## Intellectual Property, Higher Education, and Women's Inequality: Exploring Connections / Proposing Solutions

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#### ABSTRACT

This paper explores multiple ways in which intellectual property rights may undermine women's/feminists' ability to work in and through the liberal university in order to serve their interests and needs. It also provides a discussion of strategies to resist current trends and to preserve, perhaps enhance, the university's potential to advance the feminist project.

#### RÉSUMÉ

Cet article explore les différentes façons par lesquelles les droits de la propriété intellectuelle pourraient amoindrir l'habileté des femmes à travailler par l'entremise d'une université libérale afin de voir à leurs intérêts et à leurs besoins. Il offre aussi une discussion sur les stratégies à adopter pour résister aux tendances courantes et pour préserver, peut-être même rehausser le potentiel pour faire avancer le projet féministe.

#### INTRODUCTION

The development and extension of intellectual property laws and regulations is a dry and complex matter that most of us would rather leave to the lawyers and legislators. In this paper, I argue that to do so is a serious mistake, as we all have much to lose from, and have already lost much to, the ongoing privatization of previously public knowledge. Perhaps more than any other group, it is women who have the most to lose from the development and extension of intellectual property regimes (IPRs). From the ability to feed our children to our reproductive autonomy, women's already limited control over the conditions of our lives is threatened - and promises to be threatened further still - as various forms of knowledge are converted into the private property of individuals and corporations.

While the harmful impact of intellectual property (IP) rights on some aspects of women's lives has been attracting increasing scrutiny and concern (Mies and Shiva 1993; Shiva and Moser 1995), the implications of IP rights for others have not. This paper focuses on one such neglected area by exploring the implications of IP rights for women's/feminists' ability to work in and through the university to advance women's interests and needs. To set the context for a discussion of how intellectual property in the university may compromise women's particular interests, I first address the general implications of intellectual property for the future of the liberal university, defined as a publicly supported institution charged with the production and transmission of a broad range of knowledge in the public interest. Following a discussion of this paper's central concern, I conclude with some thoughts on how to resist the privatization of knowledge in and through the university as a means of protecting both the feminist project and the public interest more generally.

### WHERE IT ALL STARTED

Over the last twenty years, and particularly in the last decade, universities in Canada and elsewhere have become increasingly implicated in the production and exploitation of intellectual property. This involvement stems from two analytically separate, but related, developments, The first is the corporatization of the university, which is the result of efforts on the part of industry and governments in several countries to harness academic resources to national projects to enhance economic competitiveness (Currie and Newson 1998; Newson and Buchbinder 1988; Soley 1995; Slaughter and Leslie 1998). As universities have become progressively involved with - and indeed have become more like - businesses, they have increased both their infrastructural support for, and

actual involvement in, the privatization and commercialization of knowledge1 (Bordt and Read 1999). The second source of the university's involvement in IP is what I call "the global knowledge grab," which stems from the development and extension of national and particularly international intellectual property regimes through fora such as the GATT and the World Trade Organization. As the scope of intellectual property rights and the consequent privatization of knowledge have increased, knowledge producers in both private and public institutions are attempting to develop and appropriate as much intellectual property as possible, as both a defensive strategy to sustain their knowledge production capacities and an offensive strategy to maintain or to gain a competitive edge (Shulman 1999).

# INTELLECTUAL PROPERTY AND THE DEMISE OF THE LIBERAL UNIVERSITY

I do not dispute that the university's involvement in intellectual property has benefitted particular individuals and corporations. However, I argue that IP is undermining the liberal university's ability to reproduce itself in at least two ways. On the one hand, IP is eroding the university's ability to draw on and to replenish the commons of knowledge, that is, that pool of freely available public knowledge, which is one condition of its survival. On the other hand, intellectual property rights set into a motion a number of dynamics which prevent the university from fulfilling its public service mission. This may undermine public support for the university which is a second condition of its survival. Taken together, these mutually reinforcing dynamics produce a vicious spiral that puts the university's future at serious risk. As this paper is not uniquely concerned with the general impact of intellectual property on the university, I do not discuss these two dynamics in detail; however, I do provide some examples<sup>2</sup> to illustrate how they work. In presenting these examples, I distinguish between what I call private and public academics, the former being those academics who are involved in the production and/or exploitation of intellectual property (for example, through research alliances with industry, through exchanging preferential access to their

research for the right to use private knowledge, or through entrepreneurial activities of their own), and the latter being those academics who are not.

