APA Newsletter on

Philosophy and Computers

Jon Dorbolo, Editor | Spring 2004 | Volume 03, Number 2

From the Editor

This issue advances the excellent mix of reviews, critical articles, and creative endeavors that characterize the computing and philosophy area. Bill Uzgalis, Marvin Croy, Doug Birsch, and Ron Barnette simply never cease to rise to new standards of excellence with each issue. We are especially grateful to Susan Stuart, V. Alan White, and Angie Cooksey for sharing their teaching experiences and ideas in this issue. All who are reading this have what it takes to do the same. Please do consider submitting an article to this *Newsletter*. Send your work, or a query if you wish, to the editor.

Of particular significance is the upcoming special issue of this *Newsletter* in Spring 2005 which will be edited by Barnette in collaboration with the Fall 2005 issue of the journal *Minds and Machines*. The topic of these marks will be Daniel Dennett and the Computational Turn. All readers of this *Newsletter* are urged to send a query to Barnette and Dorbolo to explore areas to write about. This is a superb opportunity. It is possible that a book will come out of this project. Dennett will accept the 2003 CAP award at the December 2004 Eastern APA conference. These issues will coincide and mark that event with reviews and critical essays. Many aspects of Dennett's influence upon computing and philosophy have hardly been explored by commentators at all. Please consider joining us in this exciting effort.

Call for Papers

Minds and Machines
(http://www.wkap.nl/journalhome.htm/0924-6495)
in collaboration with
The American Philosophical Association *Newsletter on Philosophy and Computers*
(http://www.apa.udel.edu/apa/publications/newsletters/default.asp)

Special Issue*: *Daniel Dennett and the Computational Turn

Guest Editors: Jon Dorbolo (Oregon State University) and Ron Barnette (Valdosta State University)
***Deadline*:** September 1, 2004.

Daniel Dennett will accept the Barwise Prize at the Eastern American Philosophical Association meeting in December 2004. Conferred by the APA Committee on Computing and Philosophy, the Barwise Prize is awarded for significant and sustained contributions to areas relevant to the philosophical study of computing and information.

To commemorate this award, *Minds and Machines* and the *APA Newsletter on Computing and Philosophy* will collaborate to publish two special issues regarding "Daniel Dennett and the Computational Turn." The Spring 2005 *APA Newsletter on Computers and Philosophy* issue (Guest Editor: Ron Barnette) and a special issue of Minds and Machines in Fall 2005 (Guest Editor: Jon Dorbolo) will present this work. Submissions made in response to this call will be considered for both publications and authors will be consulted on the outcomes of the review process, with regard to which publication is suitable. An editorial board will conduct the reviews. Members of the editorial board are:

Terry Bynum, Southern Connecticut State University
Robert Cavalier, Carnegie Mellon University
James Moor, Dartmouth
Susan Stuart, University of Glasgow
David Rosenthal, City University of New York
Bill Uzgalis, Oregon State University

For this publication effort the editors will focus on those aspects of Dennett's work that have implications for the issues where philosophy and computing or information intersect. These include artificial intelligence, artificial life, information ethics, machine learning, mentality and machines, robotics, and education, among others. Both expository and critical approaches to such topics are sought.

Based on the works received, the authors intend to pursue a book proposal and symposia at major meetings in addition to the *Newsletter* and Journal special issues.

Instructions for authors are available at:
http://www.kluweronline.com/issn/0924-6495
and
http://oregonstate.edu/groups/cap/newsletter

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From the Chair

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Since my last report, two major conferences have had significant bearing on Philosophy and Computers Committee activities. The 2003 Computing and Philosophy conference was held at Oregon State University in August, and the APA Eastern Division met in Washington, D.C. Both of these meetings bought together various members of the Committee, thereby reinforcing and stimulating electronic interaction, and further defining the shape of Committee projects. I've just returned from the Eastern Division meeting where I had the opportunity to speak with Michael Kelly. Michael is very supportive of our Committee's emerging projects, and he also paved the way for my meeting with a representative of National Endowment for the Humanities (NEH). NEH's budget has been cut drastically in recent years, but our Committee will nevertheless pursue the idea of submitting proposals to support our efforts. (More on those projects below.)

APA conferences provide opportunities for our Committee to present reports on the latest developments in computer-related research and teaching within our profession. At the Eastern Division meeting, for example, Patrick Grim's panel on "Philosophical Modeling and Robotics: Examples and Reflections" consisted of his "dream team" of simulation researchers. These included (1) Brian Skyrms (University of California-Irvine) who investigated the complex nature of the social contract via the Stag Hunt simulation; (2) Selmer Bringsjord, Marc Destefano, and Bettina Schimanski (Rensalear Polytechnic University) who have implemented a logicist AI approach by means of which a robot (PERI - Psychometric Experimental Robotic Intelligence) solves components of the Wechsler Adult Intelligence Scale; (3) Pete Mandik (William Patterson University) who's presentation on "Modeling Memory and Mental Representation" explored the relation between life and intelligence; and (4) J. McKenzie Alexander (London School of Economics and Political Science) who demonstrated the connection between philosophical modeling and the structural evolution of norms. (Those interested in areas addressed by these presentations might want to consult Alexander's article on evolutionary game theory in *The Stanford Encyclopedia of Philosophy* (http://plato.stanford.edu/entries/game-evolutionary/).) In a separate session sponsored by the Society for Machines and Society, Grim reported on his research team's own simulations in a presentation titled "The Origins of Meaning: Hints from Large Arrays of Neural Nets."

The CAP conference held last August at Oregon State University, coordinated by Jon Dorbolo, provided unique opportunities for new insights and renewed enthusiasm on many fronts. The wide variety of topics covered was impressive and can be reviewed at http://oregonstate.edu/groups/cap/. Indeed, videos are available at that site for all of the major presentations. Perhaps the highlight of the conference was a special session on collective intelligence which involved a discussion, dinner, and reception at Peavy Arboretum. There, amidst towering evergreens and mountainous vistas, Doug Englebart's lifelong work was considered and reconsidered in a relaxed yet animated discussion.

Other noteworthy points: The CAP Australia conference occurred Oct. 11-Nov. 2, 2003, at The Australian National University. CAP Europe (at The University of Pavia, Italy) is planned for June 3-5 2004. The CAP North America (Carnegie Mellon University) conference is scheduled for August 4-6, 2004. Check the IACAP site for links and details. (http://iacap.org/).

The Barwise Prize for 2003 will be officially awarded to Daniel Dennett at the 2004 Eastern Division meeting in Boston. Special issues of this Newsletter (guest edited by Ron Barnette) and of *Minds and Machines* (guest edited by Jon Dorbolo) will feature commentary on Dennett's achievements. Also bear in mind that the Philosophy and Computers Committee sponsors sessions at APA divisional meetings. Committee members, Noam Cook (San Jose State University) and David Stern (University of Iowa), are involved in coordinating sessions for the Pacific and Central Division meetings respectively. Please check the Proceedings and the APA website for details.

As mentioned above, various Committee projects are now taking shape. One project aims at instituting a mechanism whereby information concerning the professional use of computer and other electronic technologies can be collected, analyzed, and used to inform decisions made within the APA. The general plan is to collect information concerning current technology use via the APA's website and for that data to be analyzed and reported on by the Philosophy and Computers Committee. This would occur once during each three-year term of the Committee's chair. This report would then be submitted to other APA committees such as the Committee on the Teaching of Philosophy (TOP). These committees may make recommendations for correlating graduate education with professional technology needs in respect to instruction and research. I am happy to report that Larry Hinman, Chair of the TOP Committee, is positive about such a development. Chris Caputo, APA webmaster, has indicated that this initiative is feasible given the resources of the APA's current server.

Another project aims to facilitate philosophic research which makes use of electronic sources. Just what direction this facilitation takes and how far it goes is currently in the process of being determined. Clearly, the Committee will contribute to building Web pages on the APA website—at the very least, a helpful list of what resources or resource-location techniques are available, and perhaps something like an annotated list including links to reviews and reports from various users. We are in the process of doing something similar for the use of electronic resources in teaching. The APA website should be THE first stop when it comes to information about electronic resources that support teaching and research within our profession.

Finally, I'd like to say that it continues to be a pleasure meeting and working with members of this Committee. It is because of their ability and energy that my expectations for our efforts are high. I'll keep you posted on progress concerning existing projects and others as they emerge.

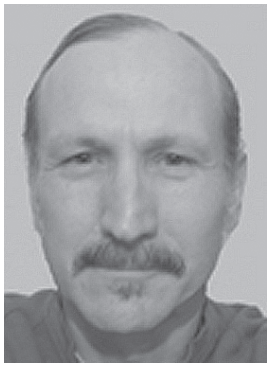
ARTICLES

Marvin J. Croy Profile

Bill Uzgalis

We are pleased to present the following exchange that Bill Uzgalis conducted with Marvin J. Croy. Marvin is one of the early players in the Computing and Philosophy conferences (CAP) and a long-time investigator into uses of software for teaching logic. Marvin is Associate Professor of Philosophy at the University of North Carolina, Charlotte and is the current Chair of the APA Committee on Philosophy and Computers. A selected bibliography of Marvin's publications is provided at the end of the interview. Some of the articles can be accessed online at: http://www.uncc.edu/colleges/arts_and_sciences/philosophy/faculty/croy.html.

Uzgalis: Marvin, you are the new Chair of the APA's Committee on Computers and Philosophy. You are a long time member of the CAP community. How did you first become involved with the computers and philosophy movement within the profession?



Croy: My interest in computers began in graduate school at Florida State University. I took a course in communications that dealt with a string processing language named SNOBOL. SNOBOL was built for the Navy for breaking codes. I immediately saw the connection of computer programs to logic, particularly via the concept of recursion, but it was some time before I became interested in teaching logic with computers. That interest was spurred of two events. The first was FSU's acquisition of the PLATO educational computer system which allowed me to develop lessons for teaching logic. A second important event involved the FSU Philosophy Department. Its Chair, David Gruender, was very interested in the possibility of teaching logic with computers, and in the summer of 1978, he, I, and the FSU computing center director (Jesse Poore) flew out to Stanford to investigate the possibilities of porting the Stanford Logic Program to FSU. I was very interested in Pat Suppes's empirical approach for guiding program development, and those events were very formative for me. I subsequently learned several programming languages and began building my own instructional programs. Out of graduate school, I spent a year at Rutgers developing PLATO logic lessons with Peter Kline who had a grant from Control Data Corporation. Then I came to UNC Charlotte and pretty early on decided that I would make or break my career doing computer-assisted instruction for logic. (I was explicitly warned against this!) I used Jim Moor and Jack Nelson's BERTIE for a while, and tried to implement Jim Garson's EMIL, but eventually I decided to start building my own programs.

Uzgalis: You have given talks about computer-assisted instruction in logic at CAP conferences a number of times. This is the original subject that developed into the present multifaceted computers and philosophy movement we have today. What do you think about the progress we have made in using computers to teach logic over the years?

Croy: It's said that for any new technology the key issues are cost, quality, and accessibility. In the days of mainframe computing, no one knew much about what the eventual costs would be, or about how growth of demand would interact with accessibility. The main goal concerned quality and effectiveness. No one dreamed that one day the issue of accessibility or of driving down costs would be so pervasive. Anyhow, much of the early promise of computers in education was in terms of increased individualization. "Individualization promotes learning, and computers promote individualization" was the early epigram of the movement. That's what drove my efforts, and despite lots of jokes about not having to grade students' proofs, it's what I believe motivated most of the early efforts in logic CAI.

Pat Suppes has referred to each student having a personal tutor in the form of a sophisticated computer program. Now, your question was about what progress we've made over the years in using computers to teach logic. Unfortunately, I am somewhat pessimistic about this, particularly if we take individualization as the central goal. To some extent, the nature of the Internet and of virtual learning environments (WebCT, BlackBoard, etc.) play a role in this. Logic is about inference, and learning logic requires developing the process (procedural skill) of making acceptable inferences. The Internet and virtual learning environments make it very easy to build courses out of information delivering HTML pages and multiple choice quizzes that do little to actively shape the acquisition of inferential processes in real time. That being said, Internet resources include Java, multimedia facilities, and file manipulation that can accomplish much more in that respect. Data collection and analysis, often on the fly, is essential for individualization and accomplishing this is a demanding, though achievable, task. So, its not the available tools themselves but the way a potentially inadequate subset of those tools can so easily be used to build an entire logic course.

