ABSTRACT

In this thesis, I argue that the nascent politics of Intellectual Property is poorly served through attempts to conceive IP rights as an "enclosure of the intangible commons of the mind" and highlight a number of problems with the enclosure/commons dialectic more generally. To this end, it tries to indicate some new possible directions for the politics of IP, based on the insights of pragmatist philosophy and Actor-Network Theory. Such insights, I argue, allow us to interrogate questions about IP along two axes that the enclosure/commons dialectic neglects. A move away from the "intangible commons" allows us to focus on the very material way in which many of the harms of IP rights play out, and on IP's contentious function as a regualtor of objects, bodies and technologies. Second, it allows for an interrogation of the epistemological question of whether knowledge is considered to have been created or discovered, a distinction which is of vital importance to the question of whether any give sort of knowledge will be protected by an IP right. In order to address these difficulties, I argue that, instead of seeing knowledge as a sort of substance, we should instead see it in terms of practice and relations. Ideas, I argue, are not things, but assemblages of materials.

This perspective is developed and illustrated through a number of case studies. I examine the history of copyright, showing that its emergence was not as a means of granting rights to ideas, but instead as a method of controlling the circulation of books. The notion of knowledge as a substance, I argue, was introduced only later, as a way of legitimating and naturalising this system. I offer a similar account of the information commons, an idea that developed from the tendency to frame issues of internet regulation in terms of applying the law to a particular place – cyberspace. Finally, I examine the controversy surrounding the Google Book Search project. I argue that the attempted settlement should be understood as a combination of two different systems of control. Again, the language of substance obscures this insight, presenting the settlement as a compromise over access to knowledge.

I conclude by arguing that this theoretical critique is also a political critique – that a politics of IP which gave up on the idea of knowledge of substance would necessarily have to focus more on the specific parties and practices that are threatened by IP rights.

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ACKNOWLEDGEMENTS

This thesis spends an embarrassing number of words arguing that texts should be seen not in terms of their relationship to a single person, but in terms of relationships between people. The writing of it is a much more eloquent way of making the point than the finished product. From interviewees struggling to give sensible answers to ridiculous questions, to friends on the postgraduate department patiently listening whilst I endlessly repeated the same point in slightly different ways, a lot of people have shown a great deal of generosity and patience in helping me get this thing written.

In the case of my supervisors – Steve Graham, Louise Amoore, and Colin McFarlane – the required levels of patience and understanding approached superhuman levels. They were unfailingly supportive, helpful and good humoured in the face of my various hiccups, difficulties, crises of confidence and unexplained changes of direction. I like to imagine I would have been as graceful if I were in their shoes, but I suspect otherwise.

Finally, I'm in awe of my wife Lizzie, who I love more than I can say. I'm still not sure how she managed to put up with the process of me finishing this thing, but I know it couldn't have happened if she hadn't been here. Whatever I produced instead would have been entirely uninspired and littered with grocer's apostrophes.

All the remaining errors, grammatical and otherwise, are mine. In that case at least, someone is going to have to claim ownership.

INTRODUCTION

In 2009, 7.1% of the votes cast in Swedish national elections went to a single-issue party which, as a consequence, won a seat in the European Parliament. This in itself, of course, is unexceptional. A number of Members of the European Parliament represent parties such as the Green party, the various far right parties, or the UK Independence Party, all of which maintain narrow foci on, respectively: the environment, immigration and isolation from the European Union. In this case, however, the party was the Swedish Pirate Party, and the issue was radical weakening of Intellectual Property law. What this proves about the merits of the party's substantive positions is open for debate. More broadly, however, the Pirate Party's success shows something that is harder to dispute: IP is now a significant political issue. This represents a quite remarkable change in the subject's status. Three decades ago decades, IP was seen, at least by those who slightly arcane area of law that could be safely confined to a small number of legal specialists. Now it is the core issue bewildering variety of scholars, politicians, musicians, scientists, lawyers, farmers, and civil libertarians.

The conventional wisdom is that this sea-change is largely a result of the increasing importance of knowledge for economic activity. The UK government-commissioned report *Digital Opportunity: A Review of Intellectual Property and Growth* (more colloquially known as the *Hargraves Report*) opens with a statement of exactly this point: "In advanced economies like the UK's, innovation is crucial to competitive edge. That makes IP policy an increasingly important tool for stimulating economic growth."[1] IP policy is now more important because knowledge is more important.

What IP policy should actually be, however, is a more vexed question. The claim that knowledge is a key driver of economic growth may sound on first hearing like a call for stronger IP rights. Indeed, one strand of thought argues exactly this – if knowledge is a key commodity, then property rights must be granted in order to facilitate its exploitation through markets. Indeed, as I describe in Chapter 1, rights-holders have organised themselves around a shared concept of property in order to orchestrate a quite astonishingly successful campaign of IP expansion. By this I mean that IP rights have been widened to cover more sorts of knowledge and lengthened to protect it for longer, that

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penalties for the infringement of rights have become harsher and the means of detecting that infringement more invasive, and that these norms have been globalised through multilateral and bilateral treaties.

Hargreaves itself spends the majority of its 130 pages detailing the ways in which the strength and complexity of current IP rights can actually stifle economic growth by providing barriers to market entry and/or rendering important knowledge unusable. Whilst the sober government review may not share much with the more radical stylings of the Pirate Party, both are united in the sentiment that stronger IP rights can, at least in some cases be harmful. The authors of the Hargreaves report and the Pirate Party, along with developing economies,[2] universities wishing to commercialise research,[3] software and hardware companies wondering whether their products are even legal,[4] farmers bewildered by the fact that they do not so much own their crops as licence them,[5] and many others besides, share a interest that can properly be characterised as political.

One important task for academics is to think through the articulation of this interest. If those pushing for the expansion of rights have successfully couched their claims in terms of property, what concepts might be deployed by those seeking to highlight the harmful consequences of such expansion. One promising candidate to emerge over the last decade has been that of "enclosure" and the corresponding argument that knowledge represents a "commons" that should be available to all. The benefits of the "enclosure/commons" dialectic is two-fold. In the first place, it seems to have political salience. Just as the various beneficiaries of stronger protections for copyrights, trade-marks and patents have achieved significant things by seeing themselves as participants in a collective struggle for the protection of "intellectual property", so stakeholders affected by their efforts might unify around the idea of protecting "the commons."[6] Secondly, by analogising the current process of expanding IP rights to older, and better understood, processes of capitalist accumulation, the enclosure/commons dialectic seems to provide some theoretical traction: we have

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2 Shiva, V., 1997. *The enclosure and recovery of the commons: biodiversity, indigenous knowledge, and intellectual property rights*, Research Foundation for Science, Technology, and Ecology.

3 Rai, A.K., 1999. Regulating Scientific Research: Intellectual Property Rights and the Norms of Science. *Northwestern University Law Review*, 94, p.77.

4 Cockburn, I.M. & MacGarvie, M.J., 2009. Patents, Thickets and the Financing of Early‐Stage Firms: Evidence from the Software Industry. *Journal of Economics & Management Strategy*, 18(3), pp.729-773.

5 Carstensen, P., 2005. Post-Sale Restraints via Patent Licensing: A Seedcentric Perspective. *Fordham Intellectual Property, Media & Entertainment Law Journal*, 16, p.1053.

6 Boyle, J., 1997. A Politics of Intellectual Property: Environmentalism for the Net? *Duke Law Journal*, 47(1), pp.87-116.

a rich and detailed understanding of the historical enclosure, and of the philosophy of property – if the current process of IP can be understood in similar terms, then analysis of it should be relatively straightforward.[7]

These advantages notwithstanding, this thesis argues that the language of enclosure and commons is a mistake. So summarise the argument, which will later to be expanded on at some length, briefly the "enclosure/commons" dialectic have allowed their opponents to dictate the terms of engagement. The dialectic reacts to, and endorses, the idea that IP is property. This is a mistake. The point of the term "intellectual property" as Mark Lemely persuasively observes, is to try and turn the debate about IP into a debate about property more generally. If any expansion of IP law can be characterised as a referendum on whether one is for or against property. The "enclosure/commons" dialectic thus concedes at the outset what should be one of the most important points of argument.

Unpacking this idea slightly, there are two important lines of distinction that the dialectic considers insufficiently. First, many of the strongest arguments against IP rights concerns their effects not on ideas as such, but on material things. One theme that emerged again and again throughout my empirical work was a concern about the effect that IP rights would have on physical things – that they would stop people from using their computers in the way they wanted, or from selling second-hand CDs, or lending books to friends. Elsewhere we see concerns about the rights of farmers to engage in traditional seed practices. The language of "enclosure" relegates this debate to the "intangible commons of the mind", but this immediately moves the focus away from the very material way in which many of the harms of IP rights play out.

Second, the link to material property and the implicit claim that knowledge is really a sort of substance, is theoretically confused, or at least incomplete. Models that treat knowledge as a resource, substance or commodity that can be owned always leave themselves open to the question of how ownership of the resource differs from knowledge of it – in many cases they would appear to be the same thing. One of the ways that IP law has historically tried to mediate this problem is through the epistemological claim that there are really two different sorts of knowledge – the own-

[7] Burch, K., 1995. Intellectual Property Rights and the Culture of Global Liberalism. *Science Communication*, 17(2), pp.214 -232.

able sort that is made by humans, and the unown-able sort that is discovered from the world. The exact placement of this distinction, however, is contentious. Are genetic therapies creations, or discoveries? Mathematical algorithms? Business methods? Book meta-data? The enclosure/commons dialectics assumption of a straightforward distinction between knowledge-as-substance and knowledge-of-substance leaves it unable to deal with these sorts of problems. I illustrate this point more thoroughly with two stories about IP.

Thomas Babington Macaulay: Marxist?

In 1841, there was a widely reported debate in the House of Commons concerning a proposal to extend the duration of authors' copyrights. This apparently obscure subject had become something of a *cause celebre* in the House and amongst the reading public, ostensibly as a result of concern for the descendants of various literary figures. The most prominent of these was the granddaughter of John Milton, who had died nearly a century before. Whilst her forbear's works had continued to enjoy commercial success, this young woman had lived in poverty. Bereft of her rightful inheritance, she had been reduced to living on the charity of the lettered London classes; David Garrick, the famous actor, had staged a production of one of her grandfather's works, with the proceeds going to her. The particular case of Milton's heir, it was generally agreed, was emblematic of a general problem of legal inconsistency; whilst more conventional sorts of fortune could be passed down from parent to child quite happily, the same did not hold true for copyright,[8] which at this time did not usually outlive the author of the copyrighted work.[9] The proposed solution was to have them last for sixty years after the death of the author.

Macaulay spoke against the proposal. The core of his argument was that copyright was a form of monopoly. By placing control of a work under a single owner, it allowed copyright holders to raise the price of books far above their cost of production:

> Copyright is monopoly, and produces all the effects which the general voice of mankind attributes to monopoly... the effect of monopoly generally is to make articles scarce, to make them dear, and to

[8] This argument appears to be a perennial one – see, for example, Helprin, M., 2007. A Great Idea Lives Forever. Shouldn't Its Copyright? *The New York Times*. Available at: http://www.nytimes.com/2007/05/20/opinion/20helprin.html [Accessed June 7, 2011].

[9] When Macaulay was speaking, copyright in the United Kingdom lasted either for 28 years or the life of the author, whichever was longer.

make them bad.

Moreover, there was no guarantee that this ability to raise prices was necessarily a benefit to the heirs of creators. Milton examined the plight of Milton's granddaughter, the example around which the case for copyright extension had been built:

> At the time at which Milton's granddaughter asked charity, Milton's works were the exclusive property of a bookseller... Here, then, is a perfect illustration of the effect of long copyright. Milton's works are the property of a single publisher... And what... is the situation of the only person for whom we can suppose that the author... was at all interested? She is reduced to utter destitution. Milton's works are under a monopoly. Milton's granddaughter is starving.

Finally, Macaulay emphasised that the question of literary property was not limited to the economic harms and injustices that a publisher's monopoly might inflict. By way of illustration, he asked the House to imagine that the works of John Wesley, the founder of Methodism, were still under copyright:

> His journals, interesting even to the common reader, are peculiarly interesting to the Methodist: for they contain the whole history of that singular polity which, weak and despised in its beginning, is now, after the lapse of a century, so strong, so flourishing, and so formidable. The hymns to which he gave his imprimatur are a most important part of the public worship of his followers. Now, suppose that the copyright of these works should belong to some person who holds the memory of Wesley and the doctrines and discipline of the Methodists in abhorrence. There are many such persons... Suppose that the works of Wesley were suppressed. Why, Sir, such a grievance would be enough to shake the foundations of Government.

Exclusive control over a work – and thus the right to prevent its publication – allowed the owner to exercise a form of power that might be properly characterised as political.

Against these very serious problems, the only argument that commended copyright to Macaulay was that the only alternative means of securing an income for authors was to hope that rich clients would provide patronage. This, he suggested, was even more fraught with political problems. If authors protected by copyright created only what they thought booksellers wished to buy, writers supported by the wealthy would use their talents to produce only what they thought their patrons wanted to hear. Such a solution seemed “certain to turn those minds which are formed by nature to

be the blessings and ornaments of our species into public scandals and pests."[10] Copyright might have its faults, but it was at least largely immune to this sort of very crass corruption.

Macaulay's stance was thus that copyright was an unfortunate if necessary incentive for authors. As May observes, this principle of balancing private rights against public benefits underlies all IP.[11] Macaulay's formulation of this principle is worth repeating: "It is good that authors should be remunerated; and the least exceptionable way of remunerating them is by a monopoly. Yet monopoly is an evil. For the sake of the good we must submit to the evil but the evil ought not to last a day longer than is necessary for the purpose of securing the good."[12]

To summarise, then, Thomas Babington Macaulay – Whig historian, establishment politician and one of history's greatest advocates for and enablers of the spread of liberal capitalism at the point of a bayonet – opposed a bill in Parliament for the protection of property, arguing that this property was a form of monopolistic control, that its main function was to allow owners to extract surpluses, that a strengthening of property rights would benefit these owners without delivering any appreciable benefit to the workers on whose labour such rights were ultimately based, that it would allow this small class of owners to exercise a form of political power over society at large, and that whilst we should respect the dynamism and innovation that this sort of property produced, it would be a grave mistake to confuse this evil with a good. The usual term for this sort of view is "Marxist."[13]

It is, however, profoundly unlikely that Macaulay was a secret devotee of Karl Marx. Those who would not wish to rule out the possibility would be advised to consider that, as Michael Perelman has noted,[14] Macaulay was far from unique in his suspicion of IP. Other prominent critics of the idea that IP is property include Friedrich Hayek[15] and Milton Friedman.[16] This is not a result of their

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10 Macaulay, T.B.M., 1891. *The Miscellaneous Writings and Speeches of Lord Macaulay* Popular ed., London: Longmans, Green, and Co.

11 May, C., 2009. *The Global Political Economy of Intellectual Property Rights: The New Enclosures*, 2nd ed., Milton Park Abingdon Oxon: Routledge. p. 10

12 Macaulay, T.B., *The Works. Volume 11. Speeches, Poems amp Miscellaneous Writings. Volume 1*, Elibron.com.

13 Marx, K., 1995. *Capital: An Abridged Edition*, Oxford: Oxford University Press; Marx, K., 2004. *The Communist Manifesto*, London: Penguin.

14 Perelman, M., 2003. The Weakness in Strong Intellectual Property Rights. *Challenge*, 46(6), pp.32-61.

15 Hayek, F.A. von, 1980. *Individualism and Economic Order*, Chicago: University of Chicago Press.

16 See, for example, Friedman, M., 2002. *Capitalism and Freedom* 40th ed., Chicago: University of Chicago Press, p

hostility to property. Rather, whilst these thinkers remain enthusiastic proponents of property in general, they feel that IP falls outside the scope of such enthusiasm. Whilst they, like Macaulay, regard the inventions and creations associated with IP as good, they see the exclusive grant of private rights over knowledge that we grant to creators in order to achieve this as an evil. Essentially, they agree with May that IP rights are a matter of "public/private balance",[17] a state-granted monopoly imposed for limited periods in order to promote certain sorts of activity.

This sort of unanimity between critical IPE theory and neo-liberal orthodoxy is rare. In one sense, it answers the first research question outright. The idea of a "state-granted monopoly" that must be finely tuned in order to ensure that the public derives the maximum possible benefit is very far from the sort of "absolute dominion"[18] that we commonly understand the concept of property to imply. Answering the question in this fashion, however, raises obvious further difficulties; if everyone is sure that IP is a form of monopoly, where did the suggestion that it is property come from in the first place? Why do we not instead talk of "intellectual monopoly",[19] or some other such thing?

One important point to make is that, from a technical perspective, there is no question to answer, since there is no legal reason why monopoly cannot be a form of property. A property right is just a certain sort of legal form that governments may grant over all sorts entities, from land and money to animals, people and ideas. May explicitly draws our attention this at the start of his book:

> Professor Walter Hamilton summed this up succinctly, noting that it was 'incorrect to say that the judiciary protected property; rather they called that property to which they accorded protection"... Property *qua* property does not predate the apparatus of government (or the state), waiting to be recognised legally; rather, the legal recognition of property constitutes its existence in a form we can identify... Therefore, rather than thinking of property as a physical thing, it is better to think of it as a social institution, one that can change in response to social and political requirements.[20]

127, and Economists Brief in ELDRED V. ASHCROFT (01-618) 537 U.S. 186 (2003)

17 May, C., 2009. *The Global Political Economy of Intellectual Property Rights: The New Enclosures*, 2nd ed., Milton Park Abingdon Oxon: Routledge. p. 10

18 Burch, K., 1997. *Property and the Making of the International System*, Boulder, Colarado: Lynne Rienner Publishers Inc.

19 The economists Michele Boldrin and David Levine in fact argue that this is exactly what we should do, see Boldrin, M. & Levine, D.K., 2008. *Against Intellectual Monopoly*, New York: Cambridge University Press. So far, however, this is a pretty marginal movement.

20 May, C., 2009. *The Global Political Economy of Intellectual Property Rights: The New Enclosures* 2nd ed., Milton Park Abingdon Oxon: Routledge. p. 16

Taken literally this seems to provide a complete answer to May's question about "whether products of the intellect can be considered property at all." If property is simply whatever the court declares it to be, then "the central issue in a political economy of intellectual property" is simply a matter of what the existing law is at the time. One might object that whilst it is possible for IP to be property in this sense, there are good normative reasons for it not to be, but this is, of course, is precisely the issue. If IP is legal property, on what basis would we declare that it could not be property?

The problem, for May, is how to offer an argument that IP's status as property is problematic, without suggesting that IP lacks some essential characteristic that is found in other forms of property, and thus suggesting that these forms of property are unproblematic. One solution to this problem is to abandon this second commitment. As I argue in Chapter 1, Marxian thinkers like David Harvey,[21] as well as some libertarians like Richard Epstein,[22] have done exactly this, arguing that there is an irreducibly monopolistic aspect to all property rights. Both thinkers thus move us toward the idea that there is an underlying unity between IP and other forms of property. This perspective is, I think, the likely outcome of viewing questions of IP through the lens of enclosure – the whole point of that metaphor, after all, is to form a link between the creation of IP and the creation of landed property. Questions of IP thus turn into questions of the legitimacy of property more generally. This may not be the advance over the tradition of anti-monopoly criticism that defenders of the commons seem to think it is.[23]

However, Harvey and Epstein's perspective seems to leave one important question unanswered: why is there no liberal tradition of the need for a public/private balance in land rights? Are Macaulay and others simply hypocrites? Or is there something about IP that really does warrant special treatment? My claim is that there is indeed something different about IP. I illustrate exactly what that difference is with a rather different story.

Judicial Epistemological Anxiety

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[21] Harvey, D. "The Art of Rent" in Harvey, D., 2001. *Spaces of Capital: Towards a Critical Geography*, Edinburgh: Edinburgh University Press.

[22] Epstein, R. 2006 "The Structural Unity of Real and Intellectual Property", *Progress on Point*, Vol. 13 No. 24

[23] See, for example, Boyle, J., 2003. The Second Enclosure Movement and the Construction of the Public Domain. *Law and Contemporary Problems*, 66, pp.33-74. Boyle surveys the anti-monopoly tradition, before concluding that it is an entirely negative critique of IP, and that there is a political requirement for a positive theory of the commons. I return to the wisdom of this move in my conclusion.

In 1997 the United States Patent and Trademark Office granted a patent on BRCA1. A second patent on a similar gene – BRCA2 – was granted in 1998. The value of these patents lay in the role that BRCA1 and 2 can play in medical diagnosis; the presence of these genes makes it more likely that a woman will develop breast cancer. Myriad developed a method of breast cancer screening based on these genes and, by virtue of its patent, kept exclusive control over it. The result, as Vandana Shiva argues, is that access is more restricted than it would otherwise be: "For the 40,000 women who die of breast cancer annually, there is no cure from [*sic*] the breast cancer gene patent. In fact, even the screening has become less accessible as public laboratories, such as the University of Pennsylvania Genetics Diagnostics Laboratory are forced to pay royalties."[24]

Moved by these concerns, a group of doctors and charitable organisations, including the American Civil Liberties Union (ACLU), challenged the patents in 2009. Their arguments were twofold. In the first place they suggested that the gene patents were harmful as a matter of public policy:

> Ease of access to genomic discoveries is crucial if basic research is to be expeditiously translated into clinical tests that benefit patients in the emerging era of personalized and predictive medicine. The patents make ease of access more restricted... Because of the patents and because Myriad chooses not to license the patents broadly, women who fear they may be at an increased risk of breast and/or ovarian cancer are barred from having anyone look at their BRCA1 and BRCA 2 genes or interpret them except for the patent holder... Many women at risk cannot even be tested because they are uninsured and/or cannot afford the test offered by Myriad.

These arguments would have been familiar to Macaulay. Myriad's patents "make [tests] dear", to the extent that many women cannot afford such tests; they "make them scarce", insofar as Myriad license their patents narrowly; they "make them bad" by restricting the development of the basic research to Myriad, rather than allowing others to build their own, possibly superior, tests on the basis of it. The ACLU also argued that the patent was invalid as a simple matter of law. BRCA1 and 2, they claimed, were simply not the sort of things that could be the subject of a patent. The US patent system, like others around the world, explicitly prohibits the patenting "products of nature, laws of nature, and/or natural phenomena" as well as "abstract ideas or basic human knowledge".[25]

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[24] Shiva, V., 2004. Trips, Human Rights and the Public Domain. *The Journal of World Intellectual Property*, 7(5), pp.665-673.

[25] Complaint in *Association of Molecular Pathology, et al. v United States Patent and Trademark Office, et al* (2009) No. 09 Civ. 4515 (RWS)

Unsurprisingly, Myriad took a different view of the matter. They did not dispute that the patents restricted access to tests, and thus made them more expensive. But this, they claimed, was the whole point; the research upon which their patents had been based had only been conducted because of the prospect of an exclusive property right:

> Myriad Genetics and the other Defendants have spent considerable time, effort, and money, in competition with other researchers, to discover the BRCA1 and BRCA2 genes, synthesize DNA corresponding to the genes in test tubes, and identify specific gene mutations that are correlated with breast and ovarian cancer... The testing for these mutations has helped thousands of women get information that enabled them to make important choices and take steps to reduce their risk of breast and ovarian cancer... Without such efforts incentivized by exclusivity, there would be a much smaller number of women, if any, tested for mutations in the BRCA1 and BRCA2 genes. Indeed, but for the prospect of the patent exclusivity, Myriad Genetics would not have been established and funded by investors. [26]

Once again, the basic argument here should be familiar from Macaulay. Myriad do not argue that expensive breast-cancer tests are a good thing in and of themselves. They simply argue that they are necessary in order to provide incentives for research into gene therapies - "for the sake of the good, we must submit to the evil." So even Myriad, at least on the face of it, do not dispute the proposition that IP rights should embody a balance of some sort. They just happen to think that the correct balance involves them keeping their patent.

The question of whether Myriad are correct in this assessment is beyond the scope of this thesis.[27] Moreover, they are not, strictly speaking, relevant to the outcome of the case. Courts are not meant to make decisions based on policy – that is a job reserved for legislatures. The job of the courts is to determine the law according to a rather narrower set of legal rules.[28] Whilst we may wonder how

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ss. 102, 103

[26] Memorandum of Law in Support of Defendant's Motion to Dismiss, *Association of Molecular Pathology, et al. v United States Patent and Trademark Office, et al* (2009) No. 09 Civ. 4515 (RWS)

[27] Although it is perhaps worth noting that patents are not the only, or even the chief, means of funding basic research into biotechnology. For a detailed discussion of these issues, see Rai, A.K., 1999. Regulating Scientific Research: Intellectual Property Rights and the Norms of Science. *Northwestern University Law Review*, 94, p.77.

[28] There is an interesting side issue here as to whether the courts themselves create the law or discover it. That

well this model of judicial decision-making describes the actual practice of the courts, it is nonetheless the model that judges must formally keep to. The key question to be decided by the Southern District Court of New York, where the case was heard, was not whether the patents struck the right balance between incentivising innovation and allowing public access to knowledge. Rather, its judgment concerned only the question of whether BRCA1 and 2 were the sort of things that could, in fact, be the subject of a patent. On this question, his judgment was unambiguous:

> DNA represents the physical embodiment of biological information, distinct in its essential characteristics from any other chemical found in nature... While many inventive steps may be necessary to allow scientists to extract and read a gene sequence, it is undisputed that the ordering of the nucleotides is determined by nature.[29]

The patent was found to be invalid, because it was a law of nature. It is worth repeating that this decision has very little to do with May's public/private balance. Suppose Myriad's rather self-serving assessment of where the balance should lie is entirely correct, or even that they had, in a moment of ill-advised modesty, actually understated the benefits of the patented subject matter, the difficulty of the research needed to arrive at it, and the vast sums of capital that were mobilised only because investors were motivated by the prospect of a patent. This would not, or at least should not, have made any difference at all to the actual outcome of the case. The patent would still not be valid, because they would not have invented anything, they would merely have discovered it.

Most obviously, the disputes over whether such diagnostics are the proper subject of a patent provide a clear illustration of why IP law is important. As Judge Sweet observed, the patentability of BRCA1 and 2 "deeply concerns breast cancer patients, medical professionals, researchers, caregivers, advocacy groups, existing gene patent holders and their investors, and those seeking to advance public health."[30] Putting it more crudely, the patent's validity has consequences for the life and health of an unknown number of women. The ACLU and Myriad may take radically opposing views about what those consequences are, but they are in absolute agreement about their gravity. What determines the case, however, is not a weighing up of the possible consequences, but a

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question, however, seems to be beyond the scope of *any* thesis. See generally, Dworkin, R., 1998. *Law's Empire*, Oxford: Hart.

[29] *Association of Molecular Pathology, et al. v United States Patent and Trademark Office, et al* (2009) No. 09 Civ. 4515 (RWS)

[30] *Association of Molecular Pathology, et al. v United States Patent and Trademark Office, et al* (2009) No. 09 Civ. 4515 (RWS)

decision as to whether Myriad have actually made knew knowledge, or simply found it.

If *Myriad Genetics* shows the importance of the distinction between making and finding, it also shows its precariousness. This claim may seem unlikely to some, who may instinctively feel that Judge Sweet's verdict is simply a vindication of the common sense position. The association between a gene and a disease seems about as clear an example of a discovery as it is possible to imagine. BRCA1 and 2 would, after all, be associated with cancer whether or not Myriad had been founded in order to profit from that fact. Surely this makes it a law of nature, and thus clearly exempt from the scope of patent law, and the only mystery is that the US courts took so long to recognise this fact? The trouble with this argument is that it cannot explain why many things that really *do* look like inventions are not also discoveries. After all, an invention that does not, in some sense, rely on "laws of nature" is really just an invention that does not work. Silicon, plastic, copper, and rare earths could presumably be assembled into an iPad whether or not Steve Jobs knew how to do it. Similarly, the fact that the laws of nature governing the operation of aspirin were eventually explained[31] does not mean that it was wrong for Bayer to have been awarded a patent on the drug.

Distinguishing what is created from what is discovered, then, is clearly not a straightforward business. Indeed, a substantial and diverse range of thinkers have refused to recognise that there is any *a priori* distinction between making ideas and finding them. The basic philosophical premise here is nicely illustrated by Donald MacKenzie's observation about the common etymology of the words "fact" and "factory":[32] discoveries are not found – they are, quite literally, *made*, in the sense of being constructed or fabricated. Discoveries, for these thinkers, are really just creations that we agree to pretend have always been there.[33]

Before the reader dismisses this line of reasoning as outright nonsense, they may wish to consider Myriad's appeal against Judge Sweet's verdict. The outcome of this case is, at the time of writing, still not decided. However, given their importance to both potential breast-cancer sufferers and

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[31] Vane, J.R., 1971. Inhibition of prostaglandin synthesis as a mechanism of action for aspirin-like drugs. *Nature: New Biology*, 231(25), pp.232-235.

