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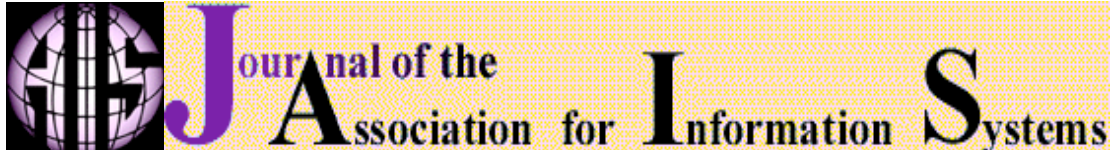
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RESEARCH ARTICLE

## Plagiarism by Academics: More Complex Than It Seems <sup>1</sup>

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### **Abstract**

The unattributed incorporation of the work of others into an academic publication is widely regarded as seriously inappropriate behavior. Yet imitation is fundamental to many things that people do, even in academic disciplines. This paper examines the range of activities in which academics engage, including a detailed study of the authoring of textbooks. It concludes that a more fine-grained analysis of plagiarism is needed, in order to distinguish copying that is harmful to the intellectual process, and that which is important to it.

**Keywords:** ethics, code of conduct, professional misconduct, incorporation, attribution, citation, reference, academic publication, originality, copyright

### **Introduction**

A great deal has been written about the inappropriate use by students of material originated by others. The literature relating to plagiarism by academics, on the other hand, is rather more limited, particularly within the information systems discipline. The legal and ethical frameworks are far from clear, and the tone of many articles is rather shrill. The Internet has brought new opportunities for plagiarists, and new investigative tools for their opponents. The time is ripe for deeper consideration of the issues that arise in the context of rapid, wide-reaching, electronic publication.

Throughout the first few years of the new millennium, ethics within the profession of information systems research has been the subject of a small flurry of activity. A related case appeared in *Communications of the ACM* (Kock, 1999), IS World established a Resource Page on the topic (Davison and Kock, 2000), and ICIS panels have addressed various topics within the area (e.g. Davison et al., 2001; Davison et al., 2003).

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<sup>1</sup> Detmar Straub was the accepting senior editor. Robert Davison, Malcolm Munro, and Ned Kock were reviewers for this paper. This paper was submitted on November 13, 2004, and went through one revision.

Furthermore, the Association for Information Systems (AIS) has studied the question of member misconduct (Heales et al., 2002; George et al., 2003), including an overview of the plagiarism literature by Heales (2003, pp. 59-65). Shortly afterward, a paper on the topic appeared in *MISQ* (Kock and Davison, 2003).

The AIS subsequently published a Code of Research Conduct, a segment of which is concerned with plagiarism (Davison et al., 2004b, together with supporting documents, Davison et al., 2004a and 2004c). A key motivation for the research underlying this paper was the articulation of concerns about some aspects of the AIS Code.

During the review process for this paper, a paper submitted to an AIS-sponsored major conference was found to be highly plagiarized. About 70% of the paper was copied almost exactly, without quotation marks. The original paper was in the reference list. AIS reported the matter to the author's Dean and the author was later reported to have been subjected to severe punishment (AIS 2005).

The development of the argument in this paper was informed by literature research, consideration of the many contexts in which academic publishing is undertaken, and an investigation into allegations of plagiarism in a textbook.

The paper commences with a brief review of plagiarism generally, to provide context for the more specific concerns of inappropriate copying by academics. I present arguments against plagiarism under the headings of pedagogical, ethical, and legal, and outline several counter-arguments. In order to throw light on the tension between the two sets of arguments, I include a case study.

The paper suggests that balance is needed, and that conventional, narrow, defensive, and proprietary attitudes to copying need to be moderated. The boundaries need to be clarified, through community debate. I suggest some constructive proposals that are intended to provide a basis for postgraduate training, to assist individual authors, and to support investigations into allegations of plagiarism. These relate to evaluation criteria for the seriousness of instances of plagiarism, and appropriate processes and enforcement mechanisms. I also make specific proposals for revisions to the AIS Code.

## **Background**

This preliminary section reviews dictionary definitions of plagiarism, and its manifestations in journalism, creative literature, entertainment, and education.

### ***Definition***

Plagiarism resembles pornography, at least to the extent that people believe that they know it when they see it, but seldom take the trouble to construct, or to seek out a definition of the term. Dictionary entries include the following:

- To take and use another person's (thoughts, writings, inventions ...) as one's own (Oxford);
- To steal or purloin from the writings of another; to appropriate without due acknowledgement (the ideas or expressions of another) (Merriam-Webster);
- To appropriate or imitate another's ideas and manner of expressing them, as in art, literature, etc., to be passed off as one's own (Macquarie);

- To copy and pass off (the expression of ideas or words of another) as one's own; to use (another's work) without crediting the source (Merriam-Webster Dictionary of Law).

The Encyclopedia Britannica 1911 edition identifies its etymology as being the Latin *plagiarius* – a kidnapper, stealer, or abductor of a slave or child, and the Oxford traces it further back to the Greek *plagion* – ‘a kidnapping.’ On the other hand, its coinage appears to be relatively recent: the first occurrence identified in the Oxford is in 1621. It appears to have been in common usage by the mid-eighteenth century.

### **Plagiarism in Journalism**

Published syllabi for journalism courses pay little attention to plagiarism. Professional Codes of Ethics generally mention it, but lack depth in their treatment of it. For example, the current Code of the Australian Journalists Association (now a Division of the Media, Entertainment and Arts Alliance) says, "Do not plagiarize;" and the draft replacement states, "Plagiarism is stealing. Always attribute fairly." The exhortation in the 1,000-word Code of the U.S. Society for Professional Journalists is a masterpiece of brevity: "Never plagiarize."

Some corporate codes of conduct and statements by newspaper publishers vilify plagiarists, e.g. "Plagiarism is one of journalism's unforgivable sins – and, at this newspaper, a dismissible offense" (from the *Grand Forks* (North Dakota) *Herald*, quoted in Journalism.org 2004). Some codes recognize 'value-add' as a criterion or mitigating factor: "When other work is used as the source of ideas or stylistic inspiration, the result must be clearly your own work" (from the *Detroit Free Press*, quoted in Journalism.org 2004).

In practice, the profession of journalism involves the production of a great deal of text in a short time, with minimal time for research and reflection. As a result, plagiarism is rife, and only some of the most extreme cases are acted upon. This is especially the case in specialist newspapers and magazines targeted at particular industries, whose copy in many cases comprises minimally creative re-working of the content of media releases from suppliers. But the problem can also afflict the great names in journalism, as was evidenced by the departure of the Editor of *The New York Times* in mid-2003, as a result of the paper's failure to detect and control fabrication and plagiarism by one of its reporters, Jayson Blair (e.g. Hernandez, 2003).

### **Plagiarism in Creative Literature**

In the various literary genres, instances of direct and substantial plagiarism arise from time to time, often with serious consequences for the author's reputation, and sometimes with a serious effect on their livelihood.

Less serious instances can still be contentious. It is common to hear criticisms of works as being 'derivative,' by which appears to be meant sufficiently similar in approach, style, and devices that only limited claims of creative originality can be sustained. Much discussion takes place about the re-use of plot-lines, and scandals surface from time to time. Yet many plot-lines can be ultimately traced back to at least Shakespeare and often ancient Greece. Even the concept of genre is related to plagiarism, to the extent that all, say, crime thrillers, horror stories, and love stories conform with stylistic norms.