Uzgalis: So, have we made progress?

Croy: Definitely yes, but I'm not sure its in the right direction at present.

Uzgalis: So, the last question I want to ask you is to tell us about your vision for the APA PAC Committee.

Croy: My vision has the Committee working to facilitate understanding of the uses of information technologies (IT) within the profession. This means gaining a better understanding of how IT *is* being used and how it *ought* to be used. So, there's both a descriptive and a normative task. I'd like to see the Committee active in collecting and analyzing data concerning current use of computers in teaching and research within the profession. Such data should inform decisions made by other APA committees, such as the Committee on Teaching Philosophy. Ultimately, I'd like to see other committees use this data in making recommendations concerning graduate education within philosophy. Graduate students should be prepared for decisions they'll face concerning the uses of technology in both teaching and research. In particular, they should be familiar with arguments in favor of and against various uses. In addition to learning something about the technologies themselves, they should be familiar with viewpoints of both optimists and pessimists. These last statements involve normative conclusions about our profession's teaching and research endeavors, but ultimately conclusions such as these have to be drawn by other committees. I'd like to see the PAC Committee contribute periodic reports on the uses of various technologies and the consequences of those uses. Once that process is initiated, I think that other committees will generate questions that can shape future data collection.

In addition, I'd like to see the Committee identifying electronic resources that support teaching and research within philosophy and, where possible, make those resources accessible via the APA's website. This will be one of the foci for PAC sessions at APA conferences. The APA website ought to be THE first stop in any search for such resources.

Marvin Croy Bibliography

Articles

Croy, M. "Ethical Concerns in Computer-Assisted Instruction." *Metaphilosophy*, 16 (1985): 338-349.

——. "The Current Status of Computer-Assisted Instruction for Logic." *Teaching Philosophy*, 9 (4) (1986): 333-350.

——. "CAI and Rule Applications for Deductive Proof Construction." *Collegiate Microcomputer*, *VI* (1988): 51-56.

——. "The Use of CAI to Enhance Human Interaction in the Learning of Deductive Proof Construction." *Computers and the Humanities*, 22 (4) (1988): 277-284.

——. "Ethical Issues Concerning Expert Systems' Applications in Education." *AI and Society*, 3 (1989): 209-219.

——. "Empirical Explorations of Deductive Proof Construction." *Computers and Philosophy Newsletter*, 4 (1989): 111-127.

——. "Integrating CAI Development and Empirical Research: Opportunities and Responsibilities." *Computerized Logic Teaching Bulletin*, IV (1991): 2-12.

——, Cook, J., and Green, M. "Human versus Computer Feedback: An Empirical and Pragmatic Study." *Journal of Research in Computers and Education*, 27 (1993): 185-204.

——, Cook, J., and Green, M. "Assessing the Impact of a Proposed Expert System via Simulation." *Journal of Educational Computing Research*, 13 (1995): 1-15.

——. "Collingridge and the Control of Educational Computer Technology." Techné: *Journal of the Society for Philosophy and Technology*, 1 (4) (1996): 1-15.

——. "An Incrementalist View of Proposed Uses of Information Technology in Higher Education." *Philosophy in the Contemporary World*, 4 (1997): 1-9. (pdf version).

——. "Distance Education, Individualization, and the Demise of the University." *Technology in Society*, 20 (1998): 317-326.

——. "Graphic Interface Design and Deductive Proof Construction." *Journal of Computers in Mathematics and Science Teaching* (1999) (pdf version).

——. "Faculty as Machine Monitors in Higher Education?" *Bulletin of Science, Technology, and Society*, 20. (2000): 106-114.

——. "Problem Solving, Working Backwards, and Graphic Proof Representation." *Teaching Philosophy*, 23 (2) (2000): 169-187. (Word Version) (pdf version).

——. "Philosophy of Mind, Cognitive Science, and Pedagogical Technique." *Metaphilosophy*, 33(1/2) (2002): 49-69.

Publications and Books

Croy, M., and Amidon, J. "A Mouse-Driven Graphic Interface for Deductive Proof Construction." Burkholder, L., ed. *Philosophy and the Computer*. New York: Westview Press, 1991, 198-203.

——. "The Ethics of Evaluating Instructional Computing." Bynum, T., ed. *Computer Ethics Issues in Academic Computing*. New Haven: Research Center on Computers and Society, 1992, 48-63.

——. "Report on the Discussions of the Working Group on Policy Issues in Campus Computing." in Bynum, T., ed. *Computer Ethics Issues in Academic Computing*. New Haven: Research Center on Computers and Society, 1992, 90-96.

——. "CAI to Enhance Human Interaction in Learning Deductive Proof Construction." *101 Success Stories of Information Technology in Higher Education: The Joe Wyatt Challenge*, J.V. Boettcher, ed. New York: McGraw-Hill, Inc.,1993, 501-506.

Computing Ethics

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Prentice Hall recently published second editions of two books related to computer ethics and information technology: *A Gift of Fire* by Sara Baase and *Case Studies in Information Technology* by Richard A. Spinello. Baase's 464-page text surveys many of the important "social, legal, and ethical issues for computers and the Internet." Appropriate for both computer science majors and non-majors, the text contains an introductory chapter, as well as chapters on privacy, cryptography and encryption, computer reliability, freedom of speech and the Internet, intellectual property, computer crime, computers and work-related issues, computers and technology, and professional ethics. These chapters incorporate numerous examples and cases. Each chapter is followed by review exercises, general exercises, assignments, a list of related books and articles, and a separate list of organizations and websites. An appendix provides "The Software Engineering Code of Ethics and Professional Practice" and "The ACM Code of Ethics and Professional Practice." An instructor's manual can be found at Baase's website (www-rohan.sdsu.edu/faculty/giftfire). This website includes a course overview, assignments, exams, exercises, student presentation topics, class discussion topics, updates on cases, Power Point slides to accompany the text, and references. Users of the first edition of *Gift of Fire* should be comfortable with this second edition because despite being updated, the scope of the text remains basically the same. Instructors who want a monograph survey text should investigate this book.

Spinello's *Case Studies in Information Technology* is a collection of 42 short information technology case studies, some fictional and some real. The opening chapter, "Frameworks for Ethical and Policy Analysis," introduces the reader to ethical theories and analysis. The cases are arranged in chapters covering the following areas: free expression in cyberspace, intellectual property (two chapters), privacy and information, computer-related crimes, liability and reliability, and fair competition and Internet access. The text also includes an excellent list of articles and books topically organized. The author has deleted many articles from the first edition and added 22 others to produce 252-pages, about 30 pages shorter than the previous edition. Spinello claims that the book can be "used profitably in advanced undergraduate and graduate programs in schools of business, engineering, and public policy." It could also be used successfully with computer science majors in information technology ethics courses. The text might even be adopted in undergraduate applied ethics courses whose instructor focuses on information technology. *Case Studies in Information Technology* is an excellent text for professors who wish to incorporate additional cases into their courses or who teach using the "case study method."

Two useful websites related to computer ethics and information technology are David Vance's "Computer Ethics-Cyberethics" and the "Computers and Software" section of the website of the Online Ethics Center for Engineering and Science. Vance is an assistant professor of information systems at Mississippi State University. His site (http://cyberethics.cbi.msstate.edu/) contains many valuable links. These include links to articles by Luciano Floridi, Richard DeGeorge, and Richard Mason, as well as links to the Tavani Bibliography of Computing Ethics and Social Responsibility (discussed in an earlier column) and Ron Barnette's website

of philosophy resources. Links to various organizations, conferences, and electronic forums, as well as to case studies and some additional papers are also present. Finally, one finds links to a number of Vance's syllabi. The site is well organized and easy to use.

The second website is maintained by the Online Ethics Center for Engineering and Science at Case Western Reserve University. This site covers areas connected to engineering and science and includes a section entitled "Computers and Software." This section provides "cases, discussions, and ethical guidelines bearing on the professional responsibilities of computer scientists, computer engineers, and software designers and engineers." This material encompasses a variety of areas "such as computer theory, computer architecture, and systems engineering." The four cases included relate to David LaMacchia, a "killer robot," Internet privacy, and the Therac-25. A scenario investigating ethical issues involved in the electronic monitoring of a secretarial staff's email is also present. Others links connect to an intellectual property role-playing scenario, a classroom module on legal and ethical issues relating to software testing, and various syllabi. Finally, the site includes a link to a PowerPoint presentation on privacy.

There are many valuable textbooks and websites related to computer ethics and information technology. Please feel free to let me know about your favorites and I will bring them to the attention of our colleagues (drbirs@ship.edu).

The following article, "Copying Computer Programs for Friends," is a discussion of Helen Nissenbaum's popular article "Should I Copy My Neighbor's Software?" that evaluates the illegal, small-scale, non-commercial copying of programs for family and friends. In future issues, we hope to publish other discussions of popular articles used by instructors. Please send essays of any length involving such discussions to drbirs@ship.edu. The author grants permission to reproduce the following article for classroom use as long as the copyright notice is included.

Copying computer programs for friends

Most of the computer programs currently on the market are created by software companies to be sold for profit and are protected by copyrights, although other legal mechanisms may be used. In spite of these legal mechanisms, billions of dollars worth of software is illegally copied each year. Unauthorized copying occurs in different forms, but this article will be concerned with only one of them: the illegal, small-scale, non-commercial copying of programs for family and friends. For example, Mary purchases a copy of a popular tax program and then makes a copy for her friend, Joe, who needs help with his taxes, but cannot afford the program at this time. Is it ethical to make unauthorized copies of copyrighted computer programs for family and friends?

The ethical evaluation of unauthorized copying

In an article entitled "Should I Copy My Neighbor's Software?" Nissenbaum evaluates the illegal, small-scale, non-commercial copying of programs for family and friends.[1] She considers the following case:

> Millie Smith is pleased with the way the home bookkeeping application, Quicken, organizes her financial records, even printing checks. Knowing how useful this would be to a good friend of hers, Max Jones, who lives precariously from one paycheck to the next, and yet knowing that the program's price tag puts it outside of Max's financial reach, Millie is tempted to help Max out by offering him a copy of hers. She has read the lease agreement on the outside package, which prohibits making copies of the diskette for any purpose other than archival backup, so she suspects that she might be breaking the law. However, Millie is not as concerned about breaking the law (nor about the second-order question of the morality of law breaking) as she is about violating moral principles.[2]

Would it be ethical for Millie to make a copy of Quicken and give it to Max? Nissenbaum first evaluates the case using a consequentialist approach. While her evaluation provides an excellent starting point, it can be filled out a little to produce an even more forceful conclusion. Two consequentialist evaluations will be discussed in this article: a rule utilitarian one and an act utilitarian one. Nissenbaum concludes that the harms of small-scale copying do not outweigh its benefits, and the separate utilitarian evaluations in this article will support her claim. She also evaluates this kind of copying based on a deontological approach and concludes that this ethical approach also fails to show that illegal copying is unethical. In contrast, this article's deontological evaluation will show that this form of illegal copying should be considered unethical.

The rule utilitarian idea is that people ought to act based upon rules which, if everyone followed, would produce more benefit than harm. For a simple example, we can agree that if everyone followed the rule "You should not kill innocent people," the benefits would outweigh the harms. The harms of the general killing of innocent people would be so great that they would outweigh the occasional benefits that might be gained from slaying innocent people, as in a case where killing some innocent people would also allow us to kill a much larger number of evil ones. Technically, a person should not accept the rule until he or she sees a complete listing of the harms and benefits and a discussion of why the one set outweighs the other, but in some cases the outcome is obvious.