[32] MacKenzie, D., *Material Markets*, Oxford: Oxford University Press. p. 8

[33] Latour, B., 1999. *Pandora's Hope: Essays on the Reality of Science Studies*, Cambridge, Mass: Harvard University Press. pp. 145-73

investors in biotechnology, however, the proceedings are closely monitored, and one report of the court's proceedings contained this frank admission from Judge Kimberley Moore: "I get a little nervous extending the umbrella of what is naturally-occurring' after 35 years of patent law has gone the other way."[34] A cynic might suggest that this judicial nervousness was largely a matter of not wanting to upset entrenched interests. As mentioned above, a large number of individuals and institutions have invested an enormous amount of money on the premise that biotechnology patents are based upon inventions, and thus legitimate. Perhaps this is what is making Judge Moore nervous? Whilst there may be something to this argument, the fact that a judge can "extend the umbrella of what is naturally occurring" might be enough to unnerve even those of us who are unmoved by the plight of biotechnology patent holders. The fact that an Appellate Court judge can determine whether or not something is part of nature raises some fairly fundamental questions about what "nature" actually is. The fact that this determination seems to be based, at least in part, on something so insubstantial as what other judges think seems positively scandalous, inviting as it does the worrying suggestion that what is natural and what is not is no more than a matter of social convention.

The usual way to calm this sort of nervousness is to insist that this is simply a matter of classification. According to this argument, judges cannot actually affect whether something is a creation or a discovery. They merely try to discover whether things are creations or discoveries, and they may be right or wrong about this. This argument begs the question somewhat, amounting as it does to a claim that discovery is something entirely separate from creation because it is possible to discover (rather than create) a distinction between them. Nonetheless, it has a good common-sense feel to it. After all, most of the things we think of as "ideas" seem to fit unambiguously into one of the two categories; no judge would dare to claim that Newton "invented" gravity, or that *Hamlet* had always existed, and that Shakespeare was simply the first person to "discover" it. In these cases the distinction seems entirely straightforward, and this in turn suggests that there must be some equally straightforward way of explaining it.

The most obvious problem with this intuition is that if distinguishing a creation from a discovery were straightforward, then *Myriad Genetics* would never have seen the inside of a courtroom. Litigation is an expensive enough activity that people do not usually engage in it frivolously. If

[34] Wadman, M., 2011. Arguments heard in high-profile patent case against Myriad Genetics. *Nature*. Available at: http://blogs.nature.com/news/2011/04/arguments_heard_in_patent_case.html [Accessed June 2, 2011].

there were a clear rule that one could apply in order to work out whether an idea had been made or found, both parties might have saved themselves considerable expense, and Judge Moore her bout of nervousness, by simply applying it and working out who was going to win. If there is some way of reliable way of distinguishing discovery from creation, then it has yet to be discovered.

This haggling over what counts as "creation" and how it is to be distinguished from "discovery" would probably strike the reader as pointless scholasticism, were it not for the fact that, as pointed out above, the health of a large number of women (not to mention the continued happiness of a large number of investors) depends on the same sort of haggling. One of the key arguments of this thesis, given in detail in Chapter's 2 and 3, is that this distinction is socially constructed in Latour's sense.[35] This does not mean that it is arbitrary – that we could simply wake up tomorrow and collectively decide that *Hamlet* is a discovery, whilst *A Tale of Two Cities* remains a creation – but it does mean that it is potentially subject to reconstruction. Indeed, this sort of process must necessarily be at least part of what May is indicating when he discusses "the way in which the inclusiveness of the field, and what lies beyond it, is continually reconstructed."[36] The legal boundary between knowledge that is the product of human creation and knowledge that is the common heritage of all mankind – between invention and discovery in patent law, and expression and idea in copyright law – has changed over the course of history.

Nonetheless, I do not expect the reader to be immediately convinced of the assertion that the distinction between creation and discovery – between the true and the made-up – is something that human beings can reconstruct. A number of thinkers have argued, in a fashion that might charitably be referred to as "robust", that to accept this position is to throw one's lot in with sophists, relativists, and other such charlatans, and thus to give up on ideas of truth and objectivity altogether.[37] Much of the early part of this thesis will be spent trying to show that, whilst Latour's account may be counter-intuitive, it is no more so than the alternative suggestion that there are ideas that exist even in the absence of a person to think them, patiently awaiting "discovery."

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35 See generally Latour, B., 2005. *Reassembling the Social: An Introduction to Actor-Network-Theory*, Oxford: Oxford University Press.

36 May, C., 2009. *The Global Political Economy of Intellectual Property Rights: The New Enclosures*, 2nd ed., Milton Park Abingdon Oxon: Routledge. p. 64

37 Sokal, A. & Bricmont, J., 1998. *Fashionable Nonsense: Postmodern Intellectuals' Abuse Of Science*, New York: Picador.

For now, however, I simply want to claim that a discussion about the nature of knowledge has an important role to play in the question of whether knowledge can be property. This claim should be less controversial. It is, however, important insofar as it provides an answer to the difficulty presented above: why are (neo)-liberal thinkers like Macaulay, Hayek and Friedman, usually so insistent about the need to extend the maximum possible protection to private property, so reluctant to provide the same protection to what purports to be "intellectual" property? My answer, explained in more detail in Chapter 2, is that, as (neo)-liberals, these thinkers are first and foremost invested in an account that emphasises the ability of the market itself to produce knowledge. At the risk of over-simplification, the fundamental premise of (neo)-liberalism as an ideology is that decisions about the allocation of resources are questions that can have an objectively correct answer, and that liberal capitalist markets are the best means of obtaining that answer.[38] Markets, in this vision, are giant fact-producing machines.

The liberal anti-monopoly position can thus be viewed as a refusal to be drawn into a debate about what exactly constitutes a fact in the first place. Obviously I do not mean that each of these thinkers literally sat down, looked at patents and copyrights, considered the epistemological difficulties, and decided that, whilst they would like to mount a full-blooded defence of IP as property, it was not worth the risk to their greater project of defending property in general. Rather, they were strongly committed to an ideal of truth being arrived at through the liberal exchange of information between individuals, both in the market and in civil society.[39] In the liberal view, it is this sort of information exchange that sorts the real from the made-up. The "market-place for ideas" needs to trade as frequently as possible in order to ensure that the answers that are arrived at are the most rational ones possible. The whole point of IP rights is to limit that trade.

This view thus postulates two worlds, a material world that needs to be ordered, and an ideal world that represents and orders it. It emphasises the fact that an IP right is a monopoly insofar as it allows its owner control of a various and geographically dispersed class of objects. These objects are

[38] See generally Hayek, F.A., 1945. The Use of Knowledge in Society. *The American Economic Review*, 35(4), pp.519-530. For a more critical account of this tendency, see Harvey, D., 2005. *A Brief History of Neoliberalism*, Oxford: Oxford University Press. pp. 20-1 Mirowski, P. & Plehwe, D., 2009. *The Road from Mont Pelerin: The Making of the Neoliberal Thought Collective* 1st ed., Harvard University Press.

[39] Habermas, J., 1989. *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*, Cambridge, Mass: MIT Press.

unified by the belief that they are all embodiments of some single ideal form – each individual copy of *Hamlet* is a sort of corporeal manifestation of the *essence* of *Hamlet*, and it is to this essence that copyright adheres. It is only through the postulation of a second ideational realm in which these essences actually exist that intellectual property can make sense as a unified entity. Without it we simply have a deeply problematic attempt to control a class of objects. The monopoly view is a refusal to admit these essences into our ontology.

Any discussion of IP as property has to assume this sort of dualism. It claims that there exists a world of ideal forms, and that whilst the sorts of ideas that can be discovered are unownable, a different set of ideas – those that can be created – can have property rights exercised over them in the normal fashion. Claims that IP represents an enclosure of the commons accept this sort of dualism, arguing that capitalism started in Europe, expanded to cover the material world and, with the coming of the "information age"[40] is now moving into the "intangible commons of the mind."[41] A different sort of critique – more radical in the sense of getting closer to the root of the problem – would be to reject the dualism altogether. This thesis is an attempt to present such a critique.

Methodology

This thesis started life as an International Political Economy project. I was fascinated by the Agreement on Trade-Related aspects of Intellectual Property Rights (TRIPs) and the slightly Orwellian spectacle of a global system of monopoly rights being negotiated in the name of free trade. Naturally enough, this led to a reading of May's work on the subject, and to a more general engagement with notions of enclosure commons described above. My initial aim – clearly indicated by my project's working title of "Info-Legal Landscapes" – was to try and develop the enclosure analysis in a very literal and straightforward way. In particular, David Harvey's work on the

[40] May, C., 2002. *The Information Society: A Sceptical View*, Cambridge: Polity Press.
[41] Boyle, J., 2003. The Second Enclosure Movement and the Construction of the Public Domain. *Law and Contemporary Problems*, 66, pp.33-74.

inherently monopolistic potential of property in land,[42] and Karl Polanyi's arguments about the central role of the state in the process of commodification[43] seemed to me to offer the possibility of a reasonably straightforward description of how quite well-understood capitalist processes were expanding to new areas.

The twist, of course, was that these areas were ideational – methodological questions about how to identify looked a lot like epistemological questions about how knowledge is known. So, for example, I had imagined, in a slightly muddled fashion, that my research process would be a species of cartography – of finding different commons, identifying them clearly, and showing how they were threatened by the possibility of enclosure. Open-source software, academic publishing, and government funded information such as geo-data all suggested themselves as possible sites for this sort of analysis, and I conducted preliminary interviews with respondents from some of these fields. One obvious point that emerged from this process was that the commons seemed much harder to measure than the enclosure. Knowledge is, notoriously, a difficult substance to measure and define, but this does become easier if one attaches an IP right to it. This is why, for example, econometricians often use the granting of patents as a measure of innovative activity.[44]

My next idea was to explicitly address this epistemological aspect of enclosure – to look at the way that IP rights brought certain sorts of knowledge into the capitalist system by making rigorously defining it and thus making it calculable and eliminating uncertainty.[45] One way of viewing enclosure through IP is to see it as a process of turning knowledge into the sort of object that the market can recognise and thus evaluate. This is itself, however, a problematic assumption, since IP seems to do such a spectacularly poor job of making knowledge known.[46] There is in fact a good deal of literature about how both patents and copyrights succeed in achieving exactly the opposite

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42 See David Harvey (1982) *The Limits to Capital* (Oxford: Basil Blackwell) Ch. 5 p. 137-55, David Harvey (2003) *The New Imperialism* (Oxford: Oxford University Press) Ch. 3, 4 pp. 87-182

43 Karl Polanyi (2001) *The Great Transformation* (Boston: Beacon Press)

44 Audretsch, B., 1998. Agglomeration and the location of innovative activity. *Oxford Review of Economic Policy*, 14(2), pp.18 -29.

45 Knight, F.H., 2006. *Risk, Uncertainty and Profit*, Mineola, NY: Dover Publications; Drahos, P., 1996. *A Philosophy of Intellectual Property*, Aldershot: Ashgate.

46 One interviewee suggested this point to me in a particularly memorable way when he suggested the example of Audi's advert in which they claimed to have registered more patents making one of their vehicles than NASA registered in putting a man on the moon.

effect – to make knowledge invisible to the market.[47] Indeed, early work on the importance of the public domain made much of precisely this problem – that, by virtue of their ideational nature, IP rights have ill-defined boundaries and are thus very hard to avoid infringing accidentally.[48]

One of the things that being forced to consider methodological issues about IP did, in short, was to focus my mind on the sort of paradoxes that emerge when one tries to represent knowledge in a systematic way: there is never a clear boundary between knowledge as the object under consideration, and knowledge as the means of representation. This uncertainty, as should be clear from the above story about Myriad Genetics, has become the real focus of my research. My areas of investigation were all chosen for their ability to illustrate this – to show how this tension between knowledge as an object and knowledge as a means of rationalisation emerges, and how it is concealed through various processes.

The empirical studies relied on a mixture of different materials: court materials – broadly construed to include submissions to the court from all interested parties as well as the court records of fairness hearing and the final judgment; the two settlement agreements; interviews with librarians, publishers, authors and activists; online "netnography" of different affected online communities; working papers by academics and IP lawyers; public statements by various parties; news coverage of the case; as well as other miscellanea; works of fiction.

Between December 2009 and January 2011, I conducted formal interviews with five authors, two publishers and three librarians and two digital rights activists. Three of the interviews with authors were conducted via email, all other interviews took place in person, and were recorded and transcribed. I also conducted participant observation of numerous specialist technology and copyright forums online, and of a seminar given by the Publishers Association in which the organisation explained to its members the workings of the now-defunct Google Book Search

[47] The orphan works problem described in Chapter 5 is a problem of precisely this sort – copyrights prevent the sale and indexing of older works, since no-one knows who actually owns them. Similarly, Drahos and Braithwaite describe how pharmaceutical companies will register large numbers of dubiously valuable patents in order to intimidate competitors who, uncertain of what is actually protected and what is not, either stay away from particular areas of research, or agree to pay licensing fees. So-called "patent trolls" - companies and individuals who make profits simply from threatening patent infringement suits – often rely on precisely this sort of uncertainty. See Bessen, J. & Meurer, M.J., 2008. *Patent Failure: How Judges, Bureaucrats, and Lawyers Put Innovators at Risk*, Princeton: Princeton University Press. Ch. 3 pp. 48-72.

[48] Lange, D., 1981. Recognizing the Public Domain. *Law & Contemporary Problems*, 44, pp.147-178.

Settlement.

Material from the interviews appears in chapters 5 and 6, but the themes that emerged have informed the thesis more broadly. Both interviews and participant observation demonstrated, in a way that is not immediately apparent on reading much of the scholarly literature, the extent to which copyright is now a debate structured around two opposing sides. Whilst different respondents were on different sides of this debate, all were in agreement that there were two sides, and that theirs was both embattled and widely mischaracterised. Perhaps more interestingly, the central dichotomies which this thesis seeks to challenge – creation/discovery, individual/collective and ideal/material – emerged as a very important way through which speakers structured their answers.

Chapter Structure

The first chapter considers the question of whether it is possible for IP to be property. I argue that the question of whether it is, is actually less important than the fact that a political group has been built around the idea that it is. Over the past half century, copyright, patent and trademark owners have coalesced around a shared concept of property, and successfully lobbied for greater protections to their rights on this basis. One of the key tasks of critical thought, I argue, is to articulate a popular politics that would act as a countervailing force to this movement. From this point of view, the problem with many critical accounts of IP is that they function as general critiques of property, focussing on the way that the expansion of IP rights constitutes an "enclosure of the intangible commons of the mind" in much the same was as actual property rights are used to enclose the actual commons. Such accounts may thus be unhelpful as a means of organising political opposition to IP.

In chapter 2, I consider two accounts of IP expansion, both of which emphasise the tendency to see the development of knowledge too much as a matter of individual creativity. These critiques instead stress that knowledge is necessarily inter-subjective – a collective practice. The key feature of both accounts, I argue, is that they blur the distinction between creation – the subjective knowledge of particular individuals – and discovery – knowledge that we see as necessarily impersonal. It is this distinction that lets us see certain sorts of knowledge as resources or objects – things that we can

apply market forces to. Whilst political economy approaches often take this epistemological distinction between making and finding for granted, I argue that they should instead make it an object of their enquiry. This is especially the case since, as I show in chapter 2, so much of the expansion of IP has consisted in a process of reclassification, as knowledge that was once considered to be factual is reclassified as personal enough to be owned. Chapter 3 develops an account of knowledge that does not presume a distinction between creation and discovery. I follow William James and Richard Rorty in taking a pragmatic view of knowledge. Such a view necessarily emphasises the relational nature of knowledge – ideas have meaning only as part of wider language games. This account is completed in with a turn to the material semiotics of Bruno Latour. Such an approach emphasises that knowledge is not a substance, but a relationship between things. In Chapters 4 – 6, this theoretical case is illustrated and applied in three case studies: the development of copyright from the Stationers' monopoly in the 17th and eighteenth century, the development of the discourse of the information commons from the language of cyberspace, and the controversy and attempted settlement of the Google Book Search project.

CHAPTER 1: What is (intellectual) property

We say that the most dangerous criminal now is the entirely lawless modern philosopher. Compared to him, burglars and bigamists are essentially moral men; my heart goes out to them. They accept the essential ideal of man; they merely seek it wrongly. Thieves respect property. They merely wish the property to become their property that they may more perfectly respect it. But philosophers dislike property as property; they wish to destroy the very idea of personal possession. - G.K. Chesterton[49]

Introduction

The first question of this thesis asks whether it is possible for knowledge to be property. In the first section of the chapter, I draw on Kurt Burch's argument that property is a constitutive principle of liberal thought in order to better answer the question.[50] The idea of a constitutive principle is nicely illustrated by the quote above. Property, for G.K. Chesterton, is more than simply the "bundle of rights" that law students learn of. Respect for property, the desire to amass it, and the "idea of "personal possession" are part of the "essential ideal of man." Only the "lawless philosopher" would think to question these premises. Property is thus, as Christopher May points out, afforded "common sense protection".[51]

From this point of view, the idea that IP is property is deeply problematic, because liberal thought has historically been ambivalent on the question, sometimes viewing it as property, sometimes suggesting that it is simply a monopolistic interference with the free market. Under this conception, IP is permissible only insofar as it is shown to have benefits. In the second section, I develop this second conception to show a number of ways in which we can see IP as a balance. The third addresses the ways in which we are failing to achieve this balance, looking at the political failure that is the making of IP law at the national and international levels, before reviewing some of the explanations and proposed solutions for this problem. The general character of such a solution, as

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[49] Chesterton, G.K., 1963[1908]. *The Man Who Was Thursday: A Nightmare*, Beaconsfield [Eng.]: D. Finlayson.

[50] Burch, K., 1997. *Property and the Making of the International System*, Boulder, Colarado: Lynne Rienner Publishers Inc.

[51] May, C., 1998. Thinking, buying, selling: Intellectual property rights in political economy. *New Political Economy*, 3(1), pp.59-78.

James Boyle argues, is that we need a public understanding of IP that can support a public politics of IP. However, I argue that Boyle's approach to developing such a politics – a lionisation of the "information commons" – actually tends to minimise the theoretical problems of IP. By treating "information" as a sort of substance, we make the granting of property rights in it more plausible.

The fourth section discusses the work of political economist Christopher May. I suggest that May's work can be understood in terms of two strands – one that seeks to show the problems of IP, and another that, in seeking to integrate IP into an account of historical capitalism, actually tends to minimise those same problems. To the extent that these accounts compete, I suggest that they might be reconciled by suggesting that all property is deeply contradictory, and that IP is thus typical in this regard. I use the work of David Harvey to develop such an account in the sixth section. In the seventh section, however, I argue that such an account remains problematic. In using concepts such as "intellectual property", "intellectual labour" and "the enclosure knowledge commons", we are engaging in a sort of dualism, imagining a sort of ideal world to which our we apply economic analyses designed for the material world. The fundamental problem with such an approach is that these economic analyses already have a role for ideas to play – knowledge is viewed as

What is IP?

IP is usually taken to stand for "intellectual property." However, since this thesis asks whether it is possible for ideas to be property, using the phrase "intellectual property" might seem question-begging – an unsubtle attempt to smuggle the conclusion into the terms of the enquiry. Not wishing to beg the question, I would thus ask the reader to hold judgment on the issue of whether IP stands for anything, and simply see it as a convenient place-holder for whatever it is that we agree that patents, copyrights, trademarks and other such rights actually are.

The question of whether IP is property is only answerable to the extent that we can say what property is. One way to answer this question is to adopt a narrowly legal definition, to declare that property is simply whatever the law says it is. Christopher May, for example, starts his *Global Political Economy of Intellectual Property* with this caution:

> Professor Walter Hamilton summed this up succinctly, noting that it was "incorrect to say that the judiciary protected property; rather they called that property to which they accorded protection"... Property *qua* property does not predate the apparatus of government (or the state), waiting to be recognised legally; rather, the legal recognition of property constitutes its existence in a form we can identify.[52]

Such an admonition is a useful start to thinking about questions of property because it cautions us against imagining that property has some natural essence. It calls our attention to the fact that property laws are not given by nature, but are instead the result of a political settlement. Property, as May reminds us, could always be otherwise than it is at the moment. Many things that have been accepted as property under different systems of law now strike us as things that most definitely cannot be property – people are perhaps the most obvious example. Similarly, changing social and political requirements do give rise to new forms of property.[53] We would thus do well to avoid thinking that property has some unchanging essence.

A guard against essentialism, however, can only be the start of the enquiry. For all that, in the final analysis, property may be simply whatever the law says it is, there is at least a reason that May has to remind us of the fact. Property, as May observes, is a "social institution, one that can change in response to social and political requirements."[54] There are reasons why the law says that some things are property and some are not. Indeed, as May has documented, large swathes of philosophy devote themselves to arguing about precisely these questions,[55]and even those who are not inclined to pursue philosophical debates about the nature of property tend to have strong feelings about what sort of things can be property, and what cannot. A government that tried to legalise slavery or abolish property rights in land tomorrow would likely meet some resistance.

This is all a somewhat long-winded way of saying that there are normative and philosophical questions involved in property, and that the question of whether something can be property is in this sense a question of how well it fits into broader narratives of what property is. In order to formalise

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[52] May, C., 2009. *The Global Political Economy of Intellectual Property Rights: The New Enclosures* 2nd ed., Milton Park Abingdon Oxon: Routledge. p. 16

[53] Stark, D., 1996. Recombinant Property in East European Capitalism. *American Journal of Sociology*, 101(4), pp.993-1027.

[54] May, C., 2009. *The Global Political Economy of Intellectual Property Rights: The New Enclosures* 2nd ed., Milton Park Abingdon Oxon: Routledge. p. 16

[55] May, C., 1998. Thinking, buying, selling: Intellectual property rights in political economy. *New Political Economy*, 3(1), 59-78.

this point somewhat, I want to follow Kurt Burch in making a distinction between property rights – legal rules which declare something to be property – and property itself. Burch argues that property, in this broader sense, is a "constitutive principle" of liberalism, a foundational idea on which much of modern political and economic thought is based: "Instructive principles declare that x counts as y, where y has value. In this sense, definitions of property create a patterned, fundamental, constitutive principle of social life... Other rules confer rights and duties, including those to property."[56]

Liberal ideology, in its broad sense as a world-view that stresses freedom, the rule of law, social relations structured through markets and rights,[57] takes property as a foundational concept upon which to base other beliefs and decisions, and on the basis of which to co-ordinate interaction amongst members of society. Such a process is perhaps most obvious in the case of markets and the highly intricate sorts of co-ordination amongst property-owners that have been exciting comment since Adam Smith[58] – the exchange of goods can only take place between parties who accept the rules of ownership. Moreover, our assumptions about property affect our understanding of ourselves, a phenomenon that C.B Macpherson termed "possessive individualism"; individuals are seen as having possession over themselves and their abilities, and structure their interactions with each other on this basis – the freedom to amass their own property and to dispose of it as they wish is one of the key means through which, in the liberal tradition, individuals are enabled to pursue competing concepts of the good life. Indeed, the whole idea of "the good life" is profoundly influenced by the idea of property. Burch quotes Macpherson to illustrate the point: "It cannot be said that the... concepts of freedom, rights, obligations and justice are all derived from this concept of possession, but it can be shown that they were powerfully shaped by it."[59] The notion of property brings with it related concepts of ownership, dominion and sovereignty that are fundamental to our interaction with the world around us, and with each other. Visiting a friend's house is one example of a social encounter that is powerfully influenced by an understanding of property. I behave in a particular sort of way to my friend's property, and to my friend when using her property – but it is not, in all but the most unusual circumstances, a market transaction. It is thus one of those "fundamental concepts embedded in rules by which actors organize their societies, from which

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[56] Burch, K., 1997. *Property and the Making of the International System*, Boulder, Colarado: Lynne Rienner Publishers Inc. p. 12

[57] Burch, K., 1995. Intellectual Property Rights and the Culture of Global Liberalism. *Science Communication*, 17(2)

[58] Smith, A., 2003. *The Wealth of Nations / Adam Smith ; Introduction by AlanB. Krueger ; Edited, with Notes and Marginal Summary, by Edwin Cannan* Bantam classic ed., New York, N.Y: Bantam Classic;

[59] Macpherson, C.B. in Burch, K., 1998. *"Property" and the Making of the International System*, Boulder, Colo: L. Rienner Publishers. p. 63

societies generate actors' identities and interests, and through which forms of rule emerge."[60] Considerations of property, then, do not just allow for a division of labour, allowing "the butcher, the baker and the brewer"[61] to look to their own interest for the greater benefit of society. Rather, the idea of property shapes the trio's understanding of what their interests are in the first place.

To designate something as "property" is thus to seek to incorporate it into social and political understanding in a very particular way. This view is mirrored in anarchist and Marxian thought. While neither tradition is quite so sure of property's virtues, both are at least as slavish as liberalism in seeing the concept as an important means through which social relations are structured, and both have developed their analyses accordingly – that "Property is Theft"[62] or, as Marx and Engels put it: "the theory of the Communists may be summed up in the single sentence: Abolition of private property."[63] In each case, the designation of something as "property" acts as a trigger to bring a legacy of established analysis, and related assumptions, to bear on the thing so-designated. A liberal who claims that something is property is implicitly making an argument that protection of it is a legitimate use of state power,[64] an anarchist is claiming that it is a form of theft by the state, and a Marxist is suggesting that it involves an element of exploitative social relations.

When I ask if IP qualifies as property, then, I am really asking how comfortably do IP rights flow from the constitutive principle of property, and if it makes sense to bring the same sorts of analyses to bear on IP as we do on other questions of property. Burch sees such analysis as unproblematic, arguing that the extension of IP rights on a global scale through the 1995 agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) represents "a decisive statement of political principles generally described as liberal... it... extends an essentially liberal conception of social life as relations organized and understood by reference to exclusive property rights."[65] For Burch, then, the strengthening of IP rights represents a straightforward triumph of liberalism – the ideology of property. It may be argued against from within the liberal view by resorting to other liberal values such as "distributional concerns" about justice. But these are to be set against the virtues of

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60 Burch, K., 1998. *"Property" and the Making of the International System*, Boulder, Colo: L. Rienner Publishers. p. 39

61 Smith, A., 1990. *An Inquiry into the Nature and Causes of the Wealth of Nations* 2nd ed., Chicago: Encyclopædia Britannica, Inc.

62 Proudhon, P.J., 1994. *What Is Property?*, Cambridge [England]: Cambridge University Press. p.13

63 Marx, K. & Engels, F., 1848. Communist Manifesto (Chapter 2). Available at: http://www.marxists.org/archive/marx/works/1848/communist-manifesto/ch02.htm [Accessed March 12, 2009].

64 Nozick, R., 1974. *Anarchy, State and Utopia*, Oxford: Basil Blackwell.

65 Burch, K., 1995. Intellectual Property Rights and the Culture of Global Liberalism. *Science Communication*, 17(2), p. 215

"process, procedure and efficiency"[66] that are stressed in the liberal account of property. Whilst Burch does not say it, the same thing must logically hold true for critiques from outside the liberal tradition – thinkers who have made general criticisms of property will find that their critiques apply to IP.[67]

Burch's view of IP as essentially unproblematic – and its global extension as liberalism's crowning achievement – is leant support by Ayn Rand, who declared that "patents are the heart and core of property rights... once they are destroyed, the destruction of all other rights will follow automatically, as a brief postscript."[68] Given Rand's status as history's most enthusiastic agitator for the idea that social life should be "organized and understood with reference to exclusive property rights", her declaration that IP rights such as patents constitute property's "heart and core" might strike us as decisive. This, however, would be too hasty. There is, in fact, a strong tradition of argument within liberal thought which, refusing to accept the claim that IP grants property rights over "ideas", instead insists that IP grants property rights in monopolies, and that monopolies, like people, are not a legitimate form of property.[69] Whilst, in this vision, IP may be justified by appealing to some benefits that may accrue as a result of granting a monopoly, the argument here is not that IP has the virtues that liberalism usually ascribes to property, but that, it is a necessary evil that must be sharply circumscribed. Thus, for example, Martin Wolf, in a defence of liberal globalization entitled *Why Globalization Works*, argues that while "patent and similar forms of protection may be appropriate for some of the bigger or more advanced developing countries... it is a rent extraction device for the rest of them".[70] It is difficult to imagine him making such a case about property rights more generally.

Many of liberalism's more prominent thinkers have voiced deep suspicion about IP rights. In the introduction to this thesis I provided an account of Macaulay's opposition to copyright extension, but his is hardly an unusual case. As Fritz Machlup and Edith Penrose note, IP and competitive capitalism have frequently been thought incompatible:

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66 Burch, K., 1995. Intellectual Property Rights and the Culture of Global Liberalism. *Science Communication*, 17(2), p. 227

67 I provide just a critique later in this chapter, incorporating David Harvey's work.

68 Rand, A. et al., 1967. *Capitalism: the unknown ideal*, Signet.

69 For an extreme version of this view see Boldrin, M. & Levine, D.K., 2008. *Against Intellectual Monopoly*, New York: Cambridge University Press.