Valentine (2005) describes a case in which the author of a 2005 short story closely paraphrased the plot of a 1928 Agatha Christie tale (although shifting it from Dartmoor to Tasmania, and changing the murder weapon from an ancient dagger to an aboriginal flint), and closely paraphrased the text as well (re-writing it in a different style, but, in a few places, sentence-by-sentence). The author was perceived to have compounded her sin by denying plagiarism, when it would have been easy to invoke such ideas as 'allusion' and 'homage.'

This all suggests a need for accusers and accusees alike to keep a sense of proportion.

### ***Plagiarism in Entertainment***

The concept of genre is institutionalized in the entertainment world. Barbara Cartland could re-write the same novel many times, and Mills & Boon continues to commission very similar novels from successions of willing, heavily mutually-plagiarizing authors. In television and multi-media entertainment, copyright and trademark laws are used to enable genres like 'reality TV' and the many variants of 'Idol' to generate considerable revenue-flows from licensing in many limited geographical areas around the world.

A further consideration that blurs the concept of plagiarism is the considerable extent to which artists of all kinds are applying modern technologies to allude to earlier creative works. Cartoonists self-plagiarize their previous depictions of individuals, and their and others' symbols for events, attitudes, and values. Digitized and originally-digital photographic images are manipulated with a level of professionalism that was seldom attainable with 'air-brushing' techniques applied to silver chloride prints. The 'sampling' of music has rapidly moved from oddity to established art form. Recorded video is being manipulated to create surrealism and super-realism, which rely for their impact on being at once close to and distant from the original depiction of human experience.

With so many forms of communication making constructive use of copies of prior works, it is only natural that questions should arise about the continued relevance of longstanding norms concerning plagiarism, and even the notion of authorship.

### ***Plagiarism in Music***

Music falls into both the creative and entertainment arts, and much in the previous two sections applies to it as well. The 'cumulative tradition,' the inevitability of dependency on prior experiences, and the derivative nature of a great deal of music are summed up in this quotation: "Abba learnt from the Beatles and Phil Spector who studied Chuck Berry, Little Richard and Motown who knew all the tricks of Irving Berlin, and Cole Porter who cut their teeth on the minstrel shows and vaudeville musicals who were indebted to Stephen Foster who got everything he knew from now long forgotten folksters, troubadours, balladeers, doggerelists busking outside his window" (Valentine, 2005, but – fittingly – quoting an unnamed critic in the BBC TV series 'Walk On By: The Story of Popular Song,' produced in 2001).

In music, but in other forms as well, the digital era is exacerbating this reality of deeply nested appropriations and allusions.

## **Plagiarism by Students**

In marked contrast with the relaxed attitudes to plagiarism in some contexts, educators have been hardening their hearts against plagiarism by students, particularly at the undergraduate level. A vast informal literature has arisen in recent years, especially in the U.S. but also in some other countries, stimulated by the ready availability of conveniently copy-able sources accessible over the Internet.

Many papers deplore copying without appropriate attribution, often in strongly moralistic tones, e.g., Standler (2000). Most institutions express firm rules (sometimes called 'Honor Codes'), and some specify sanctions rather than leaving them at the discretion of teaching staff. Sets of guidelines include Bone (2000-2003), Harris (2002), and Northwestern (2003).

Student guidelines on plagiarism are binding on the educational institution as well as students. When a staff-member at the University of Newcastle (N.S.W.) failed students from an Asian campus because of plagiarism, the University had the papers re-marked and passed. A formal investigation by a government regulator concluded that the University's "desire to avoid any potential adverse consequences [for] the University's offshore program [undermined] academic standards," and that two of its academics had acted corruptly (ICAC 2005, p. 6). The case appears to have been a significant factor in the early departure of the University's most senior officer.

On the other hand, some authors have questioned whether adjustments may be needed in the current era of ready discovery of and access to materials (e.g. Hunt, 2002, Hart and Friesnaer, 2004). A forceful exclamation of doubt is that "despite all the work done in print culture studies, all the history of authorship that demonstrates the historical contingency of categories like *plagiarism* and *originality*, all the hypertext theory and experience that demonstrates the permeability of all notions of the author (whether on line or off), in our classrooms we continue to sustain notions of plagiarism inherited from Romantic literary theory and current-traditionalist rhetorical theory" (Howard, 1998). Moreover, the strong emphasis on plagiarism in the Google era presents a moral dilemma for academics: standards are being imposed on students, in some cases resulting in severe sanctions, in ways that may exceed, or at least be perceived by students to exceed those that are imposed on academics. The changed context demands re-assessment of plagiarism by academics and the clarification of attitudes and policies that have hitherto remained to a considerable extent implicit.

## **Plagiarism by Academics**

The focus of this paper is on academic publishing. Research ethics have been attracting considerable attention in recent years. Competitive pressures have increased, both for positions and for research funding. Funders are concerned that research be of high quality and perceived to be performed in a responsible manner. Accusations of plagiarism need to be avoided. High-profile cases have occurred in many disciplines, to the extent that archives exist (e.g. Standler, 2000; Heales et al., 2002; Stoerger, 2002-), even for prestigious institutions (e.g. HPA 2004-).

Serious cases have been publicized within IS and disciplines cognate with it, including the recent case at a major IS conference referred to above (AIS 2005). In addition, well-known cryptography writer Bruce Schneier recently reported the wholesale appropriation

of a paper that he published seven years earlier in *Springer-Verlag Proceedings* (Schneier, 2005). He asserts that the authors in question have a track-record of plagiarism, and he was very surprised to find that the ACM, the publisher of the offending article, has no policy with regard to plagiarism, despite being both an academic association and a major publisher.

Academic publishing is undertaken primarily by individuals employed in academic posts that carry with them responsibilities in relation to both teaching and research. The scope extends to those who are employed in other roles that involve publishing in the formal literature, including full-time and part-time researchers in tertiary institutions, government agencies, corporations, and consultancies; and to non-employees who publish, particularly postgraduate students and interns. The scope of this paper is defined not by the author's employment, but by the fact of publication and the nature and target-market of the publishing venue.

Most explanations of plagiarism in the literature examined during this project are variations on the themes arising in the dictionary definitions. One that usefully articulates several aspects is in Hexham (1992):

Plagiarism is the deliberate attempt to deceive the reader through the appropriation and representation as one's own the work and words of others.

Academic plagiarism occurs when a writer repeatedly uses more than four words [Author's note: presumably to be understood as 'more than four successive words'] from a printed source without the use of quotation marks and a precise reference to the original source in a work presented as the author's own research and scholarship. Continuous paraphrasing without serious interaction with another person's views, by way [of] argument or the addition of new material [and] insights, is a form of plagiarism in academic work.

The following definition appears in the refereed information systems literature (in Davison et al., 2001):

Plagiarism is the use (or 'appropriation') of pre-existing material by the author of a new work in such a manner that it appears to be claimed to be an original contribution by that author, in particular because of the absence of a citation of the original work.

A further definition is significant in that it is provided by an organization that performs a role similar to an industry association for universities (AVCC, 1997):

To plagiarize shall be understood to mean the presentation of the documented words or ideas of another as his or her own, without attribution appropriate for the medium of presentation. ... A researcher or reviewer shall not intentionally or recklessly ... plagiarize.

