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The practitioner from within:

revisiting the virtues

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Abstract: Traditionally the study of computer ethics involves taking students who are not philosophically trained, exposing them to action-guiding theories, presenting them with the codes of ethics of several companies and professional organizations and asking them to make ethical decisions in scenario-based cases. This approach is deliberately action-based and focuses on doing. "What would you do?" is the traditional question we ask our students. While this pedagogical methodology forces them to examine situations and argue from a particular point of view, it does little to influence their character. They see the utilitarian or deontologist as someone other than themselves. There seems to be very little internalization of these action-based theories.

Virtue Ethics offers character-forming theory that has been more successful with my students than the action-based theories of computer ethics texts. Why? Virtue Ethics is directed toward character development. The focus is on being rather than doing. It presents a good heuristic or approach to the problem of moral agency. Virtue ethics offers a way of teaching self-reflection through narratives that focus on core values, heroes and moral exemplars. It is grounded in practical wisdom. It is experiential, learning to care about the self, others, the community, living the good life, flourishing and striving for moral excellence. It offers a model for the development of character and personal ethics which will lead to professional ethics. Yet, the strict Virtue Ethics espoused by Aristotle has its limitations. This paper will explore the need for a more integrative approach to contemporary moral theory, one that may be found by revisiting the virtues through the works of Aristotle and Kant. It will offer insight into translating theory into practice for students of computer science and information technology.

Keywords: Virtues, Aristotle, Kant, Core Values, Computer Ethics

Introduction: ethics and morality

Western society is confronted with moral and ethical problems on a daily basis.¹ Tabloids, soap operas, and scandals scream about breaches of ethics, lying, immoral behavior, etc. that bounce 'serious news' off the front page. Information technology offers many opportunities for breaches of morality. As users of computer technology, we are faced with a myriad of ethical problems generated by computer-mediated action. Invasions of privacy, using the Internet for pornography and illegal access to information and systems have become as newsworthy as the sex scandals and more far-reaching. The response to these issues, at least in the United States has been to try and pass laws to stop the abuse. As we have seen, these attempts at regulation are seriously disputed by those who value the freedom associated with the global information infrastructure and hacked around by those with technological expertise.

As a professor of computer science and information technology, I believe that it is my responsibility to sensitize my

students, the future computer professionals and current users of technology, to the moral seriousness of these ethical issues. It is my contention, after working with computer ethics students for over four years, that there is a certain level of amorality that needs to be addressed. Although action-guiding theory has predominated computer ethics texts, I believe that my students have found more meaning in character-forming theories such as virtue ethics.

This paper will argue that solving discrete ethical problems as a deontologist or consequentialist is not enough. If we are ever hopeful of tackling the serious macro-ethical issues generated by computer technology on a more than theoretical level, we need to examine how to handle the micro-based or individual problems of moral agency. All the policies developed will be meaningless unless they impact a group of individuals who are sensitive to ethical issues. As a practitioner of computer ethics, I would like to suggest that the philosophers who are seeking to define the philosophical basis for this field might consider a more integrative approach that revisits the virtues. This would benefit those of

us who are attempting to educate students to behave as moral agents in their personal and by extension professional lives by providing character-forming ethical theories on which to structure our courses.

Character-forming vs. Action-guiding theories

I would argue that character-forming theories are more fundamental than action-guiding theories to the study of computer ethics. Attempting to teach students computer ethics by telling them what to do in discrete situations based on what a consequentialist would do, does not impact on their character. And, "knowing what to do in any serious sense requires good character; for the agent must have developed certain abilities of judgment and perception over time, and the exercise of these abilities is precisely what we mean by good character".² The focus should be on how to develop 'practical wisdom' and flourish rather than what to do in an isolated situation.

