Libratory Law: The (Un)Making of Knowledge, 1976-2006

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1979, Bruno Latour and Steve Woolgar published *Laboratory Life*, a study that would go on to become *the* seminal book on the making of science. Of course, the Laboratory had long before that symbolized the ultimate creative milieu—even when it in effect meant the decidedly obsessed tinkerings of a Dr. Jekyll—and to this day the image of the laboratory as a site of scientific advancement and innovation jockeys with that of a place harboring madness, hubris, and dangerous substances in general.

My paper today delineates a possible research project examining the multiple ways by which the Law interacts with and impinges on the creative practices of two specific domains: the research library and the laboratory. Of integral importance to higher education, both institutions are defined as *creative knowledge environments* (Hemlin *et al* 2004). While the laboratory has achieved iconic status as enabler of creativity and knowledge production in the natural sciences, it is perhaps less obvious that to the scholar in the humanities or social sciences, the library *is* the laboratory. On the surface, each stands in for one of C.P. Snow's "two cultures," and yet, I will stipulate that the library and the laboratory share certain profound characteristics warranting the "libratory" of the title.

The purpose of the study I envision can be formulated in the following question: *how and why it is that intellectual property rights—originally an instrument intended to act as incentive and reward—increasingly seems to circumscribe and undo creativity in these two domains, and what are the consequences of such a development for research in the sciences and the humanities*? By considering the making and unmaking of creative practices as it relates to respective legal frameworks—in the case of the library, copyright law, and in the case of the laboratory, patent law—the overall ambition of this project is to contribute to studies on the relationship between creativity, knowledge and the Law in higher education.

In the Information Age, substantial economic investments are channeled into what Willinsky (2006, 17) terms the know-biz industry. The exponential growth of knowledge-intensive businesses in information- and biotechnology as well as in the more consumer-oriented media and entertainment sector makes knowledge and information a raw material of significant cultural, social, and economic importance. We know that during the last thirty years, intellectual property rights have expanded on three fronts; *in subject matter* (from text, music, or film to databases, software, DNA-sequencing, and potentially also traditional knowledge); *in time* (the period of protection has gradually become longer); and *in space* (still subject to national legislation, from the 1886 Berne Convention to TRIPS in 1994, major international and global conventions and agreements set the agenda for intellectual property rights policy).

The result, as so many have argued, is an overbloated and counterproductive protection that does not achieve its purpose of incentive and reward but instead proves detrimental to creativity. Higher education is not a distant ivory tower untouched by the present tendencies of enclosure, but represents a domain where these have significant repercussions for society as a whole. Despite important contributions, for instance Corynne McSherry's 2001 book *Who Owns Academic Work?*, higher education is a field within interdisciplinary intellectual property scholarship that so far has received far less attention than has been the case with other creative domains, for instance music, art, and media.

Underpinning the entire project is L. Ray Patterson's (1991) argument that intellectual property rights exists not only to protect the legitimate rights of individual creators but also as a *user's right* whereby unfettered access to culture and knowledge for the greater good of society ultimately must trump the interests of rights holders to protect their assets. In this present context users refer therefore primarily to a very distinct category, namely students, scholars, and scientists doing research in the Triple-Helix "libratories."

a) Making Knowledge and Owning Things

In the library as well as in the laboratory, intellectual property rights mark out a continuously moving boundary within these domains as academic arenas and legal arenas, between making knowledge and owning things (Myers 1995, 101). Although the makeup and rationale of copyright and patents differ in fundamental ways that should not be underestimated, intellectual property scholarship has long recognized that the legal construction of creativity expressed through these rights depend on the trope of the "author." That the arrival of the modern author is inextricably linked with the arrival of an institutional praxis wherein legal ownership and a new subjectivity seamlessly overlap, originates with Michel Foucault, whose idea of an "author function" has proven tremendously influential in understanding both the history and expansion of intellectual property rights.