If rule utilitarianism were applied to the unauthorized copying of computer programs for family and friends, a short version of the procedure might go as follows. First, the rule to be considered will be: *an individual should make illegal and unauthorized copies of computer programs for family and friends whenever those people could benefit from the programs and cannot afford to buy them.* Would this activity produce more net harm or benefit for everyone affected by it? This rule covers both Millie's action of copying Quicken and Max's action of accepting it. When thinking about the consequences that would occur if everyone followed this rule, there are both harms and benefits. One harm is that the software companies, their employees, and their suppliers will not be selling the programs and making money from them. This is not a significant harm, however, since these people, such as Max, could not afford to buy the programs for themselves. This means that their family members or friends, such as Mille, would have had to buy the programs for them. This might happen in some of the cases, but probably not in most. A second harm is that with the loss of sales, the software company will have less money to use for research and development. This will mean that consumers will be harmed because there will be a decrease in the number or quality of computer programs available to them. As with the previous harm, this one is probably not too significant since only in some of the cases would the family members or friends have bought the commuter programs for the people who could not afford them. Thus, the amount of money lost to research and development is probably relatively small. The third harm is that since the software companies are selling fewer programs, they will have to keep the price of the programs fairly high. A larger number of sales allows a company to realize a specific

profit level at a lower price than is necessary with a smaller sales volume. As with the previous two harms, this one is probably not very significant since not many sales have actually been lost. Finally, there are the harms related to breaking the law. The individuals making the copies and receiving them may feel guilty and hence unhappy about breaking the law. This is also not very significant because if the individuals felt a large amount of guilt, they would not have copied the software or received it. Another possibility is that breaking the law in this one area may produce a tendency to break the law in other areas. For example, people may be more inclined to break other laws, such as those related to speeding on highways or using illegal drugs. Breaking the law in these other areas may harm the individual or others. This transition is unlikely though, since copying software for friends and speeding on the highway or smoking marijuana have different motivations. The motivation in the copying case is presumably that the person wants to help his or her friend, while the motivation for speeding or using illegal drugs would usually be different. The more reasonable transition would be that copying software for friends would lead to copying CDs, VHS tapes, and DVDs for friends and family. There is probably no such sequence, however, since many people already violate the copyright law in other areas, such as copying movies on VHS tape or music on CD. Copying computer software is simply another example of this activity. There seems to be a fairly widespread disregard for the copyright law; therefore, it is doubtful whether this limited kind of copying involving software would produce further lawlessness. In summary, there would seem to be no very significant harms associated with this kind of unauthorized copying.

On the other side, there are some benefits that would follow from making the illegal copies. First, the individuals doing the copying will provide more programs to family and friends than if they had to buy them. This means more individuals will have the programs and will benefit from using them. This is an important benefit if we assume that the programs provide a significant increase in the happiness of the people using them. A second benefit is that the individuals who make the copies will have more chances to feel good or happy for helping their families and friends. This is not a very significant benefit since the happiness will probably be short-lived and not lead directly to further happiness. The individuals have passed up a chance to feel even better since buying the programs for their family and friends would be a greater sacrifice and presumably produce a greater feeling of happiness related to helping. A third benefit is that the individuals who receive the programs may feel happy because someone thought enough of them to copy a program for them. This is also not a very significant benefit since this happiness will also be short-lived and not lead directly to further happiness. A fourth benefit is that some of the people who receive the illegal copies may go on to purchase them or upgrades of them. This will benefit the software companies, their employees, and suppliers since they will make money on these purchases. This seems like an insignificant benefit, however, since it is probably rare for someone who already has an illegal copy of a program to purchase a legal one. It is more likely that they will buy updates, but if they got the original programs from friends or family members, then they might get the updates from them also. Finally, some of the family and friends receiving the programs may be computer programmers and may improve the programs or base new programs upon them. This will benefit the people who receive the improvements or who buy the new programs. This benefit does not seem very significant since my speculation is that it does not apply to many people. It is, however, hard to calculate how many people who receive illegal copies of programs might improve the programs or base new programs upon them. In summary, there are more kinds of happiness than unhappiness produced, and the most significant positive consequence is the benefit that results from the illegal copies providing a significant increase in the happiness of the people using them.

A rule utilitarian evaluation of illegal copying agrees with Nissenbaum's general consequentialist one. The benefits or happiness produced by the small-scale copying for family and friends outweigh the harms or unhappiness produced. The only really significant consequence on either side was the increased happiness of the people who received and used the copied programs. The next section presents an act utilitarian evaluation of the case involving Millie and Max.

An act utilitarian evaluation

The second kind of consequentialist evaluation is an act utilitarian evaluation. Act utilitarians attempt to evaluate separate actions instead of trying to find general rules and following them without exceptions. They would need a specific case and therefore would evaluate the case involving Millie and Max without considering the general practice of making unauthorized copies for friends and family. Assume that Millie makes an unauthorized copy of Quicken and gives it to Max, who uses it to organize his finances. Thus, the "action" has two component actions, Millie's giving Max the software and Max's accepting it. Both will be considered together in a brief act utilitarian evaluation. There are several benefits to this action. First, Max benefits from having his finances better organized. Second, he also benefits from feeling good about his friend's action since he is pleased that Millie gave him the program. Third, Millie benefits from feeling good about herself for helping Max. She also feels good about Max since she knows that he will be better off. Thus, on the benefit side, there is the improvement in Max's finances and there are good feelings generated by the action. The good feelings will be relatively short lived and will probably not lead directly to further benefits, but the improvement in Max's financial situation may be a long lasting benefit and may lead directly to future benefits. When Max's financial situation improves, he will have more money. Spending this additional money might lead to further happiness for him and possibly for others.

The action also produces some harms or kinds of unhappiness. One harm is the bad feeling and unhappiness that Millie may have if she feels guilty for breaking the law. This is not a very significant harm since if Millie really felt badly about this, she would not have copied the software. Second, there may also be the bad feelings that Max may have for being unable to buy the program for himself or for needing Millie's help. This does not seem significant either since it would probably be short-lived and not very intense. Third, there is the harm to the software company, its employees, and suppliers who have lost money because the software was not purchased. Even if Max cannot afford the program, Millie could have bought it for him. If she could not afford to buy it for him however, then the software company, its employees and suppliers and hence the software company may not have lost any money. This is not a major harm since she might not have bought it and even if she did purchase it, the benefit to the software company, its employees and suppliers would have been minimal. Fourth, there is the idea that breaking the copyright law in regard to copying the software for Max may lead Mille and Max to break other laws. This additional lawbreaking may harm them or others. This scenario does not seem likely however. Millie's motivation for copying the software is to help Max, an action that is easy for her to do and has few risks. It is doubtful whether she would now break

other laws as a result of this one action. For example, she will not start using illegal drugs since it is not clear how this would help Max. It also doubtful that she will turn to robbing banks to help Max since such an action is not easy or without risk. The reasonable sequence in relation to additional lawlessness is that Millie will be led to break the copyright law in other areas, such as copying VHS tapes or CDs. This sequence, however, is suspect. Millie has probably already been violating the copyright law before she copied the software for Max. This act of copying is not the impetus to a life of crime, but merely one act in a sequence of violations of the copyright law. Therefore, this final consideration does not seem significant.

While there are more possible harms or kinds of unhappiness than benefits or kinds of happiness to this act of copying software, the harms that result from Millie's copying the software and giving it to Max are less certain than the benefits. Also all the harms are relatively short lasting and not very intense. None of them will last as long or be as significant as the improvement in Max's financial situation. These considerations, particularly the significant benefit provided by the improvement in Max's financial situation, imply that the action is ethical for an act utilitarian.

A deontological ethical evaluation

Nissenbaum's deontological evaluation of the legal protection for computer programs takes a rights-based approach. There are other ways to pursue such a deontological evaluation, but this article follows her example. One way to understand rights is as legitimate claims to protection for vital interests. For example, the right to property gives an individual a legitimate claim against others that they will not interfere with his or her possession of and control over such property. When others respect or acknowledge this claim, property is protected. When someone violates the person's legitimate possession of or control over his or her property, the person violates the right to property. A paradigm case of violating the person's possession of and legitimate control over property is stealing it. When someone steals Mary's television, she loses it and all control over it. The action of stealing the television constitutes a violation of Mary's right to property.

Nissenbaum points out that the object of a deontological evaluation related to the unauthorized copying of computer programs is to show that it violates the programmer's right to property. She begins her deontological evaluation with the claim that because a programmer writes a program, he or she owns it. She justifies this claim with considerations related to Locke's labor theory of property. For the sake of this article, this point will be conceded. Therefore, this deontological evaluation will begin with the idea that the programmer owns the program. In relation to the earlier example, the programmer or programmers who wrote Quicken worked for Intuit Inc. The company owns the product of the programmer's labor so the owner of Quicken is Intuit Inc. Assuming that a company can have moral rights, the company's right to property protects the Quicken program. This right to property justifies the company's possession of a set of further economic rights in relation to the software. If these further rights are enumerated in a way similar to the rights that accompany a legal copyright, they would be the rights: (1) to make copies of the work; (2) to produce derivative works based on the work; and (3) to distribute copies. The company may, of course, give other people permission to do any of these. The company also has a further "moral right" which allows them to prevent any distortion, mutilation, or modification of their work which might damage their reputations. These rights allow the company to maintain their possession and control of the program. Nissenbaum reasons that, "we can conclude that a programmer, or owner, has rights over the program including rights to restrict access and rights of use and enjoyment."[3]

The company exercises its right to restrict access to the software by using a license. The license specifies the conditions under which the copyright holder allows the buyer to use the software. It also states what can be done to the software. License agreements are usually shrink-wrapped inside software packages. The license agreement that accompanies the Quicken software is probably similar to the one that accompanies Microsoft products. Information on the outside of Microsoft Software informs the user that the software's use is subject to an enclosed license agreement. Inside the package, the buyer finds the "End-User License Agreement for Microsoft Software." It states, "The Software Product is licensed, not sold." Some of the terms of the license include the following. The user may install and use one copy of the software product. The user may make one backup copy for archival purposes. The user may not reverse engineer, decompile, or disassemble the software product. The user may not separate the program into its component parts for use on separate computers. The software may not be leased or rented. Terms such as these make it clear that Microsoft is trying to retain a large degree of control over its computer programs. Intuit Inc. is surely doing this also.

The license agreement allows Intuit Inc. to control access to the program and protects their ability to gain benefits from the sale of the program. Their right to property justifies this restriction of access to the program. Violating the license agreement violates their control over the program and their right to property. When Millie first used her copy of Quicken, a copy of the license agreement appeared on her screen. In order to use the program, she had to click a button that corresponded to the statement that she agreed to use the program under the terms of the license agreement. When Millie duplicated the Quicken program and gave Max the copy, she violated the license agreement. She also violated the right to property of Intuit Inc. At first glance, it would seem that her action was unethical.

Nissenbaum points out that the ethical evaluation of Millie's action is complicated by the idea that, "property rights are subject to the limitations of countervailing claims of others."[4] The exercise of the right to property is often limited when the use of that right would interfere with the rights of others. For example, my automobile is my property, but my use of that vehicle is regulated. The "countervailing claims" of other members of society and the protection of their rights justifies the regulation of my use of my automobile. Nissenbaum asks, "Does Millie Smith have a reasonable counterclaim that might limit the extent to which Quicken's owners can constrain her actions?"[5] She suggests that Millie would view her copying as an act of generosity, motivated by kindness towards a friend. She concludes, "Thus, Millie's countervailing claim is the freedom to pursue the virtue of generosity within the private circle of friends and family."[6] Nissenbaum sees Millie's copying as a conflict between the obligation to respect the software company's right to property and the obligation to help others. She concludes that the deontological argument against Millie's copying Quicken is not a forceful one. She seems to think that Millie has a "right to generosity" that is as significant as the right to property of Intuit Inc.

Nissenbaum's conclusion is at odds with the usual resolution of such conflicts. There is no "right to generosity" that has the status of a basic moral right. Millie's generous action is an expression of her right to liberty, the right that protects a person's ability to make certain choices and decisions and to act and believe in certain ways. The right to liberty does

not protect all choices, decisions, actions, and beliefs, but only those that are ethical. It might be claimed that Millie's right to liberty conflicts with Intuit Inc.'s right to property. Normally in conflicts between these two rights, the right to property takes precedence. For example, it is not ethical for me to steal your television and then give it to a friend, even if I try to justify my action by claiming a right to be generous to my friend. The implications of Nissenbaum's position are disturbing. Anyone could steal anything as long as he or she did it motivated by generosity or kindness. Contrary to Nissenbaum's deontological evaluation, Millie's copying of the Quicken program should be considered unethical because it violates the right to property of Intuit Inc. and because she has no equally significant countervailing claim related to her right to liberty. The moral rights theory has a serious problem with conflicting rights, but there is one area of agreement, that the right to liberty is not as significant as the rights to life, property, or privacy. The right to property takes precedence over the right to liberty and Millie's action would be unethical.