## DEPLETING THE COMMONS OF KNOWLEDGE

Whether they are "private" or "public," the ability of all academics to replenish the commons of knowledge is being curtailed by intellectual property rights. Private academics are less involved in replenishing the commons of knowledge because the results of their work are increasingly being privatized or withdrawn from the intellectual commons. Private academics are also less involved in replenishing the commons because their contribution to public knowledge production is progressively limited, both by obligation and by choice. To a growing degree, private academics are either explicitly prohibited, or are refraining, from informally discussing their work with colleagues (Blumenthal et al. 1997; Scott 1998). They are also limiting their participation at or in academic conferences and slowing the pace at which they share the results of their research through other vehicles, such as scholarly journals (Loughland 1996; Nature 1998).

In a number of ways, public academics are also less able to replenish the intellectual commons. The development and extension of intellectual property regimes are limiting their access to important resources they need to do their work. These include freely accessible knowledge, research funds, which are increasingly targeted toward privately oriented knowledge production (Polster 1994), and research collaborators, many of whom are becoming private academics. Another resource in increasingly short supply for public academics is time. As more and more knowledge is privatized. public academics are spending more time keeping informed of what IP rights are granted to whom in order to avoid infringement; negotiating special access to private knowledge (such as through agreements for experimental use); or finding ways of working around the obstacles to their research thrown up by IP rights (Marshall, 1997). Further, as entrepreneurial research becomes more highly valued both by universities and governments, the ability of public academics to obtain institutional rewards that may facilitate their work, such as

release time, is also eroded, particularly relative to (and in part because of) the ability of their privately oriented counterparts to reap such rewards. It seems likely that as public knowledge production becomes increasingly difficult or dissatisfying for them, many public academics will be tempted to join the ranks of their privately oriented colleagues. As well as further depleting the intellectual commons, this will redouble the hardships faced by those academics who remain steadfast in their public orientation.

## IMPEDING THE UNIVERSITY'S PUBLIC SERVICE MISSION

Intellectual property rights are also impairing the ability and willingness of academics to serve the public interest. For a number of reasons, such as confidentiality agreements, private academics are increasingly less able to share the results of their research and their knowledge with a variety of publics in a variety of fora. They may also be prevented from protecting the public from harm, as was the UCSF professor who was unable to disclose the fact that the company for whom she did work was gouging the public on its drug prices<sup>3</sup> (Vogel 1997). Private academics (and university administrators) may even harm the public interest either inadvertently or knowingly, such as when they grant exclusive licenses to academics' inventions in order to advance institutional goals such as generating funds or cultivating valuable corporate allies. Among other things, these exclusive licences may damage the public interest by inflating the prices of consumer goods and/or by reducing scientific or economic development, as was the case when Stanford University granted an exclusive license on its oligonucleotide machine (Cohen 1997).

Intellectual property regimes do not simply limit the ability of academics to *use* the knowledge they produce to serve the public interest, but may also reduce their ability (and/or willingness) to *produce* knowledge that responds to a variety of social needs. Private academics who work with corporate partners may be less able or willing to work in the future with or for groups with other or opposing interests. This may be for a number of reasons ranging from fears of compromising their personal financial interests (if they have a stake in the company) to fears of being sued for infringing on the company's IP when working for these groups.