70 See, for example, Wolf, M., 2004. *Why Globalization Works*, New Haven: Yale University Press. p. 216-7

> In actual fact, the controversy surrounding the patent of invention is very old, and the chief opponents of the system have been among the chief proponents of free enterprise. Measured by number of publications and by its political repercussions – chiefly in England, France, Germany, Holland and Switzerland – the controversy was at its height between 1850 and 1875.[71]

This 19th century controversy was perhaps the high watermark for the view that IP rights constituted illegitimate monopolies. However, prominent liberal thinkers have continued to have misgivings about excessive IP protection that one would find it hard to imagine them expressing about property rights in general. For example, Friedrich Hayek – often identified as one of the intellectual founders of modern neoliberalism[72] – whilst acknowledging that IP could be seen as property, stridently argued against the idea that it should be:

> The problem of the prevention of monopoly and the preservation of competition is raised much more acutely in certain fields to which the concept of property has only been extended in recent times. I am thinking here of the extension of the concept of property to such rights and privileges as patents for inventions, copyrights, trademarks and the like. It seems to me that in these fields a slavish application of the concept of property as it has been developed for material things has done a great deal to foster the growth of monopoly and that here drastic reforms may be required if competition is to be made to work.[73]

Similar accounts from impeccably liberal thinkers are not uncommon. Perhaps the most striking of recent times was an *amicus curiae* submission to the court in the US case of *Eldred vs Ashcroft*.[74] Considering the question of whether copyright protection should be extended, seventeen different economists, including Kenneth Arrow, Ronald Coase and Milton Friedman, submitted that it made absolutely no sense to do so.

Liberalism might thus be said to be confused on the subject of whether IP rights are property. Opinions range from Ayn Rand's suggestion that IP rights are the most important rights there are, to Hayek's feeling that referring to IP as property was a pernicious habit of mind that should be stopped forthwith. This presents anyone trying to build a critique of intellectual property with

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71 Machlup, F. & Penrose, E., 1950. The Patent Controversy in the Nineteenth Century. *The Journal of Economic History*, 10(1), p. 1

72 Mirowski, P. & Plehwe, D. eds., 2009. *The Road from Mont Pèlerin: The Making of the Neoliberal Thought Collective*, Cambridge, Mass: Harvard University Press.

73 Hayek, F.A. von, 1980. *Individualism and Economic Order*, Chicago: University of Chicago Press. pp. 113-4

74 Eldred V. Ashcroft (01-618) 537 U.S. 186 (2003)

something of a dilemma. If, like Burch, we suggest that IP is property, then we can use the same criticisms of IP that we use for other sorts of property. We may suggest that property's extent, contours and overall legitimacy are deeply political questions, and that the theories, assumptions and political interests that we bring to the analysis of property will be relevant to our discussion of IP. By contrast, if we do not accept that IP is property, arguments about the legitimacy of property are entirely irrelevant. In that sense, these accounts will be radically different. In another, however, they are similar. In both accounts, IP rights represent what Christopher May terms a "public/private balance" – a political settlement that balances the competing interests of rights-holders against those of the broader public. For those who suggest that IP should be viewed as property, this balance weighs the purported efficiency that property rights introduce against other concerns such as social justice, redistribution and the desire to keep some parts of social life away from the logic of commodification that the granting of property rights enables. For those who do not accept IP's status as property, the nature of the balance may be more complex. Once IP is no longer seen as property – at least not in the constitutive principle sense that Burch means – a range of competing concerns may emerge. It is to those concerns I now turn.

Different perspectives on balance

The classical justification for IP rights holds that they allow exclusive rights to knowledge in order to encourage the production of that knowledge. So, for example, it is common to speak of IP rights as representing a reward for intellectual labour, in response to the "public goods"[75] problem that such labour seemingly faces. Such accounts tend to rely on what economists term the "non-rivalrousness" of ideas, meaning simply that their being utilised by one individual in no way detracts from others making such use. Unlike material goods, knowledge is not naturally scarce, and it is also difficult to exclude others from its use. The result is that intellectual labour often goes unrewarded – once an individual has done the hard work of inventing a device or writing a book, it is very difficult to stop others from copying it at far less expense. By making the knowledge artificially scarce, and allowing the creator to charge a price for such copying, IP provides an incentive for intellectual labour. As Yochai Benkler characterises this idea more formally:

[75] Paul A. David, "A Tragedy of the Public Knowledge 'Commons'? Global Science, Intellectual Property and the Digital Technology Boomerang" WP 04/00, OIPRC Electronic Journal of Intellectual Property Rights, [http://www.oiprc.ox.ac.uk/EJWP0400.pdf, accessed 3 August 2005]

> From the perspective of a society's overall welfare, the most efficient thing would be for those who possess information to give it away for free – or rather, for the cost of communicating it and no more. On any given day, enforcing copyright law leads to inefficient underutilization of copyrighted information. However, looking at the problem of information production over time, the standard defense of exclusive rights like copyright expects firms and people not to produce if they know that their products will be available for anyone to take for free. In order to harness the efforts of individuals and firms that want to make money, we are willing to trade off some static inefficiency to achieve dynamic efficiency.[76]

One way of thinking about the public/private balance then, is as a compromise between these immediate harms, and the long term benefits of innovation. This criticism of excessive IP rights is thus not just that the public would like knowledge to be cheaper because of concerns of distributive justice. Rather, the concern is that such excess will fail to achieve the sorts of virtues of "process, procedure and efficiency"[77] that property rights are meant to introduce.

The suggestion's chief harm is static inefficiency, however, is itself insufficient description of the harms involved in granting IP rights.[78] Seeing the balance along the lines of static/dynamic reduces the role of the person using the knowledge to an essentially passive one – a potential consumer of a resource, who may be excluded from it as the IP right raises its price. This account misses the very active uses to which knowledge is often put – knowledge is only very rarely 'created' by its producer in the sense of emerging from nothing. More usually it is a novel rearrangement of existing knowledge, and even the greatest new discoveries are made, in Isaac Newton's well-worn phrase, "standing on the shoulders of giants."[79] Knowledge, as Benkler points out, is both an input and an output of the creative process.[80] Increasing the cost of the inputs may increase the cost of knowledge production, even as it makes the results of such production more valuable. Established knowledge, so long as it remains in the public domain, is thus grist for the creative mill, and by preventing access to that body of resources, IP rights can actually defeat their own purpose by impairing innovation.[81]

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[76] Yochai Benkler (2006) *The Wealth of Networks* (New Haven: Yale University Press) p. 36-7

[77] Burch, K., 1995. Intellectual Property Rights and the Culture of Global Liberalism. *Science Communication*, 17(2), p. 227

[78] In part, of course, this is just because the language of economics considers the issue with such magnificent abstraction as to make us lose sight of the actual harms it is describing. To recall the Myriad Genetics case from the Introduction, "static inefficiency" seems an anaemic term for "death as a result of undiagnosed breast cancer."

[79] Newton, I. 1676. "Letter to Robert Hooke" 5 Feb. in Partington, A. ed., 1992. *The Oxford Dictionary of Quotations* 4th ed., Oxford: Oxford Univ. P.

[80] Yochai Benkler (2006) *The Wealth of Networks* (New Haven: Yale University Press) p. 37

[81] For an example of this phenomenon in copyright, see the discussion of the Google Book Search Settlement in

This is particularly significant because IP rights do not simply allow an owner to increase the price of knowledge. They actually allow an owner to prevent certain uses of knowledge altogether. In this vein, Richard Dunford outlines a variety of strategies by which businesses might aggressively use patents to maintain a position of advantage in the market-place through suppressing the emergence of a particular technology, perhaps the most striking example being the alleged cynicism of the oil industry in its early support for renewable energy sources:

> One of the results of the "energy crisis" of the early-to-mid-1970s was the increased involvement of many large oil corporations in the area of solar energy research… Critics have interpreted the activities of the companies as 'token commitment to solar development beyond patent acquisition' (Felmeth 1981: 206). The argument is that control over key technologies will give these companies significant influence over the development of a technology that competes with those technologies to which they already have an entrenched commitment.[82]

IP rights thus allow their owners to withhold certain sorts of knowledge, and to stop others from making use of it. This right to withhold can be used to the advantage of the rightsholder, allowing them to behave strategically.[83]

Again, however, economics provides a narrow lens through which to see the harms caused. Many of the uses that people might wish to make of information, and that rights-holders may be allowed to prevent, are not easily valued in economic terms. Political activity is an obvious example of a use of knowledge that IP rights regulate – one emblematic US trademark case from the 1990s concerned the US Olympic committee's refusal to allow the use of the "Olympic" brand in the San Francisco "Gay Olympics" (consequently renamed the "Gay Games").[84] More subtly, as Lawrence Lessig has

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Chapter 5 of this thesis, as well as, more generally, Lessig, L., 2001. *The Future of Ideas: The Fate of the Commons in a Connected World* 1st ed., New York: Random House. On the patent system, se Bessen, J. & Meurer, M.J., 2008. *Patent Failure: How Judges, Bureaucrats, and Lawyers Put Innovators at Risk*, Princeton: Princeton University Press. Heller, M., 2008 and *The Gridlock Economy: How Too Much Ownership Wrecks Markets, Stops Innovation, and Costs Lives*, New York: Basic Books.

82 Dunford, R., 1987. The Suppression of Technology As a Strategy for Controlling Resource Dependence. *Administrative Science Quarterly*, 32(4), p. 516

83 Dunford, R., 1987. The Suppression of Technology As a Strategy for Controlling Resource Dependence. *Administrative Science Quarterly*, 32(4), p. 514. This may possibly, as Dunford points out, invite the attentions of competition authorities. The most familiar modern example of this is the US and EU regulators' disputes with Microsoft relating to the interoperabilty of its operating system with its competitors' products.

84 Coffey, C.W., 1987. Trademarks Law - International Olympic Committee v. San Francisco Arts & (and) Athletics: No Olympic Torch for the Gay Games. *Golden Gate University Law Review*, 17, p.129.

persuasively argued, copyright law's presumptive refusal to allow transformative uses of cultural work promotes a largely passive relationship with such work; users are viewed as mere consumers of knowledge, they can read, hear or see it, but are legally prohibited from incorporating it into their own expression.[85]

The idea of a "public/private balance" is thus multi-faceted. A simple view sees it as largely question of setting the immediate expense of goods controlled by IP rights against the incentives for intellectual labour. Even if incentivising intellectual labour were our only consideration, however, IP would still need to achieve a balance between output and input: whilst IP provides an incentive for the production of knowledge, it also makes it more expensive for others to incorporate that knowledge into their own productions. Finally, IP rights allow rights-holders not just to make knowledge more expensive, but to prevent others from using it altogether, and this may lead to concerns about free expression and cultural participation, as well as the strategic withholding of technology. It follows that an IP system that favours the private side of the balance at the expense of its public regarding aspects will be capable of causing considerable harm. Goods covered by IP rights – which may include such essentials as food, educational materials and medicines – will be needlessly expensive. Innovation may be hampered. Consumers of knowledge will be prevented from using knowledge products in their own works, and will thus enjoy a more passive relationship with such products.

Achieving the balance?

In the last section, I suggested some ways of thinking about IP as a balance, and explained why that balance was important. In this section I argue that, in practice, this balance is seldom achieved – political decisions regarding IP rights have overwhelmingly been made in favour of rights holders, rather than the public, and IP rights have expanded prodigiously over the last three decades. I first offer some examples of this prodigious expansion. These focus chiefly on the United States, which itself, continues to set the agenda in terms of setting global IP rights through international organisations and bilateral treaties. I then suggest that we should see such expansion as a form of political failure – powerful IP rights-holders have organised to lobby for extensive protection of their rights, whilst those harmed by such extension have been less able to articulate their interests.

[85] Lessig, L., 2008. *Remix: Making Art and Commerce Thrive in the Hybrid Economy*, New York: Penguin Press.

This, in turn, explains why critical theory about IP is important. By giving an account of the harms caused by IP expansion, theories about IP can mobilise opposition that would function as a balance against excessive political capture by rights-holders. I conclude by offering an account of one such theory – James Boyle's concept of information environmentalism, which encourages us to see IP as an enclosure of the commons.

In terms of duration, material covered, new protections afforded and remedies granted and geographical coverage, IP has expanded prodigiously in the last three decades. Copyright in the United States has expanded massively since its first introduction in 1790, when copyright terms were fourteen years, renewable for a further fourteen. In 1909 both the copyright term and the period of extension were doubled to twenty-eight years each, whilst the Copyright Act of 1976 "granted a nineteen year extension of the renewal term of all copyrights registered before January 1 1978. New works created on or after that date would receive a single copyright term, instead of an initial and a renewal term, and would enter the public domain fifty years after the author's death."[86] The Sony Bono Copyright Term Extension Act of 1998 then extended existing and future copyright terms by a further twenty years, to seventy years after the death of the author.

IP rights have also broadened to cover ever-larger conceptual areas. Copyright in texts, for example, is usually thought of as maintaining a distinction between ideas, which are not subject to protection, and their expression, which is. Always somewhat vague, this distinction has been subject to an almost entirely one-way alteration in favour of ownership, as an ever-more-improbable variety of rights have been held to fall on the "expression" side of the divide. Over time the law has expanded to include film rights, translation rights, rights to the uses of characters developed in a work and rights to elements of its plot structure.[87]

There has also been significant geographical expansion as the norms of IP protection from the economic north have expanded south. The World Trade Organisation's much-criticised Agreement on Trade-Related Aspects of Intellectual Property Rights[88] (TRIPs) is perhaps the best-known

[86] Ochoa, T. 2002 "Patent and Copyright Term Extension and the Constitution: a Historical Perspective" *Copyright Society of the USA* Vol. 49, 1. pp 22-3

[87] Vaidhyanathan, S., 2001. *Copyrights and Copywrongs: The Rise of Intellectual Property and How It Threatens Creativity*, New York: New York University Press.

[88] WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (1995)

example of this phenomenon. By obliging all WTO members to adhere to the extremely strong standards of IP protection that are usual in the Japan, the EU and the USA, it ensures that the effects of the two processes described above are now felt on a global, rather than national, level.[89] Similarly, the World Intellectual Property Organisation (WIPO), as part of its copyright treaty, obliges members to enact anti-circumvention laws to protect technological locks on copyright content.[90]

Much of this expansion, as I suggested above, can be seen as a matter of political organisation. As Susan Sell and others have documented, rights-holders have waged a disciplined, sustained, and hugely successful campaign to persuade trade negotiation teams,[91] legislators[92] and courts[93] that IP rights need more protection. By contrast, the losers from over-expansive IP legislation are unlikely to enjoy the same level of funding or access to the legislature, are considerably more dispersed, and have their interests represented only weakly. Recent accounts of IP legislation at the national, international and global levels all, in their different ways, tend to reflect this pattern.[94] As James Boyle observed more than a decade ago,[95] this is exactly the sort of model of concentrated benefits and dispersed losses that would lead us to expect bad policy; the gains from stronger IP rights accrue to a well-organised group of rightsholders who are well aware of their interests; whilst the costs of such rights, by contrast, fall on a broadly dispersed public who is not yet aware that such measures will even effect them. The problem for this public, Boyle argued was that "we have no politics of intellectual property... We lack a conceptual map of issues, a rough working model of costs and

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http://www.wto.org/english/tratop_e/trips_e/t_agm0_e.htm

89 See, for example, Sell, S.K., 2003. *Private Power, Public Law: The Globalization of Intellectual Property Rights*, Cambridge, U.K: Cambridge University Press. May, C., 2000. *A Global Political Economy of Intellectual Property Rights: The New Enclosures?*, London: Routledge. Drahos, P. & Braithwaite, J., 2003. *Information Feudalism: Who Owns the Knowledge Economy?*, New York: New Press.

90 Cohen, T.B., 2003. Anti-Circumvention: Has Technology's Child Turned against Its Mother? *Vanderbilt Journal of Transnational Law*, 36, 961.

91 Drahos, P. & Braithwaite, J., 2003. *Information Feudalism: Who Owns the Knowledge Economy?*, New York: New Press; Sell, S.K., 2003. *Private Power, Public Law: The Globalization of Intellectual Property Rights*, Cambridge, U.K: Cambridge University Press.

92 See, for example Gillespie, T., 2007. *Wired Shut: Copyright and the Shape of Digital Culture*, Cambridge, Mass: MIT Press; Lessig, L., 2004. *Free Culture: How Big Media Uses Technology and the Law to Lock down Culture and Control Creativity*, New York: Penguin Press.

93 Lemley, M.A., 2004a. Property, Intellectual Property, and Free Riding. *Texas Law Review*, 83, p.1031; Lemley, M.A., 2004b. Ex Ante versus Ex Post Justifications for Intellectual Property. *The University of Chicago Law Review*, 71(1), pp.129-149.

94 See, on TRIPs, May, C., 2004. Cosmopolitan Legalism Meets 'Thin Community': Problems in the Global Governance of Intellectual Property. *Government and Opposition*, 39(3), 393-422, Sell, S.K., 2003. *Private Power, Public Law: The Globalization of Intellectual Property Rights*, Cambridge, U.K: Cambridge University Press, and Drahos, P., 2003. *Information Feudalism: Who Owns the Knowledge Economy?*, New York: New Press. For an account of national level copyright negotiations in the USA, see Litman, J., 2006. *Digital Copyright* Pbk. ed., Amherst, N.Y: Prometheus Books.

95 Boyle, J., 1997. A Politics of Intellectual Property: Environmentalism for the Net? *Duke Law Journal*, 47(1)

benefits, and a functioning coalition-politics of groups unified by common interest perceived in apparently diverse situations."[96] Such a politics, Boyle suggested, might draw inspiration from the environmental movement, and see the public domain of unowned information as a sort of landscape at risk from the excessive protection of private property rights.

The expansion of IP mentioned above can thus be characterised as the encroachment of the logic of the market into new spaces. In a seminal piece entitled "The Second Enclosure Movement", Boyle updates his earlier work to explicitly address this idea. The analogy he draws is to the enclosure of the commons in early modern England, as described by thinkers such as Marx[97] and Polanyi. Acknowledging the number of scholars who had been drawn to analogy with the original enclosure movement,[98] Boyle argues that:

> We are in the middle of a second enclosure movement. It sounds grandiloquent to call it "the enclosure of the intangible commons of the mind," but in a very real sense that is just what it is. True, the new state-created property rights may be "intellectual" rather than "real," but once again things that were formerly thought of as either common property or uncommodifiable are being covered with new, or newly extended, property rights.[99]

Boyle goes on to survey some of the harms caused by this enclosure. He dwells on its ability to damage what he terms "distributed creativity" – the sort of collaborative, internet-based models of intellectual work exemplified by the Free and Open Source Software (FOSS) movement, as well as by projects such as Wikipedia. He then recalls the arguments of Macaulay and recounts the history of liberal opposition to monopoly rights in the 19th century, but stresses that these are primarily negative critiques – they speak of IP's harms, but do nothing to affirm the public domain and the commons. He concludes by suggesting that such affirmation is necessary as part of the project of developing a coalition-based politics of IP:

> The idea of the public domain takes to a higher level of abstraction a set of individual fights – over this chunk of the genome, that aspect of computer programs, this claim about the meaning of parody, or the ownership of facts. Just as the duck hunter finds common cause with the bird-watcher and the salmon

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96 Boyle, J., 1997. A Politics of Intellectual Property: Environmentalism for the Net? *Duke Law Journal*, 47(1), p. 89

97 Marx, K., 1995. *Capital: An Abridged Edition*, Oxford: Oxford University Press. pp. 366-71

98 Polanyi, K., 2001. *The Great Transformation*, Beacon Press.

99 Boyle, J., 2003. The Second Enclosure Movement and the Construction of the Public Domain. *Law and Contemporary Problems*, 66, p .37

> geneticist by coming to think about "the environment," so an emergent concept of the public domain could tie together the interests of groups currently engaged in individual struggles with no sense of the larger context.[100]

Boyle's approach is thus to look to the public domain – knowledge that is not controlled by IP rights – as well as to the sorts of "knowledge commons" on which arrangements like FOSS and Wikipedia rely.[101] By understanding these phenomena better, he suggests, we may better appreciate the value of knowledge that is not subject to exclusive IP rights, and thus better defend it.

Such lionisations of the commons have been criticised by Anthony McCann as reflecting a "resource management" perspective.[102] McCann perceptively argues that, behind all the rhetoric, such claims amount to nothing more than the argument that it would be more economically efficient for certain sorts of information to be left in the commons. McCann suggests that such a critique may in fact work as a prelude to further enclosure – having identified knowledge as a resource of some sort, most of the work is done. The only remaining question is one of what economic system would ensure the most efficient management of said resource. Even if we decide that the resource should remain in the commons, this is a question that can always be revisited. This critique is reflected in Boyle's choice of metaphors – "enclosure" actually reinforces the basic claim of IP rightsholders that their rights can be unproblematically thought of as property, and should thus be afforded the same sort of respect. The response of "information environmentalism" is to say that this is all true, but that the commons are important as well.

From this point of view, it is not clear that Boyle's move from the negative, anti-monopoly tradition to the positive celebration of the commons is as much of an advance as he suggests. As Burch points out, liberalism "is an idea and worldview unexplored for its seemingly self-evident meanings except by philosophers and cultural commentators",[103] and liberalism tends to venerate property. If liberalism offers us a choice between viewing IP as property or as monopoly, and we think that IP rights are currently too strong, then monopoly is the obvious choice. Monopoly thus puts the burden

[100] Boyle, J., 2003. The Second Enclosure Movement and the Construction of the Public Domain. *Law and Contemporary Problems*, 66, p. 73

[101] Benkler, Y., 2002. Coase's Penguin, or, Linux and "The Nature of the Firm." *The Yale Law Journal*, 112(3), pp.369-446.

[102] McCann, A., 2005. Enclosure without and within the information commons'. *Information & Communications Technology Law*, 14(3), pp.217-240.

[103] Burch, K., 1995. Intellectual Property Rights and the Culture of Global Liberalism. *Science Communication*, 17(2), p. 215

on rights-holders to justify their monopolies in a way that property simply does not. The relative importance of property and the commons is, after all, a matter on which reasonable people are likely to differ according to their political persuasion. No-one, however, is in favour of monopoly for its own sake.

As well as this concern about whether it makes sense to see ideas as property, there is a second, less immediately obvious concern. I said above that IP should, for the moment at least, be taken merely as a place-holder for whatever it is that we agree that patents, copyrights, trademarks and other such rights are. But it is not clear if we should see these rights as a natural grouping in the first place. There are, after all, important differences between them. Copyrights are rights to control the reproduction of certain forms of expression or representation – text, pictures, sound recording, film and software code – typically for a period of the life of the originator plus seventy years. Patents are a more robust form of rights over the inventions and processes, but last for a shorter length of time – the WTO requires a twenty year minimum. Trademarks confer exclusive rights to mark a product with a distinguishing mark, geographical indicators do the same thing for products from a particular locality, whilst trade secrets operate as a legal supplement to a company's efforts to keep commercially valuable knowledge from its competitors.[104]

These different rights have been justified in very different ways. So, for example, patents, being granted only over novel inventions that are non-obvious and have an industrial application, are usually justified in very utilitarian terms that emphasise the social utility of the inventions that the patent system is deemed to incentivise. Copyrights are often also justified in terms of offering an inventive for intellectual effort but, being granted for personal expression, they are much more susceptible to more moralised arguments about artistic integrity. Thus whilst some copyright systems grant "moral rights" to original authors,[105] allowing them to dictate the uses to which their work is put even after they have licensed it, there is no such equivalent for patents. Trademarks have not been seen as an incentive for intellectual labour at all. In this case, the usual justification focuses on consumer protection in a complex market economy – a trademark allows consumers to reliably identify the origin of a product marked with a particular symbol by allowing the provider of that product exclusive use of that symbol. In the case of trade secrets, there seems to be no

[104] For a good all-round introduction to questions of IP, see Drahos, P., 1996. *A Philosophy of Intellectual Property*, Aldershot: Dartmouth.
[105] Goldstein, P., 2003. *Copyright's highway: from Gutenberg to the celestial jukebox*, Stanford University Press. p. 136

commonly accepted justification at all![106]

One of the effects of grouping these various rights together under the umbrella-term "IP" is to elide these fundamental differences. Indeed, I have already done this myself in the first section, speaking of the way in which IP can be seen as addressing a public goods problem that results from the non-rivalrousness of knowledge. This analysis seems to work for copyrights and patents, both of which might be thought of as policy responses to public goods problems.[107] From here, however, it extends outwards to cover trademarks and geographical indications, without ever quite explaining how it manages this. This may sound like a pedantic point about classification, and indeed it is. But classification has consequences – the worry is not so much that the terminology is not accurate as that, in blurring the distinction between justificatory schemes, it is actually likely to become more so.

Perhaps the clearest example of this comes from trademark law, and the recent example of what are termed antidilution rights. Celia Lury[108] points to the antidilution provisions of current European trademark law to suggest that the ability to capture marketing value is now formally encoded in law. Trademarks, she suggests, are now increasingly seen as about protecting the investment that companies make in "building brands." Developing laws to better protect the accrued value of a trademark makes some sense if we consider IP as a unified entity whose purpose is to reward creative effort. After all, even without antidilution laws, trademarks and geographical indications can and often do incentivise intellectual labour, in the sense that it is only once the identity of a product is protected from confusion with others that it becomes worthwhile to increase the value of the trademark by investing in advertising. From this point of view, antidilution laws are simply an increase in the amount of protection that such labour is awarded.

By contrast, if the various rights are treated separately, antidilution rights seem more problematic: whilst we may quibble about whether the current patent system is always the most effective way of rewarding inventors, there is at least a plausible policy argument that governments should grant exclusive rights in order to encourage investment in new technology. These considerations of

[106] Risch, M., 2007. Why Do We Have Trade Secrets. *Marquette Intellectual Property Law Review*, 11, p.1.
[107] I say "seems" because, as I will argue later in the thesis, I find the "public goods" view of information to be at best question-begging (Chapter 2) and quite possibly incoherent (Chapter 3).
[108] Lury, C., 2004. *Brands: The Logos of the Global Economy*, London: Routledge. pp.92-6

incentivisation, as well as the idea of artistic integrity, are an intuitive justification for copyright, although, again, we might wish to argue over the strength and nature of the protections offered. As Yochai Benkler points out, however, the awarding of the same sort of monopolistic power to trademark owners seems at odds with the traditional justification for that right:

> It can be entirely clear to consumers that a particular use does not come from the owner of the brand, and still, the owner has a right to prevent this use... [This represents] a basic change in the understanding of trademark law — from a consumer protection law intended to assure that consumers can rely on the consistency of goods marked in a certain way, to a property right in controlling the meaning of symbols.[109]

These finer distinctions are lost once we conflate patent, copyright and trademark together into a single homogeneous block of "intellectual property."

The effects of the conflation of different rights into a homogeneous block of "property" are equally evident at the level of political organisation. As Susan Sell emphasises, it "requires that actors be organised into a self-conscious grouping for the pursuit of shared aims," and this organisation will require both "material and discursive strategies." IP's primary salience, I would argue, is as part of such a discursive strategy. Sell's focus is on the discursive strategy of linking IP to issues of free trade. Obviously, this speaks to my first point IP's questionable status as property – an argument that property rights must be strengthened in order to facilitate free trade is more persuasive than one that suggests that free trade demands stronger monopolies. But the second concern – the erosion of distinctions between separate rights, is also relevant. In describing the emergence of rights-holders as a political group Sell observes that:

> Adversely affected industries began by lobbying separately; patent interests and copyright interests engaged in parallel but unconnected political action. Over time, and with the help of several key individuals..., these different groups realized that they were seeking the same goal – heightened IP protection. They came to lobby together, so that patent interests testified on behalf of copyright interests and vice-versa.[110]

The idea that IP is property thus functions as a concept through which rights-holders pursuing their

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[109] Yochai Benkler (2006) *The Wealth of Networks* (New Haven: Yale University Press) p. 290

[110] Sell, S.K., 2003. *Private Power, Public Law: The Globalization of Intellectual Property Rights*, Cambridge, U.K: Cambridge University Press. p. 44

individual interests may coalesce into an effective political force, the better to secure their interests. Indeed, as Sell and others have documented, the success of this campaign has been truly staggering; as I argued above one of the most notable features about patents, copyrights and trademarks is the way in which they have been expanded over the past half century.

The second problem of the information commons is thus that it reinforces this tendency towards a unified conception of "intellectual property", instead of a loosely related assortment of monopoly rights. This is a fundamental problem with the approach. The point of the "information commons" is, after all, to provide intellectual unity over a range of different issues, to take "to a higher level of abstraction a set of individual fights – over this chunk of the genome, that aspect of computer programs, this claim about the meaning of parody, or the ownership of facts."[111] Rather than challenge the notion that IP should be conceived of as a single homogeneous block of property, Boyle has to accept this notion in order to provide the counterpoint to his own unified commons.

More broadly, however, Boyle helps us understand why theorising about IP is a useful activity. If IP is meant to be a balance, it is a badly skewed one – there is an urgent need to get some weight on the public side of the balance. By clarifying the particular sorts of harm involved in the process of making ideas property, theories of IP may facilitate such action. The implication of this is that, in order to facilitate effective action, we need to be making good theories. As Anthony McCann points out, celebrations of the commons such as Boyle's are in many ways quite limited.[112] They largely celebrate the commons from the perspective of resource management, pointing out the ways in which the commons can meet the liberal goals of efficiency and process better than the granting of IP rights. Whilst this is certainly better than nothing, might a more fundamental critique not also be possible? In the next section, I turn to the work of Christopher May, the foremost thinker in International Political Economy seriously engaging with questions of IP, in order show how such a critique might be developed.

[111] Boyle, J., 2003. The Second Enclosure Movement and the Construction of the Public Domain. *Law and Contemporary Problems*, 66, p. 73

[112] McCann, A., 2005. Enclosure without and within the information commons'. *Information & Communications Technology Law*, 14(3), pp.217-240.