Nissenbaum's deontological evaluation focuses on Millie's action of copying the software and ignores Max's action of accepting it. Thus, her evaluation completely neglects the position of the person receiving the copied software. Even if it were ethical for Millie to make the copy, it is incorrect to automatically conclude that it is ethical for Max to accept it. Nissenbaum argues that Millie's "right to generosity" counterbalances the company's right to property. Even if Nissenbaum was correct about the "right to generosity," Max is not acting based upon his "right to generosity" when he accepts the copied software. He is simply acting out of self-interest. In some case, Max might accept the software, not because it will be useful to him, but simply to be nice to Millie, but that would not seem to be the usual case. Thus, Max has no "countervailing claim" to balance out his violating the software company's right to property by accepting the copied software. Based on a deontological evaluation, Max's action of accepting the copied software is unethical.

Nissenbaum's article was an important step in understanding the issue of unauthorized copying, although it dealt with a very limited aspect of the issue. She focused on perhaps the strongest case for concluding that unauthorized copying could be ethical. While the consequentialist evaluations in this article support her position on copying for family and friends, it should not be assumed that other kinds of unauthorized copying are also ethical from a utilitarian point of view. Nissenbaum's conclusion in regard to a deontological evaluation seems mistaken. There is no difficult conflict of rights involved in regard to unauthorized copying of computer software. Such copying may be an expression of the copier's liberty, but the right to liberty does not outweigh the violation of the software owner's right to property. Based on a deontological evaluation, Millie's act of copying the software and Max's act of accepting it are unethical. It should be assumed that, on deontological grounds, other acts of unauthorized copying are unethical as well. Thus, the unauthorized copying of software for family and friends is an area where the consequentialist and deontological approaches to ethical evaluation produce different conclusions.

Nissenbaum's consequentialist and deontological conclusions were consistent that the arguments in favor of the no-copy position were not compelling. She says: "I conclude not that all unauthorized copying is morally acceptable, but that some copying is acceptable."[7] Thus, she did not need to discuss whether the consequentialist or right-based approach is better. This paper's conclusions produced a different situation. Based on this paper's conclusions, the consequentialist or utilitarian positions endorse this kind of copying, while the right-based approach concludes it is unethical. What should a person who wants to be ethical do, copy or not copy? It is beyond the scope of this paper to resolve the consequentialist/deontological debate that can be traced back at least to the different positions of David Hume and Immanuel Kant, or Immanuel Kant and John Stuart Mill. I will only call the reader's attention to Nissenbaum's comment that there is a "prevailing presumption…that were we to follow the dictates of moral conscience, we would cease completely to make copies of software."[8] It is possible that this assumption reflects our collective moral intuition and if so, the deontological position is more consistent with our collective moral intuition than the consequentialist position. In my opinion, this is a reason, although not a very powerful one, to endorse the rights-based approach. Alternatively, perhaps most of us are supporters of the rights-based view, which has been so influential in Western philosophy and law. This does not imply that the reasons for endorsing it are better than the reasons for supporting utilitarianism. If the latter explanation is correct, what is a well-meaning person to do? This paper can only produce a conditional answer. If the person is an ethical consequentialist, he or she should make copies for friends in need. If the person endorses the rights-based view, he or she should not copy.

Endnotes

1. Deborah G. Johnson and Helen Nissenbaum, *Computers, Ethics, and Social Values* (Upper Saddle River, New Jersey: Prentice Hall Inc., 1995).
2. Ibid., 201.
3. Ibid., 208.
4. Ibid., 209.
5. Ibid.
6. Ibid., 211.
7. Ibid.
8. Ibid.

Teaching in Cyberspace

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Philosophy Songs and New Models of Student Learning? As we all know so well, students learn philosophy in different ways and often when we least expect it. But good for them, we rejoice—whatever it takes! The joys of learning, however gained, is a significant goal in the life of a philosophy teacher. One reads much nowadays about alternative teaching styles, learning modes and the like, and teaching strategies that work well for some while not for others. It has been a theme in this column of the *Newsletter* to explore how Web-based or Web-enhanced technologies can assist in the learning and teaching of philosophy, in a variety of ways, as professors utilize the Internet in creative ways. I say "creative" with a direct purpose: One should never adopt a teaching motif simpliciter, but should always explore how best to achieve the learning goals envisioned, and the effective approaches to their realization. The web is a marvelous tool, but its use needs to be tailored appropriately for the task at hand, like any good tool. With this said, let me introduce our authors and their articles for this issue.

Susan Stuart and Alan White have each used the web effectively in their philosophy instruction, and each have employed creativity for successful instruction, albeit in quite diverse ways. Susan Stuart teaches philosophy at the University of Glasgow, in Scotland, and Alan White teaches at the University of Wisconsin , Manitowoc. Susan's article, "Why On Earth Would You Ask Philosophy Students to Create Web Pages?" explores and describes her successful efforts with an alternative model for assessing students' work by having them learn from the thoughtful development of their own websites in her classes. She addresses the issues well, and shares a wealth of helpful ideas and experiences, especially for those teachers who look to student presentations and collaborative work, as critical for course goals and assessment of student performance, in the context of their learning. As she notes, even the student responses "reveal the excellent use to which this method of assessment can be put in assisting our students to develop good learning and thinking strategies." Very instructive, Susan!

Alan White is a creative spirit indeed, who has written many songs that incorporate keen philosophical nuances and themes, which can be very useful in the classroom, as he describes. [Remember Dan Dennett's *Philosophical Lexicon*, which is still around? As his 1960s grad student at UC Irvine, I recall well how we all reveled with this unique "inside" venture, well before the mixed media of the web!)] The mixed media of Alan's fun website on Philosophy Songs inspired his own dedication to philosophy learning through a dose of philosophical humor through music! And with the Internet, Alan's works have grown through new audiences, as he and others have used the website in a wider educational context. Our readers might just like to sing along with his clever words and music, which he provides! Very imaginative, Alan. One can just imagine your classes after their website visits!

With this said as an introduction, please enjoy these pieces for our Teaching-in-Cyberspace column.

Why on Earth Would You Ask Philosophy Students to Create Web Pages?

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Two years ago I was asked to design, develop and deliver two third level, non-Honors courses that would be philosophical in nature but interdisciplinary in content. These courses would be quite new within the Faculty of Arts and I was delighted to have such an opportunity. Thus, and with a great deal in between, *Consciousness and Cognition* and *Space, Cyberspace and the Self*[1] ran for the first time in 2002/03. The course content seemed unproblematic but in devising the assessment section of the courses I moved away from a form of assessment that had its main emphasis on essays and examinations to a model where students were assessed on presentational skills and their ability to design and develop a Web page that would present some aspect of the course in the form of an online lecture. My conception of the Web page requirement was that the students would learn a useful skill and their pages could be used by other students to facilitate their learning. However, I shall argue that the students' insights into their experience demonstrate that assessment procedures are tools for learning in their own right, and provide good reasons for us to encourage the use of this mode of learning.

Introduction

The degree structure in the Faculty of Arts in an ancient Scottish University[2] offers a four year MA (Honors) and a three year MA (general) degree. Students entering this system must take three courses (six modules) in each of their first and second years, and entry to Honors is conditional on their performance. Not all students satisfy the entry requirements to progress to Honors, some will have made poor course choices, and some, who do not need an Honors degree for the next step in their career plan, choose instead to complete the MA (General) degree. Whatever their reasons these are students who have completed two years of tertiary level education and have proved themselves to be academically able in a range of subjects. What better way could there be, then, than for them to complete their degree by using this breadth, and engaging critically with exciting and current interdisciplinary areas that emphasize different influences as a means to understanding a subject more fully.

Deciding what topics to cover in these new courses was straightforward; I chose areas that were pertinent to my own fields of interest so that my enthusiasm would be more readily conveyed to the students. The decision about what form the assessment would take was, however, quite a different matter. I had been asked to bear a couple of things in mind; firstly, that these students might not have fared well with the conventional forms of teaching and assessment, for example, large impersonal lectures and seminar groups of twelve or thereabouts where confidence can be easily dented, with everything hanging on their essay and final exam. And, secondly, that when designing the assessment could I keep in mind the notions of transferable skills and employability.

So, after much discussion with our Teaching and Leaning Service and having given a great deal of thought to notions like being able to present an argument, developing oral and written communication skills, working to deadlines, developing team skills, and so on, I settled on a mixture of formative and summative assessment, with individual work and group work,

holding on to the essay and examination but with a lighter weighting than usual, and introducing an assessed seminar presentation and the development of a Web page on some aspect of the course.[3] Thus the students' final grades would be calculated from individual work: one essay (25%), an examination (30%), a seminar presentation (20%) and their group work: Web page (25%).

The students, with whom I discussed the structure and content of the courses prior to their presentation, expressed surprise at the range of assessment and envy at how lucky the students doing the course would be in not having their final result depend ultimately on their examination. One or two of them added that they liked the idea of learning to write Web pages, though they could not really see their place in a philosophy course. Thus it is with this aspect of the assessment and its success that I shall be concerned in the rest of this paper.

Setting things up

In my first formal meeting with the students I explained the workings of the assessment procedure and, because it was the part with which they would be least familiar, I talked in some detail about the nature of the group project and what would be expected of them. They were told that the group work would be centered around devising, in groups of two or three, a Web page that presents some aspect of the course in the form of an online lecture. I explained that all students would be expected to attend two formal workshops in which guidance on how to write and develop a Web page—showing them how to use basic HTML and Dreamweaver™ would be provided. The group of students, ten in the first course and twelve in the second, was then divided into numbered groups with topics, that ranged, in the *Consciousness and Cognition* course, from defining what is meant by "consciousness" to explaining the role of cognitive ethology in understanding the mind; and in the *Space, Cyberspace and the Self* course, ranging from an explication of Leibniz's conception of space, to an examination of body dysmorphia. Each group was given a deadline by which their completed pages had to be submitted to me and I would post them to a class Web page. The explicit goal here was that the pages be not just about assessment, but also that they be available as the course progressed so that each group would benefit from the work the other groups had carried out. They might use the previously prepared pages in the preparation of their seminar papers, or as reference tools to help guide them through the course material and the intended learning outcomes, or simply for revision when it came to the examination.

To all of this I added that I was aware that they would have different aptitudes and varying levels of experience with the Web, and even with the technology, and that I did not mind how the tasks were distributed within the group, but I did want to see a short journal account of the development of the page and the role that each individual played in its development. Over the weeks that followed—but also contained in the class handbook—I made several suggestions about how they might approach the task, but I particularly emphasized the need to think first about the content that they wanted to include and only when they had settled on that should they think about how they would like their page to look. I mentioned the need for accessibility in both a browsing and an intellectual sense, adding that just as when they would be preparing and writing an essay they should avoid unnecessary complexity and keep to the point. Lastly, I reminded them about the blight that is plagiarism and, when they realized that their work would be on the Web for all to see, they listened more intently.

Finally, I provided them with some reassurance by pointing out that there was a computer suite near my office that was available for them to use and that help would never be far away.

What transpired

Despite some initial anxieties about the immensity of the pending task they were all eager to learn what was involved and every student completed their Web page assignment in good time, though not always absolutely on the deadline! It is true that this was to be an exercise in team work, but I have to admit that some students, for what always seemed like perfectly good reasons,[4] could not be available at times that suited others and so, as long as they were comfortable about the prospect of working alone I allowed them to do so. The fears I had that individuals working alone would flounder was unfounded, indeed some of the individually produced pages are excellent pieces of work. But this is something I will have to consider for forthcoming years, for if it is the element of group work that is important here, I will have to toughen up on this; however, if it is the creation of a good piece of work, carefully thought through and developed for display in a public environment, then I might simply continue to waive the "rule" in good circumstances.