Traditionally computer ethics texts and courses involve taking students who are not philosophically trained, exposing them to action-guiding theories, presenting them with the codes of ethics of several companies and professional organizations and asking them to make ethical decisions in scenario-based cases. This approach is deliberately action-based and focuses on doing. "What would a utilitarian do? A deontologist? What would you do?" are the traditional questions we ask our students. While this approach helps them examine situations that may arise in the profession and teaches them to argue from a particular point of view, it does little to change their individual character. They see the utilitarian or deontologist as someone other than themselves and there seems to be very little internalization of these action-based theories.

Virtue ethics offers character-forming theory that has been more successful with my students than the action-guiding theories of computer ethics texts. Why? Virtue ethics is directed toward character development. The focus is on being rather than doing. It presents a good heuristic or approach to the problem of moral agency. What does virtue ethics offer? Virtue ethics offers a way of teaching self-reflection through narratives that focus on heroes and moral exemplars. It is grounded in practical wisdom. It is experiential, learning to care about the self, others, the community, living the good life, flourishing and striving for moral excellence. It offers a model for the development of character and personal ethics that will lead to professional ethics.

Need for contemporary moral theory: A more integrative approach

One problem for novices in the field of ethics, (I would include most computer science professors in this category), is the reductionist view of ethics presented by our current texts. Each theory is presented as discrete, apart from any

others. Practically speaking, a page on Kant or Aristotle does not give one much with which to work. Some professors argue, therefore, that foundations of ethics should be left to the ethicists and kept out of computer science courses. Until we are ready, however, to require philosophical ethics courses of our students, most professors are caught in the quandary of how to best teach computer ethics given their training and background. I do not want to turn this into a debate on who should teach computer ethics, which has already been done by Deborah Johnson. Ideally, a team approach of an ethicist and computer scientist would be 'the best of all possible worlds'. But until universities are willing to support this, I am trying to find a realistic answer to a very difficult problem of how to shake students who are used to dealing in binary decisions out of their complacency about ethical issues by professors who are more used to being technical wizards than moral mentors.

It is unrealistic to discuss computer ethics without merging the languages of technology, philosophy, psychology and sociology. So it is limiting to read texts that only peripherally touch on these subjects in relation to moral agency. Attempts to define the moral theory underlying computer ethics seem to take the narrow perspective of trying to fit it into an existing philosophical niche instead of trying a broader and more integrative approach. This is particularly troublesome because computer ethics is by nature an interdisciplinary field. Until recently, Aristotle and virtue ethics were not even mentioned in computer ethics texts although his work provides insight into moral agency and practical wisdom, both applicable to the field. Yet, I do not want to dismiss virtue ethics merely because certain critics view it as limited to the Greek polis. The concept that we live a certain way and that our actions grow out of the vision of who we are is too important to jettison. Personal intentions and dispositions guide actions, and people who care about morality think of others as well as themselves. Morality is knowing how to live and act well. It depends on the humanity within oneself. Doing the right thing is not about an action divorced from the self. It is an action that flows from the self; it is internally rather than externally imposed. Thus, there seems to be a justifiable reason to hold onto the concepts of Aristotle. Yet, it would broaden the scope of ethical theory to reassess the place of Kant in discussing the virtues. This would give us a basis for a richer sense of morality (Louden, 1992) and perhaps, a more meaningful base on which to build contemporary moral theory.

Revisiting the Virtues: Broadening the Scope

While ethicists such as Alasdair MacIntyre and Charles Taylor have re-introduced the language of the virtues into recent ethical theory, very few philosophers have looked to virtue ethics as a realistic approach to computer ethics. That is because they take what I believe to be a 'strict constructionist' view of virtue ethics restricted to and limited by the

mores of the Greek polis. Robert Louden in *Morality and Moral Theory* and Nancy Sherman in *Making a Necessity of Virtue: Aristotle and Kant on Virtue* make the case for the reassessment of the role of virtue in contemporary ethics. Both Sherman and Louden have taken the next step in revisiting the concept of virtue from the perspective of Aristotle and Kant. Although Aristotle is known as the proponent of what has come to be known as Virtue Ethics, there is evidence that Kant preserves the idea of virtue in his moral theory as well. Sherman writes, "For it has not been adequately appreciated that Kant develops a complex anthropology of morals- a tailoring of morality to the contingent features of the human case-which at times brings him into surprising alliance with Aristotle and his project of limning an account of human excellence".³