Analyzing the definitions and usage, I identify several elements of the notion of plagiarism:

- (1) **publication:** the presentation of another person's material, work, or idea. A pre-condition for plagiarism is that the new work is made available to others; personal notes are not at issue;
- (2) **content:** the presentation of another person's material, work, or idea. A pre-condition for plagiarism is that some part of the new work is derived from someone else's prior or contemporaneous work;
- (3) **appropriation:** the presentation of another person's material, work, or idea as one's own. A pre-condition for plagiarism is that the claim of originality of contribution is either explicit or implied by the manner of presentation; or the presentation may be such that the reader is reasonably likely to infer the work to be an original contribution; and
- (4) **lack of credit given:** the presentation of another person's material, work, or idea as his or her own, without appropriate attribution. A pre-condition for plagiarism is that the reader is not made aware of the identity of the originator, nor of the location of the original contribution.

The notion of a 'deliberate attempt to deceive' has been intentionally omitted from the list, on pragmatic grounds. If it were included, it would necessitate inferring the state of mind of the alleged plagiarizer. Effective administrative and legal decision-making is only possible if the criteria are expressed in terms of observable phenomena. However, the question of intent is revisited later in this paper as a relevant factor in assessing the degree of seriousness of an act of plagiarism.

The AVCC definition explicitly recognizes that attribution is a relative rather than an absolute concept, in that it may be achieved in different ways depending on "the medium of presentation." I consider in a later section various categories of academic publishing venues. Further, I will suggest that many factors are relevant in determining whether an act of plagiarism is sufficiently serious to require action.

## Arguments Against Plagiarism

In the literature on plagiarism, a variety of reasons are advanced as to why it (or some manifestations of it) is an evil that needs to be addressed. The following sub-sections summarize the primary arguments that are put forward, classifying them into ethical, instrumentalist, and legal aspects. A further sub-section examines the relationship between plagiarism and copyright.

### ***Ethics***

Most sources on plagiarism simply assume that it is wrong, and that everyone agrees that it is wrong. It is common to see reference to 'integrity' and 'hono(u)r,' and to the classification of plagiarism as a form of 'cheating,' which everyone agrees is wrong, without any need for discussion.

Where argument is provided, it is often along the lines that plagiarism is morally wrong because the plagiarizer both claims a contribution that he or she is not justified in claiming, and denies the originator the credit due to him or her. This perspective has gained widespread international recognition in the form of 'moral rights' extensions to copyright laws (although the U.S.A., with its strong orientation toward copyright as an economic weapon, has not conformed).



Mark Twain's ethical perspective on appropriation appears to have been somewhat more discriminating. He regarded the copying of his books for commercial purposes as theft, whereas plagiarism was just 'bad manners' (Spender, 2004, citing Vaidyanathan, 2001).

### ***Instrumentalism***

"From the point of view of the abstract 'advancement of knowledge,' plagiarism is not a particular problem, since the knowledge is disseminated regardless of who gets credit for it. But from the point of view of individual scholars, credit for ideas is vital in career terms and, typically, even more so in terms of self-image" (Martin, 1994, p. 41). Plagiarism fails to communicate linkages in the train of communal thought that constitutes knowledge within a discipline. And it tends to result in accelerated progression within the discipline for 'less fit' academics, to the detriment of 'more fit' academics.

More broadly, plagiarism may result in individuals having an aura of expertise in an area that causes other people to pay more credence to their statements than is justified: "a plagiarist simply repeats the words and ideas of others without having mastered the basic source materials. ... Therefore, it has to be assumed that the plagiarist is simply a sophisticated parrot who is really fooling everyone by claiming to be an authority when in fact they are entirely dependent on the authority of others" (Hexham, 1992).

### ***Legal Constraints***

When reading papers on the topic of plagiarism, it would be easy to infer that it is illegal. General statements are not easy, because of the enormous differences in the substantive details of laws, and even in the frameworks of laws, in the many hundreds of jurisdictions throughout the world. However, I offer the following observations.

The widely-repeated assertion that plagiarism is 'theft' is generally incorrect in law, because:

- theft necessarily relates to objects or defined value, rather than to ideas or expressions of ideas;
- theft involves the denial of the benefits of possession of those objects or defined value; and
- theft requires *mens rea*, that is to say intention by the culprit to deny the victim the benefits of possession.

The claim that plagiarism is fraud is more tenable, but only in those contexts in which the action is intentional, deceitful, and gains benefits that would not have been gained without the action. Proving criminal fraud is challenging.

In many common law jurisdictions, there is a possibility that plagiarism could constitute the tort of 'passing off' (or, more to the point, 'reverse passing off,' because someone else's goods and services are presented as one's own). This is a civil rather than criminal matter, and hence lower standards of proof are involved, but it is an ancient and arcane branch of law that has been further developed in recent years mainly in commercial contexts.

Recourse against plagiarism is seldom sought through any of the channels mentioned above. The most common ways in which complaints are pursued are:

- through breach of employment contract, generally where the person is employed by an educational or research organization;
- through breach of the terms of enrollment in a course of education; and
- through breach of the terms of a Code of Conduct administered by a professional body.

In each of these cases, the extent to which copying without attribution is actionable depends on the specific wording of any relevant contract and any applicable codes, the dispute processes specified or implied, and the sanctions that are available within the particular legal context.

Bartlett (2005b) chronicles the instance of a Dean at the University of Missouri whose commencement address plagiarized a well-known academic. This was discovered by another academic who knew neither party. She tripped over the relevant segments after both papers were returned by Google in response to a search for a quotation from Hegel about the slaughterhouse of history. The Dean may find the quotation apt, given that he was then suspended pending an investigation (Carnevale, 2005).

### **Copyright**

One further body of law requires more detailed consideration. Copyright law provides the author or commissioner of a work with a small basket of specific rights in relation to the work. There is considerable commonality in copyright laws across the world because of their common origin in English law, and because of the existence of multilateral conventions that are hono(u)red to at least some degree by many countries. There are, however, very considerable differences on matters of detail, and hence it is very challenging to make authoritative statements that are accurate with respect to the law in most jurisdictions. One attempt is WIPO (2005).

Among the basket of rights that constitute copyright are the powers to grant permission to others to reproduce, to adapt and/or to re-publish material from the work. But these rights are qualified. In Australia, for example, the 'fair dealing' provisions ensure that the large majority of relatively small incorporations do not require what is called in Australia a 'copyright licence.' This only becomes necessary where 'a substantial part' of the original work is to be incorporated (ACC, 2004a, 2004b, 2005). The U.S. doctrine of 'fair use' is more extensive and extensible than the limited Australian 'fair dealing' qualifications (see SULAIR, 2004).

Between the 1920s and 1990s, it became progressively more common for the economic dimension of copyright law to be supplemented by so-called 'moral rights.' In countries that have implemented the provisions, an author has the right to attribution and to object to derogatory treatment of the work.

A successful suit for breach of copyright may or may not represent evidence of some form of academic misconduct, but whether it would represent evidence of plagiarism depends solely on whether the content was appropriately incorporated and attributed. If those conditions are satisfied, then the action would not constitute plagiarism, even if it is a breach of copyright. Moreover, the existence of a copyright license does not in any

way absolve an author from the requirements of appropriate incorporation and appropriate attribution.

Even an express denial of permission may not be relevant to the question of plagiarism. A breach of an express denial may be actionable in the courts, and it might represent academic misconduct, although whether it would be relevant to an allegation of plagiarism depends on the circumstances. Moreover, it is clearly in the interests of academic freedom that authors, academic and otherwise, should not be able to suppress analysis of their work by others, simply by requesting that material from their published works not be incorporated into other works.

In short, the presence or absence of permission to republish has no simple relationship to the question of plagiarism, and in many cases may have no relationship at all.

## **Counter-Arguments**

Most of the literature on plagiarism focuses on arguments against plagiarism, although qualifications are found even in works that strongly condemn plagiarism. This section draws attention to reasons why copying without attribution can also be valuable.