The pages created in the *Consciousness and Cognition* course were on defining consciousness, behaviorism, innate ideas, animal consciousness, and machine consciousness; and in the *Space, Cyberspace and the Self* course they were on the notions of space and substance in Descartes, Newton, Leibniz, Berkeley, and Kant, on Strawson's particulars, pantheism and the self, a rape in cyberspace, and body dysmorphia. They vary quite considerably in their structure and the confidence with which their content is expressed but all, without any doubt, are imaginative, thoughtfully conceived and valuable as an opportunity for these students to think in a novel way about complex issues.

Two of the most extraordinary pages were produced by a student, Fiona Innes[5] working individually. Fiona seemed completely undaunted by the challenge and produced pages that were impressive in a number of ways. In the case of her page on consciousness she combined information with informality and the result is as much something that will keep you reading as will provide you with a wry look at the world from a student's perspective. In the case of her page on body dysmorphia she had become enthralled by the course reading, which included Sacks (1985), Turkle (1995) and Dery (1996), and she approached the task in a very different way. She gave a lot more thought to how graphics can operate in this environment and the opening page acts as a rather disturbing mirror, giving the viewer the unhappy perception of a kind of dysmorphia in their own self-image. This page is quickly followed by a page with the John Tenniel picture of Alice in Wonderland after she has eaten the cake and is "opening out like the largest telescope that ever was."[6] The image itself is unsettling, but when it is accompanied by the claim that every one of us has, from time to time, worried about our bodies and how we look, it seems altogether more sinister. Admittedly, there is a flaw in this page, it has a very difficult background from which to read the text, but perhaps the squinting that you need to do to make it legible adds—though possibly not intentionally—to the feeling of bodily discomfort. It is a very striking collection of pages that keeps the viewer's or reader's attention by combining images that jar the senses with very readable text.

Student feedback

The student feedback about having to create Web pages as part of their learning experience was not unanimously positive. There were two dissenting voices and both of them said that learning to create Web pages in a philosophy course was unnecessary, adding that philosophy was text-based and rarely used pictures. Interestingly enough, both of these students had done very well throughout their academic careers; one had dropped out of Honors philosophy to complete his degree more quickly so that he could become a Royal Air Force Pilot and the other was a Italian exchange student majoring in philosophy. Their academic success is significant in this context because it demonstrates that they had already acquired successful analytical and conceptual methods for dealing with arguments and forming their reasoning cogently in response to them. A number of the other students, who had been dogged by poor grades but performed well in class discussions, claimed that creating a Web page of their own had made them think much more carefully about what they wanted to say and how they wanted to say it. They had thought about the issue at stake, they had read about it and talked about it in seminars, they had even talked about it amongst themselves. They had thought about how the main claims or theories should be represented and how their response to them could be structured to best effect, and they had thought about what graphics they could use and whether they augmented their claim or got in its way. Finally, as if to drive home their point, they said that if they had this method of thinking earlier, that is, thinking about how their thoughts about something would look—how they would visualize them—they would have known how to plan their essays. I am convinced that these responses reveal the excellent use to which this method of assessment can be put in assisting our students to develop good learning and thinking strategies.

Philosophy is primarily about the presentation of good reasons in the form of arguments for the claims we have grown to hold dear, and when we think and express these arguments we do so in some formal language or other. When we teach people to present their reasoning we do so in well-tried and tested ways, for example, in essays and examinations—and, of course, logical notation—but these methods do not work for everyone and even some very intelligent and discerning students slip through. An alternative, when teaching people how to understand complex reasoning, how to relate the claims made by one individual or school to another, and how to conceive of and structure their responses, is to encourage people to think about the clear and concise content they would present on a Web page and how they would want that page to look if they are going to be firstly, engaging and secondly, persuasive. There is a palpable dissonance between these students' abilities and what they have achieved to date, and much of this would seem to be the result of our reluctance to adapt our pedagogical methods and think more carefully about how assessment is also a tool for learning. We must move away from the teaching and learning model in which "One size fits all"; it does not (As anyone who has bought one of those t-shirts will know!). With a little thought and an inclination to be flexible in our modes of assessment we can work to reduce this dissonance for our non-traditionally able students; and, at the same time, continue to provide a valuable learning environment for those students who are not struggling.

Conclusion

Before I embarked on these courses I had not thought about methods of assessment as tools for assisting in a student's learning. It is one of those truism that gets bandied around, but until you have actually seen it in action it sounds rather empty. I had worried rather vaguely about the superficial learning that goes on the night before an examination but that was about it. A number of the students in these classes had been thought to be "not all that bright" but, given a smaller class size, a more interactive learning environment, and asked to do something a little unusual that combines different sorts of media in which ideas can be represented in imaginative ways, these students have done marvelously well.

In my advice to them I had suggested that they prepare their Web page in the way that they would an essay. I had made an assumption about them having a clear method they could employ. Instead it turns out that in helping them to learn how to devise a Web page to express a theory along with their response, I had indirectly provided them with a method for writing an essay. Next year I shall put the horse before the cart!

Endnotes

1. Both course handbooks and the student Web pages can be accessed from my home page: http://www.gla.ac.uk/departments/philosophy/Personnel/susan/index.html.
2. The ancient Scottish University in question is the University of Glasgow: http://www.gla.ac.uk/.
3. I think the length and complexity of that sentence should give some indication of all the things that I felt I was having to juggle to get things right!
4. It is also true that some of them just do not enjoy working in groups; and whilst we think it is important to encourage them to do so, there are just some who are not going to do it even if their class grade is at stake.
5. There is little point in being secretive about the student's name since if I include the URLs for her pages, as I am about to do, you will read her name when you get there. Fiona's pages are available at: http://www.gla.ac.uk/departments/philosophy/Personnel/susan/Fiona/index.htm http://www.gla.ac.uk/departments/philosophy/Personnel/susan/Fiona2/SCSS%20first%20page.htm.
6. From *Alice's Adventures in Wonderland*, Chapter II, "The Pool of Tears."

Bibliography

Carroll, L. *Alice's Adventures in Wonderland*. Everyman, 1992.

Dery, M. *Escape Velocity: Cyberculture at the End of the Century*. Hodder and Stoughton, London, 1996.

Sacks, O. *The Man Who Mistook His Wife For A Hat*. Picador, 1985.

Turkle, S. *Life on the Screen: Identity in the Age of the Internet*. Simon & Schuster, 1995.

Philosophy Songs: In the Best Tradition from Thales to Dennett (Except for the Singing)

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From Thales' ancient pratfall into a well because he was so distracted by contemplation of the heavens to Wittgenstein's *Three Stooges* fireplace poker *ad baculum* against Popper, philosophy always has seemed to marry sublimity of thought with raucous absurdity. There seems to be more here than a marriage of convenience, too. Often people seem to create particularly well when some strong emotion is in tow. Would Sylvia Plath be the same poet without her famous pathos?[1] Could Van Fraassen really have sold erotic explanation as well as he did without the cute backhand slap of the chevalier ghost-story?[2] (I refrain from drawing further conclusions about the natural alliance of poetry with angst and philosophy with humor; the respective counterexamples are Kenneth Koch and almost any nineteenth-century Continental.) In any case there is a rich tradition of tongue-in-cheek philosophizing in the Western tradition, and today Daniel Dennett and I will continue to do our best to see whose tongue prevails—though I already plead *nolo contendere* on the philosophizing part.

But seriously, folks. Professors at least know that students are awake when they laugh, and that's one very practical reason to lace ponderous arguments with humor. It really does make for memorable learning. Besides, as I solemnly swear before every one of my Introduction to Philosophy classes, one of the most fundamental reasons to be highly educated is that you "get" better jokes.

My own humorous tendencies have always skewed towards the musical. I can still sing *Mad* magazine parodies that I read in the 1960s, which says something about the mnemonics of lyricism without having to actually dig up research on stuff like the educational psychology of Homeric legends. So when I went to grad school in the 1970s and wished to set down philosophical ideas in a memorable way, of course I turned to song.[3] Many of those original tunes were admittedly more autobiographical than anything else, so "Solipsism's Painless" and "This PhD" (sung to "Suicide is Painless" and "This Diamond Ring"), for instance, tended more to vent about grad student life than to convey philosophy. Still, some real philosophy always sneaked in, as in "Poppycock" ("Rockytop, Tennessee"):

> So look with me to the march of philosophy
> to see what's false and true—
> there're proofs for God and modal opacity,
> and then, of course, there's grue—
> the moral here is, once you know it all,
> and got it locked and stocked—
> is when a paper appears in the *Phil Review*
> that says "It's poppycock!"
>
> Poppycock is all I see—
> Examined Logically—
> It's all poppycock—
> Poppycock logically, poppycock logically.

In the Fall of 1981, I was hired as an Assistant Professor at the University of Wisconsin-Manitowoc. For the next 15 years, I was consumed with teaching and writing and got away from singing philosophy when, in the mid-1990s, the internet plopped itself down on every UW faculty desktop. Always something of a computer geek myself, having bought an Atari for my office in 1985, I eagerly plunged into this new digital medium. I learned HTML and decided that since my CV, as was once said of Rogers Albritton's, was as thick as Socrates', my niche was to sing for Sophia. I published my old songs first and posted crude *a cappella* clips of them in huge WAVS which only intrepid musical masochists could endure. Later, I mercifully added public-domain MIDIs of the songs I parodied so that netters could punish themselves, karaoke fashion, rather than have me do it.

Doing all this re-energized my muse (or curse), and I began to write more songs, now much less about me and more about philosophy. The first, "We Didn't Start Inquiry" ("We Didn't Start the Fire") surveyed the history of philosophy:

> Russell's denotation scheme, Godel crushes Frege's dream,
>
> Popper, Whitehead, Dewey, James, Santayana, Royce—
>
> Novel time of Einstein, tables turned by Wittgenstein,
>
> undetermined quantum cats that die by choice . . .
>
> Carnap, Tarski, Reichenbach, ordinary language acts,
>
> Ayer, Strawson, on "Two Dogmas"—gems true grue—
>
> Anscombe, Kripke, Frankena, Dummett, Putnam, Plantinga,
>
> Barcan Marcus, Rorty, Lewis—even me and you!
>
> (chorus)
>
> We didn't start inquiry,
>
> But with ideas churning we can kindle learning—
>
> We didn't start inquiry,
>
> But with questions going we can foster knowing!

Many others followed: "Hume on the Brain" ("Home on the Range"), "Antinomy"[4] (Chimchiminey"), "Make a Talk on the Ryle Side" ("Take a Walk on the Wild Side"), "Ergo Sum" ("In My Room"), etc., etc. In recent years I learned how to combine tracks in an audio-editing program and started producing stereo MP3s complete with music, so now once again I am inflicting my at-times-marginal voice on willing victims. (You can even burn them on CD should you wish such torment to follow you into your car.)

Something began to happen with the appearance of these new songs—emails of appreciation for them. From all over the world people thanked me for this or that song (not the singing mind you), and a few thanked me for an if-it-was-a-snake-it would have-bitten-me reason I had never have anticipated.

They used them in the classroom. To teach philosophy.

"The Gad-Fly Athenaios" ("The Girl from Ipanema") to teach Socrates. "We Didn't Start Inquiry" for history surveys. "The Hook's a Bust" ("The Look of Love") for conditionals in formal logic. "Prehension" ("Suspicion") for Whitehead's process philosophy. "Supererogationisticextraobligation" (can you guess?) for discussion of morally required heroism.

So—a bit belatedly I sadly admit—I began to use them in the classroom too. And it does work remarkably well to reinforce ideas and as a mnemonic aid for rather complex ideas. Too bad that for so many years I could not see past the

self-indulgence of it all to recall the lesson of Thales, the image of Wittgenstein trying to pop Popper, Van Fraassen's gotcha story, and the host of other liaisons of philosophical wit and wisdom that cried out the pedagogical utility of my little ditties. But I am trying to make up for lost time, both in using my songs myself and producing more besides.