Louden states, "Much contemporary argument in ethics depends on over-simplified pictures of Aristotle and (particularly) Kant. Such argumentation posits exhaustive alternatives that fit neither Aristotle nor Kant but only lesser thinkers. An available richness is therefore missing from current moral argument, and part of my aim is to recover it".⁴ Both authors offer insight and a new way of approaching ethical theory that made sense to me as a professor of computer ethics and has led me to revisit virtue ethics from a broader perspective than the traditional agent vs. act debate. Louden attempts to recover a richness lacking in current moral argument that "recognizes both the irreducible plurality of moral values and the reality of irresolvable moral conflict and one whose interest in moral deliberation is not distorted by an extremist faith in a universal decision procedure (Louden, 1992). Sherman elucidates the need for discussions of particulars, principles and emotions in dialogues on moral agency. In their arguments and explanations, the authors demonstrate that when discussing the virtues, there is a place for Kant as well as Aristotle.

It is beyond the scope of this paper and its author to develop a detailed integration of the ideas of Kant and Aristotle around the virtues, but I will attempt a brief summary of the views of Louden and Sherman. What Louden is attempting to do is to move ethics away from a single theoretical model and incorporate a variety of irreducibly plural types of moral value into its basic structure (Louden, 1992). He believes that both Aristotle and Kant in their respective theories sought to describe how people actually think about moral issues and then use the results of the analysis for normative purposes. "In my view, the best approach to normative moral justification is via just this sort of descriptive account of moral agent's actual moral view".⁵ Sherman seeks to examine each theorist's account of the role of practical reason and moral perception within virtue. While both authors acknowledge the differences in approach to moral theory by Aristotle and Kant, they do not see them as irreconcilable and try to bring the two philosophers into dialogue in a way that avoids oversimplification and caricature (Sherman, 1997).

Both authors answer the criticism commonly associated with the theories of Kant and Aristotle. In citing from Kant's *The Doctrine of Virtue*, Louden seeks to justify why one needs to examine both the grounding and applying aspects of Kant's ethics giving each its due. Both are necessary when trying to apply moral theory to human life. Louden writes,

To summarize Kant's position...nowhere does he assert that human beings can simply deduce correct moral judgments from universal, timeless principles. "Empirical or 'anthropological' knowledge is always needed when we apply moral theory to human life; ...Kant acknowledges repeatedly that principles and rules are never self-deploying and that non-rule driven judgment is needed in ethics whenever we deliberate about specific cases. Moral principles, in his view, cannot simply tell us what to do."⁶

Sherman reinforces this idea in her discussions on "The Cultivation of Emotions as Supports for Duty and Moral Anthropology".⁷ On the Aristotelian side, Louden and Sherman address the issue that the virtues represent "little more than a conventional list reflective of the social climate of his times". Both defend his virtues as being meaningful in the realm of human nature and experience. While Aristotle is not known for focusing on principles, Louden feels that it is worth exploring the connection of the virtues with principles. Although Aristotle's analysis of higher-order considerations and principles are not as detailed as Kant's, he does attempt to understand moral virtues in terms of what reason prescribes, of how one ought to think and feel, of what nobility requires and of what is just at the end of Book II of *Nicomachean Ethics* (Louden, 1992).

Both Aristotle and Kant share a fundamental interest in the question of what basic constraints reason sets on the moral life of human beings. Neither asserts that human beings can simply deduce correct moral judgments from universal principles. Both recognize the obvious necessity of informed empirical knowledge in human practical reasoning. Each is concerned with the issue of what limits general rational considerations place on morality. However, in neither case does this latter interest take the form of issuing step-by-step rules that tell people what to do (Louden, 1992).