### ***Practicality for Authors***

From the point of view of the author of a new work, avoiding plagiarism requires a great deal of effort. Far more is being written and published by far more people than ever before in the history of the human race. It is simply impractical to avoid repetition, uneconomic for every author to deliver originality in every element of everything he or she writes, and a waste of time and energy that could be applied to more constructive activities. Moreover, much writing within a discipline is intentionally cumulative, and hence the incorporation of prior content is an intrinsic feature of almost all scholarly writing.

A counsel of perfection in presentation is unreasonable, and hence, "In judging that an author plagiarizes[,] great care must be taken to ensure that careless mistakes, printing errors, inexperience, and even editorial changes made by a press are not used as accusations against an innocent person" (Hexham, 1992).

Even in relation to matters of content, it would be unreasonable to urge attribution for every element of a work. For example, "[history] professors often don't know from where they got a particular definition or description of a well-known figure or event. As long as such writing deals with things that are essentially public domain, even though at times specific wordings may be very similar indeed, this is not plagiarism because it does not involve deliberate fraud" (Hexham, 1992).

The much-referenced material provided in Northwestern University (2003) on plagiarism is typical of the guidance provided to students: "Generally knowledge which is common to all of us or ideas which have been in the public domain and are found in a number of sources do not need to be cited." Similarly, it is conventional for well-known proverbial, biblical, and literary expressions to be incorporated without attribution.

Moreover, citation is not needed for ideas that could reasonably be perceived to be generally known by the audience to which the document is addressed. Generally speaking, the more novel and specific the idea, the greater the importance of including some form of attribution. With well-known ideas, an appropriate allusion to the originator may be as acceptable as a formal citation (e.g. Newton's Laws in physics, Piaget in developmental psychology, von Neumann in computing).

Unfortunately, the vagueness of concepts such as 'public domain' and 'well-known' force authors and editors to make many judgment calls as to whether particular information is well-known to the intended readership, or sufficiently obscure to require attribution. [I include several tests of this proposition later in this paper, enclosed by square brackets]

### ***Practicality for Readers***

In addition to the impact on authors, readers are poorly-served by an excessive emphasis on the avoidance of plagiarism. Citations clutter text. Long reference lists take up space. Defensive wording makes for turgid style. Editorial adjustments (such as omissions signalled by ellipsis (...) and corrections signalled by square brackets and/or *sic*) interfere with readability. Moreover, many academic writings are longer than strictly necessary, simply because the author feels constrained to write defensively, by pre-countering possible attacks from his peers.

In short, many of the recommended techniques for avoiding the suspicion of misappropriation are dysfunctional from the viewpoint of most readers, especially those reading for pleasure, for answers, or as part of a course of study, rather than as a discipline.

### ***The Role of Imitation in Learning, and in Innovation***

Imitation has always been an important element of learning, and it continues to be so. As a result, undue constraints on imitation stunt learning. At the secondary school and undergraduate levels, the solution lies in skillful design and wording of assignments. Questions that are capable of being answered directly from existing publications invite plagiarism. Questions therefore need to encourage candidates to discover and use the old, but then contribute something new, e.g. 'Find and present three possible answers to the following question, explaining in what ways the answers differ. Cite your sources.'

As author Dale Spender puts it, avoid inviting copying without alteration: "the teachers or lecturers who ask their students – 'what can we **do** about homelessness' – are becoming the professionals of the digital age. In such an assignment, cut-and-paste can only be the first stage" (private communication, October, 2004). Thompson (2005) explains that he ended up not using a chapter that he had drafted by taking advantage of unacknowledged sources. His reasoning was as follows: "The amount of work it had taken me to fashion a well-crafted piece of plagiarized text was only marginally less than the amount of work involved in putting together something of my own that was at least as good." There is an old security adage that the cost of compromising a security measure needs to be about as high as the benefits that can be gained from doing so. In the digital era, the challenges placed before students need to be devised with that adage in mind. Moreover, marking schemes need to be consistent with that approach, rewarding and being known to reward appropriate behavior and to penalize inappropriate behavior. See also (Boehm, 1998; Howard, 2001; and Martin, 2004).

The same principles may have application even at postgraduate level and within a profession or academic discipline. I further discuss this issue later in this paper.

Excessive emphasis on the evils of plagiarism also works against innovation. By 'innovation' is meant the deployment of ideas in the real world. It is the phase during which an invention is articulated and integrated into existing artifacts and processes. It involves adjustments to existing artifacts and processes in order to accommodate the new idea. [This is common general knowledge, and needs no attribution.]

Particularly in the information industries, innovation is incremental, because it arises from people standing on the shoulders of others. As the much-used maxim has it, "copying from one source is plagiarism, copying from several sources is research." Or as it was re-stated by Biggs (1999, p. 129), 'conventional academic writing' is "ideas taken from multiple sources and repacked to make a more or less original and relational type of synthesis" (quoted in Bone, 2000-2003).

Innovation is heavily dependent upon freedom of movement of ideas and information among many individuals and organizations (Dempsey, 1999). Monopoly powers such as copyright and patent constrain that freedom. To the extent that constraints on plagiarism prevent the flow of ideas, they too are harmful. Balance is needed between the harm arising from plagiarism, and the harm arising from barriers to the flow of ideas. Where the ideas of another person are merely republished unadorned, one balance may be appropriate; whereas a different balance-point entirely may be needed where the new presentation embodies added value, through critique, extension, or application in new contexts.

### ***Alternative Cultural Interpretations***

Plagiarism seems not to have been an issue in Dark Ages monastic scriptoria, which copied not only Scripture but also secular works. The same can be said about oral traditions, such as those of medieval bards and tellers of sagas. [Again, this is all sufficiently well-known that attribution would seem pedantic.]

Such traditions are not mere historical relics. Contemporary aboriginal societies place value on the repetition of traditional stories. Larkham and Manns (2002, p. 339-340), in the context of Martin Luther King's PhD thesis, draw attention to "cultural acceptance in the American oral preaching tradition ... of widespread borrowing from unacknowledged sources."

The first authors of what was to become a mainstream genre — novels or fiction — encountered criticism for uttering what the 'literary critics' of the early 18th century perceived as nothing more nor less than a sustained lie (Spender, 2004). The same accusation is being leveled at contemporary authors of investigations of social issues that are fictional but are represented as though they were true stories. The Encyclopedia Britannica 1911 edition and the Wikipedia entry both suggest that "plagiarism is a concept of the modern age and not really applicable to medieval or ancient works." Brynn (2002), citing Mallon (1989), suggests "plagiarism came to be regarded as a problem in the seventeenth century, when writing became an occupation."

Viewed another way, the strong bias against copying in academic work is a western intellectual preoccupation. It appears to date from the *rinascimento* of the 14th-16th

centuries, and it appears to reflect humanism's strong emphasis on the worth of individuals.

East Asian cultures are imbued with centuries of Confucianist pressure to submit to authority, and place less value on individuality. Perhaps cultures such as those are less concerned about what western European tradition calls 'cheating' and 'plagiarism.' A professor with close links to the Chinese Communist Party, who was recently accused of "repackaging fashionable terms – human rights, democracy, rule of law – for the party's ends," defended his plagiarism in what might be interpreted as a culturally appropriate manner. He hinted that "because of [the aggrieved party's] history of dissent, it was not politically sound for the publishing house to leave his name in the accreditation notes" (Gill, 2006).