Political Economy Approaches

Christopher May's work on IP as a political settlement starts with his early and productive engagement with Susan Strange's idea that we should see power as being exercised through a variety of different structures,[113] and that knowledge is one such structure. Strange was interested in the way that expertise in particular fields brought with it an ability to frame debates by defining problems and determining which sorts of solutions should be on the table. This proposition – that expertise carries with it the ability to determine political outcomes – has opened up a number of interesting lines of enquiry in International Political Economy, as scholars have examined fields such as management consultancy, risk management, and finance in order to explore its implications. In each of these fields, choices that may have huge distributional outcomes for large numbers of people are presented as "rational" answers to "technical" questions, and this apparent objectivity serves to shield such decisions from political criticism: "illogical, 'extreme', idealistic, outdated, opinionated, 'political' alternatives may be stigmatised, and below them there are a sub-stratum of positions that are irrational or 'stupid.'" May has shown that law, and especially IP law, is a particularly productive field for such enquiry. The field is often portrayed as a complex body of knowledge that is only comprehensible by, and of interest to, a relatively small number of technical specialists with the appropriate training. This serves to mask the contestable character of the law itself, a point that May elegantly summarises with a quote from Eriksson: "It is often forgotten that law as a matter of fact is frozen politics."[114]

May's work, by my reading, is meant to challenge this sort of perception of IP, to show the poor reasoning lying behind many of the justifications for IP, and thus to work towards a fairer politics of IP. In this section, I argue that May pursues this goal in two ways. One strand of May's thought, and particularly his work with Susan Sell, emphasises that IP is first and foremost a political settlement – a provisional compromise between many competing interests. That second strand forms part of a more general critique of capitalism, which sees IP as a result – possibly a necessary result – of the capitalist organisation of markets. I argue that these two strands correspond roughly to the two sides of the dilemma posed in the first section of this chapter, whereby IP can be seen either as a deeply contradictory compromise within capitalism, or as a necessary tool for establishing "markets for

[113] Strange, S., 1994. *States and Markets* 2nd ed., London: Pinter.
[114] May, C., 2004. Commodifying the Information Age: Intellectual Property Rights, the State and the Internet. *SCRIPT-ed*, 1(3), p.409

information." I conclude the section by arguing that, whilst both strands make useful points about IP, the second is dangerous insofar as it makes IP seem like a more credible and stable part of liberal market capitalism than it needs to.

In an early article on the topic, May addressed this topic by considering philosophical arguments for material-based property, of which he identified three: Lockean "instrumentalist" justifications, which stress that property is a natural right that accrues to the individual through the mixing of his labour with natural resources; Hegelian "self-developmental" justifications, which stress the importance of holding property for individual flourishing and protection against the power of the state; and functionalist "pragmatic" arguments, that see property as evolving in response to resource allocation problems. Much of the justification for IP, he observed, involved an attempt to take these justifications and apply them beyond their proper scope. Thus "legitimisation [of intellectual property] is asserted rather than established" since "intellectual property cannot be unproblematically brought into economic relations on the same basis as material-based property."[115]

May's reasons for seeing IP as different to material-based property are familiar from the discussion above. In the first place, knowledge is not subject to scarcity in the same way that material property is. As such, restrictions of it lead to losses in static efficiency. Moreover, knowledge is both an output and an input to production – "new" knowledge is based largely on existing knowledge:

> But knowledge creation is incremental. All knowledge must be largely extant by virtue of the extent of knowledge needed to have the insight or creativity (call it what you will) to add something to any field. If the provision of the building blocks of knowledge involves no necessary diminution of utility to previous users/owners when (re)used to create or invent, then it is difficult to justify a rationale for charging for inputs (their marginal cost is nil--once an idea has been had there are no extra costs in rethinking it)... Equally, is it ever possible to identify the part of the knowledge product that is completely the labour of the right-owning individual (who is enjoying labour's desert)? Neither of the dominant streams of justification of property fully deals with these problems with intellectual property.

Justifications for IP, May suggests, get around these problems by ignoring them, choosing to focus

[115] May, C., 1998. Thinking, buying, selling: Intellectual property rights in political economy. *New Political Economy*, 3(1), 59-78.

only on "the individual creator, the 'author', acting in solitude to produce a new piece of knowledge."[116] So long as we focus on the individual, rather than the multiple inputs that are required in order to facilitate that individual's creation, IP can be made to look plausible in the same way as material property.

Whilst his initial focus, as mentioned above, was developed primarily through Susan Strange's work on the knowledge structure, he has, in collaboration with Susan Sell, evolved this approach to incorporate the insights of Robert Cox, whose work on the Gramscian concept hegemony and its interaction with institutions and material capabilities in many ways mirrors Strange's focus on the way that the knowledge structure should be analysed as part of an interplay with the three other structures of production, credit and security. In both cases, the theory is used to "develop a critique of the institutionalisation of intellectual property that disputes its emergence as a 'rational' solution to a problem of economic organisation."[117]

In this vein, May's work on the mechanisms through which international IP agreements are reached reflects Boyle's account of concentrated benefits and dispersed losses. The problem underlying one-sided agreements such as TRIPs, May suggests, is that the interests of rights-holders are much better articulated at the international level than those of the public at large:

> Whereas in national political debates those groups shouldering the immediate social costs may have a number of political avenues through which counter-measures can be mobilized... there is much less scope for such mediation at the international level. Thus, while there are considerable organizational structures for the global governance of IPRs any mechanisms for the realization of a global polity or community interest within these interactions is severely under-developed... [and] the social costs of the propertization of knowledge are accorded too little weight in global political processes.[118]

Whilst agreements like TRIPS purport to be part of the necessary legal architecture of a world in which information is now the key resource to be traded, they are better viewed, for May, as

[116] May, C., 1998. Thinking, buying, selling: Intellectual property rights in political economy. *New Political Economy*, 3(1), 59-78.
[117] May, C., 2009. *The Global Political Economy of Intellectual Property Rights: The New Enclosures* 2nd ed., Milton Park Abingdon Oxon: Routledge. p. 41
[118] May, C., 2004. Cosmopolitan Legalism Meets 'Thin Community': Problems in the Global Governance of Intellectual Property. *Government and Opposition*, 39(3), p. 421.

provisional political settlements. Moreover they are settlements in which the under-representation of particular interests has led to an unfortunate outcome. In the absence of a properly functioning political mechanism, the public/private balance breaks down.

Finally, May has also examined new developments in the collaborative creation and sharing of information such as FOSS, Open Access Publishing and Wikipedia are here emblematic of a more general tendency for particular intellectual communities to turn towards more open methods of knowledge production. May draws on the work of Lewis Mumford to analyse the political motivations of such movements in terms of the discontent felt by various constituencies with the overly authoritarian nature of IP laws. By licensing work to ensure that it remains in the "intellectual commons" such movements ensure access to particular sorts of knowledge by the relevant community: FOSS lets programmers inspect, modify and redistribute code, Open Access lets academics freely exchange work and invite comment, and Wikipedia provides a free reference source that users with relevant knowledge can update and improve. Like the software industry's demands for interoperability, FOSS provides examples of movements within capitalism that function as a countervailing force against an excessive vision of IP. As May observes: "[t]he uptake of LINUX by some major industry players (IBM, Hewlett-Packard, Sun) underlines that there is nothing inherently destructive of capitalism in the character of open source-related products or services" and that the such moves might be best thought of as "not necessarily anti-capitalist... [but] *differently* capitalist."[119]

FOSS, for May, is thus emblematic of a more general move towards "openness",[120] a movement which, he suggests, provides a "countervailing dynamic to commodification that has emerged within the 'information society.'"[121] The nature of this dynamic, however, is somewhat uncertain. Whilst the suggestion that such movements should be seen as "differently capitalist" might suggest that May sees "openness" as, in part at least, a fight between competing visions of capitalism, in other passages, he seems to suggest that we should see this movement as something entirely

[119] May, C., 2005. Between Commodification and "Openness": The Information Society and the Ownership of Knowledge. *The Journal of Information, Law and Technology (JILT)*, (2-3). Available at: http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2005_2-3/may [Accessed July 10, 2009]. Emphasis in original.

[120] The use of the phrase "openness", rather than the popular formulation of "commons" is, I think, significant. In part, this may reflect May's acknowledgement of McCann's powerful critique of the way in which the commons brings with it a certain "resource management" perspective.

[121] May, C., 2005. Between Commodification and "Openness": The Information Society and the Ownership of Knowledge. *The Journal of Information, Law and Technology (JILT)*, (2-3). Available at: http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2005_2-3/may [Accessed July 10, 2009].

external to capitalism: anti-capitalist rather than differently capitalist. In this account, "openness" is the second part of a Polanyian "double movement", one of the spontaneous protection measures that emerge as society tries to defend itself against the "boundless and unregulated change"[122] brought about by the expansion of the market:

> The expansion of IPRs (with more strident attempts to commodify knowledge and information in the global system through TRIPs complaint laws) has been an attempt to further remove knowledge and information from [their social] context and embed them in the system of property rights that underpins capitalism. This move to socially dis-embed information has provoked the second part of a 'double movement' that seeks to return knowledge and information to the more socialised milieu, the opposite of a complete marketisation or commodification.[123]

This account of FOSS as a sort of digital Luddism sits very uneasily with the declarations of many of the more cogent defenders of the "knowledge commons", who criticise IP explicitly in terms of its constituting a form of protectionism for the victims of technological change. Lawrence Lessig, for example, has frequently argued that most new copyright legislation is primarily passed "to defend the old against the new."[124] Indeed, some of the strongest opponents of IP are other capitalists, and most especially those capitalists most concerned with the introduction of new technologies likely to cause the sort of social dislocation that concerned Polanyi: current literature on the economics of intellectual property is replete with discussions of the chilling effect of excessive IP on exactly the sort of "speculative investment in new industries"[125] that May sees as its primary purpose.[126]

This sort of move is representative of the second strand of May's thought. In this account, rather than thinking about IP in its own specific terms, he places it within the larger context of historical capitalism, and its tendency towards expansion. In this account, IP is a necessary requirement of capitalism's commodification of information:

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[122] Polanyi, K., 2001. *The Great Transformation: The Political and Economic Origins of Our Time* 2nd ed., Boston, MA: Beacon Press. p. 79

[123] May, C., 2008. Opening Other Windows: A Political Economy of "openness" in a Global Information Society. *Review of International Studies*, 34(Supplement S1), 69-92.

[124] Lessig, L., 2001. *The Future of Ideas: The Fate of the Commons in a Connected World* 1st ed., New York: Random House. p. 199

[125] May, C., 2007. The hypocrisy of forgetfulness: The contemporary significance of early innovations in intellectual property. *Review of International Political Economy*, 14(1), p. 12

[126] See, for example, Heller, M., 2008. *The Gridlock Economy: How Too Much Ownership Wrecks Markets, Stops Innovation, and Costs Lives*, New York: Basic Books; Boldrin, M. & Levine, D.K., 2008. *Against Intellectual Monopoly*, New York: Cambridge University Press; Lessig, L., 2001. *The Future of Ideas: The Fate of the Commons in a Connected World* 1st ed., New York: Random House.

> For the proto-capitalist organization of markets in knowledge and/or information, commodification was required because otherwise the markets themselves could not be established. Thus, as soon as early proto-capitalists sought to arrange opportunities for the accumulation of surpluses through the production of goods encompassing knowledge and/or information for sale, then they required the legal structures of (early) intellectual property.[127]

The expansion of IP is thus historically driven by capital's need to establish a division of labour, and more particularly to alienate that labour from its originators and "define the knowledge of important workers, not as the workers' skills and abilities, but as the (intellectual) property of the employer."[128] IP thus allows for the exploitation of employees in much the same way as capitalists used ownership of the means of production to exert leverage over workers in the traditional Marxian bargain.

This strand of May's analysis emphasises the essential continuity of IP with other forms of property – just as capitalism in material-based goods requires property rights, so knowledge capitalism requires intellectual property rights. For example, May bases his critique of the "information economy" on precisely such continuity, observing that the increasing undertaking of intellectual rather than physical labour by citizens in developed countries has been accompanied by "a largely successful attempt by capitalists to (re)make the information economy in the shape of the previously existing material goods economy." IP plays an important function in this insofar as it serves to continue the capitalist mode of production. Thus May argues that because "intellectual property is (legal) property, its effects are similar... The information society's characteristic property relations are therefore little different from those of the previous (industrial) society."[129]

It is thus possible to detect at least two strands of thought in May's work on IP, roughly analogous to the positions I outlined in the first section. On the one hand, he seeks to emphasise the way in which IP differs from other sorts of property; knowledge is not subject to the same sorts of problems of scarcity as material goods, and the claim that IP represents a reward for intellectual labour rests on a

[127] May, C., 2007. The hypocrisy of forgetfulness: The contemporary significance of early innovations in intellectual property. *Review of International Political Economy*, 14(1), p. 14

[128] May, C., (2002) "Trouble in e-topia: Knowledge as Intellectual Property" *Urban Studies* Vol. 39, 5/6 p. 1042-44

[129] May, C., 2002. *The Information Society: A Sceptical View*, Cambridge: Polity Press. p.76. I return to this topic in Chapter 3.

problematic view of individual creativity. On the other hand, he seeks to develop a critique of IP based on existing critiques of property and commodification, most especially those of Marx and Polanyi. This account emphasises IP's role in creating markets and maintaining capitalist social relations in the information economy. As I emphasised in the first section, these accounts are, to some extent at least, in tension with each other – one claims that the whole idea that knowledge can be property is deeply problematic, the other seeks to apply a broad critique of property to IP. My own preference is to drop the second strand, the better to develop the first. The next two chapters of this thesis are an attempt to do so.

It would, however, be dishonest to suggest that these strands are irreconcilable, or even especially problematic. Perhaps the problematic and contradictory nature of IP's relationship with liberal thought and capitalist dynamics is not so much symptomatic of a specific problem within IP, as of a general problem within property. Similarly, liberalism's ambivalent view of IP – seeing it as either a monopolistic interference with the normal functioning of a capitalist market or an important precondition for capitalist markets – is less of a problem if one's theory of capitalism emphasises its contradictory nature. In the next section, I turn to the work of David Harvey and other Marxian thinkers to develop the idea that IP's monopolistic nature makes it entirely of a piece with other sorts of property.

Monopoly's properties

David Harvey has spent more than a quarter of a century integrating an account of spatial competition and monopoly into Marxian theory.[130] Thus, whilst Harvey has not sought to develop an explicit theory of IP, it is no surprise that he has interesting things to say about a form of property whose critics often charge it with promoting exactly the sort of strategic behaviour that one might more traditionally associate with territorial factors. Harvey argues that capitalists feeling the competitive pressures of the time-space compression of globalization will seek to "secure ever more firmly the monopoly rights of private property through international commercial laws that regulate

[130] See generally, Harvey, D., 1982. *The Limits to Capital*, Oxford: Blackwell.

all global trade. Patents and so-called 'intellectual property rights' have consequently become a major field of struggle through which monopoly powers more generally get asserted."[131] Thus, for Harvey, "avid protection of technological advantages... through patent rights, licensing laws, and intellectual property rights" function "always [as] a substitute for locational advantages".[132]

In the last section I surveyed May's argument that "intellectual property" was ultimately a philosophically confused idea that sought to mask its confusion behind an appeal to creative authorship. I then turned to his broader analysis that sees IP as part of a broader trend towards commodification in capitalism. My concern was that this second argument was the same one made by the advocates of strong IP – that IP could be analysed in the same terms as things like land and money, and thus that it should be afforded a similar level of legal protection.

Marxian thought is well-known for its concern with the idea of private property, but, as mentioned above, this is not in itself particularly unique: property is an important political issue for schools of thought like liberalism and anarchism as well, because property is an important political issue full stop. The distinctive contribution of Marxian political economy is to offer a developed critique of the power relations involved in property. More specifically, it takes very seriously the legal truism that property is not a relationship of people to things, but a relationship between people with regards to things:[133] I cannot take legal action against my bicycle, but I can use the law in order to exclude others from it. Put differently, my property right in the bicycle allows me a certain degree of state-backed social control over anyone who wishes to make use of it. This simple insight lies at the heart of much Marxian theory – most obviously in the notion of the commodity fetish, whereby people begin to attribute this socially wrought power to the object itself.[134] As such, it animates many of the critical accounts of economics that would wish to direct attention towards the social relations that underlie the supposedly immutable material foundations of economic systems. It is not any inherent properties of objects themselves, these accounts suggest, but the social systems that we construct in order to facilitate our interaction with them, that do the real work in determining the social and distributional outcomes of economics.[135]

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[131] Harvey, D. "The Art of Rent" in Harvey, D., 2001. Spaces of Capital: Towards a Critical Geography, Edinburgh: Edinburgh University Press. p. 395

[132] Harvey, D., 2005. *A Brief History of Neoliberalism*, Oxford: Oxford University Press. p. 98

[133] Munzer, S.R., 1990. *A Theory of Property*, New York: Cambridge University Press.

[134] Marx, K., 1995. *Capital: An Abridged Edition*, Oxford: Oxford University Press. pp. 42-50

[135] Carrier, J.G. & Miller, D. eds., 1998. *Virtualism: A New Political Economy*, Oxford: Berg. For a critique of this position, see Holm., P. "Which way is up on Callon" in MacKenzie, D.A., Muniesa, F. & Siu, L. eds., 2007. *Do*

This insight about the essentially social nature of private property rights is interesting from an IP point of view in that it starts to elide the usually unproblematic distinction between property – the stuff trafficked on a market – and monopoly – the unreasonable control of said market. If property rights are rights of control over others, and market competition is the process in which participants try to amass as much property as possible, then the logical outcome of the competition would seem to be increasingly centralized control of the market. Writing in *Outlines of A Critique of Political Economy* Friedrich Engels expressed the insight thus:

> Each smaller group of competitors cannot but desire to have the monopoly for itself against all others. Competition is based on self-interest, and self-interest in turn breeds monopoly. In short, competition passes over into monopoly... The contradiction of competition is that each cannot but desire the monopoly, whilst the whole as such is bound to lose by monopoly and must therefore remove it. Moreover, competition already presupposes monopoly – namely, the monopoly of property (and here the hypocrisy of the liberals comes once more to light); and so long as the monopoly of property exists, for so long the possession of monopoly is equally justified – for monopoly, once it exists, is also property. What a pitiful half-measure, therefore, to attack the small monopolies, and to leave untouched the basic monopoly! And if we add to this the economist's proposition mentioned above, that nothing has value which cannot be monopolised – that nothing, therefore, which does not permit of such monopolisation can enter this arena of competition – then our assertion that competition presupposes monopoly is completely justified.[136]

This passage actually contains two related ideas. In the first place, there is the idea of competition leading to the centralization of capital – the process through which open market competition moves ever larger quantities of property into the hands of its winners in what Marx would later describe as "the transformation of... the pigmy property of the many into the huge property of the few."[137] More fundamental, however, is the second insight on which this idea is based, "that nothing... which does not permit of such monopolisation can enter this arena of competition." Any property owner has at least a monopoly in that which he owns, and if a competitive market requires that property rights be assigned in order that prices can be established in the first place, then monopoly seems to be an inescapable aspect of competition.

Economists Make Markets?: On the Performativity of Economics, Princeton: Princeton University Press.

[136] Engels, F., 1844 " Outlines of A Critique of Political Economy" in Marx, K., 1975. *Karl Marx, Frederick Engels: Collected Works*, London: Lawrence & Wishart.

[137] Marx, K., 1995. *Capital: An Abridged Edition*, Oxford: Oxford University Press. p. 379

It may now seem as though the argument turns on a vastly over-expansive definition of monopoly. This, however, is very much the point: providing a more rigorous definition – one that would exclude all the things we commonly think of as "property" but still recognizably cover most of what we think of as "monopoly" – turns out to be a remarkably tricky business. Nor is this merely a consequence of starting from a Marxian definition of property; liberal thought tends to run into exactly the same paradox. Consider the popular definition offered by Milton Friedman – assuredly no Marxist – who maintains that "[m]onopoly exists when a specific individual or enterprise has sufficient control over a particular product or service to determine significantly the terms on which other individuals shall have access to it."138 This definition has a "common sense" feel to it – capturing the core issue of market power that we think of as the salient feature of monopoly. Ultimately, however, it simply begs the question by shifting the point of contention to the term "product or service." Recall, for example, the property right in my bicycle mentioned above, which most certainly allows me to "determine the terms on which other individuals shall have access to" the bicycle.

Am I then, in Friedman's terms, a bicycle monopolist? One suspects he would not have thought so; whilst I may have control of my particular bicycle, I do not have control of the market for bicycles – there are any number of other bicycles that would serve the purposes of "other individuals" equally well, and the property rights to these are held by other people. This is the argument made by Richard Epstein, a libertarian legal scholar who has frequently argued that there is indeed an underlying structural unity between IP and other types of property:

> [A] property right over some tangible object gives an owner at the very least the right to exclude. That language of exclusion is picked up in the antitrust law that deals with market dominance, when it asks how the dominant player excludes others by various unilateral strategies with respect to bundling, tie-ins, and predatory pricing. As some wag put it, monopoly and property rights are not opposite sides of the same coin, they are the same side of the same coin... when you have monopolies that are close substitutes to one another, in practice, you have a competitive market with strong property rights.139

[138] Friedman, M. & Friedman, R.D., 1962. *Capitalism and freedom*, Chicago: University of Chicago Press. p. 120
[139] Epstein, R. (2006) "The Structural Unity of Real and Intellectual Property", *Progress on Point* Vol. 13 No. 24

A property right can be distinguished from a monopoly right, in this account, to the extent that there exist other goods which are, if not perfectly substitutes for it, at least close. The more perfectly fungible the goods on a market, the more effectively they can compete with each other. Thus Engels's insight is most powerful when applied to markets where goods are not an exact substitute for each other. This is most obviously the case with real property – property in land; there is in an important sense in which any particular house is not a substitute for the house next door, and is certainly not a substitute for a similar house in a different city. As Harvey puts it:

> Spatial location always confers a certain monopolistic advantage. Private property in land entails at its very basis a certain monopolistic power: no one can place their factory where my factory is already located... Capitalists can and do use spatial strategies to create and protect monopoly powers wherever and whenever they can. Control over key strategic locations or resource complexes is an important weapon in the capitalist's arsenal.[140]

It is on this insight that Harvey's work builds, analysing the ways in which the monopolistic nature of real property affects the spatial aspect of capitalist development, and it is this same dynamic that he applies to IP – that it is in the distinctiveness of the property that the key to monopoly rents lies.

Such an insight goes a long way towards explaining the attractiveness of the enclosure trope. Bicycles can be replicated indefinitely, but in both the IP and real property cases no one bit of property is the same as any other. As Chamberlin emphasises, competition, usually conceived of as a process of trying to produce the same item more cheaply than one's competitors, takes on a very different meaning in this context – it becomes a process of trying to emphasise and cultivate that which is distinctive about one's property.[141] Capitalism's operation in the field of knowledge thus represents, for Harvey, another playing out of a dynamic already observable in its operation in the spatial context. One issue is the pursuit of factors unique enough to earn monopoly profits. The classic example of this is Marx's "vineyard producing wine of extraordinary quality that can be sold at a monopoly price," wherein a unique quality of the land itself gives rise to monopoly rents. There is, however, a more explicitly locational version of this phenomenon, whereby value is derived not from the qualities of the property in itself, but from its unique position relative to other items of property. As he explains, "[t]he locational version would be centrality (for the commercial

[140] Harvey, D., 2003. *The New Imperialism*, Oxford: Oxford University Press. p. 96
[141] Chamberlin, E., 1949 *Theory of Monopolistic Competition* Oxford: Oxford University Press. pp.58-116

capitalist) relative to, say, the transport and communications network (for the hotel chain) or proximity to some highly concentrated activity (such as a financial centre).”[142]

Harvey's analysis gains much of its analytical force by allowing us to think productively about these twin aspects of monopolisation. In the first case, the notion of monopoly profits accruing as a result of the unique qualities of a product, it is precisely those unique qualities that IP rights are predicated on. Patents are awarded only for innovative steps, copyrights for original works, etc. Many of the most intuitive examples of this sort of process involve trademarks: Nike can price T-shirts at well above their marginal cost of production because of the prestige that accrues to their IP. IP rights are thus intentionally designed to facilitate the pursuit of monopoly profits in a way that seems very similar to the spatial strategies Harvey describes.

Similarly, Harvey's observations about the specifically locational monopoly conferred by exclusive rights in land also have their counterpart in the realm of ideas. Just as the value of real property is, at least in part, determined by its location relative to other properties – the hotel near the airport, the financial consultancy in the City of London – so the value of any given IP right is derived in large part from its relationship with to other IP rights. Indeed, because rights-holders are given extensive discretion to dictate who may access their property, and on what terms, these sort of locational effects are actually more pronounced in the realm of information. The various patents and copyrights protecting Apple's iPhone, for example, are made more valuable by the existence of a large number of third-party apps – an iPhone that can be used to read books or play games is more useful than one that cannot, in the same way that a hotel with access to the airport is more useful than a hotel in the middle of nowhere. The difference is that Apple can destroy much of the value of a developer's IP simply by denying it access. Indeed, Apple actually does do this if it has a strategic reason to do so.[143] Harvey's contention that “[c]ontrol over key strategic locations or resource

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[142] Harvey, D. “The Art of Rent” in Harvey, D., 2001. *Spaces of Capital: Towards a Critical Geography*, Edinburgh: Edinburgh University Press. p. 395

[143] Anderson, N., 2009. Google Voice rejection came from the top at Apple (updated). *Ars Technica*. Available at: http://arstechnica.com/tech-policy/news/2009/09/fcc-releases-confidential-details-of-google-voice-app-rejection.ars [Accessed July 20, 2011]. It is at least instructive to note that software business jargon uses the spatial metaphor of “platform strategies” to describe this sort of relationship. Indeed, it is the fecundity of the spatial metaphor that makes the language of enclosure and commons appealing to legal scholars. Thinkers like Lawrence Lessig and Yochai Benkler use the enclosure/commons dialectic as a way of thinking through precisely these issues of strategic behaviour by rightsholders. For Lessig and Benkler, much of the benefit of open, commons-based systems like FOSS is precisely that, by ensuring that such platforms are not subject to the control of any single owner, they prevent the opportunity for such strategic behaviour. As Lessig puts it: “The users of an open code project are not therefore hostages. That's the lesson argued so far. They are not hostages to bad code... And they are not hostages to

complexes is an important weapon in the capitalist's arsenal" actually applies more strictly to the informational landscape than it does to the material one!

Somewhat disappointingly for IP specialists, Harvey has only really addressed the first sort of monopoly – originality and distinction – in any depth. In "The Art of Rent"[144] he examines this sort of process with regards to the monopoly profits to be gained from prestigious cultural goods like art and fine wine. As he observes, monopolies that result from distinction provide a special sort of problem for capitalism – if the point is to make a profit on the market, one wouldn't want one's goods to be so unique as to be literally priceless. Whilst uniqueness may provide the basis for monopoly, these unique goods have to be exploited on a market if profits are to be realised. This means that a price must be established for the sale or licensing of such goods, which in turn means that there must be at least some basis for comparison with other such goods. Thus, "while uniqueness and particularity are crucial... the requirement of tradeability means that no item can be so unique or so special as to be entirely outside of the monetary calculus." As goods are incorporated into the market, they become less distinctive and their ability to command monopoly prices diminishes: "the more easily marketable such items become, the less special and unique they appear."[145]

Naturally enough, this breeds resistance; Harvey notes "that much of the emphasis within the anti-globalization movement in recent times has focused on the theme of reclaiming the commons and attacking the joint role of the state and capital in their appropriation."[146] Nor can capital afford to entirely extinguish such processes. Capitalism itself is too homogenising a force to produce the sort of distinctiveness that monopoly rents require: "if capital is not to totally destroy the uniqueness that is the basis for the appropriation of monopoly rents... then it must support a form of differentiation and allow of divergent and to some degree uncontrollable local cultural developments that can be antagonistic to its own smooth functioning."[147] Whilst it may relentlessly

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strategic code – open code can't behave strategically. These two features together constitute the innovation commons... the public value that open code supports." (Lessig, L., 2001. *The Future of Ideas: The Fate of the Commons in a Connected World* 1st ed., New York: Random House.)

144 Harvey, D. "The Art of Rent" in Harvey, D., 2001. *Spaces of Capital: Towards a Critical Geography*, Edinburgh: Edinburgh University Press.

145 Harvey, D. "The Art of Rent" in Harvey, D., 2001. *Spaces of Capital: Towards a Critical Geography*, Edinburgh: Edinburgh University Press. p. 396

146 David Harvey (2004) "The New Imperialism: On Spatio-Temporal Fixes and Accumulation by Dispossession" *Socialist Register* Vol. 40

147 David Harvey (2002) "The art of rent: globalization, monopoly and the commodification of culture" in L. Panitch &

force the commodity form upon different knowledges and cultures, then, capital must allow some flourishing of oppositional culture, if only to further commodify it.[148] For Harvey, it is this contradiction that drives the enclosure of knowledge: capitalists crave the monopoly rents to be found from distinction, but capitalism is a homogenising force. As such, it is both driven to expand into those areas which are not yet commodified, but also to leave them open in the hope of their producing something worth enclosing.