While Kant's moral theory is generally regarded as action-guiding and Aristotle's as character-forming, does that mean that Kant shows no interest in moral education and character development or that Aristotle does not focus on action? It seems obvious that in choosing to publish two works: *Education* and *The Doctrine of Virtue*, that Kant must have been concerned with both. In acquiring excellence of character according to Aristotle, we have knowledge, choose the act, choose it for its own sake, and the action must proceed from a fixed character. The virtuous person takes pleasure in this activity. He/she is one of action, not simply one who theorizes about virtue. The language is about action. Sherman and Louden conclude that there are both descrip-

tive and normative aspects in the theories of Kant and Aristotle although they differ by degrees. Neither of them sought to guide moral practice 'from a position above or outside it'... Their goal is not to govern practice from above but rather to influence it from within".⁸

Louden investigates whether Kant and Aristotle seek to produce a moral decision procedure. In the *Critique of Pure Reason* Kant asserts that carrying out rules is a sole concern of ethics. Louden feels that reading this assertion as a strict rule interpretation flies in the face of Kant's core thesis concerning autonomy and the need to think for oneself. (Louden, 1992). Does adhering to the categorical imperative contradict acting autonomously? Louden claims, "But while autonomous agents who test their maxims by the categorical imperative are 'following a rule,' they are not applying a moral decision procedure that can issue a definitive solution to any specific moral problem. For insightful application of the categorical imperative always requires a judgment at a variety of levels".⁹ Sherman concurs that for Kant the Categorical Imperative is a procedure for deliberation.¹⁰ While Aristotle negates that universal rules and principles can serve as arbiters of ethical correctness, he states in *Nicomachean Ethics* that

It is difficult to get from youth up a right training for virtue if one has not been brought up under right laws; for to live temperately and hardily is not pleasant to most people especially when they are young. For this reason their nurture and occupation should be fixed by law;... since they must, even when they are grown up, practice and be habituated to them, we shall need laws for this as well, and generally speaking to cover the whole of life; for most people obey necessity rather than argument.¹¹

Yet, although Aristotle recognizes a need for laws in the public domain, he doesn't subscribe to them as a part of the ethical domain. Sherman points out that for Aristotle, "To have practical wisdom is just to have virtue internalized in a non-codified way. However helpful moral rules of thumb, Aristotle doesn't think of them as expandable into explicitly statable rules..."¹² He relies on experience and interpretation. So, although both Kant and Aristotle stress the importance in practical deliberation, neither subscribes to a moral decision procedure that rules out the need for judgment and interpretation.

By following the spirit of Aristotle and Kant, moral theorists, in demonstrating concern for the particulars and the principles, can help people place their specific moral concerns within a larger (and more rationally justifiable) context by 1) generalizing different types of relevant moral conflicts for which historical records exist; 2) indicating, in encapsulated form, how such conflicts are addressed previously, by both the wise and the ignorant; 3) advocating better alternatives that might otherwise be overlooked; and 4) rendering judgments more consistent.¹³ I agree that there is a need to advocate pluralistic models that integrate, in a non-reduc-

tionist way, strong notions of virtue and act. Ethics, especially computer ethics is non-trivial and certainly non-simplistic and we should use everything we can to make it meaningful. To quote Bernard Williams,

If there is such a thing as the truth about the subject matter of ethics,... why is there any expectation that it should be simple? In particular, why should it be conceptually simple, using only one or two ethical concepts, such as duty or good state of affairs, rather than many? Perhaps we need as many concepts to describe it as we find we need, and no fewer.¹⁴

Perhaps we need to heed this advice in thinking about computer ethics.

Core Values

What are we trying to impart to students? One issue is that power necessitates responsibility and accountability. As James Moor states in "Reason, Relativity and Responsibility in Computer Ethics", ethical responsibility begins by taking the ethical point of view. We must respect others and their core values. If we can avoid policies that result in significant harm to others that would be a good beginning toward responsible ethical behavior.¹⁵ We find the basis of these core values in the language of the virtues.