On the other hand, declining funding and institutional rewards for alternative knowledge production, that is, knowledge not aimed at the production of IP, makes it more difficult for public academics to do research that responds to a diversity of social needs. As well as becoming more difficult, alternative knowledge production may also become more risky as IP becomes more important to the university. Indeed, there is growing anecdotal evidence of universities suppressing the production of alternative knowledge that threatens their or their partners' commercial interests, such as by failing to support grant applications for such potentially "dangerous" research or failing to renew the contracts of academics who engage in such research (Strosnider 1993). It stands to reason that as more academics become less responsive to the needs of the general public, and as confidence in academics' impartiality and reliability wanes, public support for higher education will decline, as will the public funding on which universities in most countries still heavily rely. This will set into motion a vicious cycle through which the universities' dependence on, and subservience to, private sources will only continue to grow.

It is worth emphasizing that these two threats to the future of the liberal university namely the erosion of the university's ability to replenish the commons of knowledge and to fulfil its public service mission - are inextricably linked and mutually reinforcing. Together, they will make it increasingly difficult for the liberal university to continue on as it has. While intellectual property is not likely to produce the physical destruction of the university, it is very likely to produce a fundamental, and likely irreversible, transformation of it. From an institution that produces a broad range of freely available knowledge that serves a multiplicity of social needs in a variety of ways, intellectual property regimes are helping to turn the university into an institution that produces a more limited range of knowledge, to which access is increasingly restricted, and which is shared with society (and which serves society) primarily through the mechanism of the market. Ultimately, this shift is likely to dissolve most if not all of the differences between the university and any other private knowledge institution. There will remain no university dedicated to a robust conception of public service, that is, one that stems from a concern with intrinsic rather than mere utility values and one that is universalistic rather than particularistic in its orientation. And there will thus remain no university worthy of public support.

### IMPLICATIONS OF THE LIBERAL UNIVERSITY'S DEMISE

Thus far, this argument has focused on the costs to the liberal university of its involvement in intellectual property. My underlying concern, however, is the cost to the general public of the loss of the liberal university. Although knowledge production and transmission in the public interest can and do take place outside of the university's walls, the existence of an institution dedicated solely to these functions is a precious, possibly irreplaceable, resource whose potential loss should be vigorously protested and resisted. And while this loss needs to be opposed by all citizens, I would argue that it should be protested and resisted even more by citizens of disadvantaged groups, particularly women.

As is the case when other public institutions are destroyed, it is women who will be disproportionately harmed by the liberal university's demise. Be it because they are less able to afford the escalating costs of higher education, which are intimately related to the university's involvement in IP (Negin 1993), or less able to have their research needs addressed by academics, or less able to access the knowledge, services, and products whose creation their tax dollars subsidize, women's inequality will be intensified by the liberal university's demise. It is not only the costs of the destruction of the liberal university to individual women that need concern us, however - even though, in and of themselves, they are sufficient cause for concern. The impacts of IP will also cost women collectively in that they will undermine the university's effectiveness as a tool to advance the feminist project. In the following section, I address some of the potential threats to the feminist project that are posed by the university's increased involvement in intellectual property.

## INTELLECTUAL PROPERTY, THE UNIVERSITY, AND THE FEMINIST PROJECT

It is indisputable - and an understatement - to say that the liberal university has not always effectively or willingly served women's interests and needs (Aisenberg and Harrington 1988; Bannerji et al. 1991; Chilly Climate Collective 1995; Dagg and Thompson 1988; Stalker and Prentice 1998). Nonetheless, the university has been a very useful tool in advancing the feminist project, particularly in two respects. First, it has furnished feminists with the opportunity and space within which to develop a knowledge base that is vital to supporting and sustaining our movement. Second, the university has served as a site in and through which to build links among women that support and sustain our movement. The university's involvement in IP will dramatically reduce our ability to produce and sustain both the knowledge and solidarity that feminists need to advance our project. While this is unlikely to destroy our project outright, it will, nonetheless, deal it a serious blow.

## ERODING THE FEMINIST KNOWLEDGE BASE

Above I suggested that the development and extension of IPRs both within and outside of the university will put increasing pressure on all academics to become private academics, that is, to become involved in the production of privatized knowledge. While feminist academics might be more philosophically or politically opposed than most to becoming private academics, they may also be more pressured than most to become private academics. Because feminists are disproportionately marginalized and vulnerable in the university, the greater research opportunities and institutional rewards that accompany privately oriented research may be harder for them to pass up. This is not simply for personal or professional reasons, such as the legitimate desire to protect or enhance one's career. This may also be for political reasons based on the beliefs that it is better to do private research than no research at all (due to funding shortages); or that it is possible to squeeze one's own research agenda into a larger private research agenda; or that it is important that feminist perspectives be at least

represented in, rather than completely marginalized from, private research initiatives.