Meanwhile, the 500-year-old tradition of individuality is under challenge in two conflicting ways. Large-scale multi-media works (such as feature-length videos, and games) have large teams of originators rather than 'an author,' and the large corporations that produce them are hyper-sensitive to plagiarism. Yet, at the same time, the digital era has enabled sampling, adaptation, and mixing on a scale and at a speed that was never previously possible. Consumer-producers, particularly in the world of music, regard appropriation no longer as an evil, but rather as an art form. The valuation that cultures place on individuality is in flux, and hence so are the notions of 'cheating' and 'plagiarism.' [The points made in this paragraph are sufficiently evident in the literature and the trade press that no formal citations are needed.]

Context is also important. For example, many statements have been interpreted differently since 11 September 2001. Words extracted from one work and reproduced in another may have a quite different impact on many readers than they did have, or would have, in their original setting. This can arise even with quotations as short as Hexham's boundary test of four words: consider a work that has the statement "I had a dream" uttered not by Martin Luther King, Jr., but by Adolf Hitler, Kim Il-sung, or Osama bin Laden. The re-contextualization is not merely artistic, but also potentially instructive. The war against plagiarism must be waged sufficiently carefully that ideas are not caught in straitjackets, but remain free to cross-fertilize one another.

Finally, it may be appropriate to consider the implications of post-modernist perspectives, which assert that meaning is a construction by the reader, not an invention by the author. A text is interpreted differently by each reader. An instrumentalist interpretation of post-modernism (which may, admittedly, be a conflict in terms) is that any value that derives is partly due to the stimulus provided by the work, but substantially due to the perceptive and cognitive apparatus of the reader. If post-modernism is anything more than intellectual fairy-floss, is there sufficient justification for authorial monopoly on even the presentation of an idea, let alone the idea itself?

In short, the approach one takes to judging whether plagiarism has been committed needs to reflect a comprehensive appreciation of the perspectives of different cultures over time, and different cultures across space. Deeper insight into these issues could be provided by a literature on the cultural relativity of cheating, but my searches have to date unearthed no such literature.

## Case Study: A TextBook

The preceding sections have identified tensions between purist and more tolerant views on plagiarism. The resolution of that tension requires deeper consideration of the realm of authoring and publishing by academics than has usually been applied. In order to provide greater depth in one particular context, this section presents a case study in which the author of a textbook was accused of plagiarizing a number of works. I was commissioned to conduct the investigation. I express the presentation below in the passive voice, for ease of reading.

The vice-chancellor of an Australian university received a letter alleging plagiarism in an eCommerce textbook authored by a member of the university's staff. The textbook had been issued by a major publisher, and the staff member was using it in a unit taught at that university. Although the allegations were anonymous, they were detailed, and a preliminary investigation suggested that an arguable case existed.

A full investigation was sought by an independent person with appropriate expertise in the topic-area. The Terms of Reference were carefully negotiated, in order to ensure that the university would get the information it needed in order to take any further steps, that no imbalance or unfairness to the accusee would arise, and that the interests of the investigator were protected.

Textbooks appear to be beyond the scope of the AIS Code. This is because the Code "offers guidance in matters directly related to research and publication of scholarly works ... [and] does not purport to ... guide members in areas of professional activity such as teaching..." (Davison et al., 2004b, p. 9). A textbook is generally not regarded as a scholarly work (although textbooks designed to support advanced, postgraduate studies might be an exception).

The relevant definition of plagiarism for the purposes of the investigation was that published by the Australian Vice-Chancellor's Committee (AVCC) and reproduced in section 3 above. This first required tests of the nature and extent of any appropriation of content; second, of the nature and extent of any claims of originality in the material; and third, of the nature and extent of attribution. Finally, to the extent that evidence of plagiarism was found, the investigation needed to consider its degree of seriousness, and in particular whether it was intentional, reckless, careless, or merely accidental.

A process was devised, commencing with a literature search and analysis in order to inform the process, establish the criteria to be applied, and guide the assessment activities. Analyses were to be undertaken of the work and of the various items that were alleged to be sources that it plagiarized. Further testing was to be performed, with a view to establishing whether the instances that had been drawn to attention appeared to be isolated, or to be indicative of a wider problem. The findings of fact were then to be assessed using the criteria established at the commencement of the investigation.

The literature search yielded a disappointing quantity and quality of guidance. The scope of most references was narrow, and very few directly addressed textbooks. The preponderance of the available papers addressed plagiarism by students, and those that addressed plagiarism by academics were almost entirely focused on refereed papers and scholarly books. Other researchers appear to have conducted similarly fruitless searches: "... where that leaves the textbook writers I dare not contemplate" (Biggs,

1999 p. 130, quoted in Bone, 2000-2003). It was therefore necessary to undertake some meta-analysis, interpolation, and extension of existing thinking about both assessment criteria and processes.

A textbook is generally not authored in order to express original ideas, nor as a means of communicating research results, nor even as a primary means of demonstrating suitability for tenure or promotion. The intentions generally are to make existing knowledge accessible, to address a particular market need, and (less convincingly) as a supplementary source of income.

Moreover, a textbook is usually intended for a particular audience, such as candidates within particular kinds of courses, within particular disciplines or domains of study, and even at a particular stage of their studies (e.g. introductory, intermediate, advanced undergraduate, postgraduate). The primary function of a textbook is therefore pedagogical, and the criteria used in assessing it need to reflect that fact.

One source offers the following: "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, citation and other forms of attribution will differ from what is expected 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" (AHA, 2003, bolding added).

The only other directly useful document located was Hexham (1992), which includes the following passage: "... **many basic textbooks contain passages that come very close to plagiarism**. So too do dictionaries and encyclopedia articles. **In most of these cases the charge of plagiarism would be unjust because there are a limited number of way[s] in which basic information can be conveyed in introductory textbooks** and very short articles that require the author to comment on well known issues and events like the outbreak of the French Revolution, or the conversion of St. Augustine, or the philosophical definition of justice. Further, in the case of some textbooks, dictionaries, newspaper articles, and similar types of work, both space and the demands of editors do not allow the full acknowledgment of sources or the use of academic style references. ... **It ... therefore seems necessary to distinguish between academic and other types of writing and to ask what is the reader led to believe an author is doing**. If a book or thesis contains academic footnotes, is written in an academic style, and is presented as a work of original scholarship, then it must be judged as such and measured against the accepted rules for citation" (bolding added).

Given how trenchant Hexham is in his condemnation of plagiarism in scholarly work, the distinction he draws between criteria for scholarly and textbook writing is telling.

Due to the paucity of sources, I also referred to a sample of textbooks in fields cognate with the textbook in question. Combining the various considerations, I developed the set of criteria in Exhibit 1, against which the allegations of plagiarism could be tested.

### Exhibit 1: Evaluation Criteria for Plagiarism in a Textbook



The approach to incorporation and attribution in a textbook should:

- avoid citations intruding into the presentation in such a manner that they detract from the primary pedagogical objective;
- avoid not only express claims of originality, but also implied claims, and language that could mislead the intended audience into inferring that the work is original; and
- provide ready access to works on which the author has drawn heavily.

Generally, incorporation should avoid the use of quotation marks, because these intrude too much. On the other hand, the use of verbatim, near-verbatim and close-paraphrase passages imposes yet greater expectations on the author in relation to attribution.

