution to the problem. Many universities today have such committees, but still, plagiarism continues to happen. Nevertheless, university ethics committees could potentially play an important role by serving as a liaison between local constituencies and a research community-backed ethics committee.

As illustrated by Vic's story, unless the victims of plagiarism stumble upon some singularly fortuitous evidence (and it is fair to assume that most plagiarists would be more careful than Plag was), leaving them to fend for themselves is likely to result in no action against the perpetrators, and possibly an implicit incentive for plagiarists to continue stealing the work of others to obtain personal advantage. After all, the idea of having to spend a few hours copying and adapting someone else's work, rather than months or years collecting and analyzing research data, to obtain very similar results is likely to be very tempting to many people, particularly those under pressure to publish or perish.

As with any institution formally invested with the authority to critically assess and pass judgment on the actions of others, an IS research ethics committee would only be seen favorably by the IS community if it focused on serious matters, as opposed to frivolous ones, and if it clearly provided a service to the community. While defining *frivolous* and *service to the community* may be difficult, we suggest that such a committee should focus on cases that individually meet all of the following criteria. We believe that plagiarism, in the many forms that it may take, will generally meet all of these criteria.

1. The case should represent behavior that is widely agreed to be unethical, and here there would be a need to rely on survey data from the AIS standing committee on member misconduct as to what is widely agreed to be unethical.
2. The case should have clearly identified offender(s) and victim(s), who should be indi-

viduals or groups of individuals (e.g., co-authors of a paper) and not formal organizations (e.g., companies, education institutions, etc.).

3. The case should have the potential to damage the public image of ethical conduct of IS researchers.

Furthermore, an ethics committee would work most effectively if it were associated with a professional society that has some legal or regulatory clout. AIS lacks this clout as it is not, strictly speaking, a professional association that can deny its members the right to practice their chosen profession. Developing IS into a regulated profession would take a lengthy period of time and so while we encourage debate on this possibility, it is not our short-term objective. Nevertheless, an academic society such as AIS may be able to exert a certain amount of formative guidance and/or regulation in that it oversees certain key conferences and journals in our field. It might be possible, for instance, for otherwise nonaffiliated journals to accept the authority of AIS in black-listing individual researchers from publication if they have been found to violate the AIS code of ethical conduct/practice. Even if other consequences do not ensue from an AIS ethics committee report, the inability to publish in reputable journals, at least for a period of time, should form a substantial incentive to behave ethically given the aforementioned publish-or-perish imperative.

Conclusion

We have made what we believe is a strong case for at least a serious debate regarding the creation of community-wide mechanisms to address acts of unethical behavior such as plagiarism. Those mechanisms involve educational and enforcement approaches, and gravitate around an IS research ethics committee, the recently created AIS committee on member misconduct. While some of our IS research colleagues may argue that, since we ground our argument on a single case, what we propose may be an overkill, we do

believe that the case described in this article is representative of many other similar cases that have happened in the past and went unreported, as well as of cases that will happen in the future if the proper mechanisms are not put in place.

Whenever we discussed solutions to the problem of plagiarism in this article, we tried to think in terms of relatively broad and community-wide solutions. We purposely moved away from solutions that would place too much responsibility on specific groups whose primary responsibility is not to address cases of plagiarism, but who could be easily seen as a first line of defense against plagiarists. Notable among these groups are editors and reviewers, whose primary responsibility is, in our view, to ensure that papers meet the contribution standards of the particular outlet they serve, and not necessarily to certify that the papers they recommend for publication are plagiarism-free. While editors and reviewers are often able to spot evidence pointing at a plagiarism attempt before it reaches the publication stage, the responsibility of having to do so may lead many to turn down editorial and refereeing opportunities. This could conceivably have a more negative impact on IS research than plagiarism itself.

In the end, we need to realize as a community that the nature of our craft, that is, IS research, implies adherence to very high standards of ethics. We believe that today, if an IS researcher reports study findings that are relevant, counterintuitive, and somewhat unusual, it is likely that those findings will be seen as a new contribution to knowledge in the IS field. We do not look forward to the day in which the same report will immediately lead to suspicions about data fabrication or disguised plagiarism (with some superficial modernization) of classic studies already published. We hope that this article will contribute to a community-wide dialogue that will prevent that from happening.

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About the Authors

Ned Kock is an associate professor of MIS in the College of Business Administration, Texas A&M International University. He holds a Ph.D. in information systems from the University of Waikato, New Zealand. Ned is coeditor (with Robert Davison) of the ISWorld Section on Professional Ethics. He is an associate editor for *Journal of Systems and Information Technology* and for the Information Systems section of *IEEE Transactions on Professional Communication*. In December 2000, Ned chaired a panel on IS research ethics at the International Conference on Information Systems. He is the author/coauthor of five books, and has authored articles in a number of journals including *Communications of the ACM*, *Decision Support Systems*, *IEEE Transactions on Education*, *IEEE Transactions on Engineering Management*, *IEEE Transactions on Professional Communication*, *Information & Management*, *Information Systems Journal*, *Information Technology & People*, *Journal of Organizational Computing and Electronic Commerce*, and *Knowledge and Process Management*.