At a more general level, we might use Harvey's work to claim that IP is driven by capital's need to find new areas for investment as the rate of profit falls. Such a line of argument has been developed by Christian Zeller, whose focuses on the way the production of knowledge within the pharmaceuticals industry. Such production, Zeller argues, is an essentially social process, and "[t]his socialization makes it difficult to assign the elements of an intellectual achievement to specific actors and firms." In one sense, this simply echoes a point made by May, earlier in the chapter, about the limitations of a view of knowledge that sees it as being the product of a single author. But Zeller develops this argument in an important way. The point is not simply that all knowledge must be composed of prior knowledge, but that the production of knowledge is itself a social process:

> The production of knowledge and new technologies is a process based on division of labor in complex systems and networks. Often innumerable people take part in this process... The enterprises aspire to free access to knowledge and information, and at the same time they want to reserve as much private property thereof as possible.[149]

In order for new knowledge to be developed, firms must allow researchers and knowledge workers to circulate freely – attend conferences, collaborate on projects, share ideas, etc. But the valorisation of the knowledge produced requires that such circulation be prevented through IP rights that are specifically designed to prevent the flow of knowledge.[150] Capital is thus engaged in a permanent process of killing the goose that lays the golden egg – constantly seeking short-term profits through

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C. Leys (eds.) *A World of Contradictions: Socialist Register*, pp. 93–110.

[148] Similarly, Harvey has always followed Marx in maintaining that capital must strike some sort of balance between monopoly and decentralization if it is to prevent total stagnation. Capitalists may want total control of their markets, but in order to be saved from themselves they must be prevented from completing this project. Finance is a key actor in this respect, allowing capital to remain highly centralised while still providing funds for new ventures.

[149] Zeller, C., 2008. From the gene to the globe: Extracting rents based on intellectual property monopolies. *Review of International Political Economy*, 15(1), p. 93

[150] See Jessop, R. "The State and the contradictions of the knowledge-driven economy" in Bryson, J.R. ed., 2000. *Knowledge, Space, Economy*, London: Routledge. pp. 63 - 78

the introduction of restrictive IP laws that make it more difficult to produce further knowledge.

Harvey and Zeller's thought is powerful. By applying a general analysis of capitalism to the specific problems of IP, it allows us to better see the monopolistic nature of property rights generally, and to better understand Harvey's point that, as soon as we deploy an economy in actual space, economists assumptions about strong property rights leading to competitive markets being to look hopelessly incoherent. Correspondingly, the virtues of the "knowledge commons" may help us to appreciate the virtues of other sorts of commons. As a specific critique of IP, however, it is less useful precisely because it aspires to be a general critique of property. As I suggested earlier in the chapter, one of the specific problems of IP legislation is that rights-holders have been able to claim that their rights are "property rights" in the strong, constitutive principle sense described by Burch. They go to legislatures and courts making the claim that the fate of capitalism in general is intimately bound up with the fate of their particular rights. The sort of Marxian critique I have outlined agrees on all these points – that is its strength. It accepts Ayn Rand's claim that IP and capitalism must stand or fall together, and then points to the contradictions that riddle IP in the hope that this will finally show us that all capitalism is contradictory.

The problem with this critique is that it, like the lobbyists, must minimise the considerable history of opposition to IP rights from within capitalism itself. It can point to the "hypocrisy of the liberals" in attacking the "small monopoly" but leaving "the basic monopoly [of property] untouched", but it cannot explain why IP has so often been considered a "small monopoly" rather than an untouchable basic one. In the next section, I explain why I think liberal anti-monopoly opposition to IP is more than mere hypocrisy. I suggest that IP is plausible only to the extent that we characterise knowledge as a sort of resource, a substance that can be made through "intellectual labour," kept in a "knowledge commons", or subject to "intellectual property" rights. As soon as we refuse to indulge in seeing knowledge a substance that exists in some separate intellectual realm, IP begins to look far more problematic.

Beyond the Commons[151]

As I explain in Chapter's 2 and 3, this thesis follows Bruno Latour in thinking that social science often moves too fast, fleeing the location where action takes place, and preferring to discuss the magnificent abstraction of ideas that exist above this "local" context. Latour instead asks us to keep firmly to the local – to "pay our way" by explaining how we get from one location to the next, without postulating some overarching concept of force that each local context is simply a manifestation of.[152] The monopoly view, I suggest, can be seen as a way of doing this with regards to IP rights. Seeing an IP right as a monopoly right over goods, rather than as a property right in an idea, focuses our attention on the way in which the right regulates objects – the way in which, say, a pharmaceutical patent grants rights to dictate where certain pills are made or sold, and puts procedures in place to make sure these sorts of rights are enforceable. A focus on "intellectual property", by contrast, asks us to ignore the pills themselves, and focus on the "knowledge element of the commodity" that they supposedly all embody. It moves us from the scene in which actions actually take place, and into a world of ideas that no-one can see, but that can apparently nonetheless be owned. There are two problems with such a move.

In the first place, taking the world of the mind is to engage in a sort of dualism – to suggest that the world can be divided cleanly into the material and the ideal, before forgetting about the material and turning ones attention to the ideal. As Steve Graham has emphasised, such "fantasies of transcendence" have become particularly prevalent in the context of the internet: "commentators have consistently ignored that it is real wires, real fibres, real ducts, real leeways, real satellite stations, real mobile towers, real web servers and – not to be ignored – real electricity systems that make all of this possible." Thus "'[c]yberspaces do not exist on their own; the many supposedly 'virtual' domains and worlds are brought into existence, and constantly facilitated, by massive, globally extended sets of material systems and infrastructures."[153]

Focussing purely on knowledge thus risks neglecting its account of the objects, architectures and

[151] This section title is taken from Anthony McCann's web-page [http://www.beyondthecommons.com/], and this section is heavily influenced by McCann's work.
[152] See generally Latour, B., 2005. *Reassembling the Social: An Introduction to Actor-Network-Theory*, Oxford: Oxford University Press.
[153] Graham, S.. 2004. Introduction in Graham, S. ed., 2004. *The Cybercities Reader*, London: Routledge. p.13

practices through which that information emerges. May, for example, in his account of Digital Rights Management schemes, focuses principally on the way in which such schemes contribute to the further enclosure of information. However, viewing such developments exclusively in terms of their often ineffectual efforts to shore up copyright ignores their significance as part of larger trends in the use of technology to shape the lived environment.[154] As Siva Vaidhyanathan,[155] Jonathan Zittrain,[156] Tarleton Gillespie and others have argued the question of whether such schemes are an effective way of protecting IP may be somewhat beside the point: "[e]nlisting technological design as a way to regulate its users will have significant consequences for the trajectory and cultural life of digital technologies, and for how we get to make use of them"[157] whether or not it achieves the proximate aims of copyright holders.

This is not a phenomenon confined to digital copyright. Consider, as an example, the controversies about seed rights.[158] Biotechnology patents on particular seeds allow owners to prohibit farmers from saving part of their crop in order to replant it next year, or sell it for that purpose. Moreover, the formation of an IP right involves a sharp and immediate curtailment on the actual property rights that farmers have over their own crops[159] – the right to re-plant, exchange or do whatever else you please with it has been de-laminated from the seed itself and attached to the *idea* of seed. But in order for there to be an ideal seed to which one can attach rights, the material world has to be rearranged: law-makers have to be persuaded, call centres have to be set up to receive anonymous tip-offs, private investigators have to be retained, standards for determining when a crop contains too much of the patented seed have to be devised, experts have to be hired to testify and precedents have to be established. It is only after all this work has been done that a "right to the knowledge embedded in seeds" can emerge as something distinct from the seeds themselves, and thus only at this point that one can start a debate about whether such rights are the private property of biotechnology corporations or the common heritage of mankind.[160]

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[154] See, for example, Thrift, N. & French, S., 2002. The Automatic Production of Space. *Transactions of the Institute of British Geographers*, 27(3), 309-335. Graham, S.D., 2005. Software-sorted geographies. *Progress in Human Geography*, 29(5), 562-580. Dodge, M. & Kitchin, R., 2005. Codes of life: identification codes and the machine-readable world. *Environment and Planning D: Society and Space*, 23(6), 851 – 881.

[155] Vaidhyanathan, S., 2004. *The Anarchist in the Library: How the Clash Between Freedom and Control Is Hacking the Real World and Crashing the System*, New York: Basic Books.

[156] Zittrain, J., 2008. *The Future of the Internet: And How to Stop it*, London: Allen Lane.

[157] Gillespie, T., 2007. *Wired Shut: Copyright and the Shape of Digital Culture*, Cambridge, Mass: MIT Press. p. 8

[158] See, for example, Shiva, V., 2000. *Stolen harvest*, South End Press.

[159] Carstensen, P., 2005. Post-Sale Restraints via Patent Licensing: A Seedcentric Perspective. *Fordham Intellectual Property, Media & Entertainment Law Journal*, 16, 1053.

[160] May, C., 2009. On the border: biotechnology, the scope of intellectual property and the dissemination of scientific benefits. In D. Castle, ed. *The Role of Intellectual Property Rights in Biotechnology Innovation*. Edward Elgar Publishing, p. 475.

We are thus apt to forget the material world, where actual property and the actual commons are located, when we start talking about "intellectual property" or "the intangible commons of the mind." But dualism also introduces another problem, one that is perhaps most apparent in liberal economic analyses. Knowledge, in these analyses, is seen as a tool for making decisions about material resources. Much of modern neo-liberalism is based around the idea that markets are information processing tools, and that giving them free reign will ensure the best possible allocation of resources.[161] So, for example, Hayek, whose defence of capitalism focussed on what he termed the "calculation problem" of centrally planned socialist states, tended to emphasise precisely the fact that markets were social tools for the distribution of knowledge. The superiority of markets, for Hayek, lay in their ability to identify and allocate scarce resources quickly and efficiently through the price system, without the need for any central authority to control or process the relevant information.

The point is thus not simply that accounts of IP engage in dualism. Rather, accounts that wish to claim that knowledge has a "propensity to be organised through markets" are engaged in two contradictory sorts of dualism at the same time. A claim that markets are superior because of their function as information processors may sound reasonable when we maintain a sharp divide between the material world, where the commodities are, and the ideal world, where signals about them are processed. In this view, the communication of knowledge is a good thing. When we suggest that the commodities themselves exist in the world of ideas, however, communication of knowledge is immediately viewed as a public goods problem. As I argue in the next section, proponents of IP have to rely very heavily on a distinction between creation and discovery in order to make this problem disappear. Only by establishing such a distinction can they claim that some sorts of knowledge – art, technology, creativity – are quite obviously more like actual goods than others – prices, science, facts. One is a useful thing in itself, and thus may be owned, the other is useful only insofar as it represents something else, and should be made freely available.

This sort of criticism actually seems to be latent in Boyle, May and Harvey's work. Take, for example Harvey's suggestion "there are always strong discursive effects at play in defining what is

[161] Harvey, D., 2005. *A Brief History of Neoliberalism*, Oxford: Oxford University Press. p. 21

or is not so special about a product"[162] and that monopoly rents are thus "as much an 'effect of discourse'... as they are a reflection of the qualities of the product."[163] Property may thus command a monopoly rent either because of what it is, in which case capitalists would presumably want to exclude others from it pending payment, or because of a particular representation of it, which they would presumably want circulated as widely as possible. When the property in question is itself a representation, there would seem to be a question of whether it commands a high price because of the scarce, private knowledge it encloses, or if its value is the result the free, public discourses that suggest it is in fact something worth having. When May suggests, as above, that the fiction of individual authorship is the key element concealing the circularity of justifications for IP, this seems to gesture towards the role that the distinction between creation and discovery must play in legitimising the idea that knowledge can be property. Similarly, Boyle, before he formulated IP's problems as a matter of protecting the "information commons" wrote a number of works in which he suggested that IP's problems were best conceived of in terms of what he termed "romantic authorship."[164] In the next chapter, I return to this earlier work in order to build a different critique of IP.

Conclusion

At the beginning of this chapter, I argued that we should see property as something more than simply legal rules, and envisage it instead as a constitutive principle. It was in this sense that we had to ask whether IP was in fact property. From this perspective, IP's status as property looks ambiguous, at least in liberal thought – it was sometimes celebrated as property and sometimes derided as monopoly. Notwithstanding this ambiguity, IP rights have been systematically strengthened over the past three decades. These two facts seem contradictory. If liberalism is so ambivalent towards IP, then why have IP rights grown so prodigiously under liberal globalization. A large part of the explanation is given by the account of concentrated benefits and dispersed losses told by Boyle and Sell. IP rights-holders are simply better organised than their counterparts. This, as Boyle argues, is why we need a politics of IP.

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[162] Harvey, D. "The Art of Rent" in Harvey, D., 2001. *Spaces of Capital: Towards a Critical Geography*, Edinburgh: Edinburgh University Press. p. 408

[163] Harvey, D. "The Art of Rent" in Harvey, D., 2001. *Spaces of Capital: Towards a Critical Geography*, Edinburgh: Edinburgh University Press. p. 401

[164] Boyle, J., 1997. *Shamans, Software, and Spleens: Law and the Construction of the Information Society*, Cambridge, Mass: Harvard University Press.

The question is whether we should view the expansion of IP rights as something more than a simple political failure. Does, as May sometimes seems to suggest, knowledge capitalism demand property rights in knowledge in the same way that material capitalism demands property rights in material goods? I have argued in the final parts of this chapter that such a line of reasoning introduces the same sort of dualism that IP's advocates invoke. Both accounts claim knowledge is a substance that can be subject to the same sorts of economic laws as material goods, even though the whole notion of “economic laws” involves a different, and diametrically opposed account of knowledge. I develop this problem in the second chapter.

CHAPTER 2 Facts without Labour

The mainstream essentially abandoned the Novel of Ideas after Henry James, and turned its collective attention to the Novel of Character. They had sucked that dry by mid-century, and they're still chewing on the pulp today. Meanwhile a small group of writers, desperate for something new to write about, for a new story to tell, invented a new genre called science fiction. They mined the future for ideas. The infinite future – like the infinite coal and oil and copper they had then too. In less than a century they had mined it out; there hasn't been a genuinely original idea in science fiction in over fifty years.[165] *- Spider Robinson*

Introduction

"Melancholy Elephants," a short story written in 1983 by Spider Robinson, depicts a future in which copyright has already expanded dramatically, and in which a bill that would make it perpetual awaits ratification by the US Senate. Dorothy, a representative for an artists' organisation, lobbies a powerful senator in order to stop the passage of the Bill's passage. Much to her dismay, the senator reveals that he has already committed himself, having received a large donation from backers of the bill in order to ensure that it passes unchallenged. He is, however, curious as to what her arguments might be – in an economy in which information is the key form of wealth, strengthening copyright seems to him a natural step – and this curiosity is further piqued by the fact that Dorothy claims to represent artists. Surely they, more than anyone else, stand to benefit from the extension of a law that grants creators rights in their creations? What, the Senator wonders, has motivated this effort?

Dorothy responds by directing the senator to the way in which creativity has slowed over the past centuries. Whereas Wagner composed sixty hours of music, the best composers of Dorothy and the senator's day can manage less than twelve. Similarly, the flow of new books, films, sculptures and paintings has slowed to a trickle. The reason, Dorothy reveals, is that so much creativity is already owned that it is now incredibly difficult to find a pleasing combination of notes, or an interesting plot for a book, or an agreeable arrangement of colours and shapes, that someone does not already own the copyright to. This invites the troubling suggestion that art is in some sense a finite resource – something that can in principle be exhausted. And this in turn suggests the troubling possibility

[165] Robinson, S., 1983. Melancholy Elephants. *www.spiderrobinson.com.* Available at: http://www.spiderrobinson.com/melancholyelephants.html [Accessed July 29, 2011].

that art is not what humanity had supposed it to be: "Artists have been deluding themselves for centuries with the notion that they create. In fact they do nothing of the sort. They discover. To create implies infinite possibility, to discover implies finite possibility."[166] Dorothy's organisation wants to spare mankind from confronting this possibility – her own husband killed himself after discovering that the love song he had written for his wife was already under copyright. If copyrights are allowed to expire, then materials can be re-used, and humanity will never have to come face-to-face with the limits of its own creativity.

Whilst we have yet to fully exhaust our supply of artistic expression, "Melancholy Elephants" remains a very perceptive consideration of copyright. This is especially true given the time it was written. Copyright terms had been lengthened before 1983, but the aggressive effort to expand it that I described in the last chapter was only just beginning. It was not until fifteen years later that something like the act Robinson envisages was passed in the US,[167] or that academics like Boyle would suggest that the problems of expanding IP rights might be best thought of through metaphors of environmentalism and resource management. Similarly, whilst the plot of Robinson's story hinges on the fact that advocates of strong IP protection are much better organised and better funded that their opposition, this phenomenon was not nearly so obvious in the 1980s, when the lobbying effort that would lead to TRIPS appeared to be no more than a letter-writing campaign by a few CEOs.[168]

This sort of literal prescience, however, is a poor way to judge science fiction. The best science fiction is really a meditation on its own time – it takes something that an author believes to be important, and constructs a setting that allows us to see why this is so. From this point of view, "Melancholy Elephants" is simply a way of exploring the precarious distinction between creation and discovery, between ideas that are made, and ideas that are found. In this sense, Robinson's topic is an ancient one – an illustration of his own thesis that ideas must be recycled. The question of

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[166] Robinson, S., 1983. Melancholy Elephants. *www.spiderrobinson.com*. Available at: http://www.spiderrobinson.com/melancholyelephants.html [Accessed July 29, 2011].

[167] Copyright in the US now technically lasts until seventy years after the death of the author, and is prohibited by the copyright clause of the US Constitution from being perpetual. Since *Eldred v Ashcroft* (2003), however, the US Supreme Court has held that there is no bar on the US government's ability to extend the copyright on existing works, thus allowing for what has been termed "perpetual copyright on the instalment plan." See Solum, L.B., 2002. Congress's Power to Promote the Progress of Science: Eldred v. Ashcroft. *Loyola of Los Angeles Law Review*, 36, p.1.

[168] Sell, S.K., 2003. *Private Power, Public Law: The Globalization of Intellectual Property Rights*, Cambridge, U.K: Cambridge University Press.

whether certain sorts of knowledge are recent human constructs or unchanging aspects of reality are at least as old as Western philosophy. "Melancholy Elephants" takes a provocatively extreme view suggesting that even those sorts of knowledge that seem most distinctively human – songs, stories, art – are really just pre-existing aspects of reality, waiting patiently to be (re)discovered.

Debates about epistemology – perhaps justifiably – usually enjoy a reputation for being rather dry. Robinson shows us why they are important. By constructing a scenario in which the truth of the structuralist view would have actual consequences, he shows us what hinges on the question. There is a strong appeal to the idea of the creative individual who, rather than simply uncovering what already exists, makes something new. Robinson helps us to understand why – to say that we create is to say that we can change the world, to say, with Richard Rorty, that "we can be whatever it is we are clever and courageous enough to imagine ourselves becoming."[169] To say that we merely discover suggests that we, like Dorothy's husband, are merely following a path that has already been laid out, and that even our most treasured accomplishments are someone else's.

More important for this thesis is the vehicle that Robinson uses to explore these questions. Copyright is the law most directly concerned with creativity, and thus a natural battlefield for questions about the nature of creativity: if one particular view of human creativity turns out to be true, this should have consequences for copyright law. Indeed, the idea of creative authorship is, as Paul Goldstein reminds us, central to copyright:

> The appeal is emotional – public sympathy is stirred by the image of an artist struggling alone in his garret – but also rational. Copyright is about authorship, about sustaining the conditions for creativity that enable an artist to create out of thin air and intense, devouring labor an *Appalachian Spring*, a *Sun Also Rises*, a *Citizen Kane*. In a culture that depends on the marketplace, creative authorship is central.[170]

Individual creativity is both a romantic, appealing idea, and a theoretical justification for copyright. Copyrights in works are awarded to authors on the assumption that these authors are creating things from nothing – that they bring something into the world that is so entirely new, and thus so wholly theirs – that it is only natural to grant them rights to it. Again, Robinson helps us understand this – it

[169] Rorty, R. "Human Rights, Rationality and Sentimentality" in Savić, O. ed., 1999. *The Politics of Human Rights*, London: Verso. p. 70
[170] Goldstein, P., 2003. *Copyright's highway: from Gutenberg to the celestial jukebox*, Stanford University Press. p. 61

seems natural to the Senator that artists should want to see copyright extended, because this is a reward for their creativity. The idea that extensions to copyright on existing work might harm creators does not occur to him, because he, like most of us, is deeply attached to the idea that human beings can create out of nothing more than "thin air and intense, devouring labour."

The final contribution of "Melancholy Elephants" is to see that, if we are to save anything of individual creativity, we must challenge the assumption that artistic creations are born of nothing more than "thin air and intense, devouring labour." In its suggestion that creativity can only flourish if ideas are recycled, it echoes Northrop Frye's insight that "Poetry can only be made from other poems, plays from other plays." This idea was raised, but not developed, in the last chapter, where I cited Christopher May in order to touch on the same point:

> All knowledge must be largely extant by virtue of the extent of knowledge needed to have the insight or creativity (call it what you will) to add something to any field... [Given this], is it ever possible to identify the part of the knowledge product that is completely the labour of the right-owning individual (who is enjoying labour's desert)?

Like Robinson, May suggested that these difficulties could be assumed away insofar as we saw IP rights as accruing to "the individual creator, the `author', acting in solitude to produce a new piece of knowledge."[171] Such a critique has also been developed by a various other legal scholars including Boyle, whose work on enclosure I described in the last chapter. Each of them suggests that an unrealistic vision of individual creativity, which they term romantic authorship, provides a convincing explanation for the recent moves towards the enlargement of IP rights.

As we saw in the last chapter, Boyle and May now both focus on narratives of enclosure and commons. Romantic authorship, as a consequence, seems to have been abandoned. In this chapter, I argue that this is unfortunate. First, I present the romantic authorship critique of strong IP rights. Reduced to its essence, the romantic authorship critique suggests that a focus on authorship makes judges and legislators focus too much on the role of the individual in the creative process, and to give broader, more structural processes too short a shrift. I then examine one persuasive critique of romantic authorship, offered by Mark Lemley and others. These scholars see IP expansion as

[171] May, C., 1998. Thinking, buying, selling: Intellectual property rights in political economy. *New Political Economy*, 3(1), 59-78.

resulting from what they term "property rhetoric", and suggest that key decisions in IP law over the past few decades are best understood as a result of a Chicago School vision of property that focuses on eliminating free-riding and internalising externalities. I argue that the problem with the property rhetoric critique is not so much that it is wrong – it is largely correct – as that it is really just the romantic authorship critique in new clothes. Both approaches essentially see IP law as influenced by a misguided view of knowledge development and decision-making that rewards individuals too liberally whilst interfering with the less visible processes that contribute to knowledge creation and allocation.

I propose that these two approaches can be much more productively understood together. My suggestion is that the romanticism on display in strong theories of authorship complements the scientism typical of economics to divide the knowledge into two distinct spheres – objective knowledge that one "discovers" simply from looking at the world, and subjective knowledge that is the product of some special creative essence within human beings. I draw on the work of Richard Rorty[172] and Charles Taylor[173] to illustrate some of the intellectual history of this dichotomy, showing how it bases itself on the Cartesian distinction between ideal and material. As Rorty and Taylor emphasise, these distinctions are far less straightforward and determinate than the conventional wisdom would suggest. Indeed, one can see this indeterminacy at work in IP law, as judges struggle to distinguish universal ideas from individual expressions, scientific truths from their creative applications, and original marks from generic designations. From this point of view, we might envision much of the enclosure described in the last chapter as a process of re-classification, whereby knowledge that we used to think of as scientific and objective is re-branded as subjective and creative.

Poets or economists?

In the first chapter, I offered an account that saw the strengthening of IP laws as a sort of "enclosure", before offering accounts from David Harvey and Christopher May about why such expansion was taking place. I suggested these accounts seemed to omit or distort too many things

[172] Rorty, R., 1989. *Contingency, Irony, and Solidarity*, Cambridge: Cambridge University Press.
[173] Taylor, C., 1985. *Human agency and language*, Cambridge University Press

that we would want a theory of information enclosure to be able to account for, and that they were ultimately not convincing. This leaves open the question of how exactly such an enclosure can be explained.

Part of the explanation, of course, is simply the story of concentrated benefits and dispersed losses that I outlined at the start of the last chapter: IP protection produces large benefits for small groups, the costs of which are borne more widely by a more diverse group of stakeholders. This much is agreed upon by Harvey, May, myself and almost anyone else who has voiced concern over excessive IP protection. As Neil Netanel points out, however, this sort of public-choice theory analysis can only explain so much by itself:

> The naked pursuit of self-interest only goes so far in shaping a legal regime. The most robust policy ideas are informed by a cogent rhetorical framework that resonates among lawmakers and eases the way to general acceptance.[174]

Rights-holders could, for example, just demand that the government introduce a new tax and give them the proceeds:[175] benefits would still be concentrated and costs would still be dispersed. Such a nakedly self-serving policy, however, would be unlikely to succeed, because even the most venal politicians and judges usually shrink from pandering to special interests too openly. Indeed, it is seldom the case that judges and politicians think of themselves as catering to special interests at all, even when that is the practical result of their actions.

One persuasive account of the sort of "cogent rhetorical framework that... eases the way to general acceptance" centres on the idea of Romantic authorship. At one level, this analysis focuses on the way in which authors and inventors, rather than multi-nationals and investors, are presented as the chief beneficiaries of IP expansion. So, for example, recent campaigns for copyright extension in the UK were spearheaded by ageing rock stars,[176] or, as Bessen and Meurer point out, "[d]efenders

[174] Netanel, N.W., Why Has Copyright Expanded? Analysis and Critique. *NEW DIRECTIONS IN COPYRIGHT LAW, Vol. 6, Fiona Macmillan, ed., Edward Elgar, 2008.* Available at: http://ssrn.com/paper=1066241 [Accessed September 8, 2009]. p. 11

[175] Indeed, William Fisher has argued that in the case of internet file-sharing this sort of system would actually be fairer and more efficient than further attempts to shore up copyright. See Fisher, W.W., 2007. *Promises to Keep: Technology, Law, and the Future of Entertainment* 1st ed., Stanford University Press.

[176] Anderson, 2006. FT.com / Comment / Opinion - My new tune: equality on copyright. *FT.com.* Available at: http://www.ft.com/cms/s/1/f157f0f8-c98b-11da-94ca-0000779e2340.html#axzz1VE7saz9i [Accessed August 16,

of the current [US patent] system tell stories about the role of patents in protecting small inventors from rapacious corporate giants."[177] More fundamentally, such accounts emphasise the fact that the very idea of individual authorship is more problematic than it might at first seem, and that ideas about individual creativity and the rights to the products of that creativity have co-evolved historically. Perhaps the strongest version of this thesis comes from Martha Woodmansee, who goes so far as to suggest that modern notions of authorship were developed largely as part of a deliberate strategy to "establish the economic viability of living by the pen."

Critics of Romantic authorship emphasise its contingency, using this historical account to illustrate the way in which the modern category of authorship is "a culturally, politically, economically, and socially constructed category rather than a real or natural one."[178] As Woodmansee emphasises, the idea that what ends up written on a page is largely the result of what takes place inside an individual's head is a comparatively recent one. Thus, during the Renaissance, the writing of poetry, plays and romances was seen as the application of a "body of rules, preserved and handed down... in rhetoric and poetics, for manipulating traditional materials in order to achieve the effects prescribed by the cultivated audience of the court."[179] In so-doing, they draw upon the insights of structuralist and post-structuralist thought, which challenges strong notions of authorship by once again pointing to the regularities of form and content common to all texts, and without which no text could be understood. As Michel Foucault summarised the project:

> What if understanding were a complex, multiple, non-individual formation, not "subjected to the subject", which produced effects of truth? One should then put forward positively this entire dimension which the history of science has negativised; analyse the productive capacity of knowledge as a collective practice; and consequently replace individuals and their "knowledge" in the development of a knowledge which at a given moment functions according to certain rules which one can register and describe.[180]

An account of creativity that sees authorship as the beginning and end of the process, they suggest,

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2011].

[177] Bessen, J., 2008. *Patent Failure: How Judges, Bureaucrats, and Lawyers Put Innovators at Risk*, Princeton: Princeton University Press. p. 3

[178] Jaszi, P., 1991. Toward a Theory of Copyright: The Metamorphoses of "Authorship". *Duke Law Journal*, 1991(2), p. 459

[179] Woodmansee, M., 1984. The Genius and the Copyright: Economic and Legal Conditions of the Emergence of the 'Author'. *Eighteenth-Century Studies*, 17(4), p. 425

[180] Foucault, M. & Chomsky, N., 2006. *Chomsky vs Foucault: A Debate on Human Nature*, The New Press.

systematically under-estimates these factors, and leads to policy prescriptions in which the main purpose of the law is to properly identify these singular sources of authorial creativity, and then grant them the strongest rights possible.

The turn towards Foucault also brings with it an insistence that questions of authorship and textuality are applicable far beyond the confines of literary theory. The focus on authorship in relation to texts is taken simply as one instance of a larger tendency to focus on creative agency at the expense of epistemic structure. As Nigel Stirk shows, there is at least some historical basis for such a generalisation, since accounts of creative authorship drawn from the copyright debate did serve as an important model for James Watt as he lobbied parliament to extend the patent system.[181] The suggestion that the creativity of inventors and entrepreneurs is subject to a similar process of romanticisation, allows the specific critique Romantic authorship as a problem within copyright to be turned into a more general theory of the tendency towards expansion within IP law.