In the case of generic attributions to well-known authors (e.g. Piaget, von Neumann, Newton), and of well-known and well-documented quotations used in section and chapter headings (e.g. Keats, Martin Luther King), it may be reasonable to name the author, but nominate no specific work. Generally, however, attribution should be achieved through one of the following mechanisms:

- Harvard-style citation, perhaps without page numbers. This approach adds to the length of the text, but minimizes the interruption of the flow;
- numbered footnotes or endnotes. These have much less impact on the length of the text, but are nonetheless disturbing to the reader because of the uncertainty as to whether the note contains information of relevance, and hence as to whether the break in concentration is warranted that is involved in a diversion to the note;
- no citation within the text, but attribution to the source in notes at the end of each chapter or the book as a whole. A refinement to this approach is to include within each endnote a key to the page number and line number in the text where the source has been used;
- mention of the name of the author at the beginning of the relevant segment of text, or perhaps within the relevant segment of text, and inclusion of a reference at an appropriate point elsewhere in the publication;
- mention in the Preface or Introduction of the authors and works used as sources during the preparation of the book.

Precise descriptions of all works to which attribution is given need to be provided. The alternatives are listed below, commencing with the most preferable:

- a Further Reading, Recommended Reading, and/or Primary Sources List at the end of each chapter or section, which contains all works that were drawn on during the preparation of that segment. Particularly important references can be supplemented with annotations;
- a single Reference List at the end of the book, which contains all works that were drawn on during the preparation of the book;
- a Bibliography at the end of the book, which contains both works that were drawn on during the preparation of the book and works that were not.

Applying the process and criteria to the case, I found the following in relation to matters of fact:

- the author's approach to attribution to sources, and the execution of it were of very low quality;
- the specific allegations were in part factually accurate and in part inaccurate;
- there was limited evidence of additional instances of incorporation;
- there was little evidence of any claim of originality by the author.

The findings as to whether plagiarism occurred were as follows:

- multiple segments of the textbook in question evidenced plagiarism as defined by the AVCC;
- it was not possible to determine with any reasonable degree of confidence whether there were other instances of incorporation of content from other sources.

The findings as to the seriousness of the plagiarism were as follows:

- the primary problem was, within at least some chapters, the use to an excessive extent of verbatim, near-verbatim, and close-paraphrase segments, compounded by the very poor quality of attribution;
- an inference of intentional plagiarism would be unreasonable;
- an inference of reckless plagiarism would also be unreasonable;
- the plagiarism was therefore not of the most serious nature;
- the textbook in question showed ample evidence of careless plagiarism;
- the plagiarism was therefore sufficiently serious to require action in relation to both the staff-member and the book.

The vice-chancellor provided the staff member with the opportunity to respond to the findings. The staff member found the report to be fair and balanced and concurred that there was evidence of plagiarism in the book. The University found that the staff member's conduct in the matter amounted to misconduct and issued a formal censure, which played a significant role in the staff-member's contract not being renewed at the end of its term.

The publisher suspended the book from sale when it learned that a credible accusation of plagiarism had been made, and following the completion of the proceedings, withdrew the book from its catalogue.

## Implications

The evidence provided in the preceding sections has a range of implications, which I present below in a series of sub-sections. The first identifies a category of plagiarism that can be conveniently referred to as being 'necessary or inherent.' The second relates to the question of the seriousness of the act of plagiarism. Later segments discuss the investigation of allegations and aspects of enforcement.

### ***Necessary or Inherent Plagiarism***

The case study of textbook plagiarism in the previous section has relevance beyond textbooks alone. Parts of many other kinds of publications are intended "to make existing knowledge accessible" and to "address a particular market need" or "a particular audience." In particular, various sections of scholarly works such as refereed journal

articles and conference papers, theses, and academic monographs, have an expository purpose, in relation to pre-existing knowledge.

The preliminary sections of many works comprise the recitation of existing bodies of theory, in order to set the stage for extensions to, criticisms of, and/or testing of, that theory. If such recitations stray too far from the words used by prior theorists, then the author of the new work would be subject to accusations of misrepresentation or at least inaccuracy. Hence it is very challenging to 'use one's own words' while being faithful to the sources. Paraphrasing and generic attributions are therefore tolerated. The context in any case implies that little or no originality is being claimed. There is accordingly tacit acceptance of practices that would otherwise be castigated as plagiarism.

In addition, papers commonly present explanations of the research method used, and the rationale for the selection of particular techniques, and applications of techniques, rather than others. Within each specific research domain, there is a great deal of similarity among research methods adopted. This is especially marked during periods of 'normal science,' when very similar studies are undertaken in successions of marginally varying contexts. [An explicit reference to Kuhn's work is probably superfluous.] There is also only a limited research methods literature, and a limited number of key texts and exemplars. (How many ways is it possible to phrase the statement "Responses were gathered using a 5-point Likert scale"?). Hence there is tacit acceptance of plagiarism in these segments of refereed works as well.

Further, the reporting of research results is constrained by conventions, and by the commonality of inferencing techniques. ("The data supported all of the hypothesized relationships, in all cases in a statistically significant manner"). Because the scope for variation is limited, and close similarity of expression is unavoidable, members of the discipline are permissive of what might otherwise be criticized as plagiarism.

The instances cited above are all entirely apparent to members of the discipline. On the other hand, they are seldom made explicit, and students might be excused for not appreciating that academics have good reason to permit one another latitude that is denied in students' assignments.

The commonality of text reporting research methods used suggests an opportunity. Perhaps the IS discipline has matured sufficiently that recognition could be given to some fixed points in the research methods arena. For example, the AIS could formally promulgate and publish statements about various research techniques that are established and well-understood. These might be termed 'AIS research technique practice guides.' Authors could then invoke the relevant document, declare their conformance with it, and limit their description to aspects that represent departures from the mainstream technique. Of course, this would not apply to works that adopt emergent research techniques, nor those whose primary contribution is reflection on, experimentation with, or testing of research methods. But repetitive text could be avoided, and many papers could be shorter and simpler, resulting in timesavings for authors, reviewers, editors, and readers alike.

### ***The Seriousness of an Act of Plagiarism***

There are many insufficiently careful discussions in the literature, which make statements such as 'plagiarism is theft,' 'plagiarism is fraud,' and 'plagiarism is a

grievous act.’ As discussed in section 4.3, the first is incorrect in law, and the second is in most cases unlikely to be correct in law. The third may or may not be true, depending on the circumstances.

Acts of plagiarism vary in the degree to which they do harm and warrant sanction. I draw on a variety of published works in this section to construct a framework within which the seriousness of plagiarism can be judged. Especially influential were Hexham (1992), Martin (1994), and Davison et al., (2001). I argue that five factors should be the primary determinants of the seriousness of an act of plagiarism:

- whether the plagiarism is intentional or accidental;
- the nature of the new work;
- the extent to which originality is claimed in the new work;
- the nature of the incorporated material; and
- the nature of the attribution provided.

This section provides guidance intended to be applicable in several circumstances. It should be useful in the practical training of graduate students, who can be challenged to explain how the material that they produce should and should not be used. Authors should find it of value in ensuring that they deal properly with material from other sources, and thereby avoid being credibly accused of impropriety. It should also serve individuals and organizations that need to evaluate accusations of plagiarism.

### **(1) Whether the Plagiarism is Intentional or Accidental**

The AVCC definition underlines a feature of great practical importance to an investigation into an allegation of plagiarism. It recognises that plagiarism has varying degrees of seriousness, depending on whether it is judged to be, in decreasing order of severity:

1. intentional;
2. reckless;
3. careless; or
4. accidental.

If an act of plagiarism is intentional or is reckless, then it clearly represents misappropriation and demands sanction, in order to communicate to the individual concerned and the community where the boundaries lie. Accidental plagiarism is much less serious; careless plagiarism that falls short of recklessness occupies the middle ground.