In order to encompass the global nature of the world of ICT, we should try to teach values that cross cultures. Before asking our students to examine the complex and novel issues of computer technology, we must first ask them to examine themselves as human beings with values that motivate them to live their lives in a particular manner. Both Louden and Moor agree that there are a set of core values that are shared by most humans. Moor cites life and happiness for humans and includes other core values such as ability, freedom, knowledge, resources and security. "These values", he says, "are articulated in different ways in different cultures but all cultures place importance on these values to some extent".¹⁶ These core values give us a way to evaluate the rationality of our actions and policies. They give us reasons to favor some courses of action over others. They provide a framework of values for judging the activities of others as well (Moor, 1998). Basically, they give us a common ground for evaluation and understanding. This is particularly evident in the multicultural classroom where students are excited to find a mutually common ground amidst their different politics, cultural mores and religious traditions.

Louden encourages us in a similar direction in his discussion of moral exemplars. He believes that when we look at moral exemplars, there is no single scale of measurement. Each is maximizing a value be it courage or selflessness or integrity in his or her own way and situation. For Louden, this is not a problem. He asks, "Why not say that moral exemplars are simply those who successfully maximize a certain specified mix and amount of irreducible values".¹⁷ He further asserts that "It does seem to be the case that there

exists a family of core virtues that exemplars exhibit to a strong degree—justice beneficence and honesty - but they are not all stamped out of the same mold. We recognize that morally excellent individuals are those that are disposed to stand fast by their chosen principles and ideals”.¹⁸ While Moor suggests that this concept of core values offers a framework for analysis of policies in computer ethics, I would also like to assert that it offers the computer ethics professor a means of examining human behavior and illustrating examples of living well, respect for others and flourishing in the true Aristotelian sense of the word.

The study of moral exemplars who are not the “goody-two-shoes” or saints whose behavior is super human offers students insights into how ordinary people (although they are extraordinary in terms of their ethics) manifest and maximize a set of core values that results in respect for others and in caring for society as a whole. These exemplars can come from both western and non-western cultures and should be chosen by the students. They can range from the righteous Christians of the Holocaust to the freedom fighters in a specific country; from the students in China during the uprising who delivered the news to the world, to the students who spend their time in soup kitchens and building houses for the poor; from Aaron Feuerstein who kept his business, that had been all but destroyed by fire, open and supported his workers with salary and health insurance while rebuilding, to the software tester who protests the early release of untested critical software. This is a lesson of primary importance if our students are to be the developers and testers of software, creators of new technology and policy makers of the future. In asking students to identify their heroes and then examining the traits of these people, the professor and class can develop a profile of the characteristics of a hero. Keeping weekly journals for a month which detail any ethical or moral issue the student encounters including acts of moral exemplars, raises the level of moral consciousness in the student and provides a base for further discussion and expansion into moral theory.

The practitioner from within

Ideally, I believe that when the first computer goes into the primary school, students should be taught acceptable on-line behavior just as they are taught to be techno-experts. If this practice were carried out throughout the early years of school, I am convinced that we would have fewer problems on-line. When these students arrive at the university, they would already be habituated to what constitutes virtuous on-line behavior and prepared for some serious ethical discussions involving the macro or policy issues of computer ethics. At this point they could approach, with more insight and sophistication, the complex ethical issues such as privacy using philosophical theories to support their positions. Unfortunately, the students today have not had this experience.

Therefore as a computer scientist who teaches at a university, I am intimately involved with both the technical education and the moral education of students around the use of computer technology.