The URL for the Philosophy Songs Page is: http://www.manitowoc.uwc.edu/staff/awhite/phisong.htm, but it is easier to type "philosophy songs" into Google; my page is presently the first listed.

Endnotes

1. I boldly take this pedagogical opportunity to irrelevantly encapsulate *The Bell Jar* author's career poetically:

   Plath's Path

   Published.

   Perished.

   So much for the famous disjunctive correlation of print with tenure.
2. Bas Van Fraassen, *The Scientific Image* (Oxford: Oxford University Press, 1980). I had to have a parallel footnote anyway.
3. An anecdote. In preparing for my doctoral prelims on metaethics I used the lyrics of Dave Mason's "We Just Disagree" to present classic emotivism (try it in introductory ethics). When I secured my present position in Wisconsin it turned out that the song's lyricist, Jim Krueger, grew up near here and was a good friend of some of my present colleagues, one of whom was present when Krueger actually began to compose the song. Little did I know I was preparing for a degree of separation in *several* senses when I was in Knoxville!
4. "Antinomy" will appear in Roy A. Sorenson, *A Short History of Paradoxes* (Oxford: Oxford University Press, forthcoming). No kidding.

An Assessment and Analysis of Instruction in Cyberethics

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The *Computers and Philosophy* international collaborative of practitioners and scholars provides a forum for presentation and discussion of ideas that inspire and incite. A byproduct of my participation in these conferences during the past several years has been the enhancement of my research in computer ethics, resulting in new course development in the area of cyberethics. During the 2002-2003 academic year two new courses premiered on the regional campuses of Indiana University, the fabric and structure of which were instigated by ideologies and concepts I had met up with through CAP. This article is a discussion and description of the evolution of those courses, as well as pedagogical reactions to the implementation of the course plans. Selected texts, materials and lab activities will be described and discussed, but perhaps most importantly, this article will explore the intricate ideological infrastructure of computer ethics revealed through course creation, and the special challenges which emerge for cyberethicists and their students as they progress with their work in this field.

The evolution of ideas

Course creation generally begins with curiosity and interest—both in terms of the subject to be taught and the best way to teach it. For me, inquiry into the philosophy of technology and metacomputing began in the early eighties with the reading and study of Robert Pirsig's provocative book *Zen and the Art of Motorcycle Maintenance*. Pirsig's explication of the relationship between human rationality, technology and values created an interesting environment in which to raise questions about newly emerging computer technologies and how they might affect the quality of life. These initial inquiries in the eighties came to manifest themselves in a myriad of my other projects over the next twenty years. Among these was an exploration of design thinking among my thesis in the Ball State University College of Architecture and Planning.

In 1989, I joined forces with practicing architect and educator Carole Teirnan in authoring the article, "The Future of Creative Work and the Artistry of Invention." Here we raised questions about how emerging technologies, computerization among them, impacted the ideological landscape in which our students would think, work, and live. Our ultimate goal was to decipher and deploy pedagogical approaches in the studio which would equip our students with the necessarily flexible skills to design effectively and efficiently in the wake of rapid change and complexity. Over the next few years, I had the opportunity to explore these ideas further through working with a number of students whose theses engaged like questions. Among these was a young German student named Hauke Fishbeck whose thesis question focused upon the interplay between "man, machine, and meaning," and again, the role of computerization loomed large in the uniquely precarious working conditions for the modern practitioner and his design.

In 1996, the scope of my study and interests crystallized with my involvement in the international conference "Patterns of Progress and the Challenge of Change." This project brought together Asian and American scholars in dialogue about the relationship between values, culture, and globalization, and the ways in which these "new evolutionary forces" were

reshaping our world. One module developed was that which explored information technologies, and specifically, computer mediated communication. Through this collaborative, and subsequent conversations with Inae Kang and Inhee Lee, both of Kung Hee University in Seoul, South Korea, I found myself moving forward in my own investigation to the study of the precisive effects of computerization on human decision making. It was at this point that I began in earnest consistent research into the area of cyberethics.

The anatomy of cyberethics

As a researcher in the early 1990s, I came to understand cyberethics as a new and emerging sub-science that could be understood in part through the application of existing theory. I approached the area with the idea that existing ethical concepts were applicable to cyberethical analysis, and as a result, preliminary delineation of the issues came from the traditional, bifurcated perspective of normative and non-normative thinking. What little scholarly literature existed at the time, and what could be had of the subject through the periodical literature, seemed to indicate that cyberethics was a field at once concerned with exploring meta-ethical questions about the substance and structure of cyberspace, while at the same time absorbed in the Internet-driven inquiries about application-oriented challenges and concerns. This realization impacted how I crafted early presentations on the subject, and how those presentations became transformed into university courses later on.

The method of delivery for preliminary findings from my cyberethical research was a series of capstone presentations in my ethics classes during their final course unit on current issues. The pedagogy of this early work attempted to capture the connections between the macrocosmic and microcosmic features of cyberethics, providing for an exploration of both its substance and its structure. These early presentations began with a review of the traditional ethical theories of divine command, utilitarianism, egoism, Kantianism, the Rawlsian contract, and proceeded with a discussion of the reliance of these theories upon static variables of values, agency, and interests. Next the metaethical argument was posited that these variables became mutated in cyberspace, creating a need for a revisioning of traditional theory, and the development of new methods by which to morally reason and decision make The time and space of single-dimensional reality in which traditional theory had been crafted was replaced by the multidimensional possibilities of cyberspace, calling for the emergence of new values for consideration in moral theory and ethical practice. The dichotomy in cyberethics between non-normative and normative concerns revealed itself early on, solidifying the challenge of choosing effective materials and presentational strategies for use in the cyberethics classroom and beyond.

Creating a cyberethics course

During the academic year 2001-2002, I was given the opportunity by Indiana University to convert my cyberethics research presentations into course plans for deployment in readings/special study classes in the departments of philosophy on two of its regional campuses. The courses were designed to acquaint students with the discipline of Philosophy first of all, as the courses would have no listed prerequisites. Yet more specifically, the courses were to familiarize students with the academic study of Ethics and the sub-science of cyberethics in all its varieties and forms. The initial course plan consisted of four units/3.5 weeks each:

(1) History of Cyberethics - brief review of ethical concepts/history of computer, cyberissues, cyberethics (Wiener/Floridi).

(2) Computer Ethics, Maner and Johnson - case study and field study work.

(3) The Internet, a Computer Mediated Communication (CMC) case study, Graham - current issues, field study work.

(4) Undergraduate research project.

The course plan reflected what the research had revealed as the bifurcated nature of the field. Readings and textbook selections attempted the same. Wiener's book was chosen because of its communicated vision of science and technology. His exposition of messaging, organization, and automata was intriguing and provocative, yet more importantly, it acknowledged the non-normative, meta-ethical problems embedded in cyberethical investigation. His theories' contribution to the pedagogy of the course came in the form of the conceptual map they provided with which students could navigate the area "in-between" the present and the future. His was the macrocosmic vision of the philosophical challenges presented by the substance and structure of cyberspace. Although he dabbled in the normative, Wiener's focus was by and large deontological and metaethical in nature. Floridi's article was chosen for much the same reason. His discussion of the infosphere and the "transvaluation of values" in cyberspace forward Wiener's hypothesis in real and rewarding ways for the researcher and for the student.

In shifting focus from the non-normative to the normative features of cyberethical study, the Johnson text was immediately attractive because of its transitional chapter on the application of traditional ethical theories to new problems. It was also highly desirable as a course text because of its case studies. From pragmatic and pedagogical points of view, the case studies are interesting, attractive, and highly accessible to students due to their readability and experiential nature. Ideologically, the Johnson text was a good choice because its creation sprang in part from the author's reactions to and analyses of precedent inquiries by discipline master Walter Maner, one of the original cyberethicists.

Gordon Graham's commentary on the Internet was a natural choice for the cyberethics course for several reasons. First of all, its preoccupation with being a philosophical inquiry was attractive since so many other forms of writing in the field take on the trappings of other disciplines or the elements of other biases or agenda. The value of using the formal philosophical method to explore a philosophical problem in a philosophy course was self evident. Secondly, Graham's exploration is microcosmic in nature by focusing exclusively on the Internet, yet he posits his notions against a macrocosmic landscape that again compels intellectual navigation of the in-between. Anecdotes and other good narrative strategies make the complexities of Graham's theories a manageable read for students, all the while enabling them to nurture their understanding of cyberethics as a study both non-normative and normative in nature.

Listed below are the key concepts that were emphasized for each article or text:

Norbert Wiener

Patterns of messaging and their relationship to cybernetics; Parallelism between human and non-human cultures with regard to messaging and communication; The relationship between minds, brains, and computers; The concept of entropy and its consequences; The nature of information—past, present, and future.

**Luciano Floridi*

Nature of the infosphere; Comparative analysis of Truth, knowledge and information; Philosophical methodology as it applies to cyberspace.

**Walter Maner*

The special nature of computers (levels of justification for computer ethics).

Deborah Johnson

Traditional ethical theories and their relationship to cyberethics; Professional ethics and policy vacuums; Legal issues and elements of liability; Internet ethics—local and global issues.*

Gordon Graham

Evolution of the Internet; The "McDonaldsization" of America; Challenges of globalization and the digital divide; User Rights and Responsibilities.

Course readings were augmented by field study and writing assignments to further students' understanding of each thinker and his or her work. They were as follows:

Field Literature-Based Assignment

Upon completion of the semesters' readings consisting of Wiener's *Human Use of Human Beings*, Johnson's *Computer Ethics*, and Graham's *The Internet: A Philosophical Inquiry*, conduct a comparative analysis of how each thinker deals with CMC via the Internet. An enhanced explanation would posit students' hypothesizing about Weiner's reaction to today's WWW in light of his assessment of messaging, automata and entropy.

Field Study Assignment (Business Ethics)

After critical analysis of the classic business ethical perspectives of Friedman and Stone, create a questionnaire for area business professionals consisting of a ultra-brief synopsis of both points of view and a request for respondents' reaction to them. Ask for feedback with regard to the accuracy of theorists' perspective on the day-to-day realities of the working world and the particular challenge of modern life. An enhanced explanation would encourage variation in respondent pool and analysis of data with regard to particular variables of interest (sex, race, position, education, etc.)

Field Study (Computer Ethics)

Upon completion of the semesters' readings consisting of Wiener's *Human Use of Human Beings*, Johnson's *Computer Ethics*, and Graham's *The Internet: A Philosophical Inquiry*, conduct journaling of students' PC use, paying special attention to interactivity with messaging, CMC, and other ethically volatile practices. Then conduct a comparative analysis between students' PC practices and national and international attributes and trends. Anchor findings by sampling the local community for longevity, type and frequency of personal computer use.

Along with text-based and field study work, computer lab activities were also developed.

Session One

User Skills Assessment

Arrange with university computer lab to have its director or assistant conduct an orientation session for students; create "minimum skills checklist" to be completed by second session.

Session Two

User Rights/Responsibilities

Invite Director of Information Technology in to discuss user guidelines and their rationale; Find info pertinent to IU statement(s) online; find other universities' sites/statements; Create exercises for compare and contrast work with statements.

Session Three

Search Engines

Invite an "engine expert" in to describe and discuss the anatomy and infrastructure of search engine; Explore commercial and "political" implications of listing strategies and techniques; Create in lab exercises to utilize a variety of engines, for a variety of uses, and to check theoretical hypotheses.

Session Four

The World Wide Web

Invite a well established Web designer in to describe and discuss the evolution of the Web page phenomenon and the connection between local and global entities on the Internet. Discuss "hits" "cookies" "caches". . ."McDonald's & 'Garage Sale'" Concepts; create tracking exercises/activities for in-lab use.

Session Five

In's and Out's of CMC

Instructor-led explorative activities and discussion of instant messaging, chat rooms, bulletin boards, listservs, banners, pop-ups, and spam.