It is very challenging to determine intent, because it requires that the person making the judgment claim to know another person’s internal state. Hence the test might be better expressed in terms of ‘evidence of intent’ or ‘reasonably inferred intent.’

### **(2) The Nature of the New Work**

A second factor of importance is the kind of work in which the copying occurs. The greatest degree of concern arises in respect to works published in refereed venues, and the least in unpublished and informal materials. I suggest the following list as providing a set of reasonably distinct categories of publishing venues. Further, I suggest that

plagiarism in categories higher in the list is generally more serious than plagiarism in categories lower in the list:

1. refereed papers;
2. scholarly books;
3. research working papers;
4. invited presentations at academic events;
5. commissioned publications;
6. textbooks;
7. professional, unrefereed publications;
8. invited presentations at professional events;
9. codes, standards, and policies;
10. informational brochures;
11. newspapers;
12. trade publications;
13. casual publications (e.g. student newspapers, postings on email-lists, weblogs);
14. unpublished materials.

### **(3) The Extent to Which Originality is Claimed in the New Work**

The greatest degree of concern arises where an express claim of originality is made, or the context implies it. The following list is arranged in descending order of seriousness:

1. an express claim of originality;
2. an implied claim of originality;
3. the use of expressions that make it reasonable for a reader to infer a claim of originality;
4. the structuring of the work such that it is unclear which material is merely the reporting of contributions made by others and in what ways value is being added;
5. generic acknowledgement of the contributions of others in circumstances in which specific acknowledgement is more appropriate;
6. a vague implication that the work is a re-presentation of the work of others;
7. an express statement that the work is a re-presentation of the work of others.

### **(4) The Nature of the Incorporated Material**

At one extremity, a whole work may be appropriated, and at the other, the appropriation may be of longstanding ideas. The following list is arranged in what I suggest to be the appropriate descending order of seriousness:

1. verbatim or near-verbatim copying of:
  - an entire work (e.g. a book, book chapter or article);
  - a substantial part of a work (e.g. a section; or the diagram, image or table around which an entire work revolves);
  - segments of substantial size (e.g. paragraphs);
  - segments of moderate size (e.g. sentences);
  - novel or significant segments of small size (e.g. clauses, phrases, expressions, and neologisms);
2. copying of ideas that are highly original;
3. paraphrasing of segments of substantial size, without new contributions;
4. paraphrasing of segments of moderate size, without new contributions;

5. verbatim or near-verbatim copying of unremarkable segments of small size (e.g. clauses, phrases, expressions, and neologisms);
6. paraphrasing of segments of small size, without new contributions;
7. copying of ideas that are somewhat novel;
8. paraphrasing of segments of substantial or moderate size, but which include new contributions;
9. copying of the structure of the document, or of the argument, or of the sequence of information presentation or 'plot';
10. copying of ideas that are long standing.

Where a formal work draws material verbatim or near-verbatim from a prior publication, the strong expectations exist that quotation marks be used wherever practicable, and that minor adaptations to text (e.g. changes of tense, and omission of superfluous passages) be shown as such within the quotations.

Appropriation may be a much more serious matter where the original work is unpublished. This is because the original author lacks strong evidence of the primacy of his or her claim, and hence is in a more vulnerable position in the event of a dispute. Kock (1999) and Davison et al., (2004c) make the point that brazen plagiarizers sometimes dispute priority even where the original work has been formally published.) What used to be called 'Departmental Working Papers,' and are now more commonly referred to as 'PrePrints,' can assist in overcoming this problem, if they are entered into an appropriately-designed institutional or disciplinary repository at the time they are released.

Where a formal work paraphrases material from a prior publication, the strong expectation exists that it contain a contribution. Examples of contributions include additional evidence, extension of argument, adaptation or application of a generic statement to a particular context, generalization of a specific statement, clarification or simplification of explanation, the demonstration of a relationship to other sources, and integration with other sources.

## **(5) The Nature of the Attribution Provided**

The final factor is the manner in which the author of the new work draws attention to the earlier work. Clearly, a great deal of concern arises where no attribution at all is provided; whereas a specific attribution is of far less concern, even if imprecise. The following list is arranged in descending order of seriousness:

1. no attribution to the work, but attribution to the sources cited in the work. This is the most serious of all, because it not merely implies originality by the plagiarizer, but actively seeks to deny originality by the author of the uncited work;
2. no attribution to the work (which implies a strong claim of originality by the plagiarizer);
3. understatement (in particular, a citation early in the incorporated material, thereby implying originality of the remainder of it);
4. no attribution in the body of the work, but inclusion of details of the source in a distant bibliography, e.g. at the end of the work;
5. no attribution in the body of the work, but inclusion of details of the source in a reasonably adjacent bibliography, e.g. in a recommended reading list at the end of the chapter;

6. generic attribution, e.g. mention of the author at the beginning of the work, chapter or section;
7. specific attribution, e.g. mention of the author at the beginning of the incorporated segment;
8. inadequately precise attribution, e.g. mention of the author, but without sufficient details to facilitate easy discovery of the source;
9. specific, precise attribution.

The strong expectation exists in relation to attribution that:

- the source is to be cited, including declaration of the author, the document, and the location within the document. This can be effected using a Harvard-style citation in the appropriate locations, or the much less reader convenient approaches of a footnote number, endnote number, reference number, or author and year abbreviation; and
- a reference to every source is to be provided, including sufficient detail to enable a reader to discover and acquire a copy of it. There is a strong preference that the presentation of references conform with well-documented specifications.

Appropriate forms for citations and references vary considerably, depending in particular on the nature and medium of the source. Guidelines are available from various sources, such as UCB (2004) and UWM (2004). Printed documents have page numbers, whereas digital sources may not, or may have uncertain pagination. With current technologies and standards, it is difficult to provide a reliable indicator of the location of an excerpt within a source-document in such cases as images, sound, video, and some digital text formats.

## **(6) Summation: The Seriousness of Plagiarism**

When a judgment needs to be made about the seriousness of an act of plagiarism, the five dimensions need to be inter-related with one another. Clearly, the most serious forms of plagiarism are those that are extreme on all counts, i.e.:

- are intentional or reckless;
- occur in a refereed or scholarly work;
- include an express or implied claim of originality;
- involve appropriation of substantial and significant parts of one or more works; and
- fail to provide attribution, or even evidence measures to obscure the origins of the material or ideas.

Serious plagiarism is harmful to academic endeavor. Misconduct of that nature requires action by an appropriate authority, typically the author's employer, sponsor, or registration or professional body.

But it is also very important to recognize that many instances of plagiarism are mis-judgments or errors that are appropriately addressed in simple ways, e.g. through apology, amendment of the digital 'original' of the work, or publication of an errata notice. They should not be perceived or represented as being 'misconduct' of a kind that warrants disciplinary measures. Knox (2005) reports on the handling of a misdemeanor by Australian novelist Murray Bail, who included in the 90,000-word novel 'Eucalypt' 180 words that were "eight 'direct lifts' from ... an out-of-print textbook 'Eucalypts Vols One

and Two'." Bail explained how it happened, and asked his publisher to put an acknowledgement in future editions.

### **Investigation**

Because of the complexities described in this paper, great care is needed when formal investigations are undertaken into allegations or suspicions of plagiarism.

I could locate in the literature few guidelines for the conduct of investigations into accusations of plagiarism by academics. ORI (1997a, 1997b, 2003a and 2003b) are oriented to the bio-medical sciences, and in any case plagiarism is a small proportion of the scientific misconduct that they are concerned with. George et al., (2003) and some aspects of the documents relating to the AIS Code (Davison et al., 2004a, 2004b) focus on investigations by the editorial team of a journal. Kock (1999) and Davison et al., (2004c) are written from the perspective of a victim of plagiarism. ICAC (2005, pp. 15-17) describes one University's detailed procedures in relation to investigations of accusations of plagiarism by students.