Such an approach in fact informs James Boyle's early work on enclosure. Boyle's suggestion is that the Romantic author continued to make his influence felt under the apparently technical economic jargon of the "information economy." Without such a figure to structure it, he suggested, the prescription of economics for information were entirely indeterminate because the metaphor of a "market for information" uses the idea of "information" in two separate and contradictory ways. In the first place, information works as a structural feature; the central basis of the neoclassical system – the idea of buyers and sellers responding to price signals – relies on the idea that these buyers and sellers have freely available knowledge of these signals. They know what goods exist, how much they cost, and how highly they value them (which in turn suggests comprehensive knowledge of what the good actually is). This view of perfect information is well known as a simplifying assumption for economic models. As far as economists are considering efficient pricing and allocative efficiency, free and abundant information exists for them as a background assumption, flowing around the economic machine and oiling out the transaction costs. In its incarnation as a commodity, however, it becomes costly, scarce and decidedly solid. Whilst this may at first appear as a problem of purely theoretical interest – an unfortunate consequence of the inability of

[181] Stirk, N., 2001. Intellectual property and the role of manufacturers: definitions from the late eighteenth century. *Journal of Historical Geography*, 27(4), 475-492.

economics to overcome its overly general definition of information[182] – it has some decidedly tangible effects on economic policy prescriptions: "This dual – and contradictory – incarnation of information reappears in the actual market. Our search for economic efficiency pushes us toward ever freer and less costly information flow at the same time as our understanding of incentives necessary for production tells us that information must be costly, partial and deliberately restricted in its availability."[183]

The tension can be resolved, Boyle suggests, by introducing the notion of authorship. Economists were free to treat information in its commodity aspect insofar as it seemed to conform to the norms of authorship. By suggesting that some sorts of knowledge are entirely the product of individual creativity, and can thus be treated separately from other considerations, "the romantic vision of authorship continues to influence public debate on issues of information... [and] frequently structures technical or economic analysis – providing the vital choices that give the analysis its appearance of determinacy and 'commonsense' plausibility."[184] In terms of both the creation of the author figure in the public imagination and also of economic analyses that take the individual (or corporation as individual) as their default unit of creativity, then, the romantic author provides a justification for viewing information as commodity, rather than signal. An understanding of this perspective is vital for an understanding of IP expansion because it is in these terms that many of the judicial decisions are couched.

Romantic authorship thus provides one possible rhetorical framework in which to situate IP expansion – the appropriation of certain sorts of information is justified by suggesting that it results entirely from human creativity. An apparently rather different framework, suggested by Netanel, Lemley and others, is that it is the rhetoric of property, rather than of authorship, that best explains the expansion of IP. As Lemley points out, it is only for a comparatively short period that Anglo-

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[182] See Benjamin J. Bates (1988) "Information as Economic Good: Sources of Individual and Socail Value" in Vincent Mosco and Janet Wasko (eds.) *The Political Economy of Infomration* (Madison: University of Wisconsin Press)

[183] James Boyle (1996) *Shamans, Software and Spleens* (Cambridge: Harvard University Press) p. 29 A recent story from the university newspaper the *Harvard Crimson* illustrates this tension taken to its *reductio ad absurdam* conclusion. Students were apparently forbidden from writing down the prices of books in the university second-hand shop, under the pretext that these constituted the IP of the store. See Gabriel J. Daly (2007) "Coop discourages notetaking in bookstore" *The Harvard Crimson* 19th September [http://www.thecrimson.com/article.aspx?ref=519564, accessed 19/09/2007]

[184] James Boyle (1996) *Shamans, Software and Spleens* (Cambridge: Harvard University Press) p. 59

Saxon law has made regular reference to the notion of "intellectual property": seldom used in patent, copyright or trademark cases in the forties and fifties, the phrase became more common throughout the second-half of the twentieth century,[185] so that today it is common for judges, legislators and governments to speak of these different rights as a collective entity, their unity established through the analogy to physical property, as though they were all simply different locations on the information landscape. Thus, for example, Netanel notes that where rights-holders used to complain of infringement, they now borrow from the language of real and chattel property to talk of "theft" and "piracy."[186] What such a framing lacks in legal accuracy – it is really very difficult to actually steal someone's intellectual property – it more than makes up for in rhetorical effectiveness. It is, as Siva Vaidhyanathan points out, rather difficult to argue for the benefits of legalising certain sorts of theft.[187]

This shift in terminology is seen by Lemley as symbolic of a deeper trend, whereby legal and academic analysis of IP increasingly takes its cue from the very different tradition of physical property. The suggestion that the concept of "property" lends a fundamental structural unity to everything so-designated gives scholars, legal practitioners and the popular press license to apply models and theories developed to address quite different problems and circumstances. In particular, Lemley suggests that the analogy to real property paves the way for an application of the Law and Economics approach to property developed by Chicago School theorists such as Ronald Coase and Harold Demsetz.

In this account, property rights serve to ensure that market participants have the full harms and benefits of their actions accrue to them, that they fully internalise their externalities. This understanding provides the basis for a theory of the development of property rights: "If the main allocative function of property rights is the internalization of beneficial or harmful effects, then the emergence of property rights can be understood best by their association with the emergence of new or different harmful effects... property rights develop to internalize externalities when the gains of

[185] Lemley, M.A., 2005. Property, Intellectual Property, and Free Riding. *Texas Law Review*, 83, 1031.
[186] Netanel, N.W., Why Has Copyright Expanded? *Analysis and Critique. NEW DIRECTIONS IN COPYRIGHT LAW, Vol. 6, Fiona Macmillan, ed., Edward Elgar, 2008.* Available at: http://ssrn.com/paper=1066241 [Accessed September 8, 2009].
[187] Vaidhyanathan, S., 2001. *Copyrights and Copywrongs: The Rise of Intellectual Property and How It Threatens Creativity*, New York: New York University Press. pp. 10-12

internalization become larger than the cost of internalization."[188] The boundaries of the property system are thus set, according to this theory, at the point at which the costs of enforcing the system equal the harms that would be inflicted were it not in place.

Property, in this view, is just a convenient legal mechanism for allowing differing interests to enter an economy. By ensuring that the owners reap the consequences of their actions, it emphasises the role played by individual actors in supplying information and making calculations concerning the future:

> If a single person owns land, he will attempt to maximise its present value by taking into account alternative future time streams of benefits and costs and selecting that one which he believes will maximize the present value of his privately-owned land rights... In effect, an owner of a private right to use land acts as a broker whose wealth depends on how well he takes into account the competing claims of the present and the future.[189]

Property rights thus disperse the responsibility for making predictions about an uncertain future amongst actors, and the market decides amongst their judgments. It is on this basis that Demsetz builds his justification of IP. Comparing IP to other possible methods of producing commercially useful knowledge, such as voluntary or publicly funded research, Demsetz suggested that a property system might be the most likely way of harnessing the superior capacity for calculation possessed by the market:

> If, somehow, we knew how much and what types of information it would be desirable to produce, then we could administer production independently of the distribution of any given stock of information. But we do not know these things... How would such a system produce information on the desired directions of investment and on the quantities of resources that should be committed to invention? There are ways, of course. Surveys of scientists and managers could be taken and a weighting scheme could be applied to the opinions received; no doubt there are many other ways of making such decisions. But the practice of creating property rights in information and allowing its sale is not clearly inefficient in comparison with these real alternatives.[190]

As with the enclosure of land, IP rights function as a conduit through which owners' predictions

[188] Harold Demsetz (1967) "Toward a Theory of Property Rights" *American Economic Review* Vol. 57 No. 2 p. 350
[189] Harold Demsetz (1967) "Toward a Theory of Property Rights" *American Economic Review* Vol. 57 No. 2 p. 355
[190] Harold Demsetz (1969) "Information and Efficiency: Another Viewpoint" *Journal of Law and Economics*, Vol. 12 No. 1 pp. 11-12

about an uncertain future can be weighed and measured by the market. In the case of landowners, these predictions are made in terms of the possible future value of their property, which is then discounted against the possibility of current exploitation. Similarly, prospective IP rightsholders attempt to predict those types of information that will be valuable in the future, and direct investment and resources accordingly. In both cases, the market is the ultimate arbiter.

As Lemley observes, this analysis is often over-enthusiastically taken up by IP maximalists to suggest that stronger property rights mean better market information. Paul Goldstein, for example, declares that "[t]he logic of property rights dictates their extension into every corner in which people derive enjoyment or value from... works. To stop short of these ends would deprive producers of the signals of consumer preference that trigger and direct their investments."[191] Market efficiency thus becomes a matter of eliminating those uses which do not require payment, and thus that do not produce signals. As Lemley points out, this provides an apparently determinate programme for courts ruling on questions of IP – find and eliminate instances of free-riding. And this, in fact, is what they have tended to do:

> Courts applying the property theory of intellectual property are seeking out and eliminating uses of a right they perceive to be free riding. Some treat copying as free riding. They justify property-like protection for trademarks on the basis that it will prevent free riding. They debate the proper role of patent law's doctrine of equivalents in terms of whether it permits free riding... Even the courts that reject intellectual property claims do so because they cannot find evidence of free riding.[192]

One important point to note, as Lemley observes, is that there will always be more externalities. A theory that looks to eliminate free riding is, by design, a theory by which IP rights must expand. If consumers find a new way to derive enjoyment from a work, or competitors derive some benefit from its existence, then property rights must be extended so that these uses and benefits can be properly charged for it.

There are many possible objections that the reader might wish to raise to a view that suggests that all enjoyment of in-copyright work should be charged for. The really damning point that Lemely

[191] Paul Goldstein (2003) *Copyright's Highway: From Gutenberg to the Celestial Jukebox* (Stanford: Stanford University Press)
[192] Lemley, M.A., 2005. Property, Intellectual Property, and Free Riding. *Texas Law Review*, 83, 1031.

raises, however, is that it does not even work in it own terms. As he suggests elsewhere, the real problem with a focus on free riding is precisely that it insufficiently recognises the way in which IP can subvert the market's decision-making process about how information should be deployed, and thus lead to sub-optimal outcomes:

> The idea that a single company is better positioned than the market to make use of an idea should strike us as jarringly counter-intuitive in a market economy. Our normal supposition is that the invisible hand of the market will work by permitting different companies to compete against each other. It is competition, not the skill or incentives of any given firm, that drives the market to efficiency. Nothing about the fact that a work was once subject to patent or copyright protection should change our intuition here.[193]

The concern here is not so much that IP owners will be monopolistic or predatory (although that is also a concern) as that, insulated from the discipline of competition, they will simply be wrong: if only one firm is allowed to decide on the use and price of information, we should usually expect those decisions to be inferior to those that would result from the continuous adjustment of the market.

Lemley thus follows Hayek in cautioning against the tendency to assume away the process through which markets arrive at prices and The efficient allocation of information, he suggests, is not a result of the decisions of individual companies with privileged access to signals of consumer preference as a result of their extensive IP rights, but an emergent property of the decisions of many different actors whose "limited individual fields of vision sufficiently overlap so that through many intermediaries the relevant information is communicated to all."[194] The point is further developed by Tim Wu in his suggestion that one of the major harms of IP is its tendency to centralise the decision-making process about how particular sorts of information should be used:

> Of then-contemporary economic theory, Fredrick Hayek wrote that "there is something fundamentally wrong with an approach which habitually disregards an essential part of the phenomena with which we have to deal: the unavoidable imperfection of man's knowledge and the consequent need for a process by which knowldge is constantly communicated and acquired."

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[193] Lemley, M.A., 2004. Ex Ante versus Ex Post Justifications for Intellectual Property. *University of Chicago Law Review*, 71, 129.

[194] Hayek, F.A., 1945. The Use of Knowledge in Society. *The American Economic Review*, 35(4), 519-530. p. 526

> Much of the economic reasoning surrounding the grant of intellectual property rights has suffered from the problem Hayek describes. It is implicitly or explicitly based on unrealistic ideas of how firms and industries make important licensing, innovation and product development decisions.[195]

Against the argument that strong property rights will provide more information about demand to particular individuals, then, Lemley and Wu offer the Hayekian vision of the market as a collective decision-making process – information should be made widely available so that as many people as possible can provide an evaluation of it.

Lemley's concern that a focus on the incentives for individual agents at the expense of structural processes is not confined merely to the pricing and use of information. In recent work on what he terms "The Myth of the Sole Inventor",[196] Lemley applies the same argument to the process of creation itself, arguing that the traditional justification for patents reflects a deeply flawed view of how innovation actually works. Whilst patents are usualy presented as a means of encouraging innovation that would not otherwise take place, Lemley observes that "surveys of hundreds of significant new technologies show that almost all of them are invented simultaneously or nearly simultaneously by two or more teams working independently of each other." Clearly, this presents a problem for a patent system that justifies itself on the basis that it provides a reward to the creative individual; the fact that most inventions are arrived at simultaneously by a number of different people seems rather to minimise the role that the individual can play. As Lemley puts it: "Invention appears in significant part to be a social, not an individual, phenomenon. Inventors build on the work of those who came before, and new ideas are often in the air, or result from changes in market demand or the availability of new or cheaper starting materials."[197]

Accounts of law, economics and property are usually presented as alternatives to ideas of Romantic authorship. As Lemley and Netanel point out, at the level of legal argument and public policy, it is ideas of eliminating free-riding and ensuring that information attains its full market value, rather than appeals to authorship, that seem to be dominant. Lemley also sees far less of a tension between the commodity and signalling functions of information:

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[195] Wu, T., 2006. Intellectual Property, Innovation, and Decentralized Decisions. *Virginia Law Review*, 92, 123.
[196] Lemley, M.A., 2011. The Myth of the Sole Inventor. *SSRN eLibrary*. Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1856610 [Accessed August 15, 2011].
[197] Lemley, M.A., 2011. The Myth of the Sole Inventor. *SSRN eLibrary*. Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1856610 [Accessed August 15, 2011].

> The perfect information requirement applies, if at all to what one might call meta-information – information *about* a transaction for some other good or service, such as the price of a commodity or the quality of the goods being sold. By contrast, information is treated as a commodity when it is the *subject* of a transaction – a very different thing. Boyle suggests that economists have no master principle for deciding which sort of information is which, but that simply isn't so. In most cases, the difference is obvious – the information I am buying is in a box labelled "software," the price is on a sticker on the outside.[198]

Lemley thus denies the efficacy of the author at the theoretical level by denying that there is a problem that Romantic authorship could be solving. But given Lemley's thoughts on the importance of market processes, this objection seems odd: unless buyers are assumed to be the sorts of enthusiasts who, like South Sea Bubble speculators, are happy to pay money for "an undertaking of great advantage, but nobody to know what it is,"[199] the price on the outside of the box presumably depends on the consumer having some knowledge of the contents inside of the box. Indeed, the whole point of Lemley's Hayekian critique of property rhetoric is that "meta-information" like price is valid only insofar as it is the result of a through evaluation of the underlying "information" by different consumers.

Lemley, Netanel and Wu's analysis of property being protected at the expense of de-centralised Hayekian decision-making is in fact strikingly similar to Boyle, Jaszi and Woodmanse's story of Romantic authors stealing the limelight from Foucauldian collective knowledge practices. Like critics of Romantic authorship, scholars focusing on the rhetoric of property see these collective and impersonal practices as insufficiently recognised by legislature and judiciary. And if Romantic authorship offers one explanation for this selective blindness, then, as Ramello and Silva point out, the analogy to physical property can be made to serve a very similar function:

> [I]nformation is treated simultaneously as an object of consumption, productive element, commercial signal, and much more. This opens up a potentially bewildering new prospect to scholars, due in particular to the not inconsiderable differences that exist between the economics of ideas and the economics of things. A difficulty which the economic theory has often simply sidestepped by assimilating present and future to the past, for example coining the oxymoron "intangible goods" in an attempt to reduce the fluid category of information into the concrete

[198] Lemley, M.A., 1997. Romantic Authorship and the Rhetoric of Property. *Texas Law Review*, 75, p. 873
[199] Mackay, C., 1980. *Extraordinary Popular Delusions and the Madness of Crowds*, New York: Crown.

terms of goods and quantities.[200]

Analogising certain sorts of information to actual commodities allows us to ignore the tension between the signalling and commodity functions of information by assuming away the "differences... between the economics of ideas and the economics of things." If we simply assume that the information that we grant IP rights over is not information at all, but in fact a sort of material thing, then we need not trouble ourselves with the idea that all the Hayekian information-processing functions that constitute "the market" carry might be affected.[201]

Property rhetoric and Romantic authorship can thus be seen as two different ways of telling the same story, a story about our tendency to overlook the underlying tension between structure and agency that necessarily informs IP law. Both use this story to form the basis of an argument about how the law has focused too much on individual agency – romantic authors or properly incentivised knowledge owners – at the expense of more structural considerations – the productivity of the knowledge commons or "the invisible hand" of the market. This, in turn, is a major reason for the expansion of IP law – insofar as legislators and judges are blind to these more structural aspects of knowledge production and allocation, they will fail to take account of them when making and interpreting the law. Such an argument both mirrors and complements the more cynical story about concentrated benefits and dispersed losses that is the starting points for most generalised accounts of IP expansion. Just as public choice theory would suggest that a hazily defined "public interest" tends to be no match for motivated individuals with a clear idea of their interests and the demands they should make to further it, so the decentralised production and allocation of knowledge tends to lose out to accounts that can conveniently locate those functions in a single entity.

Two sorts of knowledge

The stories of romantic authorship and property rhetoric are thus more productively understood together. The advantage of a focus on property rhetoric is that it provides us with a much more complete and convincing picture of how IP is understood at the level of those individuals and

[200] Ramello, G.B. & Silva, F., 2006. Appropriating signs and meaning: the elusive economics of trademark. *Ind Corp Change*, 15(6), 937-963.

[201] It is interesting to note in passing that both these analyses also seem to mirror the "concentrated benefits/dispersed losses" story that they seek to supplement, benefits accrue to easily identifiable individual agents, costs are hidden and structural.

institutions whose decisions constitute the enclosure described in the last chapter are actually made. Law-makers, judges and academics use an apparently politically neutral economic approach that seems to yield determinate answers about how far rights should extend, and move to enact its prescriptions in practice.

As Boyle would emphasise, however, this is possible only because "the romantic vision... structures... economic analysis – providing the vital choices that give the analysis its appearance of determinacy and 'commonsense' plausibility."[202] Romantic authorship establishes a boundary between the sort of knowledge that is public, universal and objective on the one hand, and, on the other, the sort that is private, particular and subjective. Trademarks must be unique and distinctive – a bicyle manufacturer can not simply register the word "Bicycle" as a trademark and start suing any of his competitors who refer to their products as such. Indeed, through the marvellously named doctrine of "genericide", trademarks can lose their registered status if they are deemed to have come to symbolise a general class rather than a particular thing.[203]

Patents must meet standards of novelty and inventiveness in order to be valid. So, for example, we tend to take it for granted that the back-yard inventor can patent her new way of opening wine bottles, but the theoretical physicist receives no such right over her contributions to string theory. Whilst both have clearly expended time, energy and ingenuity, one has created something new, whilst the other has uncovered something timeless. In these cases it's pretty easy to tell how we should categorise both sorts of knowledge. While not many of us actually know much about string theory, we know enough to recognise that it depicts processes that would be happening whether or not we were around to think about them. The designs for a novelty cork-screw, on the other hand, seem unmistakably like the product of human invention – a necessary condition for awarding the rights for their exploitation to one human in particular.

Problems arise in those cases where it is unclear which side of the boundary a particular sort of knowledge falls on. The granting of patents to genetic cures, for example, was in part contested because it was hard to reconcile it with the notion of invention. Genetic research doubtless requires

[202] James Boyle (1996) *Shamans, Software and Spleens* (Cambridge: Harvard University Press) p. 59

[203] Moore, R.E., 2003. From genericide to viral marketing: on 'brand'. *Language & Communication*, 23(3-4), 331-357; Taylor Joynson Garrett, 1996. Looking after your trademarks - "genericide": the problem. *In-House Lawyer*, 42, pp.54-55.

the expenditure of time, money and ingenuity, but the results seem much more like the discovery of a new scientific fact than the invention of new knowledge. Such cases constitute one particularly important aspect of the enclosure described in the last chapter, as more and more knowledge that was once thought to be universal, factual and public is reinvented as particular, created and thus private. A brief consideration of recent IP related controversies reveals a long list of items that after having for a long time been considered too public, universal, and factual to ever be privately owned, have subsequently been redefined as IP. In 1989, Hettinger confidently asserted that "[l]aws of nature, mathematical formulas and methods of doing business, for example, cannot be patented."[204] Since then, patent rights have been awarded for genes on the basis of their association with specific diseases,[205] for mathematical algorithms in everything from encryption to finance,[206] it has become illegal to publish certain numbers in the USA and Europe[207], and Amazon has, famously, been awarded a patent on the process of buying goods on-line with a single mouse click.[208] Knowledge of the sort that we would once have considered public and factual is being re-cast as the product of human creativity.

The problem is even more striking in copyright law, which attempts to capture the difference between creation and discovery by distinguishing between ideas, which cannot be owned, and expression, which can. This, as the Intellectual Property Law Handbook reminds us, through this idea that systems of copyright aim to establish the balance between public and private benefits discussed in the last chapter. Distinguishing the one from the other, however, is "one of the most difficult decisions a court faces in copyright cases",[209] and the attempts that courts have made to do so provide a stark illustration of the problems involved.

In 2005, for example, Dan Brown sold the film rights to his book, *The Da Vinci Code*, to Columbia Pictures for 3.1 million.[210] The novel's blend of history and conspiracy theory had made it an international best-seller, and the film was expected to be similarly successful. For Michael Baigeant

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[204] Edwin C. Hettinger "Justifying Intellectual Property" *Philosophy and Public Affairs* (Winter, 1989) Vol. 18, No. 1 pp. 31–52.

[205] Wadman, M., 2001. Testing time for gene patent as Europe rebels. *Nature*, 413(6855), 443.

[206] *State Street Bank and Trust Co., Inc. v. Signature Financial Group, Inc.*, 149 F.3d 1368 (1998).

[207] Greene, T.C., DVD descrambler encoded in 'illegal' prime number. *The Register*. Available at: http://www.theregister.co.uk/2001/03/19/dvd_descrambler_encoded_in_illegal/ [Accessed August 8, 2009]

[208] Lessig, L. 2000. Online Patents: Leave them Pending. *Wall Street Journal*, March 23, sec. A. p. 22

[209] Halligan , R.M. ed., *Intellectual Property Law 2008 Edition*, IICLE Press. 9.22

[210] Owen, R., 2005. Vatican plots against "Da Vinci Code". *The Times*. Available at: http://www.timesonline.co.uk/tol/news/world/us_and_americas/article427749.ece. [Accessed July 21, 2009]

and Richard Leigh, two of the authors of the 1982 work, *Holy Blood, Holy Grail*, this seemed somewhat unfair. Brown had relied heavily on the earlier work's claims about the Catholic Church and the blood-line of Jesus Christ, and made himself and Columbia Pictures a great deal of money in the process. *Holy Blood, Holy Grail* saw increased sales as the result of renewed interest in grail lore that *The Da Vinci Code* had generated, but this fell far short of a movie deal involving Tom Hanks. In 2006, Baigeant and Leigh filed a copyright infringement suit against Brown and Random House,[211] but this was dismissed by the High Court, and again on appeal.[212]

The case provides an illustration of the precariousness of the idea/expression dichotomy: when Columbia makes a film of the book, its use clearly falls on the expressive side of the divide; when Brown bases his book upon another, he is merely making use of ideas, and these are freely available to anyone. The problem for Baigeant and Leigh was that they had published *Holy Blood, Holy Grail* as a work of history, rather than a work of fiction, and had thus claimed that the events Brown had incorporated into *The Da Vinci Code* were not stories that they had invented, but facts about the world that they had discovered. As Judge Frank Easterbrook comments, ruling on a similar case in the US:

> [A work's status] as fiction... makes all the difference. The inventor of Sherlock Holmes controls that character's fate while the copyright lasts; the first person to conclude [a historical theory] does not get dibs on history... that fact is available to all. [Such an author's] rights lie in... expression: in... words, in... arrangement of facts... but not in the naked "truth".[213]

The quotation marks here are instructive. Cases like Baigeant and Leigh's present judges with a difficult dilemma. If the law holds that individual creativity can be owned, but that actual facts are free to all, then such cases would seem to turn on whether Baigeant and Leigh had actually made a proper historical discovery, or just cobbled together a conspiracy theory out of little more than grail lore and an active imagination. And whilst most people might incline rather strongly towards the latter conclusion in the specific case of *Holy Blood, Holy Grail*, courts are understandably reluctant to claim that they are better judges of historical fact than professional historians. Instead, they simply consider the sort of discursive domain a work's author has chosen to situate it in – what is important to the judge is not whether or not the purported “facts” of a work are actual verifiable

[211] Baigeant v Random House Group Ltd. [2006] EWCH 719 (Ch)
[212] Baigeant v Random House Group Ltd. [2006] EWCA Civ 247
[213] NASH v. CBS, INC., 899 F.2d 1537 (7th Cir. 1990)

history, but that the authors claim them to be so. The validity of that claim is the proper concern of historians, rather than judges. All that matters is that the ideas in a work be of the sort historians might wish to discuss in a professional capacity.

Even this rule, however, is not as simple as it first seems. Twenty-six years before Baigeant and Leigh's claim, Trevor Ravenscroft, whose popular history *The Spear of Destiny* had formed the basis for James Herbert's *The Spear*, had succeeded in a very similar claim of infringement. Justice Brightman based his conclusion of the argument that "copyright protects the skill and labour employed by an author in the production of his work,"[214] and that this principle appeared to be relevant:

> Having studied the two books and heard the evidence, I have no shadow of doubt that the defendant... has adopted wholesale the identical incidents of documented and occult history which the plaintiff used in support of his theory... He did this in order to give his novel a backbone of truth with the least possible labour to himself. In so doing he annexed for his own purposes the skill and labour of the plaintiff to an extent which is not permissible under the law of copyright.[215]

In this sense, Brightman J.s reasoning seems to follow the pattern observed by Lemely. Herbert seems to be engaged in a sort of legal arbitrage, deliberately exploiting the rules of copyright to his advantage by lifting a work out of the domain of history – where it receives only minimal protection – and transplanting it into the realm of fiction, where he can free ride on Ravenscroft's work. According to the Chicago school, this is the sort of thing that property systems are designed to eliminate.

The difficulty, obviously, is how to reconcile that intuition with the rule, freely conceded by the judge, that "[t]he plaintiff cannot claim a monopoly in historical facts."[216] In order to square the circle, Brightman J. offered the following argument:

> It is not a continuous methodical record of *public* events (which is the primary dictionary definition of "history"). The plaintiff's book is poles away from history. It is disjointed and

[214] *Ravenscroft vs. Herbert* [1980] RPC 193 at 194
[215] *Ravenscroft vs. Herbert* [1980] RPC 193 at 207. Emphasis added.
[216] *Ravenscroft vs. Herbert* [1980] RPC 193 at 205

> unmethodical... being composed of a variety of different events, recollections, quotations, philosophy, meditations and so on, designed to support the theory in which the plaintiff had come to believe. Vast areas of history are left out by the plaintiff in his attempt to persuade the reader... The book is a very *personal* insight into history.[217]

Ravenscroft's account seemed to the judge to be different in kind from the sort of public facts that we are used to reading about in history books, offering a much more intimate account. The truth, it seems, can be subject to ownership if it is sufficiently personal. This slightly tenuous chain of reasoning provides a nice illustration of the way that we use the idea of individual creativity to explain why some ideas can be owned, and others cannot. By emphasising the personal nature of the ideas contained in *The Spear of Destiny*, Brightman J. establishes that they can are a form of property – creations rather than discoveries.

The twin claims that labour must result in ownership rights and that facts cannot be owned would seem to imply that facts do no require intellectual labour. This seems to be the only possible way to make sense of the idea proper history that is something other than "a variety of different events, recollections, quotations, philosophy, meditations and so on, designed to support [a] theory", or historical theories that do not originate as someone's "personal" insight into history. Similarly, the U.S. Supreme Court has suggested that the distinction could usefully be thought of as encompassing the difference "between creation and discovery: the first person to find and report a particular fact has not created the fact; he or she has merely discovered its existence."[218] In insisting on the difference between creation and discovery, Justice O'Connor is making a distinction between the sort of knowledge that pre-exists its realisation in the mind of any particular individual, and the sort that actually originates in such a mind, between facts, that come from the world, and creativity, that comes from people. The hallmark of a fact, in this view, is that it is universal – knowledge that exists even in the absence of a knower.[219]

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[217] *Ravenscroft vs. Herbert* [1980] RPC 193 at 207. Emphasis added.

[218] *Feist Publications, Inc., v. Rural Telephone Service Co.*, 499 U.S. 340 (1991) at 347

[219] The phrase "knowledge without a knower" is from Popper, S.K.R., 1979. *Objective knowledge*, Clarendon Press. Popper strongly believes in the possibility of this sort of objective knowledge. However, his account of it is unlikely to be of much comfort to Justice O'Connor, based as it is on the suggestion that knowledge is without a knower when it is embodied in some physical medium – the point at which IP rights say it is subjective and ownable. See Lange, D., 1981. Recognizing the Public Domain. *Law & Contemporary Problems*, 44, pp.147-178.