Notwithstanding the good intentions that often lie behind them, such strategies of accommodation<sup>4</sup> to intellectual property in the university may cause considerable damage to the feminist project. While feminists who become private academics may protect their careers and thus their places in the academy, they will do so at the cost of eroding the feminist knowledge base, both in terms of the research that they do and do not do. In that the results of their research will be private rather than public, these researchers will directly erode the feminist knowledge commons. They will also slow down other feminists' work, as the knowledge the latter need to do their research will no longer be freely available and may actually be unaffordable or otherwise inaccessible. It is worth further noting that in working on projects oriented to producing intellectual property, feminist researchers may be investing their talents and energies in projects that are not directly useful to women or that are less useful to women, such as developing expensive drugs to cure diseases as opposed to working on preventative approaches to diseases. In the sense that they waste or fail to maximize precious resources, private feminist academics again diminish our knowledge base.

Further, as more feminists become private academics. those who remain public in their orientation will face increased difficulties in their research work. They may have less access to free knowledge, face higher research costs, and have more constraints on their research time. They may also have even fewer collaborators with whom to work, or even to consult, which is already a serious difficulty faced by feminists in many research fields. In the present university context, which is characterized by both a serious reduction in support for publicly oriented research and a growing obsession with performance indicators, one may predict that many public feminist academics will be caught in a vicious spiral of declining productivity, worsening track records, reduced institutional rewards, and intensified workloads. Be it because they give in to pressures to engage in private research, or fail to get academic promotions, tenure, or tenure stream appointments, or abandon the university in disgust and/or despair, the public feminist knowledge base will be further diminished to the detriment of our movement.

## FRAGMENTING FEMINIST COMMUNITY

Equally damaging to the feminist project are the multiple ways in which intellectual property may divide feminist communities, severing many of the links that sustain or unite our movement. As implied above, intellectual property regimes may fragment the feminist research community by reducing the formal research interaction between feminist academics (at conferences, through journals, etc.) as well as the informal interaction (in university hallways, over coffee, etc.) between them. It seems likely that IP will also divide feminist researchers by producing a number of destructive tensions and resentments between them. These hostilities may compromise, in turn, various of the hard won gains in the university that feminists solidarity has made possible, such as the establishment of feminist institutions, resources, and practices on campus, thus further weakening the bonds among women/feminist workers and students in the university.

The development and extension of intellectual property regimes may also strain relationships between women inside and outside the university, particularly between feminist academics and activists. In the past, and still today, feminist research in the academy has directly and indirectly supported the work of feminist activists. In return, feminists outside the university have championed feminist academics and feminist studies in a number of ways. As intellectual property transforms the university, this mutually supportive relationship may be disrupted with the result that feminists are perceived to be, and actually end up, abandoning one another to their mutual disadvantage.

For example, as private feminist academics become involved in research oriented to the production of IP, both their research time and the results of their research will become less available and/or accessible to the feminist community. For a number of reasons, including various obligations to their private research partners or sponsors, these private feminist academics may also be less able and/or willing to serve the feminist community in other ways, such as by speaking at public fora, writing for the popular media, serving as expert witnesses for the community, etc. While this

silencing of private feminist academics may last only so long as do the private research projects in which they are engaged, it also has the potential to become permanent. As implied earlier, there have been cases in which researchers have been sued for supposedly divulging private information acquired in one research project in the course of working for or with other groups (Stone 1994). The mere threat of being hit with a lawsuit in retaliation for their activism may be enough to silence some private feminist academics permanently. This silencing of private feminist academics will further separate them from the wider feminist community, undermining the latter's strength and further eroding their support for private feminist academics and/or feminism in the university more generally.

