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Gender and Computer Ethics in the Internet Age

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Introduction

In this article, I wish to explore some of the ways in which considerations of gender should be taken seriously in the newly developing discipline of computer ethics. Over the last two decades, computer ethics has developed into a separate academic and practical discipline. Much of the rationale for its formation derives from the attempts of computer and IT workers to form themselves into a recognized profession with suitable codes of ethics. Additionally, legislation must keep pace with new forms of crime as they become possible via networked technology. Alongside this, every week seems to bring new examples of ethical problems relating to information and communication technology (ICT): cyberstalking, new invasions of privacy, and new and more worrying examples of hacking into computer systems. All of these things make good copy for the media. At the same time, the apparent urgency of many ethical problems in computing forces computer ethics into a reactive mode, one which does not permit of a more reflective positioning against problems which are, perhaps, more chronic rather then pressingly urgent. One such problem is the question of gender in relation to ICTs. Computer ethics is now being taught on university computer science curricula in many countries including the USA and UK, as demanded by their respective professional bodies. Hence there is all the more reason to ask whether computer ethics treats all its subjects equally or whether, in fact, the voices of underrepresented groups are not being heard in the new, and increasingly vocal, debates surrounding computer ethics.

The problem is that, as a discipline, computer ethics tends to be fairly conservative in its approach. Its theoretical positioning tends to rest either on utilitarianismbroadly speaking the greatest good for the greatest numberor a Kantian position. Kantian theory looks towards duty and the internal motivations of an action rather than purely at results (Johnson 1994). Justice and rights are the language of Kantian theory. Both utilitarianism and Kantian theory say nothing about who can assume the power to make an ethical decision. Similarly neither have much to say about emotion and feelings, i.e., why a sense of duty should outweigh our feelings and our relationships with others.

Looking toward other more radical approaches to ethics throws into relief the question of power structures. Gender and technology studies have proved successful in exposing power relations in the development and use of technologies. At the same time, major developments in feminist ethics over the last two decades , particularly in terms of Gilligan's (1982) ethic of care' make this an area at least as important as computer ethics in terms of overall contribution to

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philosophical ethics. I claim that bringing feminist ethics to bear on computer ethics offers a novel and fruitful alternative to current directions in computer ethics in two major ways: firstly in revealing continuing inequalities in power and where liberal approaches to power do not work; and secondly, in offering an alternative, collective approach to the individualism of the traditional ethical theories encapsulated in computer ethics. Nowhere are these issues more important than in thinking about gender and computing in a networked age.

I am suggesting that a pressing problem for computer ethics involves formulating a position on the way that women, and indeed other social groups such as ethnic minorities and the differently abled, may be disadvantaged or even disenfranchized with regard to information and communications technologies. This is a well recognized phenomenon. Recognizing it is one thing; suggesting what to do about it is quite another. But I argue that the sort of liberal, inclusive, consultative measures, already becoming enshrined in computing bodies' codes of ethics, may not have the effect of properly involving women users in decision making about computer systems and women in computing in general, despite a will to do so. Unfortunately liberal views, despite holding a rhetoric of equality and participation often make no challenge to the structures that are causing that inequality in the first place.

In debates about including women in technology, we can see a very clear example of where a liberal view has not had the effect it desired. I am referring to the various campaigns to attract more women into science and engineering or information technology which were popular in the UK and other Western countries in the late 1980s and later (Henwood, 1993). The idea behind these is well known. Women are seriously under-represented in science, technology and engineering. If they can be shown that these areas can offer suitable careers that women are perfectly capable of doing, e.g., through measures such as workshops for schoolgirls, then surely women will begin to enter technical areas in greater numbers. Not surprisingly such measures have had little effect. In the UK and elsewehere, women's representation in higher education computing courses continues to run at around 10%, a significant decrease from the figures of the late 1970s and early 1980s and which shows little likelihood of improving.