The role of moral mentor is a daunting concept to those of us whose expertise lies on the cutting edge of technology. Do we have the practical wisdom to be our students' guide? Aristotle believes that morality cannot be taught but needs to be practiced, and Kant says that judgment cannot be instructed; it can only be exercised. It is my contention that the computer ethics classroom affords the safe-haven for the exploration of self-knowledge in relation to the serious moral problems associated with computer technology. These problems are faced by us everyday at the university: Students have had their projects erased from a shared network drive by other students; computer software is available in the laboratories for anyone to copy; students have been flamed or defamed on email sent globally; exposed to pornography; the system has been compromised by a hacker and files are destroyed or lost; students submit plagiarized work; papers and programs are copied from web sites; students are addicted to role playing in MUD's just to name a few. Character-forming theories that focus on the role of moral agency challenge students to become more self-aware and reflective so that they can appreciate the seriousness of these problems and refrain from engaging in such acts. Students begin to realize that living ethically is not about rules and formulas. People are rational moral agents who have to interpret rules according to their own experiences. For Aristotle, if we are ever to achieve eudaimonia, we must learn to live our lives well and train our souls through our actions. The study of obituaries is an effective exercise to raise the awareness of students about what we mean by 'living well or leading the good life'. Students are able to draw the correlation between the character of the person as manifested in the adjectives that describe his/her roles, e.g., loving mother, generous friend, admired colleague and the support and care this person offered to his/her community.

Identity

The concept of identity, especially how it has been influenced and changed by computer-mediated action is the subject for my next paper. Let me just indicate that traditional university students are trying to cope with three visions of the self: the perceived self, who a person thinks he/she is; the real self, who he/she is at this time; and the ideal self, who he/she wants to become.¹⁹ The challenge of the professor is to make the real self aware of core values and ethical issues so that it knows when it is appropriate to use a perceived or virtual self and how to use its imagination to envision the flourishing of the ideal self in the future.

Imagination and narrative genre

One problem of teaching computer ethics is that often, when discussing new technology, the impact or consequences of that technology are unknown. This limits the value of the consequentialist model. For example, once an email message is sent the sender has no control over what will happen to it. Will it be globally forwarded to others? Will that cause repercussions? It is unknown. One has to trust the recipient of the message if the data is sensitive. A colleague reported that in her hospital an email was received that said, "You are sending confidential medical data to this email address and the address is incorrect". Luckily this recipient was morally responsible. Thus the focus on moral agency and manifestation of core values when using technology is imperative to the teaching of computer ethics. I have already explained the value of studying heroes and moral exemplars. Another valuable asset in the classroom is using stories. Narrative offers insight into character behavior not simply actions in a particular scenario. Actions grow out of and are motivated by the behavior of the character. Readers of stories and novels are concerned with the "being" of the character, not simply what he/she is doing.²⁰ Using stories to illustrate behavior is not a particularly new technique; biblical stories have always been used in religious schools. Sherman maintains that description and narrative of the particular case at hand are at the heart of moral judgment for Aristotle.²¹ What is the place of this narrative in the computer ethics classroom?

While there are few stories that have been written specifically about computer technology, science fiction has always explored the interaction of technology and human values. In reading the works of Arthur Clarke, for example, we discover that what was considered fiction in the 40's and 50's is reality today. John Artz in "The Role of Stories In Computer Ethics" writes, "Consider imagination as the creative capacity to think of possibilities. Imagination lets us see the world, not as it is, but as it could be".²² From *RUR* to *Star Trek*, we are confronted with issues surrounding artificial intelligence and robots. This leads to moral considerations of freedom and slavery. Is Data just a machine who can be dismantled at will, asks Captain Picard in *Star Trek : The Next Generation*? Or, because he is self-aware, does he have the right to choose whether to be part of an experiment that will dismantle him.(Edgar, 1997). We can study the implications of Asimov's Rules for Robots, *Brave New World*, 1984, and *Jurassic Park*. *The Case of the Killer Robot* also investigates ethical issues specifically pertaining to the area of computer technology. Through characters, students are offered a chance to experience things that they may never

experience. The broad appeal of this notion has led to the popularity of virtual reality. What stories can do in entertaining us is to reinforce traditional values and challenge others. Seeing the world as it could be allows us to make choices about how it should be.(Artz,1998).