Allegations are most commonly investigated by, or on behalf of, educational institutions, and hence a process description is needed that has broad application. Applying conventional business processes, I suggest the following phases and tasks:

- **preliminary phase**, including such activities as agreement of Terms of Reference, search for and review of relevant literature on plagiarism, initial review of the work(s) that are the subject of the investigation, determination of the appropriate procedures for the investigation, and preparation of the task list;
- **preparatory phase**, including assessment of the allegation and the information contained in it, search for and acquisition of works that are mentioned in the allegation and/or (subject to the terms of reference) that may be relevant to the investigation;
- **analysis phase**, including assessment of the work, the possible sources, the nature of attributions provided, and of the claims of originality. This may need to be supplemented by further research into appropriate forms of incorporation and attribution, including sampling of practices in comparable publications and detailed consideration of specific allegations;
- **reporting phase**, including outline of the investigation report, drafting of formal components of the report, submission of the draft report, review of the draft report, and amendment and submission of the final report. In order to ensure maximum clarity of the outcome, it is strongly advisable that the following be distinguished:
  - findings of fact in relation to incorporation, attribution, and claims regarding originality;
  - the criteria applied in determining whether plagiarism occurred;
  - analysis and formation of views on the accusations;
  - the criteria applied in determining the degree of seriousness of any plagiarism that was found to have occurred;
  - analysis and formation of views on the degree of seriousness of any plagiarism that was found to have occurred.

The terms of reference must be carefully prepared, in order to ensure that the process results in the information needed to enable determination of the matter, is fair to all parties involved, and is compliant with all relevant law and contracts among the parties.



Note too that publication of details about an accusation and the accusee need to be handled with caution, because of the risk of a counter-claim by the accusee, possibly on the grounds that the accuser is the plagiarizer, and possibly on the grounds that publication of the details is defamatory.

### **Enforcement**

Investigation processes and reports need to reflect the nature of any sanctions that may be able to be applied. An earlier section underlined the limited extent to which actions in criminal and even civil law are likely to be feasible.

The most common contexts are employment (where contracts may envisage such measures as dismissal, demotion, delayed promotion, and reprimand and notation), registration and licensing (where debarment may be feasible, or more likely reprimand and notation), course enrollment (where cessation and denial of credit may be available), and professional membership (where debarment or reduction of status may be possible). Given the prevalence of plagiarism, even of serious cases, it is noteworthy that few instances of the more severe forms of sanction are reported. The role of moral suasion should not be overlooked, but neither should it be over-estimated.

### **Implications for the AIS Code**

There would be apparent advantages in academic associations adopting a regulatory role in relation to academic standards generally, and plagiarism in particular. A few show signs of wanting to do so, such as the Boston Psychoanalytic Society (Bartlett, 2005a). But most lack the resources to be able to sit in judgment (and to insure against the potentially expensive consequences). Most also lack the power to apply sanctions. The American Historical Association appreciates the problems, and has ceased investigating plagiarism cases (Bartlett and Smallwood, 2004).

It would appear more practical for academic associations to hold back from a regulatory role, but to provide a framework within which other organizations can exercise control over inappropriate behavior. A vehicle whereby this can be achieved is codes of conduct. Codes issued by professional bodies are frequently referred to in disciplinary proceedings, and in cases before tribunals and courts, and hence considerable care is warranted in the phrasing selected.

The AIS has such a Code (Davison et al., 2004b). The current version does not address all of the elements identified in this paper. It includes the unqualified statement that "plagiarism is a very serious academic and professional offense" (p. 10). The AIS Guidelines for a Victim make similar statements: "plagiarism is a grievous act" and "plagiarism is fraud" (Davison et al., 2004c, p. 17).

The problem with these statements is that the seriousness of plagiarism is highly variable. The statements are true, at most, of only the most serious forms of plagiarism. Moreover, an accusation of fraud would in many cases be incorrect, and would be so serious that it could conceivably provide a basis for a defamation action by the alleged plagiarizer against the persons and/or organizations that uttered the accusation. The interests of all parties will be best served by addressing questions of plagiarism very

carefully. The substantial amount of value in the AIS Code is at risk of being dissipated because of the insufficiently careful phrasing of some parts of it.

On the basis of the evidence and analysis presented in this paper, the AIS Code requires revision in the following ways:

- to make clear that, while serious plagiarism represents academic misconduct, many instances of plagiarism are poor professional behavior, and should be addressed in a practical manner rather than through disciplinary procedures;
- to declare that, although the Code is addressed directly to AIS members and other IS professionals, it is also a very relevant source for postgraduate students, and for those called upon to evaluate accusations of plagiarism;
- to provide references to authoritative guidelines on appropriate forms of citation and attribution; and
- to provide additional references likely to be of assistance to professionals, postgraduate candidates, and evaluators of accusations of plagiarism, including this article.

Further, the Association has merely approved the Code, and has not done enough to ensure that it is applied generally across the profession. The Association should require all AIS journals and conferences to apply the Code to their contributors, and should communicate to all journals and conferences associated with AIS the desirability of its application to their contributors as well.

When revisions are complete, the AIS should draw the terms of its Code to the attention of other academic associations in cognate areas, notably the ACM.

## Conclusions

Extreme forms of plagiarism justifiably earn the opprobrium of all members of a profession. What may be referred to as 'plagiarism of authorship' or 'appropriation of entire works' does occur, and the perpetrators need to be confronted. However, "there are some dramatic cases in which word-for-word plagiarizers have been exposed and penalised, but there are plenty of contrary cases in which plagiarizers have fashioned successful careers ... for example Martin Luther King, Jr" (Martin, 1994).

A decade ago, Martin (1994) examined the tension between the naive, standard view that plagiarism is rare, and the realistic/cynical, revisionist recognition that it is commonplace. To the concept of 'institutionalized plagiarism' that Martin identified, the Internet and Web have added 'copy-and-paste plagiarism.'

Railing Lear-like against the iniquity of the storm will achieve nothing. A mature conception of plagiarism needs to be articulated, the bad forms need to be distinguished from the good, appropriate behaviors need to be encouraged, and sanctions need to be imposed on the seriously bad. The AIS is the appropriate body to perform that function on behalf of IS academics. This paper has proposed enhancements to the AIS Code, intended to achieve those ends.

The research method underlying this paper was largely contemplative and argumentative. I sought out, structured, and extended a body of theory through a combination of a literature survey and reflection. I tested boundary conditions by means

of a case study. The empirical value of the case is constrained by its 'convenience' nature, and the fact that the author was directly involved in it. Despite the weaknesses in the method, a considerable body of evidence has been marshalled to suggest that there are important anomalies in conventional approaches to plagiarism by academics.

Stronger empirical methods can be brought to bear on the issues highlighted in this paper. Studies could be undertaken of secondary data, such as the incidence of accusations and media coverage, and the approaches to plagiarism adopted in tribunals and courts. More disciplined interpretivist techniques could be applied, including action research and grounded theory applied to the texts of interviews and focus group discussions. Structured surveys and Delphi studies of senior practitioners might also prove valuable, particularly in throwing further light on the more obscure circumstances.

With competitiveness continuing to heighten, the importance of ethical behavior by academics looks set to increase. It is essential that a clear and comprehensive framework be provided, within which authors can judge how to use and attribute existing materials and ideas.

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