The problem, as Justin Hughes emphasises, is that in distinguishing between what sorts of knowledge can and cannot be made private property, the law cleaves to a philosophical view of knowledge which, whilst common, "is out of sync with much philosophy and social theory."[220] The law's insistence that all knowledge must be either a claim or a discovery ignores the fact that all knowledge has elements of both. Hughes's examples focus on what he terms social facts – facts that arise as a result of actions taken by people. So, for example, Sherlock Holmes may be the creation of Arthur Conan Doyle, but that creation itself gives rise to certain sort of facts. If we are asked where Sherlock Holmes lives, for example, there is a demonstrably true answer to the question, one that we can discover if we do not already know. Brightman J. shows us the opposite side of this phenomenon. Claims about history may be true or untrue, but coming up with either involves a certain sort of intellectual labour.

Creation and Discovery

The notion of knowledge without a knower has, as Richard Rorty has observed, more than a suggestion of mysticism to it. The divide between subjective and objective knowledge has its roots in the Cartesian notion of a wholly separate mental substance. There is thus an ontological division of the world between the material and ideal (*res extensa* and *res cogitans*). One of the useful features of dualism is that it allows for a very straightforward theory of truth. The question of what is true and what is not becomes a simple matter of correspondence between the ideal and the material, and ideas can be evaluated against a reality that they exist independently of: true knowledge is simply, in Rorty's phrase "the mirror of nature."[221]

This has the useful effect of eliminating any sociological dimension from the question of truth. If you happen to believe something true about the world, the fact that other people disagree with you may be upsetting, but it is more or less irrelevant to the question of whether it is true or not. If people do not share your belief, people are wrong – you and the world know better. With such a division in place, ideas can be evaluated against a physical world that they exist independently of, and the more exact the correspondence, the closer the idea is to being true. This claim that, as Rorty puts it, "the world splits itself up, on its own initiative, into sentence-shaped chunks called 'facts'"[222]

[220] Hughes, J., 2007. Created Facts and the Flawed Ontology of Copyright Law. *Notre Dame Law Review*, 83 p. 45
[221] Rorty, R., 1980. *Philosophy and the Mirror of Nature*, Oxford: Blackwell.
[222] Rorty, R., 1989. *Contingency, Irony, and Solidarity*, Cambridge: Cambridge University Press. p. 5

provides the basis for the sort of knowledge without a knower that provides the basis for Justice O'Connor's distinction between creation and discovery.

This account of knowledge as something that is "discovered" is one from which the traces of actual human input seem to have been erased entirely. In reaction to this there developed an account of knowledge as something that came ultimately not from the external world, but from within human beings. In contrast to the Enlightenment image of pre-existing truth to be diligently retrieved from the material world, idealist thinkers such as Kant and Hegel insisted that it should be located firmly within the ideal. As Rorty points out, this was not so much a rejection of the mirror, but a reversal of it:

> Once we give up, as Kant did, on the idea that scientific knowledge of hard facts is our point of contact with a power not ourselves, it is natural to do what Kant did: to turn inward, to find that point of contact in our moral consciousness, in our search for righteousness rather than our search for truth. Righteousness deep "within us" takes the place, for Kant, of empirical truth "out there". [223]

Knowledge, in this more profound sense, was no longer something situated in the material to which the ideal should try to conform, but something that was to be found on the other side of the Cartesian divide. Indeed, as Hegel suggested, such knowledge might itself constitute a more profound sort of truth with which the material world might eventually be brought into line. The suggestion that knowledge of the most profound sort was internal to human beings, and that such knowledge could have powerful effects in shaping the material world was still, in the hands of the German idealists, a theory of truth. As such it constituted a direct challenge to the authority of science, an attempt to "put science back in its place" by suggesting that it dealt only with the more superficial sorts of truth. Kant's "righteousness" was a phenomenon common to all human beings: a universal truth to be discovered by, as Rorty puts it, "a sort of non-empirical super-science called philosophy."[224]

For the Romantics, by contrast, the importance of the ideal was to be found not in what was universal, but in what was particular to the individual. Once again, the reversal of the mirror of

[223] Rorty, R., 1989. *Contingency, Irony, and Solidarity*, Cambridge: Cambridge University Press. p. 30
[224] Rorty, R., 1989. *Contingency, irony, and solidarity*, Cambridge University Press. p. 4

nature: knowledge is not important primarily as a means of representing the material; rather, the interesting bits of the material world are those that reflect ideas. For the Romantics, though, knowledge became something that was to be found – not in an external spirit of history – but within a particular creator. As Charles Taylor describes:

> The traditional view understood art in terms of mimesis. Art imitates the real. It may select, imitate only the best, or what conforms to ideas, but basically what it attempts to do is hold the mirror up to nature. The Romantics gave us a quite different conception by which, in one formulation, the artist strives to imitate not nature, but the author of nature. Art is now seen not as imitation, but as creative expression. The work of art does not refer beyond itself to what it imitates; rather it manifests something; it is itself the locus in which meaning becomes manifest.[225]

Rather than faithfully recreating what was there already, then, the job of the individual is to create new knowledge. The focus thus shifts away from Kant's immutable truths that are the common heritage of all humankind, and towards knowledge that is new by virtue of its having sprung from a unique mind.

Modern thought, as Taylor points out, is a compromise between two different visions of knowledge. When talking about "knowledge" in general, we see it as something objective, so that "in our scientific understanding, we tend to be men of the Enlightenment, and we accept the predominance of Enlightenment – one might say utilitarian – values in setting the parameters of public policy." This belief notwithstanding, however, "it is recognised that... people experience things in expressive terms... There is a Romantik of private life, which is meant to fit into a smoothly running consumer society." The problem, for Taylor, is that the compromise seems to verge on incoherence. It posits a world that is entirely knowable through simple observation, which paradoxically contains human beings whose experience remains entirely private and mysterious: "However effective this compromise may be politically, it is a rotten one intellectually; it combines the crassest scientism (objectivism) with the most subjectivist forms of expressivism."

My argument, then, is that we should see the central problematic of IP law as an instance of the more general problem that Taylor describes. In IP law, as elsewhere, we cleave to the Enlightenment

[225] Taylor, C., 1985. *Human agency and language*, Cambridge University Press. p. 229

in seeing knowledge as a representation of some underlying reality, and thus public and unownable, and make exceptions to this rule by declaring that some sorts of knowledge are thus personal and thus may become property.

Table 2.1

Philosophical approach	Enlightenment Objectivism	Romantic Subjectivism
Ontological view of knowledge	Information about the world	Information in the world
Method of knowledge acquisition	Passively discovered by observing the world	Actively created by intellectual labour
Patent Law	Science	Technology
Trademark law	Common designation	Brand
Copyright law	Idea	Expression

In IP law, as elsewhere, there is no *a priori* dividing line between the two, only rules that attempt to sketch out the contours of the compromise. Taylor's assessment that the compromise is an intellectually rotten one goes a long way towards explaining why the compromise seems to be so indeterminate. As we saw in the last section, whilst the division between creation and discovery may have a good, common-sense feel to it, it seems to be quite astonishingly malleable when we try to apply it in practice. Apparently clear rules saying that there can be no ownership of historical facts, or laws of nature, or mathematical formulae, are set aside when they are contradicted by equally clear rules about how it intellectual labour and creativity must be protected from free riding.

The assertion that we can make no *a priori* distinction between creation and discovery thus helps us get the best from theories of romantic authorship and property rhetoric. Both ultimately speak to Taylor's rotten compromise, showing how knowledge appears to be purely individual and creative in fact has important structural elements that are concealed through reliance on a particular sort of device – in one case an unrealistic vision of what it is that knowledge creators actually do, in the other an over-extended analogy to physical property.

But Taylor also helps us answer a different question. Lemley, in the first section, argued that it was perfectly possible to distinguish between information that was the subject of a transaction, and information that functioned as its signifier – what he termed meta-information. This claim, I suggested, actually tended to undermine the Hayekian argument he wanted to make elsewhere about the ultimate dependency of this meta-information on many different people having access to the information that it signified. Why insist on a distinction that undercuts the critique of property rhetoric?

We are now, I think, in a better position to formulate an answer, starting with a consideration of the word "rhetoric". The term is obviously pejorative, suggesting that the property analogy is simply a use of language, intended to trick us into persuading us of something we would not accept if we looked a little harder at the underlying reality. Lemley, Netanel and Wu want to set up a sharp distinction between the accounts of IP maximalists, which are language tricks performed by clever orators, and their own view which reflects the actually existing realities of the economics of information. The problem for these authors is that this insistence that there are really two sorts of knowledge – an objective sort that represents the world, and a subjective sort that individuals make up as they go along – is precisely the one they wish to problematise.

Thinking about IP in terms of creation and discovery fundamentally alters the terms of the enquiry. It is one thing to criticise the problematic dualism of object and subject, it is quite another give an account that does not base its authority on the claim it has really discovered something, and that other accounts have been revealed to be mere creations. Departing from the modernist settlement that Taylor criticises, as I explain in the next chapter, is a daunting task.

Conclusion

In this chapter I presented two, apparently quite different, critiques of IP: moved by an unrealistic notion of "romantic authorship" or misleading analogies to physical property we reduce the production of knowledge to a purely individual exercise. We are thus too quick to recognise creators, and too slow to recognise those collective and social aspects of knowledge production

without which creators would have neither sources from which to make stories, inventions and music, nor a market on which to valorise them. Boyle and Lemley's arguments both allow us to identify crucial lacunae in the way that we conceive of IP. However, there has been less work within the literature on IP on what seems to me a necessary corollary of this idea – the unrealistic story we tell about knowledge that is wholly produced by the labour of the individual is complemented and supported by an equally implausible account of public, factual knowledge which bears no trace of individual human labour.

Whilst the two arguments had previously been seen as competing accounts, they were better understood as two aspects of the same argument. Each of these critiques observed that any account of IP that required that knowledge be rationally allocated through markets was asking knowledge to do two very different things. In the first place, knowledge, suitably commodified through IP rights, was envisaged as an object – a product that could be trafficked on a market. In the second, knowledge was a structural feature of that market – buyers and sellers were assumed to have knowledge of the products being bought and sold on the market, with prices being set accordingly.

The tension between these two conceptions of knowledge, I argued, was obscured by our tendency to assume that this was a straightforward distinction between two different sorts of knowledge: creation and discovery. The key feature of both the critique of romantic authorship, and that of property rhetoric, was that they problematised this distinction. Instead of assuming a self-evident divide between creation and discovery, they offered accounts of discovery that envisaged it as a complex, inter-subjective phenomenon – Foucault's "knowledge as collective practice", and Hayek's "overlapping spheres of knowledge." This sense of knowledge as an interconnected web – that ideas have sense and meaning only in the context of other ideas – is an element that critical theory needs to incorporate.

CHAPTER 3 - Beyond Dualism

Introduction

In the last chapter I suggested that the discourse of IP was based around a number of different distinctions – between material and ideal, and between creation and discovery – and that critical accounts of IP should be interrogating these distinctions. In this chapter, I argue that material-semiotic approaches like Actor-Network Theory (ANT) provide a useful resource for such an interrogation. I explain the two concepts of performativity and assemblage, and suggest that these are useful tools in developing a critical theory of IP.

Having introduced these two concepts, I spend the rest of the chapter explaining them in more detail – explaining the three philosophical moves they entail, and the The account begins with the older and perhaps more straightforward idea of philosophical pragmatism.[226] The key insight of pragmatism, I argue, is the consequentialist view it takes of knowledge. Knowledge, for the pragmatist, is to be defined in terms of the practical difference it makes in the world. By denying that there is a special relationship between knowledge and the world, the pragmatic turn obviates the distinction between discoveries and creations. There is, it suggests, no special epistemological status of "representing the world" that discoveries enjoy, whilst creations do not. One of the first consequences of such a move is to problematise the notion of a market for knowledge through which IP is traditionally expanded. Having abandoned the idea that knowledge is representation, pragmatists can only define ideas relationally, through the relationship to other ideas. This semiotic turn challenges the ideas of individual creativity – incorporating the insights of Boyle and Lemley in chapter 2, seeing knowledge as always an action, rather than a thing. This move away from having knowledge to speaking, writing and acting allows us to introduce an account of knowledge that sees it as something material – a set of relations between objects. This final turn – the ANT turn – allows us to develop McCann's move away from "resource-management" account, by freeing us from the idea that knowledge is a sort of substance. I finish with a brief summary of exactly what it is that the ideas of performativity and assemblage contribute to the politics of IP.

[226] This approach is borrowed from Michel Callon's article "What does it mean to say that economics is performative?" in MacKenzie, D.A., Muniesa, F. & Siu, L. eds., 2007. *Do Economists Make Markets?: On the Performativity of Economics*, Princeton: Princeton University Press. pp. 311-57

Performativity and Assemblage

The first concept is that of performativity, an idea that has its genesis with the work of the philosopher J.L. Austin. For Austin there were two forms of utterance: constative and performative. Constative utterances are those that we would conventionally think of as conveying information: "there is a red house"; "the Second World War ended in 1945"; "the Earth is spherical rather than flat"; etc. Performative utterances are those that function as interventions in the world, where language is used, not to describe the world, but to bring something into being. To utter a performative is to partake of what Austin terms an "illocutionary act" – an act with the potential to affect the world is some way. Classic examples include promises and legal pronouncements: "I promise to pay you seventy pounds next Wednesday"; "I now pronounce you man and wife"; "Citizenship of the Union is hereby established."[227] Unlike constatives, performatives cannot be said to be true or false – rather, they are successful or unsuccessful.

In trying to sharpen this distinction, however, Austin was forced to abandon, or at least significantly modify it. Rather than holding that constatives and performatives were two distinct types, he held that the first was simply a subset of the second: "Stating, describing etc., are just two names among a very great many others for illocutionary acts; they have no unique position... In particular, they have no unique position over the matter of being related to facts in a unique way called true or false".[228] This insight about the capacity of *all* language to change and affect the world has been extended by Judith Butler, who has built on Austin's reasoning as part of her investigation into gender. Butler extends Austin's idea of the performative into the notion of performativity – the process though which the apparently fixed categories of gender are performed – constructed through expressive acts. Like oaths, marriages and laws, the apparently natural categories of male and female are, for Butler constructed through expressive acts.

A key point to notice here is the way in which the notion of the performative has expanded beyond the single statement to encompass a more general sense of discourse. The categories of male and

[227] *Treaty of the Functioning of the European Union* Art. 20(1)
[228] Austin, J.L., 1962. *How to Do Things with Words*, Oxford: Clarendon Press. p. 147-8

female are not created through a singular utterance - "There shall be two, and only two, genders" - but are instead constituted through a far broader network of expression. As Butler puts it: "Gender is the repeated stylization of the body, a set of repeated acts within a highly rigid regulatory frame that congeal over time to produce the appearance of substance, of a natural sort of being."[229] The apparently solidity of gender categories is, for Butler, a result of complex set of interlocking expressive acts – clothing, taboos, fables, social science studies, etc. – all of which combine to constitute roles for people to step into.

This idea of discursively constructed gender may initially seem to be something rather different to Austin's performatives, wherein actions are apparently accomplished in a single sentence: the vicar pronounces the marriage, the judge declares the verdict, and the thing is done. As Butler points out, however, even the standard, examples of performative utterances depend on complex networks of discourse: "If a performative occasionally succeeds... then it is not because an intention governs the actions of speech, but only because that action echoes prior actions and *accumulates the force of authority through the repetition or citation of a prior and authoritative set of practices."*[230] Marriages and legal verdicts may look like the actions of individual vicars and judges, but these actions are tightly governed by other discursive networks. Just like the person who pronounces themselves a boy, the judge who speaks the law or the vicar who performs the ritual mobilises a whole history of other expressive acts to give their statement illocutionary force. As well as insisting on the capacity of expression to do things, then, the concept of performativity also emphasises the relational nature of expression – the semiotic insight that expressions and utterances only have meaning because of the way in which they relate to other expressions and utterances.

Whilst peformativity may have its roots in gender theory, the concept is much more widely applied. In particular, Michel Callon and others have, over the last decade, sought to put performativity to work in their investigation of markets.[231] Much of what is interesting about the work of Callon and his collaborators is the contribution it makes to a larger political economy debate about the role that orthodox economic theory plays in explaining/legitimising/obfuscating (delete as appropriate to

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[229] Butler, J., 1990. *Gender Trouble: Feminism and the Subversion of Identity*, New York ; London: Routledge. p. 43-4

[230] Butler, J., 1996. Burning Acts: Injurious Speech. *University of Chicago Law School Roundtable*, 3, p. 205-6

[231] See, in particular: Callon, M. ed., 1998. *The Laws of the Markets*, Oxford: Blackwell; and MacKenzie, D.A., Muniesa, F. & Siu, L. eds., 2007. *Do Economists Make Markets?: On the Performativity of Economics*, Princeton: Princeton University Press.

one's position in the debate) the workings of the actual economy. Callon's argument is that none of these perspectives are right, because they are all asking the wrong question. Rather than asking how accurately economic theory depicts the economy, we should, he suggests, examine how economic theory acts to intervene in the economy.[232]

The fact that economics intervenes in the economy is not, by itself, a revolutionary insight: everyone understands that debates about economic theory inform economic policy, and thus that the content of an economic theory will have some effect on its purported object of study.[233] One of the most important things that distinguishes recent work on the performativity of economics from these more general observations about the practical consequences of economic theory is that the performativity thesis goes much further in its claim that knowledge about the economy is constructed. Much as Butler uses the concept of peformativity to deconstruct such apparently naturally determined categories as gender, performativity can also be used to examine the sorts of economic data that are more usually seen as an objective outcome of "market forces."

Donald Mackenzie's work, both on the adoption of the Black-Scholes formula for option pricing and elsewhere, is a particularly good example. In these cases, MacKenzie shows traces the way in which the apparently hard facts of the economy as prices and lending rates are socially constructed. It is worth explaining this point, since the claim that something is "socially constructed" is often taken simply to mean that its status is more arbitrary or subjective than had been previously supposed.[234] This would be a misunderstanding. As he puts it:

> "Produced" is the right word: scientific facts are not in general simply "out there", awaiting the fortunate discoverer who stumbles over them. As the Latin root of "fact" – *facere*, to make, to do – reminds us, scientific facts are made: by experiment, by intellectual work, by observation that is normally technologically mediated and typically is disciplined and goal-oriented rather than

[232] See Callon, M. "What does it mean to say that economics is performative?" in MacKenzie, D.A., Muniesa, F. & Siu, L. eds., 2007. *Do Economists Make Markets?: On the Performativity of Economics*, Princeton: Princeton University Press, pp. 311–57.

[233] Most notable in this regard is Polanyi, K., 2001. *The Great Transformation*, Beacon Press, discussed briefly in Chapter 1.

[234] For a discussion of this point, see Latour, B., 2005. *Reassembling the Social: An Introduction to Actor-Network-Theory*, Oxford: Oxford University Press, pp. 89–91.

haphazard.[235]

MacKenzie's claim is not that prices are somehow more "distorted" than we had formerly supposed – that human intervention has made these things stray from their natural order – but that *any* fact necessarily has to have been constructed. Of course, people can, and frequently do, claim that market facts like prices or interest rates are distorted, but, from MacKenzie's perspective, this simply amounts to the claim that they have been *badly* constructed. The fundamental insight that market facts have to be created, rather than discovered, remains unchanged.

I should say at once that I think this insight is what makes the concept of performativity absolutely crucial for the politics of IP. The standard argument for IP rights, as I argued in chapter 1, holds that knowledge is a public good, and that it will not be produced in a free market without exclusive rights being granted to it. What MacKenzie shows us is that the mere existence of markets involves the creation of vast amounts of knowledge to which no-one has exclusive rights. Thus, as I explain in my section on the pragmatic turn, by problematising the division between creation and discovery, performativity allows us to offer a sharp critique of the sort of "markets for knowledge" agenda under which IP rights are typically advanced.

Before I come to that discussion however, it is important to make some observations about the difference between Butler's sense of performativity, and the sense in which MacKenzie, Callon and other scholars working within the tradition of ANT, use it. Butler is primarily a theorist of discourse – drawing her inspiration most obviously from Foucault and Derrida – and her work focuses primarily on the way that language and other expressive acts can give rise to shared, stable, and thus apparently "natural" categories. Gender, she shows us, is not simply determined by the physical make-up of people's bodies. There is thus a tendency in her analysis – if not exactly to oppose the role played by such material considerations – then at least to put them to one side for the purpose of focussing on the typically underestimated effects of discourse.

By contrast, an ANT account of performativity, such as the one developed by MacKenzie, will often take material objects as its focus. This reflects not so much a disagreement about the relative

[235] MacKenzie, D., *Material Markets*, Oxford: Oxford University Press, pp. 8-9

importance of material and social factors, as a refusal to recognise any ontological distinction between the two.

A frequently used example here is the National Rifle Association (NRA)'s claim that "Guns don't kill people, people kill people."[236] This, as Latour points out, is about as purely social account of causality as one could hope to find. It is also simply wrong, akin to claiming something like "Aeroplanes don't fly, people do." But, of course, aeroplanes do fly, and guns do kill people, in exactly the same way that, as Latour emphasises, hammers "hit" nails, signs "stop" cyclists and doors "allow" access.[237] Objects, as ANT theorists like to say, have agency.

Taken by itself, of course, the claim that "objects have agency" sounds like a rather silly sort of anthropomorphism. Objects, after all, do not do much on their own. We are thus uneasy in saying that the cause of death is either entirely technological ("Guns... kill people") or entirely social ("people kill people"). Whilst committed social constructivists might maintain that the gun simply hastens a killing that would have taken place anyway, and some might manage to argue that guns incite otherwise placid citizens to acts of murder, most of us tend to feel that there is something profoundly wrong with both of these positions.

At a minimum we might want to claim that killing and flying, indeed, action generally, has both material and social causes, but even this seems to misdirect our focus. What is of real interest is not that the person and the gun can, in spite of the one's being "social" and the other "material", somehow relate to each other, but the effects they have once combined. As Latour puts it:

> To distinguish a priori 'material' and 'social' ties before linking them together again makes about as much sense as to account for the dynamic of a battle by imagining a group of soldiers and officers stark naked with a huge heap of paraphernalia—tanks, rifles, paperwork, uniforms—and then claim that 'of course there exists some (dialectical) relation between the two'.[238]

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[236] Latour, B., 1999. *Pandora's hope*, Harvard University Press. p. 177-9

[237] Latour, B., 2005. *Reassembling the Social: An Introduction to Actor-Network-Theory*, Oxford: Oxford University Press.

[238] Latour, B., 2005. *Reassembling the Social: An Introduction to Actor-Network-Theory*, Oxford: Oxford University Press. p. 75

To try to explain either the gun-crime or the battle by deciding whether it is a result of either "social" or "material" factors seems, at best, a somewhat oblique way to proceed, promising more obfuscation than explanation.

Assuming that obfuscation is not the aim here,[239] why then would one choose to formulate one's inquiry in terms of "technology" and "society" in the first place? The answer, for Latour, lies in Charles Taylor's "rotten compromise" described in the last chapter – the need to claim that there is a natural distinction between objective and subjective knowledge, and thus between objects and subjects.[240] On one side of this divide is a factual world of mechanical causes, scientific discovery and guns; on the other the uniquely human arena of beliefs, values, ideologies, creativity and murderous intentions. The advancement of knowledge, in this account, occurs as we learn to accurately tell the difference between the two – distinguishing between the facts of the universe and the way we chose to respond to them. Having carved the world up into these two halves, we have now achieved a position where we can ask questions about the nature of this divide: is it the gun or the person who does the killing? Do aeroplanes fly, or do pilots? What or who is *acting* there? Is action something we can objectively discover by looking to the natural world, or is it something that we create as the subjects of our own narrative?

Latour's suggestion is that these are not the best questions we could be asking. Every nervous passenger knows that, if you want to fly, you need an aeroplane and a pilot. Asking them to choose which they would rather have is simply perverse. Of course you need both, as well as travel agencies, check-in staff, oil refineries, radar, air-traffic controllers and much else besides. Lose any of these and you have no action, or at least not the sort of action you were hoping for. It is at this point that Latour's critique can be reunited with Butler's account of performativity. Recall that, for Butler, the performatives of judges and priests can act only as part of a larger discursive network. Latour makes the same move for all action, which emerges only as the result of the interconnection of different entities.

This is the second concept that I want to introduce: the assemblage. As Graham Harman has usefully explained, the concept of assemblage – or Actor-Network, or agencement – can usefully be

[239] Quite a charitable assumption I the case of the NRA.
[240] Latour, B., 1999. *Pandora's hope*, Harvard University Press. p. 198–202

understood as an ontological position. For my purposes, three claims are important. In the first place, the idea of assemblage holds that all action – anything that makes a difference, has effects, causes things to happen – is to be explained as a result of linking entities together. Any actor – any entity that makes a difference – is thus itself a network of different objects. Second, assemblage implies a certain sort of ontological agnosticism. The phrase I used above "network of different objects" sounds decidedly vague, and this is intentional. The idea of "assemblage" necessarily implies a lack of prior commitments about the sort of thing that can populate the network – fighter jets, Hillary Clinton, Roman numerals, Brazil, and Plato's *Republic* are all equally eligible as candidates for objects in a network. Symmetrically, none is more fundamental than any of the others – each can themselves be analysed as an assemblage of other constituent parts. Finally, this agnosticism necessarily implies a certain sort of ontological flattening. As Latour puts it: "Nothing can be reduced to anything else, nothing can be deduced from anything else, everything can be allied to everything else."[241] If any given entity can be analysed as a collection of other entities, than nothing is simply an instance or a projection of some other, more fundamental type. This final move is, to again foreshadow my argument later in the piece, truly vital for IP. As I argued in the first chapter, the rhetorical genius of the phrase "Intellectual Property" is that it directs our attention away from books, pills and iPods, and towards the ideal world of ideas that these objects supposedly embody. But it is precisely this move – the suggestion that material objects are merely the physical embodiments of an ontologically privileged "idea" - that the concept of assemblage gets us away from.

Having introduced the ideas of performativity and assemblage, I now want to explore them in a little more detail. Over the next three sections, I want to show that these two concepts are both very useful tools with which to think about the politics of IP. Much of this usefulness is of a distinctly destructive variety. Performativity allows us to put to rest two of the great founding myths of IP – that there is a special activity of "creation" which is conducted by individual human beings, and that this is distinct from "discovery" which is something imposed on humans by an external world. The idea of the "assemblage" lets us tackle another great founding myth of IP – that there exists some sort of separate substance called knowledge that we can conveniently attach property rights to.

[241] Latour, B., 1993. *The pasteurization of France*, Harvard University Press. p. 163

Pragmatic turn – knowledge does not represent things, it does things.

In the last section, I discussed Austin's distinction between constative and performative utterances – between statements that represent the world, and statements that act on it. Austin concluded that such a distinction was unsustainable – a conclusion that is built on by the performativity thesis. In this section, I want to explore this aspect of performativity – what I term its pragmatic aspect – in a little more depth. My aim is to show both the plausibility of the philosophical position it suggets, and the direct relevance of this position for the politics of IP. This significance can be understood by recalling the distinction made in the last chapter between creation and discovery – between knowledge that acts and can be owned, and knowledge that represents and thus cannot. My argument in this section is that the erosion of that distinction constitutes an attack on many of the justifications for why we have IP rights in the first place.

The basis of my argument is that the constative/performative distinction maps directly onto the distinction between creation and discovery introduced in the last chapter. In that chapter, I argued that creative, rhetorical, social knowledge is knowledge that *acts* – the speech that stirs a listener to action, the computer program that calculates your tax returns, the invention that revolutionises the daily commute. This is knowledge that, like Austin's performatives, *does* things, and because of this, it has value – we assess it in terms of success or failure, rather than truth or falsehood: the good speech is the speech that succeeds on moving the listener, just as the good chocolate bar is the one that succeeds in pleasing on the taster. Not coincidentally, this is also that sort of knowledge that we can conceive of as being subject to ownership. The commodity view of knowledge, as I argued in chapter 2, rests on the idea of creativity, and this is as true for those who worry about IP's excesses – about, say, the expropriation of the intellectual labour that went into the creation of knowledge – as for those who wish to extend them.

Mathematics, sense data, historical events and the natural sciences are familiar examples of subjects that fall within the scope of discovery. They are the sort of things that, against Austin's warnings, we do indeed see as having "a unique position over the matter of being related to facts in a unique way called being true or false," or, more accurately, of being potential facts, and thus capable of entering into the unique relationship truth or falsehood. This sort of knowledge is seen as universal and permanent – the laws of physics apply everywhere, they do so today, did yesterday and will do tomorrow. It is in this sense that they are natural rather than social – society may take a vote on the

matter or start a civil war, but the laws of physics and the events of 1938 will remain stubbornly unchanging. They are facts and, as such, judged not according to whether some individual or group happens to place a high value on a particular sort of knowledge, but in terms of correspondence with an underlying reality. Whilst discoveries may certainly have the same sort of utilitarian, instrumental value as creations – learning more about the human body may move us to despair of our fragility, eat better food, or develop medicines that interact with the body in new and interesting ways – we see these aspects as entirely inessential to the more important question of truth. You can put a law of biology to a thousand different uses, but its essence remains unchanged.