Louden defines imagination as "our ability to form meaningful mental images or concepts that are not directly derived from either sensation or standing propositions in any rule-governed manner. Imagination is the ability to think in novel ways (Louden 1992). Moral imagination helps us envision the type of technology and society in which we would like to live. It also helps in moral deliberation by aiding us in the interpretation of underlying metaphors. Therefore narrative genres can be useful in the computer ethics classroom to raise awareness of moral behavior. I would agree with Louden, however, that moral theory and argumentation should be used by students to justify their moral positions which could be based on the insights that they have found in literature. Having students write a story that presents their view on ethical issues and ICT to a group of aliens is an interesting exercise that integrates imagination and moral theory.

Conclusion

This paper has tried to add to the dialogue between the two groups concerned with computer ethics: the philosophical theorists, those concerned with moral theory and ethical issues and the philosophical engineers, the practitioners from within who work with these problems daily and attempt to educate the computer scientists of the future. As a member of the latter group who is attempting to incorporate the theories of the former into her teaching, I challenge philosophers and moral theorists concerned with computer ethics to approach the issues of computer ethics as more than just(albeit how serious) an intellectual exercise. The answer to our mutual concerns lies in open discourse between our groups: those from without and the practitioners from within. The reality of computer technology is that sooner or later we will all become practitioners from within on many different levels. We, therefore, need a commonality of language that will cross the global infrastructure of Information and Communication Technology. I encourage all of us to appreciate that approaching computer ethics through moral agency does not negate serious attention to action nor concern for objects in the information infrastructure. Rather it adds one more dimension to a complex field and approaches computer ethics as the integrative, global field that it is. ♦

Notes

- ¹ For the purposes of this paper, I will use morality and ethics as synonyms based on their etymology. Robert Louden in *Morality and Moral Theory* indicates that morality and ethics have the same roots, mores which means manner or customs from the Latin and ethos which means custom and habits from the Greek (Louden, 1992). He refutes the argument of Bernard Williams who sees morality as a subset of ethics that emphasizes duty and obligation by referencing Williams' early book called *Morality: An Introduction to Ethics*. I concur with Louden, that in daily speech ethics and morality are often used synonymously.
- ² R. Louden, (1992), *Morality and moral theory*, Oxford and New York: Oxford University Press, p. 136.
- ³ N. Sherman, (1997). *Making a necessity of virtue: Aristotle and Kant on virtue*. Cambridge: Cambridge University Press., p. 1.
- ⁴ Louden, p. 7.
- ⁵ Louden, p. 136.
- ⁶ Louden, p. 103.
- ⁷ Sherman, p. 292.
- ⁸ Louden, p. 120.
- ⁹ Louden, p. 114.
- ¹⁰ See Sherman's discussion on "Some Roles for the Categorical Imperative", p. 289 - 294.
- ¹¹ Aristotle, (1969), *The nicomachean ethics of Aristotle*. Translated by Sir David Ross. London: Oxford University Press, II, 79b27
- ¹² Sherman, p. 275.
- ¹³ Louden, p. 128.
- ¹⁴ B. Williams, (1985). *Ethics and the limits of philosophy*. Cambridge, MA: Harvard University Press, p. 17.
- ¹⁵ J.H. Moor, (1998). Reason, relativity, and responsibility in computer ethics. *Computers and Society* 28,1. March, 1998, p. 21.
- ¹⁶ Moor, p. 20.
- ¹⁷ Louden, p. 49.
- ¹⁸ Louden, p. 51.
- ¹⁹ These terms were presented in a report to the Student Development Plan Meeting at Sacred Heart University in May, 1997 by Professor Ed Malin. Thanks to Jen McGovern for bringing this report to my attention.
- ²⁰ Sherman provides an interesting discussion of narrative in her chapter on "Practical Wisdom in Kantian Ethics." P. 318.
- ²¹ Sherman, p. 244.
- ²² Artz, p. 12.

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