Flis Henwood (1993) argues that the reasons for this point squarely to the way that the "women into science and engineering" type of view offers no analysis nor challenge to the ways in which science and technology are perceived as "gendered." It is assumed that science and technology are inherently neutral and that getting more women to enter is enough for equality to prevail. This view asks women to do all the changing; it asks no change of science and technology, nor of men nor even of schoolboys. Under these circumstances, it is difficult to see why measures based largely on propaganda exercises should make a difference to women's participation. Indeed there could even be a negative effect from such activities. Women may be made to feel that they are somehow inadequate for not taking up the wonderful opportunities on offer on science and engineering when they still feel deep rooted uneasiness despite protestations about the neutrality of these disciplines.

We must beware that computer ethics, in embracing a tacit

liberalism, does not follow this well trodden route in failing to achieve equality without somehow knowing why. More pertinently here, it may fail to give a fair and proper hearing to certain groups of computer users simply because it feels it has done enough for equality and does not have to try harder.

Research on gender and ICTs has emerged as one of the major critical forces for the social study of information technologies. Although I do not want to belabor this point here, it is worth noting that "mainstream" ICTs' studies have tended to view the idea of gender as an analytical dimension as, at best, something to be added on after the main business. Witness the way that edited collections of ICTs' studies often have just one paper on gender (e.g. Dutton, 1996). Optimistically we may hope for positive change as more studies of gender and information technology begin to gel.

Within contemporary gender and ICTs' studies, there has been something of a shift from the traditional concerns about women in the workplace, with women's supposed technophobia that several studies now challenge (Adam et al., 1994; Grundy et al., 1997), towards an interest on how women fare on the internet, how communication and communities are organized, and how sexuality and identity is played out in that medium. Many studies point to the inequalities that remain between men's and women's access to ICTs and their interactions when women do have apparently equal access. The challenge is to retain a balance between the utopia/dystopia seesaw, a rhetoric which has tended to attach to studies of ICTs, and especially to the Internet (Howcroft 1998). This imbalance seen through the lens of feminist concerns translates into, on the one hand, a view which argues that women have taken over the Internet and are subverting it to their own ends (Squires, 1996; Adam, 1998) and, on the other hand a dystopian view of women's continued oppression magnified further through the lens of the internet and other ICTs (Herring, 1996).

Gender and computer ethics

Despite the increasing theoretical sophistication of research on gender and ICTs, few authors have yet chosen to take on the domain of computer ethics. Unfortunately one of the most prominent recent studies is problematic in several ways. Jennifer Kreie and Timothy Paul Cronan (1998) have looked at men's and women's moral decision making in relation to a set of computer ethics cases. Surprisingly, these authors make no reference whatsoever to the large body of writing in feminist ethics which might have helped them explain their results, all the more surprising given that the work of Carol Gilligan (1982) is very widely known over a number of domains. It makes it very difficult for them to explain their results in conceptual terms.

A more convincing approach toward gender and computer ethics is to be found in the research of Marja Vehvilainen (1994) who argues that codes of professional ethics serve to enshrine male expertise at the expense of women making their voices heard. In addition to the studies outlined above, the relatively few papers which have tackled ethical questions from a feminist point of view tend not to take a consistently philosophical approach to the ethics they question. In other words the question posed is rather whether it is ethical, in a broad sense, to treat women in the

computer industry in one way or another (Stack et al., 1998; Turner, 1998). This is certainly a start and, importantly, it recognizes that feminist concerns have some part to play in the continued development of computer ethics. It also brings these issues to a mainstream computing audience. However I argue that calls for ethical conduct in relation to women's issues will not carry the debate as far as it could fruitfully be taken. A potentially more far reaching approach would be to ask how far the development of feminist ethics could be applied to computer ethics, to use feminist ethics to criticize the traditional ethical view implicit in computer ethics, and to see what alternatives may be offered.

I have touched on some of the issues raised in thinking about how considerations of gender might be fruitfully included in debates forming round computer ethics. Clearly there is still much to be done both on the theoretical front, to bring feminist theories of ethics to bear on computer ethics, and on the empirical front where we need to gain a better understanding of how these issues relate to women's lives.

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