Robert Davison is an associate professor of information systems at the City University of Hong Kong. He currently serves as associate editor for the *Information Systems Journal* and as editor-in-chief of the *Electronic Journal on Information Systems in Developing Countries*. His key research interests involve the application of interpretive research methodologies, in particular action research, to problems involving the application of information systems in organizations. He is also engaged in research into information systems ethics, group support systems, global virtual teams, and IT in developing countries. Robert has edited special issues of the journals *Communications of the ACM* (Global Applications of Collaborative Technology) and *IEEE Transactions on Engineering Management* (Cultural Issues and IT Management).

Appendix A

The Due Process Requirements as Defined in the 14th Amendment to the United States Constitution

Below are the seven requirements of due process, as defined by the 14th Amendment to the United States Constitution. The quotes following each of the requirements, which precede our plagiarism committee-specific commentary, have been taken from the following Web site, which also provides a detailed discussion of the 14th Amendment: <http://www.access.gpo.gov/congress/senate/constitution/amdt14.html>.

1. *Notice*. "The notice must be sufficient to enable the recipient to determine what is being proposed and what he must do to prevent the deprivation of his interest."
Commentary: In a case of plagiarism, written notice should be provided to the accused about the accusation against him or her before the committee handling the matter makes any significant fact-finding attempts or deliberations.
2. *Hearing*. "Some form of hearing is required before an individual is finally deprived of a property [or liberty] interest."
Commentary: Anyone who is accused of plagiarism should be formally given the opportunity to be heard by the committee handling the matter.
3. *Impartial Tribunal*. "Just as in criminal and quasi-criminal cases, an impartial decision maker is an essential right in civil proceedings as well."
Commentary: The committee handling a plagiarism complaint should ensure that all of its members are, to the extent possible, neutral (or impartial) with respect to both the victim and the accused. For example, a member who is a close friend or relative of the victim's should be replaced with an alternate member.
4. *Confrontation and Cross-Examination*. "In almost every setting where important decisions turn on questions of fact, due process requires an opportunity to confront and cross-examine adverse witnesses."
Commentary: Anyone who is accused of plagiarism should be formally given the opportunity to confront and cross-examine the accuser (or accusers), be they the victims, editors of journals, or anyone who decides to be a witness against the accused. This could be implemented through face-to-face meetings (which could arguably be costly) or by other means such as, for example, conference calls, video-conferencing meetings, or even email (with the accused providing a set of questions to be answered by the adverse witnesses in question).
5. *Discovery*. "...the evidence used...must be disclosed to the individual so that he has an opportunity to show that it is untrue."
Commentary: Anyone who is accused of plagiarism should be formally provided with the evidence on which the accusation is based.
6. *Decision on the Record*. "To demonstrate compliance with this elementary requirement, the decision maker should state the reasons for his determination and indicate the evidence he relied on."

Commentary: In a case of plagiarism, a written report should be formally provided to the accused stating the conclusions and decisions reached by the committee handling the matter, as well as the reasons for the conclusions and decisions, and the evidence relied upon.

7. *Counsel.* "...an agency must permit the recipient to be represented by and assisted by counsel."

Commentary: In a case of plagiarism, the accused should be explicitly informed that he or she has the right to retain legal counsel.

Appendix B

ISWorld Request for Opinions

To: ISWORLD@LISTSERV.HEANET.IE

Subject: Do we need an IS research ethics committee?

Dear Colleagues,

We invite you to consider if we, as a community of scholars and practitioners, need a Research Ethics Committee that will oversee the integrity of our work and, if necessary, investigate cases where there is suspected violation of an ethical code, e.g. plagiarism, data fabrication, etc. In other communities (notably medicine, law, accountancy, engineering, dentistry, etc.), such ethical codes come as part and parcel of membership of the community—and membership is generally mandatory if you wish to practice. Violation of a code might therefore lead to consequences such as public warnings and reprimands or even expulsion (in extreme cases) from the society/community, with the consequent loss of right to practice. In IS, it is different, as there is (currently) no legal obligation to be a member of a society such as the AIS in order to practice as a teacher, researcher, consultant or other practitioner. The sanctions that an Ethics Research Committee could impose (the sharpness of its teeth, if you like) would need to be very carefully considered, almost certainly in conjunction with the journals and conferences in which we publish.

We would like to solicit your views on this topic: Do we need an IS Ethics Research Committee?

In order to protect your privacy, we will treat all opinions as anonymous, unless you give us explicit permission to identify you. Identification can include one or more of: name, affiliation, country, role (student, academic, consultant, journal editor, etc.), and any other identifier you'd like to add.

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