The idea of a "libratory" provides fertile ground for a further investigation into an interesting "authorship dilemma" where two contradictory ideas of authorship and creativity—one formed through scholarly practices and ethics that for a long period of time was considered beyond privatization by copyright or patents—and the other dependent on the affirmation of individuality and originality as it has developed from the Romantics onward. In more recent years, interest in the correspondences between intellectual property and authorship has come to include the domain of science more precisely (Biagioli & Galison 2003).

As Greg Myers (1995) very interestingly shows in his discussion on how two different scientists go about patenting their inventions in "From Discovery to

Invention: The Writing and Rewriting of Two Patents," *Social Studies of Science*, the rhetorical work deployed when writing a patent application resonates with the second "authorial" position, where "patents must be torn free from the entanglement of other texts." In academic writing, however, "articles are the strongest when most entangled" (91). Consequently, the scientist operates within two contradictory author paradigms, one where it is essential to rule out any "prior art" in order to prove innovation (the patentee-author), and one where "prior art" must in fact be acknowledged and integrated in order to give the argument sufficient strength and validity (the scholar-author). Different rhetorical strategies collide in the context of higher education and point to a rewarding field of study, where focus will be on the tensions built into scientific authorship, and how the Law constructs and deconstructs creativity, especially through patents.

b) Legally Beyond

If the laboratory represents a CKE where knowledge is both made and things are owned, so does the library. Libraries not only supply the information researchers need, but also help disseminate their results through the same channels. But the role of research libraries as seminal knowledge-brokers in higher education is coming under increased pressure by escalating transactions costs, costs that are both pecuniary (as in prohibitively expensive bundled journal subscriptions that help undermine purchases of monographs and hence contribute to the natural sciences/humanities and social sciences divide), but also impose serious barriers on free speech by a patchwork of copyright, licensing arrangements, and pay-per-view fees, that complicate rather than facilitate digital access. The shift from analog to digital formats has led to a radical disruption in the interaction between libraries and their patrons/users.

New technology—in the shape of the photocopier's unprecedented ability to reproduce texts—was one of the direct reasons for the codification of "fair use" in the revamped U.S. Copyright Act in 1976 (more on the photocopier, see Hemmungs Wirtén 2004). "Fair use/dealing" has no real equivalent in Swedish/Continental European Law and acts ideally as a safety valve whereby certain uses—facilitating research and critical commentary—are accepted during ongoing copyright protection. And as the high-profile verdict of the Canadian Supreme Court in *CCH Canadian Ltd. v. Law Society of Upper Canada* (2004) shows, combining a library with the "old" technology of the photocopier may cause copyright commotion even in the twenty-first century. From the VCR to the ipod, the three decades between 1976-2006 that delimits this project represents a period of profound technological change posing new legislative challenges to the effectiveness and legitimacy of intellectual property rights.

The stability of fair use to safeguard the rights of users has been questioned (Nimmer 2003), especially from the viewpoint that provisions once established in a very different technological environment are inadequate for the digital realm, when information is increasingly disembodied, shared, and sampled across media platforms. It would be interesting to consider more in detail the library and the laboratory as legal exceptions, particularly focusing on the potential of copyright's fair use (as well as the equivalent fair dealing in Canada and the U.K.) to act as blueprint for a similar "freedom to tinker" in the context of patent Law. By what means and arguments does the Law carve out a special status for the library and the laboratory? Can legal exceptions for the library be applied to the laboratory?

c) Information/Science Commons

The tension between making knowledge and owning things may of course express itself in a number of different ways within the laboratory and the library, by users and by the institution in question. Yet, the two domains also share certain common and formative characteristics. The main resource circulating in the libratory is primarily immaterial: knowledge. Knowledge is considered cumulative in the humanities as well as in the natural sciences, in addition to being thought of as the ultimate public good rather than a commodity. The library and the laboratory clearly merge into the "libratory," in the sense that both CKEs tend to be described as a commons. The library is often represented as an "information commons," where everybody has the right to access and use. The laboratory is integral to a "science commons," where the free exchange of basic discoveries is fundamental to the continued advancement of research.