The implementation of course plan: student demographics

Indiana University students who enrolled in cyberethics represented a surprising variety of profiles. The student I envisioned when I created the course was an upper classman with at least an introductory philosophy course under his/her belt and some skill in critical reading, writing and research. The students in these courses in reality brought quite a different set of characteristics "to the table." During both semesters, on different campuses, students ranged in academic age from first semester freshmen to graduating seniors, in philosophical experience from none to having had several courses in the discipline. A similar polemic would accurately characterize the package of academic skills students brought with them, the depth and range of both owning an exponential relationship to their years of collegiate experience. The pedagogical impact of this became played out in revised lecture plans, reduced reading loads, and compromised expectations for critical analysis and comprehension of course material. Likewise, students came to the course from a variety of majors. Initially, I had envisioned the enrolled student to come from areas like computer science, philosophy, business, history, and perhaps psychology. In reality, the majors or interest areas of the students in the course were as varied as the experience levels of the students themselves. Because of this, some students came at problem solving, analysis, and creative thinking from perspectives thick with influence from their respective disciplines. In one way, this diversity is delightful and provides for invigorating conversation and exchange. But this patchwork of perspectives can become a pedagogical nightmare with regard to an area as complex as cyberethics. Finding common ground for explanation or assimilation of material becomes very challenging, and sometimes impossible. The complexity of the discipline becomes compounded in presentation as each infrastructural discipline or issue attached to the cyberethical milieu is intellectually

ingested and processed out from totally different perspectives, using totally different landmarks and polestars from which to reason.

*NOTE: Post-course results of mastery of material from both semesters verify that even students with minimal background in the discipline of philosophy came away from the course with a solid knowledge base about issues that are cyberethical, and they report that their experience was valuable . . . and so it was with me as their professor. I certainly enjoyed them, and had learning experiences that I would not have had without those particular individual students. My point here is that pre-course visioning about students had impacted preliminary course development. Realities of student demographics became an impact variable which created a sufficient condition for revisiting that preliminary course plan. Certainly restrictions and/or prerequisites could be built into the course such that more control over the demographic could be exacted; however, it has been my experience that too many restrictions can prove fatal to accomplishing enrollment goals, especially in a new course. Likewise, I have also discovered in my tenure at the university that no matter how many safeguards you attempt to build into the enrollment structure, there is always that academic advisor—or crafty student—out there who "beats the system," thus corrupting your student pool in the end anyway.

Evaluation of course implementation

Once the semester got underway (in both semesters), it became clear that the students had come into the class with a wide variety of backgrounds and abilities not only with regard to philosophy and ethics, but also in terms of performing at an acceptable quality level as university students. Several course modifications occurred immediately because of that.

Unit One immediately expanded to include a much fuller discussion of Philosophy, both in terms of substance and of methodology. Next was a more fully developed tutorial on ethics, with its complement of specialized concepts, constructs, and vocabulary. Again, both the matter and the method of the discipline mattered, as both were critical in ultimately understanding cyberethics—the final goal of the course.

Because Unit One grew, all the other units had to shrink, and an interesting consequence occurred. Since Wiener's work was broader and more metaphilosophical in scope, we spent more time studying his theories about cybernetics and society than on the more popular normative issues. The larger concepts of the history of ideas we were learning more easily plugged into his deeper emphasis on the macrocosmic, deontological concerns. The same was true about Floridi's work with the nature of information, a good ideological companion to Wiener's ideas. The blend of the history of ideas and the history of cyberethics worked well, but the presentations and discussions were time consuming, and by the time we were on to Maner, Johnson and Graham, half the semester had passed.

Having to find a way to squeeze three units into a time frame designed for two, I decided to create a dialectic between the work of Maner and Johnson, taking her discussion of normative issues and problems embodied in the case studies and presenting them as anecdotes to what Maner had described as special features of computers. In this way, students could judge for themselves whether or not the theories of Maner and/or Johnson convinced them of the justifiability of the perception of computers as objects in need of special ethics. Along with this, I took Johnson's work with the Internet and posited it in a comparative mini-unit with parallel chapters and points in Graham. In this way I was able to shave off presentation time while maintaining the integrity of the original syllabus. A last time-saving strategy I used was to modify Unit Four—the undergraduate research unit. During the Fall semester, I combined the requirement for the students to complete a formal research project with critical analysis that still needed to occur with regard to Maner, Johnson, and Graham. Using a prompt of comparative analysis, students were asked to use fresh literature-based research to affirm or deny one or more claims they shared about the special nature of the computer and CMC—especially that furnished forth by the Internet. In the Spring term, I combined the research cycle with the study of Graham's theories, and used a field study format as opposed to a literature-based research assignment. Earlier in the semester, students had been asked to log their computer use, differentiating between processing functions and Internet functions. In this final research-based stage, students were asked to revisit their self-study, and this time, expand it to include ten people drawn from as diverse a demographic pool as feasible, considering the restrictions inherent in their research situation. They were asked to find respondents who were all adults, but in a variety of age, economic, education-based and racial groups. They were then asked to poll their respondents with regard to habits of Internet use, attitudes toward computer-mediated environments, and reactions to cyberethical hotspots like privacy, security and private morality issues. The students then conducted a critical analysis of whether or not their empirical data supported or denied the theories posited by Maner, Johnson, and Graham.

Moving the final research component of the course to a field research study was an effective strategy, and it worked well in making the course syllabus actionable. But it was also a better choice for the students Spring semester, because frankly, they felt so overwhelmed by the volume of concepts enveloped in the discussion of the infrastructural disciplines and the theories embedded in the required readings that they simply could not bear anything more. They were already struggling with assigned material; I could not imagine their having any measurable degree of success in effectively analyzing then assimilating new, additional data in a research setting. In any case, like the rest of the semester, the end turned out to look very different than I had imagined it would when first envisioning the course and the learning outcomes for students.

Reflections and results

The success of this course and its revised presentational plan can be verified in part through the final grades of the 50+ students who completed the courses (all passed with a grade of C- or better) and the overwhelmingly positive evaluations submitted by students at the end of the term. However, for me success had to also be measured against the goals I had set for the students regarding what I held to be key parts of each theory. Although I am unconvinced all of my students mastered all concepts, I remain fairly convinced the cluster of topics is an effective combination of theories that when added together, comprised a brief, yet suitable introduction to cyberethics.

Bibliography

American Philosophical Association Central Division Ninety-ninth Annual Meeting; West Michigan Avenue, Chicago, Illinois, April 24-27, 2002. Concurrent Session Notes; presentations by Barbara Becker, Gordon Graham and Charles Ess.

Floridi, Luciano. "Information Ethics: On the Philosophical Foundation of Computer Ethics." http://wolfson.ox.ac.uk/~floridi/ie.htm.

Graham, Gordon. *The Internet: A Philosophical Inquiry.* London: Routledge, 1999.

Harnack, Andrew and Kleppinger Eugene. *Online!: A Reference Guide to Using Internet Sources.* New York: St. Martin's Press, 1997.

Harnish, Robert M. *Minds, Brains, and Computers: A Historical Introduction to the Foundations of Cognitive Science*. Malden, Massachusetts: Blackwell Publishers, 2002.

Hirschbul, John J., Ed. *Computers in Education, Sixth Edition*. Guilford, Connecticut: The Dushkin Publishing Group, 1994.

Johnson, Deborah G. *Computer Ethics,* Third Ed. Upper Saddle River, New Jersey: Prentice Hall, 2001.

Maner, Walter. "*Levels of Justification for the Study of Computer Ethics*."http://www.bgsu.edu/maner/ethicomp95/keynote3-LEVELS.html.

Wiener, Norbert. *The Human Use of Human Beings: Cybernetics and Society*. DaCapo Press, 1998.

Twenty-First Century Plagiarism

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Moore's Law (1965) predicted that chip speed and storage density will double every 18 months to two years. As prognostications go, Gordon Moore was dead-on so far and the implications of this trend for information flow are fantastic. When the rate of information flow is huge and increasing, we need to consider where all this new information will come from. Part of the answer appears to be that much of the data making up the quickening stream is recycled and duplicated. Some of that duplication involves duplicity, leading to what some commentators call a plague of plagiarism.

Whether plagiarism is pandemic or even significantly more frequent in this century than it was in the last is open to question. Yet, very recently some of the fundamental institutions that we rely on for maintaining the integrity of information have been scandalized with cases of plagiarism: academia, journalism, and government. Perhaps, even more scandalous is the relative indifference with which these cases are met. It is true that some cases have led to condemnations and resignations, but unlike the hapless student caught cheating, the high profile plagiarists often profit handsomely from their guile.

Academics stand shoulder-to-shoulder in the need to duly chastise students for plagiarism. A traditional (perhaps apocryphal) story told among graduate students at my alma mater involves an undergraduate who submitted a final project for a short story course, penned with the student's signature and with the title "The Tell Tale Heart." Presumably the student had sought a dusty and forgotten tome from the old stacks of the library on the theory that even an English teacher could not have read them all. Of course, the moral of this teaching tale is that we don't need to read them all, just enough of the right ones. And which is more appalling about this case to educators, the student's naked chicanery or gaping ignorance? I will wager that most academics from TA to emeritus have at least one plagiarism story to tell. We all laugh and shake our heads at the audacity of it.

Recycling history

At the same time, academia is increasingly caught up in public displays of plagiarism. Among these are historian Stephen E. Ambrose, whose best seller "The Wild Blue" (2001) contains extensive copying and paraphrasing from other sources. Ambrose first denied the charges, then apologized with the explanation "that the omission of the quote marks was inadvertent."[1] Comparing the passages in question from "The Wild Blue" and the doppelganger sources, I would say that any student would flunk and face disciplinary action. Ambrose just keeps cranking out the best sellers. The evidence seems also to indicate that Ambrose is an old hand at subtle (and not so subtle) plagiarism, even stemming back to his 1963 dissertation and through several of his works to present.[2]

Pulitzer prize winning Harvard historian Doris Kearns Goodwin was accused of plagiarizing portions of her book "The Fitzgeralds and the Kennedys" (1987) from at least three other books. Goodwin flatly denies the charges,[3] though she later withdrew the book from circulation. Even a cursory examination of the passages and alleged sources provide sufficient basis to condemn a student who handed such a work in for a grade. Goodwin's prestige has taken some blows, even though the scandals may have stimulated interest in her books.

Recycling news

Journalism has been the source of numerous cases of fraud and plagiarism in the last few years. Reporter Jayson Blair resigned from the New York Times in May 2003 after dozens of his NYT stories were shown to be plagiarisms or sheer fabrications.[4] Blair expressed his shame by signing a book deal for "Burning Down My Master's House" for reportedly a six figure advance. The book is expected to be a bestseller.[5] How much of the book Blair actually wrote himself is not revealed.

While Blair's stories were on weighty issues, even light journalism gave way to plagiarism when Mike Barnicle was caught using lines from a book by George Carlin in a Boston Globe column penned as Barnicle's own. This flap revealed a long line of frauds and lifts performed by Barnicle.[6]

The above are instances from a large number of plagiarism cases in academia and journalism. It is important that academia and journalism are both counted on to function as guardians of the integrity of the information record. Academics, such as historians, research and write in accordance with standards of the field. Despite the controversies about history, we expect that historians will get some main facts right and provide relevant contextual information that lead to interpretations of the past. Journalists investigate and report on current history. We rely on journalism to reveal important information about what is going on in the world right now.

Plagiarism and other duplicity among historians and journalists creates a serious distrust leading to cynicism. Like Descartes' creeping doubts about the reliability of his senses, we find ourselves with increasing suspicion about the reliability of expert information. When enough trust is eroded away, conspiracy theory (e.g. malign genie, Illuminati, or New World Order) is not far behind.

Plagiarism is a fairly modern concept, being the marriage of the concept of intellectual property with the concept of property rights. The contemporary notion of plagiarism can be characterized;

> *Appropriation and reproduction of another producer's content as one's own without just attribution.*

This characterization does not cover all uses of the word; "plagiarism." For instance, educators speak of "self-plagiarism" when a student recycles old work for course credits. Not all educators are agreed on the values of this sort of plagiarism, as many students would likely start at the claim that it is plagiarism at all. It may be that the characterization given above identifies features that are functionally necessary to instances of plagiarism, but that those features are not sufficient to cover all forms of plagiarism. To see how the characterization works, consider the most egregious and blatant case of plagiarism I have ever heard of: the February 2003 British War Dossier.