The ability of public feminist academics to serve the women's movement may also be compromised in a number of respects. As their working conditions and status in the university deteriorate, they will have fewer resources to devote to the growing research needs of the feminist community. They may also be less tolerant of the many complexities and tradeoffs that this kind of work frequently involves. And although they will be free - in the sense of being allowed - to serve the feminist community in various other ways, they will have less time and energy to do so, again straining the bonds between women inside the university and those outside of it. It is worth noting that their increased vulnerability within the university, which is both cause and consequence of their separation from the broader feminist community, may also put a chill on public feminist academics' activism. For example, as their institutional security and community support erode, public feminist academics may be increasingly reluctant to challenge questionable or even harmful private research being conducted in their own or other universities for fear of jeopardizing their jobs. Yet the more they retreat from such activism, the more they will be seen as letting the women's movement down, and the more the distance between women inside and outside of the university will grow.

The university's involvement in IP may not only weaken the feminist knowledge base and the strength of our movement in the short term, but also, and perhaps more so, in the long term. This is most clearly illustrated by considering ways in which IP may transform the nature of feminist academics' relationships with their students. For instance, as private feminist academics get progressively more research support than do public feminist academics, they will take on a larger share of graduate student training, particularly in the hard science fields. This may erode the feminist knowledge base in the long term, as the training the next generation of feminist researchers will receive will not necessarily be directed toward serving feminist priorities nor involve feminist research methods and practices. Moreover, as public feminist academics are likely to be penalized for their relative lack of productivity by being assigned heavier teaching loads, there will be a greater number of students being serviced by a smaller number of overworked feminist professors. This too has the potential to weaken our movement in the long term by reducing the number of women studies students, the amount of feminist activism on and off university campuses, and ultimately the number of women and men who identify with and work to advance the feminist project.

#### **RESISTING INTELLECTUAL PROPERTY**

To be sure, the scenarios discussed in the previous section are only possibilities, not yet realities. Nonetheless, we should not underestimate how easily they may materialize. The dynamics set into motion by intellectual property are sweeping over the entire university, not only the feminist enclaves. As such, situations such as those described above may develop far sooner than we expect. They may also be more difficult to resist than we might imagine. For feminists, there is a thin silver lining to the cloud cast by intellectual property over the university, however. It is that the battle against it is not ours alone; it belongs to all people committed to the liberal university. In concluding, I offer some thoughts on how we might all work together to resist intellectual property and its harmful effects on the university, the feminist project, and the public interest.

Above I noted that the ongoing transformation of the liberal university is being driven in large part by dynamics that originate outside of it. Although the university is increasingly implicated in the global knowledge grab, it is clearly beyond the university's ability to stop it singlehandedly. In the long term, it seems to me that

the most effective strategy to protect the liberal university is for its supporters to ally with the many other social groups including farmers, indigenous organizations, and others who are working to halt the development and extension of IPRs, both directly - at the level of national and international law - and indirectly - through various local and global acts of resistance<sup>5</sup>. In the short term, however, there are some less ambitious but potentially worthwhile strategies that we can and should pursue.

The main strategy I advocate to protect the liberal university in the short term is for feminists and others to seek broad exemptions for academics from intellectual property rights. These exemptions could be sought on the basis that they are crucial to the survival of the liberal university, which, in turn, is vital to the feminist project and to the broader public interest. It is conceivable that both the general public and even the private sector could be convinced of the merits of granting exemptions from intellectual property rights to the university. However, for this to happen, at least one condition would have to be satisfied. In order to be granted IP rights exemptions in the name of the public interest, universities would have to work solely in the public interest. This means that the university's involvement with private knowledge producers would have to cease, as would academics' involvement in commercial activities of their own. Failure to meet this condition would destroy any chance of the university being granted IP rights exemptions, as it would afford both universities and their allies an unfair market advantage.