The values and norms associated with the science commons are summarized in Robert Merton's classic definition of a science ethos, consisting of both moral as well as technical prescriptions. Merton saw the science ethos as made up of four sets of institutional imperatives; universalism, communism, disinterestedness and organized skepticism (Merton 1968, 607). Particularly Merton's use of "communism" (610-612), denoting science as a common heritage and a product of social collaboration, is important in order to understand how the changes brought on by the move towards increased intellectual property protection impinge on higher education and science. Already in 1942, Merton noted that "The communism of the scientific ethos is incompatible with the definition of technology as "private property" in a capitalistic economy" (Merton 1968, 612). The inroads made on the "libratory" as an information/science commons must in this respect be interpreted against a fundamental restructuring of higher education as a whole.

In the U.S., the controversial Bayh-Dole Act from 1980—which opened the door for federally funded universities to patent their research—epitomizes the collision between an earlier "gift-economy" as described by Merton and an incoming culture of commodification. It has been argued (Heller & Eisenberg 1998; Rai & Eisenberg 2003; Eisenberg & Nelson 2002) that the accelerated impetus to patent research as a way of compensating for cuts in university funding (a tendency not limited to the U.S.) may lead to serious anti-commons tragedies. Juxtaposing the library and the laboratory in terms of the commons should offer insights into the effects of various anti-commons tragedies in the humanities and the natural sciences. That the interests of the humanities and the natural sciences converge here is substantiated by two British reports stressing the basic non-commercial identity of both the library and the laboratory: the *British Academy Policy Review on Copyright and*

Research in the Humanities and Social Sciences (2006) as well as the Royal Society's *Keeping Science Open: the Effects on Intellectual Property Policy on the Conduct of Science* (2003*).*

As a representative of Science and Technology Studies, Bruno Latour has taken an interest in the construction of knowledge and the multiple ways by which labor is configured in the domain of natural sciences and the laboratory. How does knowledge come about, and what is it that scientists do?

But in his study from nearly 30 years ago, Latour was not overtly concerned with the legal parameters of everyday work in the laboratory, but when he noted how discoveries in the laboratory became invented in the patent application (Latour 1979, 182), the author-anxiety of Myers patentees come to mind. We can perhaps think of patents as inscription devices reinforcing the notion of creativity as an expression of a genial idea, rather than that of ongoing discussions and group work (Latour 1979, 170).

Latour's perspective resonates with that of Stuart Hall, who, when discussing the notion of representation, argues that knowledge is not static but "put to work, through certain technologies and strategies of application, in specific situations, historical contexts and institutional regimes" (Hall 1997, 49). In order to deconstruct the artificial division between "creator" and "user" set in place by intellectual property rights, I rely on the affirmative view of users elaborated in Cultural Studies, where attention is drawn to active use rather than simply passive consumption.

There is an interesting dilemma of sorts in the fact that much of the material I rely on will be from the United States, the U.K., Canada and Australia. This can be traced back to 1) the public interest often seen as an integral element of Anglo-American copyright (for instance illustrated by the fair use/dealing doctrine); and 2) the interdisciplinary research tradition of Anglo-American intellectual property scholarship represents the field to which my own work most closely relates. Still, as I noted previously, we know very little of what particular European defenses—inside or "outside" the Law—that might be available when it comes to defending use in the library and the laboratory, and I see trying to remedy this lacuna as a particularly interesting aspect of a project such as the one I have just tried to outline.

Although the comparative element of the study should not be interpreted too narrowly, I believe that there are significant gains to be made from juxtaposing the various ways by which copyright and patent law constructs and deconstructs creativity. I have tried to argue that many of the present challenges are similar in the laboratory and the library, and that, through the writings of Bruno Latour (and others of course), there might be a theoretical framework that enable us to merge the two in some respects while allowing them to remain distinct from one another in others.

There are many areas of creativity, ownership and collaboration that have yet to be explored. The double "libratory" approach, then, can possibly transcend the division between copyright and patent scholarship in favor of a thematically oriented analysis sensitive to differences and similarities between the two domains and their respective legal frameworks.

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