An astonishing paradigm case of plagiarism

On January 30, 2003 the British Prime Minister's office (No. 10 Downing Street) released a report titled "Iraq: Its Infrastructure of Concealment, Deception and Intimidation." This dossier purported to be summaries and conclusions drawn from state-of-the-art information and analysis from the British intelligence services. The dossier was released to coincide with U.S. Secretary of State Colin Powell's presentation to the United Nations, which was to present the hard evidence that Iraq possessed weapons of mass destruction. The entire process was an orchestrated prelude to the war which the U.S. and U.K. claimed was necessary to disarm Iraq. Secretary Powell referred to the British Dossier as a major piece of the evidentiary picture during his presentation to the UN. The main use of the British Dossier was as an independent confirmation of U.S. intelligence to the effect that Iraq possessed large stocks of biological and chemical weapons, ready to deploy in battle; that Iraq was seeking and close to obtaining nuclear weapons; and that Iraq was an active supporter of terrorist groups.

The remarkable and deplorable aspect of the British dossier is that it is an act of wholesale plagiarism. Much of the dossier is cut and pasted directly from the Web, with spelling and grammatical errors intact. Large portions of a dissertation by former University of California student Ibrahim al-Marashi were copied into the dossier without attribution. The same is true for portions of articles from the *Jane's Intelligence Review* as well as books.

The Dossier was appropriated directly from other authors without just attribution and presented as a product of British intelligence and No. 10 Downing Street. These facts plainly fit the characterization of plagiarism given above. The British Dossier is a clear case of plagiarism and the Prime Minister's office even admitted that the dissertation and other sources were copied into the dissertation:

> Downing Street yesterday apologized for its failure to acknowledge that much of its latest dossier on Iraq was lifted from academic sources . . . the dossier issued last week— later found to include a plagiarized section written by an American Ph.D. student—was compiled by mid-level officials in Alastair Campbell's Downing Street communications department with only cursory approval from intelligence or even Foreign Office sources[7]

The admission was qualified with claims that the plagiarism was a "minor blunder" and that it all did not matter anyway, since all of the information in it is true.

Three important points about the nature and impact of plagiarism arise with the Downing Street spin to minimize the charge of plagiarism:

(1) The purpose of the Dossier was to serve as evidence from authoritative and independent sources to back up the U.S. claims about Iraq's weapons capability. To demure that the plagiarism (e.g. falsified source) does not matter because the information in it is true amounts to maintaining that the claims need no evidence after all. The Dossier was to serve as credible evidence. When that credibility is damaged, it will not do to simply reassert the claims as true. Imagine a student arguing that . . .while, no, s/he did not actually write the story that s/he handed in, s/he should still get a good grade because it is a good story all the same (indeed, "The Tell Tale Heart"!)

(2) Astonishingly, the Ibrahim al-Marashi dissertation that is copied into the Dossier is from 1991 and is about the Iraqi weapon's capabilities and political structure as it existed before the 1991 Gulf War. Along with the proper attribution, the Downing Street plagiarists left out the date. This makes the Dossier appear to be a current intelligence analysis of 2003 Iraq. The major question all along was whether UN inspectors had effectively found and destroyed Iraqi weapons of mass destruction between 1991 and 2003. Many people claimed that the weapons capability had been neutralized. The U.S. and U.K. claimed that UN efforts were ineffective; hence the necessity for war. Thus to reintroduce pre-1991 documentation is irrelevant in the extreme. Doing so without identifying the 12 year difference is deceptive in the extreme.

(3) The Downing Street plagiarists did not leave the original text as it was, but tuned the language to paint an even more sinister picture. For example, a slight change from Ibrahim al-Marashi's point that Iraqi Intelligence was tasked with "monitoring the Ba'th Party, as well as other political parties" to "spying within the Ba'th Party, as well as other political parties." In place of "aiding opposition groups in hostile regimes" the British Dossier render's "supporting terrorist organizations in hostile regimes." The pattern continues, keeping the basic text and idea with paraphrases and substitutions in vocabulary—always in order to increase the sense of threat. Similar twists are made with information pasted in from the Jane's Intelligence Review and the other sources.

The British Dossier case is as clear a case of plagiarism as one could have. Just as some students will plagiarize by assembling chunks of text gleaned from the Web into a somewhat presentable paper by paraphrasing parts and adding transitions, so did the British Government office create a mosaic of texts taken from the Web (not a secret spy Web, mind you, but the same sources that are open to everyone, including at the time Saddam Hussein). Just as the student conceals identities of the authors and elements of the text that reveal genuine authorship, the British Government office constructed a document out of different public sources, and by concealing the original authorship (as well as dates, unfavorable conclusions, etc.) they produced a work that appeared to be a product of state-of-the-art contemporary British Intelligence. The British Dossier is an; *Appropriation and reproduction of another producers' content as their own without just attribution.* Hence the characterization holds in real world cases and helps in analyzing the deceptive features of those cases.

The harms of plagiarism

Plagiarism is frequently treated as if the main, or only, moral wrong done is to the genuine author. That is why plagiarism is often described as a form of theft—stealing words. The wrong done to the original author is part of the ethical analysis of plagiarism. Yet, stealing words (content) is not the sole or even main wrong done in acts of plagiarism such as we have considered. Three stakeholders are involved in an act of plagiarism and all three suffer wrongs.

(1) The original author is wronged as is widely recognized. In the Jayson Blair case, the work of other journalists was appropriated without any credit to them. Their effort was stolen. In the British Dossier, the genuine authors also suffered the wrong of having their own words applied to a purpose different from (in the case of Jane's Intelligence Review, in direct opposition to) what they originally intended. This wrong goes beyond stealing content and ideas, it is an abuse of the stolen content.

(2) The audience is wronged by being misled as to the source and relevance of the text. In some cases this wrong may not have strong consequences (though it will always have some; e.g. a false belief as to who is the author of the work). In the British Dossier case, the consequences are as strong as one can imagine. The result was war with thousands of deaths and injuries. The world was misled regarding the relevance of

the information and choices were limited by that deception. These are extremely strong consequences which makes the British Dossier one of the most serious cases of plagiarism in history. Thus it is an important case to analyze and clarify.

(3) The plagiarist is wronged by producing a false representation of their own thoughts. One may think that the words of the report may well have accorded perfectly with the thoughts of the plagiarists, which is why they choose to use them. Yet this point makes a confusion between a representation of thoughts and the process of representing one's thoughts. There will be many instances of texts that say, in effect, what we have in mind. The texts accord well with our thoughts—sometimes almost as if we had written them (e.g., "I wish I had said that.") But that is not the same as making the effort to express one's genuine thoughts. When we work to tell the story or present the account as best we can, we participate in a process of testing, comparing, adjusting, evaluating, revising, and so on. These parts of the process are what make thinking an intelligent activity. We learn as we work to express our thoughts. Finding a ready-made expression of one's thoughts removes the effort of thinking. The British Dossier plagiarists seem to have limited their thinking to making slight revisions in the text in order to conceal the source and to add threat. Had they worked sincerely through the process of finding the best information from the relevant sources and worked to craft it into the best case possible given the evidence, then they may have come much closer to the truth. As it is, the plagiarists trapped themselves in a false room and closed all available exists and windows. From within that room, only war was possible. The plagiarist cuts him/herself off from her/his own thinking, thus limiting the potential for growth of self and a stronger grasp of reality. This is the gut level reason that many educators object so strenuously to plagiarism from students. By cutting and pasting words in place of generating original expressions of genuine ideas, the plagiarizing student sabotages their learning and potential development. Plagiarism in school is anti-educational.

Computing and plagiarism

The factors most often cited these days as probable causes of the purported increase in plagiarism (and I have not seen empirical evidence that plagiarism has increased over the last century) is computing and the Internet. Selecting, cutting, and pasting content is a basic function of personal computing. Word processors make it easy to not only insert and move text, but they allow search and replace functions that practically automate paraphrasing. It is possible that generations who learn to write via computer will incorporate the re-use of text into their very notion of writing. Such a generation may view the portability of content and the recycling of text in a different way from the older generation. If this is so, then we must take care to make sure that we are not interposing the disvalues of plagiarism into the process of writing itself.

The Internet, especially the World Wide Web, is frequently cited as a main culprit in plagiarism. It is true that cut & paste technique existed before computers (scissors and paste pot), and it is true that plagiarists were using print sources to crib from long before the Web, but it is also true that finding, acquiring, and manipulating content is far easier than ever before. Students commonly veer in the plagiarism realm by appropriating too freely from Web sources. It is at this border that it can be difficult to distinguish *unconscious plagiarism* from plagiarism by design. Carroll and Perfect demonstrate that writers can "appropriate unconsciously the ideas of previous writers . . . but have a strong sense of conviction of the originality of those ideas."[8] There is an irregular area of ambiguity in the borders between plagiarism and scholarship. Learning to perform original scholarship and writing involves learning how to negotiate that border. Novices may not be able to operate in this ambiguous zone at all. Roig demonstrated that many learners are unable to distinguish between paraphrase and plagiarism, even when given the evidence to examine.[9] Perceiving originality is a learned skill.

The Internet, Web, Web phones, media players, and the ever increasing variety and complexity of information technologies may well introduce new ambiguities into the borderlands between plagiarism and effective information use. If plagiarism matters as an ethical force in the social and personal realms, then it is necessary to investigate the effects of information technology upon the concepts, limits, and values of plagiarism. Computing savvy philosophers are the obvious candidates for this. *Computing and Plagiarism* must get a firm seat in the near future of the philosophical agenda. Or else, general trust in the authority of common information will continue to erode.

Endnotes

1. Mark Lewis, "The Ambrose Saga," *Forbes.com*, February 27,2002,http://www.forbes.com/2002/01/10/ambroseintro.html;"Ambrose Problems Date Back To Ph.D. Thesis." *Forbes.com*, May 5, 2002, http://www.forbes.com/2002/05/10/0510ambrose.html.
2. Doris Kearns Goodwin, "How I Caused That Story: A Historian Explains Why Someone Else's Writing Wound Up in Her Book." *Time*, January 27, 2002, http://www.time.com/time/nation/article/0,8599,197614,00.html.
3. Howard Kurtz, "Bylines, Datelines and Fault Lines at The N.Y. Times," *The Washington Post*, June 2 2003, http://www.washingtonpost.com/ac2/wp-dyn/A1358-2003Jun1?language=printer.
4. Rose Arce, " Jayson Blair sells tell-all book," *CNN*. September, 10, 2003, http://www.cnn.com/2003/SHOWBIZ/books/09/10/jayson.blair.book/.
5. Tom Mashberg, "Repeat Offender," Salon.com, August 20 1998,http://www.salon.com/media/1998/08/20media.html.
6. Michael White, Michael MacAskill, and, Richard Norton-Taylor, "Downing St Admits Blunder on Iraq Dossier: Plagiarism Row Casts Shadow over No 10's Case Against Saddam," The *Guardian Unlimited*, February 8, 2003, http://politics.guardian.co.uk/whitehall/story/0,9061,891579,00.html.
7. Michael White and Brian Whitaker, "UK War Dossier a Sham, Say Experts British 'Intelligence' Lifted from Academic Articles," *BBC*, February 7, 2003, http://www.guardian.co.uk/Iraq/Story/0,2763,890916,00.html.
8. Marie Carroll and Timothy J. Perfect, "Student's experiences of unconscious plagiarism: did I beget or forget?" *Applied Metacognition*, eds. Perfect, Timothy J. and Schwartz, Bennett L, 2002, 149-166.
9. M. Roig, "When College Student's Attempts at Paraphrasing Become Instances of Potential Plagiarism," Psychological *Reports* 84 (1997): 973-982.

Sources

BBC. 2003. "A piece of Plagiarism?" *BBC*. February, 7. http://news.bbc.co.uk/1/hi/uk_politics/2736149.stm.

Crader, Bo. "A Historian and Her Sources." *The Weekly Standard*. January, 28 2002. http://www.weeklystandard.com/Content/Public/Articles/000/000/000/793ihurw.asp.

Lewis, Mark. "Doris Kearns Goodwin and The Credibility Gap." *Forbes.com*. February, 27 2002. http://www.forbes.com/home/2002/02/27/0227goodwin.html.