Even before campaigns to convince the public and industry to grant IP rights exemptions to the university could be undertaken, support for this proposal would have to be cultivated within the academic community. While it might be difficult to convince entrepreneurial academics of the merits of severing corporate ties as a precondition for an exemptions campaign, other academics might be more easily persuaded, particularly once their less self-serving concerns are allayed. For example, the fear that a ban on entrepreneurial activities might produce a "brain drain" from the university to the private sector may be dispelled, as we remember academics' long history of forgoing financial rewards in exchange for others, such as professional autonomy and the opportunity to work in a stimulating environment (two benefits that are being destroyed by the university's involvement in IP). Fears that cutting corporate ties will further aggravate universities' dire financial situations may also be quelled, once the multiple costs - to universities, students, and the general public - associated with producing and sustaining corporate links are fully brought to light (Polster 1998).<sup>6</sup>

In addition to persuading academics of the feasibility - and necessity - of withdrawing from private knowledge production, there are some additional measures that those seeking to preserve the liberal university could adopt to help advance their goal. First, as a means of building public support for IP rights exemptions and of rejuvenating both the commons of knowledge and the university's public service mission (three mutually reinforcing conditions), we could launch campaigns to encourage academics - feminist and others - to voluntarily sign over to the public the IP rights to their work. Another possibility is the development of "knowledge collectives" in which various academics pool their intellectual capital and use it as a lever to free up even more knowledge. For example, these collectives could oblige anyone wanting to use a collective's knowledge to share their own intellectual property with the collective. Such a strategy would reverse the dynamic through which access to knowledge is progressively limited and move in the direction of protecting and enlarging a commons of knowledge. Efforts to change university policies, such as by incorporating into university contracts clauses that vest with the public the rights to any knowledge academics produce, would also be extremely useful, if more difficult to achieve, in terms of creating conditions favourable to an exemptions campaign. So too would be efforts to resist if not reverse various government policies which promote the development and exploitation of university intellectual property, such as those recently proposed by the Canadian Expert Panel on the Commercialization of University Research to the Prime Minister's Advisory Council on Science and Technology.

To be sure, the above proposals - not to mention the larger campaign for IP rights exemptions which they are designed to advance raise many sensitive and complex considerations that would have to be widely discussed by

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academics in our departments, faculties, unions, and professional organizations. They will also have to be negotiated with a number of constituencies including university administrations, boards of governors, government and industry leaders, various social movements, and the general public. The various competing interests involved will certainly make such discussions and negotiations difficult and complex. However, the costs of failing to take up this challenge are far too high for us to shy away from it. Once again, the feminist community has a chance to be at the forefront of a struggle that is vital both to women's interests and to those of general public. I offer this paper in the hope that we take full advantage of this opportunity.

#### ENDNOTES

1. The corporatization of the university has had many other impacts on the institution and on women's experience in it. Lack of space precludes a discussion of these here. For one excellent account see Krouse, 1999.

2. The dynamics discussed in this paper are not developing in the same way, or even at all, in all countries, universities, or academic departments. My aim here is not to deal with their variations, but rather to explore broad trends and to predict how they will develop over time so that their more harmful effects may be mitigated. It is worth further noting that while most of my examples are drawn from the "hard" sciences, intellectual property rights are increasingly transforming the nature of academic work in the fine arts, social sciences, and humanities. Indeed, the development and exploitation of intellectual property in these areas is a growing concern of government and industry leaders (see, for example, Expert Panel on the Commercialization of University Research, 1999, p. 9). For more elaboration of the argument in this section of the paper, see Polster, 2000.

3. The ongoing saga of Dr. Nancy Olivieri and the Hospital for Sick Children in Toronto is relevant here as well.

4. For an extended critique of academics' strategies of accommodation to the transformation of the liberal university, see Newson and Polster, 1998.

5. The work of Indian activists, such as Vandana Shiva, to have natural and cultivated seeds designated as community property so as to prevent their privatization and commercialization by private corporations is one such kind of resistance (Barlow 1999).

6. Indeed, as much feminist public policy analysis reveals, the tangible and intangible costs of corporate links with many public institutions are generally far greater for the majority of citizens, and particularly for women, than are the benefits derived from them. (See, for example, Ricciutelli et al. 1998 and Broad and Antony 1999).

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