Austin, Butler Latour and others are all united in their contention that such a fundamental distinction is unsustainable, and an examination of IP law gives us good reason to think they are right. Much of chapter 2 was spent arguing that, if IP law showed us anything at all, it was that the distinction between what is created and what is discovered is quite spectacularly malleable. So, for example, when looking at a historical theory, judges might see it as falling within the realm of claims that can be true of false, in which case it should not be covered by a property right. Alternately, they could observe that it was a product of intellectual labour, in which case it was clearly a creation that should be protected. Similarly, as I showed in the introductory chapter, it is possible to argue either that a particular gene's being associated with breast cancer is a more perfect understanding of the already existing gene, and thus not eligible for patent protection, or that it is merely the application of such a discovery, and thus a patentable invention.

This need to establish a difference between making knowledge and finding it – contrasting a human sort of knowledge that does things *in* the world, that *affects* reality, with a permanent, natural sort of knowledge that exists outside of the world, and may thus *represent* reality – has been cogently discussed by Richard Rorty.[242] For Rorty, the need to make this distinction is the result of a desire for a certain sort of epistemological grounding, to suggest that we are in touch with the real world because our language "hooks on to" it:

> Most philosophers of language want the same thing out of semantics that epistemologists from Descartes to Chisholm have wanted: an account of our representations of the world which guarantees that we have not lost touch with it... In both traditional epistemology and recent

[242] See generally, Rorty, R., 1980. *Philosophy and the Mirror of Nature*, Oxford: Blackwell.

> semantics there is a self-deceptive attempt to conceal this motive by describing the activity as simply an explanation of how the mind or the language works, but the account offered always betrays the need to answer the skeptic who asks: how would it be different if everything were a dream? How would it be different if it were all *made up*? How would it be different if there were nothing there to be represented? How does having knowledge differ from making poems and telling stories?[243]

The idea of truth as representation is thus motivated by a fear that we will lose contact with reality entirely, that without the idea of representation to provide a secure anchor in the world, "the manifold possibilities offered by discursive thought will play us false."[244] From this motive springs an attempt to establish a foundational difference between the real and the made up. Rorty argues that such an attempt at grounding is doomed to failure – that there is no possible answer to questions like "how would it be different if everything were a dream" and that the attempt to use semantics and epistemology to provide one does nothing more than over-complicate semantics and epistemology.

Much of twentieth century analytic philosophy, Rorty argues, can be explained as just such a futile attempt at trying to use semantics as a way of grounding our epistemology. Both the persistence of this attempt and its relevance for the debate about IP can be nicely illustrated with reference to the "Problem of fictional discourse", whereby philosophers have sought to explain how it is possible to speak truth about creations. So, for example, consider the statement, "Tony Blair lived at 10 Downing Street." This is a statement that appears to be true in exactly the sense that it does correspond with a real-world state of affairs. It makes a claim about a former state of the world – Tony's Blair's residence at 10 Downing Street – that we know to have taken place: there really is a man called Tony Blair, there really is a place called 10 Downing Street, and the first existed, at an identifiable time in the past, in a relationship of occupancy with the second.

The statement is true because it reflects reality – this may seem so obvious as to be utterly trivial. The problem emerges, in Rorty's account, when we try to move away from short, declarative sentences like "Tony Blair lived at 10 Downing Street", and suggest that this property of representing the world is a general aspect of what it means for something to be true, to suggest that

[243] Rorty, R., 1982. *Consequences of Pragmatism: Essays, 1972-1980*, Brighton: Harvester. p. 128-9
[244] Rorty, R., 1982. *Consequences of Pragmatism: Essays, 1972-1980*, Brighton: Harvester. p. 130

all truth is a matter of being made to speak in a certain way by the nature of the existing world. Such a vision is hard to square with the fact that there are many statements that we would want to call true, but which do not correspond to anything in the real world. One rich source of such statements is fictional discourse – statements about fictional entities. The claim that "Harry Potter lived at 4 Privet Drive," for example, refers to well-known entities – the boy wizard and his uncle's house – and describes a relationship between the two. Equally well-known is the fact that neither of these entities actually exist. "Harry Potter" does not correspond to a real boy, nor "4 Privet Drive" to a real house. Nonetheless, almost everyone familiar with its referents would accept that this sentence was true in a way that "Harry Potter did not live at 4 Privet Drive" was not. The sentence appears to be true, even in the absence of anything very obvious to correspond to.

Some of the most important thinkers of twentieth century philosophy, as Rorty describes, have attempted to solve this problem – to reconcile the idea that speaking truth is a matter of representing the world correctly with the fact that it is clearly possible to talk about things that do not exist within that world. One solution, ascribed by Rorty to Bertrand Russell, is to analyse sentences referring to apparently non-existing entities in terms to actual existing entities. According to this account, claims about Harry Potter's place of residence should be interpreted as shortened about the stories of J.K. Rowling – there exists a set of stories which either contains the statement "Harry Potter lived at 4 Privet Drive", or contains statements to that effect. This sort of interpretation is tortuous – note that the Russellian account will not let us claim that Potter was depicted as living anywhere, since this would reintroduce the problem of non-existent entities – but it can be made to work in this particular case.

The problem with such an account is the unnaturalness of analysing away statements about fictional characters in terms of statements about the physical media in which they are contained. One can, for example, sensibly claim that "Harry Potter is more famous than Tony Blair," although this is certainly not a statement that one can derive from the work of J.K. Rowling. Searle, influenced by Wittgenstein, tries to move away from the assertion that language users make claims about fictional objects as a sort of abbreviation for a much more complicated set of claims about the underlying physical world. Instead, he focuses on the idea of language games – language as a set of social conventions which must be observed if speakers are to understand one another. Thus, whilst the rules of language usually dictate that speakers will refer only to that which exists in the spatio-temporal world, this rule is suspended in the case of fictional discourse:

> I find it useful to think of these rules as rules correlating words (or sentences) to the world. Think of them as vertical rules that establish connections between language and reality. Now what makes fiction possible, I suggest, is a set of extralinguistic, nonsemantic conventions that break the connection between words and the world established by the rules mentioned earlier. [245]

Thus, when J.K. Rowling writes a novel, she pretends to refer to an entity that does not exist. The interesting step, however, happens when readers themselves refer to the character when talking to each other: "once that fictional character has been created, we who are standing outside the story can really refer to a fictional person."[246] Unlike Russell, who maintains that authors are simply writing books which speakers may refer to, Searle insists that "the author creates fictional characters and events."[247]

At this point I want to try and draw out the significance of this apparently rather obscure philosophical problem for questions of IP. The structure of Searle and Russell's philosophical dispute is the same as that of any number of substantive disputes over what can and cannot count as IP. We saw this sort of structure in the introduction, when the Southern District Court of New York tried to determine whether the use of a particular gene for breast cancer screening was simply a fact about the gene, or a creation of Myriad genetics. In chapter 2, we saw the same process with regards to historical works, as Brightman J. tried to distinguish Ravenscroft's "very personal view of history" from brute facts about the spatio-temporal world. In chapter 5, I offer an extended consideration of the Google Book Search case, much of which hinged on the idea that Google's scanning of in-copyright works was simply the creation of a "card index" – a series of facts about actually existing works, rather than an annexation of the materials that authors had created. In each case, the question being addressed is whether an actual fictional object has been created ("we really refer to a fictional Harry Potter") or whether talk of such an object is merely a short-hand for an already existing set of spatio-temporal relations that the speaker is claiming to have discovered ("we refer to the works of J.K. Rowling").

Whilst it may not be possible to resolve this dispute one way or the other, it is, Rorty argues, possible to dissolve it. Rorty illustrates this point through a development of Searle's argument.

[245] Searle, J.R., 1975. The Logical Status of Fictional Discourse. *New Literary History*, 6(2), p. 326
[246] Searle, J.R., 1975. The Logical Status of Fictional Discourse. *New Literary History*, 6(2), p. 330
[247] Searle, J.R., 1975. The Logical Status of Fictional Discourse. *New Literary History*, 6(2), p. 331

Recall that Searle claims that, in normal speech, the speaker commits to the idea that her statements are accurate representations of the spatio-temporal world – that there is a connection between language and reality. But when speaking about fictional discourse, the speaker follows a rule that allows them to suspend this commitment. If one can speak truth in this particular instance without needing to refer to something real, however, then why make so much of the idea that truth is a matter of correspondence in the first place? Rorty's own view builds on precisely this point, suggesting that the logical conclusion of following Wittgenstein, and seeing the rules that govern language use simply as social conventions, is to do away with the notion of representation altogether:

> [Statements] relate to the world by being counters used in games of assertion and denial, where any game can be played so long as there are conventions to tell one what moves to make. But if this were enough to say (as I, in fact, think it is), no one would have dreamed of a discipline called 'philosophy of language' which answered questions about how language works .[248]

Rorty's key point here is that the "problem of fictional discourse" is simply a result of our insisting on the view that truth must be a matter of representation. If we see the meaning of statements as simply deriving from the meaning of other statements then there is no useful function left for "representation" to perform. The distinction between real and fictional discourse falls away as soon as we realise there is no special relationship between words and the world that is enjoyed by one, but not by the other. In each case, the admissibility of a statement is a question of its conformity to the rules of a particular language game.

In the next section I will develop the idea of a language game in some detail, but for now, all I want to emphasise is that the divide between creation and discovery must stand or fall with the idea of truth as representation. If, as I suggested in the previous chapters, the assumption of a divide between creation and discovery constitutes a lacuna for critical theories of IP, then theories that set out explicitly to challenge it should be of interest, and Rorty attempts to do just this with a turn towards pragmatism. Pragmatism thus offers a fundamental challenge to the view outlined above – that we must distinguish between logic and rhetoric, between statements that get things right, and statements that have good effects. The pragmatist wants, instead, to judge all ideas by their effects: "Consider what effects, that might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the

[248] Rorty, R., 1982. *Consequences of Pragmatism: Essays, 1972-1980*, Brighton: Harvester. p. 119

object."[249] The content of an idea, for a pragmatist, is entirely exhausted by what it actually does in the world; its effects are not the temporary result of some unchanging essence that lies behind them, because no such essence exists. There is nothing deeper to be said about an idea than to simply list the sort of effects it has. Ideas, in short, can only be judged in terms of their consequences.

This has an obvious impact on how we think about discoveries. How, after all, are we to think about this sort of knowledge once we done away with the idea of correspondence to reality? What would it mean, to judge truth in terms of its effects? The answer, at first sight, may seem deeply unsatisfying: "[t]he true is," in William James's pithy definition, "the good in the way of belief." Such an approach, as Rorty observes, often strikes critics as perverse. James seems to be offering up one of truth's attributes as part of its essential definition. But James's point, as Rorty notes, is precisely that "there *is* nothing deeper to be said: truth is not the sort of thing that *has* an essence."[250] Ideas, in the pragmatic view, can no longer be true because of what they *are*, but must be judged in terms of what they *do*: "Any idea that will carry us prosperously from any one part of our experience to any other part, linking things satisfactorily, working securely, simplifying, saving labor, is true just so much, true so far forth, true *instrumentally*."[251]

For people worrying about the commodification of knowledge, pragmatism's instrumental view may seem like a distinctly regressive step. The divide between creation and discovery reduced *some* knowledge to the status of an object – suggesting that some sorts of knowledge could be thought of in the same terms as tin openers and loaves of bread. Pragmatism now wants to claim that the same view can actually be applied to *all* knowledge. Indeed, the pragmatic view seems to be precisely the one that IP rights-holders will ask the courts to adopt when they are seeking to enclose some new type of knowledge, emphasising that knowledge is made, rather than found, that it has practical uses, that it has not always existed, but has come into being only recently. Such worries may be exacerbated the fondness that pragmatist philosophers have for talking about knowledge in economic terms. James again: "But if you follow the pragmatic method... You must bring out of each word its practical *cash-value*, set it at work... It appears less as a solution, then, than as a program for more work".[252] Adopting such a view may not immediately strike us as helpful if, like Chris May, we see accounts of knowledge that "narrated [its] propensity to be organised through

[249] Peirce, C.S. & Buchler, J., 1955. *Philosophical writings of Peirce*, Courier Dover Publications. p. 31
[250] Rorty, R., 1982. *Consequences of Pragmatism: Essays, 1972-1980*, Brighton: Harvester. p. 162
[251] James, W., 2007. *Pragmatism*, NuVision Publications, LLC. p. 32 emphasis in original
[252] James, W., 2007. *Pragmatism*, NuVision Publications, LLC. p. 30 Emphasis added.

markets."[253] Similarly, if, as I argued in the last chapter, we can see much of the expansion of IP as a process of redefining knowledge as made rather than found, then the claim that all knowledge is made may seem like the last thing we need. By apparently endorsing the view that all knowledge is a product of human labour – by reducing all knowledge to moves within a language game that must necessarily have been created by human beings – it might seem to function as an IP expansionist's charter.

By refusing to let us take the boundary between creation and discovery for granted, the pragmatic turn helps us see the tensions and confusions that underlie the idea of "markets for knowledge." In this sense, it constitutes a development of the sort of critical approach to IP that I described in chapter 1. To make this point more concrete, consider May's observation that justifications for IP narrating a "propensity to be organised through markets". A critical theory of IP, for May, should interrogate this assumption, and his own theoretical work has been aimed at just such a project:

> This facilitates an account of the institutionalisation of intellectual property that disputes its emergence as a 'rational' solution to a problem of economic organisation. Rather, it is but one manifestation of the current hegemony of a systemic logic, reflecting the triumph (or ascendance) of the idea of capitalist markets as the only workable solution to political economic problems.[254]

Markets, in the neoliberal account, are tools of discovery – they help us discover the true value for any given economic object, and give a true statement of this value in the language of prices.[255] But this sort of epistemological move – whereby one posits a neutral underlying reality that compels us to represent it in a particular way – is precisely the one that Rorty and James ask us to stop making. Just as a pragmatic account refuses to allow that some particular vocabulary for discussing the world is privileged because we claim it corresponds to the exact working of the world, so it challenges the idea that there is a single right answer to problems of resource allocation that only "the market" can find. Like May and Cox, it is concerned to show that the "current hegemony" is just that – one solution amongst many.

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[253] May, C., 2009. *The Global Political Economy of Intellectual Property Rights: The New Enclosures* 2nd ed., Milton Park Abingdon Oxon: Routledge.

[254] May, C., 2009. *The Global Political Economy of Intellectual Property Rights: The New Enclosures* 2nd ed., Milton Park Abingdon Oxon: Routledge. p. 40

[255] See, for example, Hayek, F.A., 1945. The Use of Knowledge in Society. *The American Economic Review*, 35(4), pp.519-530; Fama, E.F., 1970. Efficient Capital Markets: A Review of Theory and Empirical Work. *The Journal of Finance*, 25(2), pp.383-417.

In the specific case of IP, the pragmatic turn also makes a further move, suggesting that IP rights are a curtailment, rather than an extension, of the "systemic logic of markets." In this sense, it develops a critique of IP that May discusses:

> A more dangerous argument [against IP] stems from the role of free trade and competition. Here an immanent critique sets out to show that IPRs actually constrict the 'free trade' in knowledge, and thereby undermine efficiency gains from market organisation, not least because the trade in ideas is dependant on them *not* flowing freely through the economy.[256]

The pragmatic view helps us develop this argument without succumbing to the sort of market fundamentalism it implies. The virtue of markets, in the neoliberal account, is that they produce important knowledge without the need for any central authority to step in and second guess them; the justification for IP rights, by contrast, is that knowledge is a public good, and will thus be insufficiently produced by free markets. The idea that IP is a manifestation of the logic of markets can only be made to look credible by suggesting that there is some fundamental difference between the sort of knowledge produced by markets and the sort of knowledge incentivised by IP rights – that markets provide representational knowledge about goods, and that IP rights provide knowledge that is itself a good. Again, this distinction between knowledge that represents the world and knowledge that acts in it is precisely the point at which the pragmatic account starts its attack.

A more abstract way of making the same point is to emphasise that the divide between creation and discovery is a way of rationalising the division between ownable and unownable knowledge, it does not seem to function as a way of enforcing such a division; the fact that knowledge has been viewed as a discovery has not historically prevented it from being brought within the scope of IP. As I suggested in chapter 2, modern IP rights cover all sorts of knowledge that was once considered too fundamental, too abstract, and too fact-like to be subject to such a right. Genes, mathematical algorithms, photographs, and translations of novels are all the subjects of modern IP rights. Each was previously seen as something that lay far beyond the scope of the law, and each has been redefined as unique, individual and creative enough to be worthy of protection. The divide between creation and discovery, in other words, plays us false. It assures us that there is a reason why some knowledge should be property, and other knowledge should not be, that there is a proper settlement

[256] May, C., 2009. *The Global Political Economy of Intellectual Property Rights: The New Enclosures* 2nd ed., Milton Park Abingdon Oxon: Routledge. p. 67

going on, the contours of which are determined by the nature of knowledge itself. The pragmatic view shows us that this is not the case, that it will always be possible to find traces of human labour in knowledge that we previously thought of as given by the world.

By itself, this sort of claim – that truth is made, rather than found – seems incomplete. If performativity were simply the claim that describing is a sort of creation, it would be an almost God-like process of *Fiat lux et lux fiat*, whereby an idea becomes an accomplished fact as soon as it is articulated. Clearly this is not the case – there are some constraints on the sorts of things that can be made through thinking and speaking. As Butler points out above, these constraints are, in the first instance at least, discursive: "If a performative occasionally succeeds... then it is not because an intention governs the actions of speech, but only because that action echoes prior actions and *accumulates the force of authority through the repetition or citation of a prior and authoritative set of practices."*[257] This emphasis on the inter-relatedness of knowledge, as I describe in the next section, also has important consequences for our critique of IP.

[257] Butler, J., 1996. Burning Acts: Injurious Speech. *University of Chicago Law School Roundtable*, 3, p. 205-6

The Semiotic Turn – the meaning of a word or idea is determined only by its relationship to other ideas

In this section, I argue that performativity's insistence on the semiotic – to locating particular words or signs within larger systems – helps us to incorporate an account of what Foucault terms "knowledge as collective practice."[258] In the previous chapters, I have discussed the insights of a number of different thinkers, each of which made reference to this idea. May, in chapter 1, noted that "[a]ll knowledge must be largely extant by virtue of the extent of knowledge required to have the insight or creativity (call it what you will) to add something to any field" and noted the difficulty that this presented for an IP right that is meant to cover only "the knowledge product that is the labour of the right-owning individual."[259] Similarly, Zeller noted that the "production of knowledge and new technologies is a process based on division of labor in complex systems and networks,"[260] but that IP rights were awarded only to individuals. Woodmansee in chapter 2 noted the way that the production of literary works were, with the emergence of the copyright system, no longer viewed as the application of a "body of rules, preserved and handed down... in rhetoric and poetics, for manipulating traditional materials in order to achieve the effects prescribed,"[261] but instead was seen as a manifestation of what was peculiar to that individual. Lemley observed that, whilst the patent system is based around the idea of the sole inventor who creates something that no other person ever could, in reality it is more usual for a number of different people to invent something simultaneously.[262] From this he inferred that there must be some larger, more structural force at work than individual creativity.

Each of these perspectives presents a challenge to the "rotten compromise" described by Charles Taylor in chapter 2. Under this view the world was neatly partitioned into creation – the imposition of individual perspective upon the world – and discovery, the imposition of reality upon the individual. The challenge that pragmatism presents to the idea of discovery was described in the last section. Knowledge is no longer a medium for representing the reality, it is simply a part of it. The same move presents an equal and opposite challenge to the idea of creativity. If knowledge is not a

[258] Foucault, M. & Chomsky, N., 2006. *Chomsky vs Foucault: A Debate on Human Nature*, The New Press.
[259] May, C., 1998. Thinking, buying, selling: Intellectual property rights in political economy. *New Political Economy*, 3(1), 59-78.
[260] Zeller, C., 2008. From the gene to the globe: Extracting rents based on intellectual property monopolies. *Review of International Political Economy*, 15(1), p. 93
[261] Woodmansee, M., 1984. The Genius and the Copyright: Economic and Legal Conditions of the Emergence of the 'Author'. *Eighteenth-Century Studies*, 17(4), p. 425
[262] Lemley, M.A., 2011. The Myth of the Sole Inventor. *SSRN eLibrary*. Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1856610 [Accessed August 15, 2011].

medium, then it can no longer function as the conduit of an individualised "meaning" lying deep within the subject. The significance of a creation can be determined only by relating it to other knowledge:

> [Y]ou cannot give meaning to a word or a poem by confronting it with a non-linguistic meaning, something other than a bunch of already used words or a bunch of already written poems. Every poem, to paraphrase Wittgenstein, presupposes a lot of stage-setting in the culture... There is no stronger claim that any poet can make than the one that Keats made – that he "would be among the English poets," construing "among them" in a Bloomian way as "in the midst of them," future poets living out of Keats's pockets as he lived out of those of his precursors.

Just as discoveries like scientific facts can be said to exist only within a particular language game, so also for creations. In this way, a focus on language games helps us generalise the insights developed by the thinkers in the previous chapters, by challenging the idea that there is some sort of easily identifiable "thing" that an IP rights-holder can be said to own. In the case of both creation and discovery, as Rorty observes, the turn towards a relational view of expression makes a similar move, substituting "a tissue of contingent relations, a web that stretches backward and forward through past and future time, for a formed, unified and present substance."[263]

Performativity's semiotic turn thus helps to offer a critique of the sort of romantic individualism that – as I described in the last chapter – has been an important part of the IP maximalists' case. By emphasising the relationships between knowledge and the rules governing its generation, it guards against the idea that knowledge can be attributed to – and thus owned by – an individual in an uncomplicated way. By itself, however, the turn towards semiotics seems incomplete. Pragmatism says that we need to give up on the idea of knowledge as a separate substance that can be divided into separate chunks in order to be paired off with corresponding chunks of "reality" or "the world." The truth, it tells us, is simply what works. This may sound plausible enough for big, complex theoretical statements – we should always be open to the possibility that our current theories will be replaced by ones that work better. However there are statements – like "This is red" – for which the vocabulary of representation seems to be peculiarly well suited. In that case, as Rorty observes, "our short, categorical sentences can easily be thought of as pictures... reports [that] pair little bits of language with little bits of the world."[264] Wittgensteinian language games seem to have less of a

[263] Rorty, R., 1989. *Contingency, Irony, and Solidarity*, Cambridge: Cambridge University Press. p. 41
[264] Rorty, R. "Pragmatism, Relativism, Irrationalism" in 1982. *Consequences of Pragmatism: Essays, 1972-1980,*

role to play in these cases.

Rorty's response to these sorts of problems is two-fold. In the first instance, pragmatists simply try to limit the scope of such representationalism – suggesting that, whilst it may hold true for simple statements about the world, it does not hold true for the sort of big interesting statements that epistemologists are really interested in:

> Nobody engages in epistemology or semantics because he wants to know how "This is red" pictures the world. Rather, we want to know in what sense Pasteur's views of disease picture the world accurately and Paracelsus' inaccurately, or what exactly it is that Marx pictured more accurately that Machiavelli. But just here the vocabulary of "picturing" fails us. When we turn from individual sentences to vocabularies and theories, critical terminology naturally shifts from metaphors of isomorphism, symbolism and mapping to talk of utility, convenience and likelihood of getting what we want.[265]

It is, argues Rorty, hard to imagine what exactly it is that Marx or Pasteur's theories might be said to correspond to, but easy to think of ways in which they might be said to succeed or fail, once they have been put into practice. At the level of hypothesis and theory, a pragmatic approach might seem to reflect no more than an inclination towards experiment and empiricism as a method of verification.

This first response, however, seems superficial. Rorty claims that truth is not a matter of representation, but when confronted with cases in which representation really does look like a matter of picturing something, he simply claims that this is uninteresting, and this is not the sort of question that semanticists or epistemologists are really interested in. This seems to be at best an evasion, and at worst untrue. After all, if there is one thing that has been proved by the century of debate about the problem of fictional discourse, it is that semanticists and epistemologists seem to have an almost unhealthy interest in the question of how apparently trivial sentences might be said to picture the world.

Brighton: Harvester. p. 162

[265] Rorty, R. "Pragmatism, Relativism, Irrationalism" in 1982. *Consequences of Pragmatism: Essays, 1972-1980*, Brighton: Harvester. p. 162-3

More fundamentally, this first strand of Rorty's argument assumes, rather than shows, that there is a fundamental difference between picturing something correctly, and getting what we want. In practice, the two tend to collapse into each other. Thus, when asked to define what the utility of a theory means in practice, pragmatists have a tendency to fall back into the language of representation. James, for example, in elaborating his definition of what it means for something to be true, suggests that the eventual test of an idea must be in the verification of sensible experience introduces similar ideas of picturing and accuracy:

> True ideas lead us into useful verbal and conceptual quarters as well as directly up to useful sensible termini. They lead to consistency, stability and flowing human intercourse. They lead away from excentricity and isolation, from foiled and barren thinking. The untrammeled flowing of the leading- process, its general freedom from clash and contradiction, passes for its indirect verification; but all roads lead to Rome, and in the end and eventually, all true processes must lead to the face of directly verifying sensible experiences *somewhere*, which somebody's ideas have copied.[266]

This suggestion that ideas function as copies of verifying sensible experiences seems to present a potential problem for pragmatism more generally. If, after all, an idea is a copy of something in the world, it might presumably copy its subject matter more or less successfully. But if such a copying is made the ultimate test of an idea, then James's definition of a theory that works might seem to mean little more than "tending to generate accurate representations." Pragmatism seems to have returned to the sort of representationalist paradigm that it claims to have escaped from.

Rorty's deeper answer to this problem of representation is to follow James's suggestion that the test of ideas must take place *somewhere*. Rather than focussing our attention on the realm of thought, he suggests, we should direct it to the more concrete realm of situated practice. The first move in such a process, implicit in much of what has gone before, is to replace a focus on ideas with a focus on their specific expression in language. The second is to focus not on language as an abstraction, but on the specific noises and markings which constitute the actual manifestation of language.[267] These, for Rorty, are all that language – and hence knowledge – actually consists of. To illustrate the point, he offers the thought experiment of trying to communicate with the native of a totally foreign culture into which he is unexpectedly parachuted. Communication, if it is achieved, will be largely a

[266] James, W., 2007. *Pragmatism*, NuVision Publications, LLC. p. 87
[267] What semioticians would term the *parole*, rather than the *langue*.

matter of learning the appropriate responses to certain actions that the other makes, including certain noises or markings: "She and I are coping with each other in the same way as we might cope with mangoes or boa constrictors – we are trying not to be taken by surprise."[268] The point of this example is to help us see language and thought as a kind of physical practice, rather than a disembodied medium – to erase the distinction between "knowing a language, and knowing our way around the world generally."[269] Having made this ontological move, Rorty can explain the success of an idea without the need to introduce ideas about copies of reality. Those sorts of noises and inscriptions that produce the right sort of results in particular circumstances are true to exactly that extent. This move "naturalizes mind and language by making all questions about the relation of either to the rest of the universe *causal* questions, as opposed to questions about adequacy of representation."[270]

By moving thought and language out of the minds of speakers and into the realm of observable behaviour, Rorty saves himself from having to make use of ideas of representation. The more prosaic language of cause and effect can now do all the work. In making this move, however, he introduces a different problem. Placing language and thought in the world of cause and effect, alongside mangoes and boa constrictors, finally rids us of the idea of language as a separate substance. But if questions about language are ultimately causal questions, this does seem to raise the question of why we would want to restrict our list of what can do the causing to the inscriptions and noises that we term linguistic. Mangoes and boa constrictors can be sources of causation just as much as philosophical statements. If there is no split between words and the world, then why talk about *language* games, as though language still remained in a separate domain?

The answer, I think, is that Rorty never quite manages to overcome his focus on the individual subject. A self-described Romantic liberal, he is passionately interested in the realisation of the individual subject, in agency and autonomy, in the individual's ability to impose her own personal narrative onto the "tissue of contingent relations" of which she forms a part, and to say, with Nietzsche, "Thus I willed it." As discussed above, he always sees this project as a necessarily incomplete one; even the most individual imposition of meaning must be made using the materials of others, and in the language of others. It is however, instructive to consider the terms he uses for

[268] Rorty, R., 1989. *Contingency, Irony, and Solidarity*, Cambridge: Cambridge University Press. p. 14
[269] Davidson, D. in Rorty, R., 1989. *Contingency, Irony, and Solidarity*, Cambridge: Cambridge University Press. p. 15
[270] Rorty, R., 1989. *Contingency, Irony, and Solidarity*, Cambridge: Cambridge University Press. p. 15

this limitation:

> The strong poet's fear of death as the fear of incompletion is a function of the fact that no project of redescribing the world and the past, no project of self-creation through imposition of ones own idiosyncratic metaphoric, can avoid being marginal and parasitic... For even if we agree that languages are not media of representation or expression, they will remain *media* of communication, tools for *social* interaction, ways of tying oneself up with other *human beings*.[271]

Whilst Rorty, regretfully, insists that language and thought can never be the exclusive medium of a single human, he nonetheless holds that it is a *medium* of some sort. Specifically, it is a *social* medium, something exclusively human which binds them together as a group distinct from things that do not have this property; the ability to create meaning in language allows an individual to at least attempt to formulate some sort of action that is her own, even if there is necessarily always some collective element to that action. This move back towards media allows Rorty to hold onto the idea that there is something special about the human subject, but in doing so it reintroduces the problematic idea of language and knowledge as a substance that he has tried so hard to get away from. Language and knowledge have once again slipped back into being a sort of substance.

Rorty is interested in human beings, and the possibility that human beings might become individuals through Romantic self-creation, but this exclusive focus on what is distinctively human reintroduces all the talk of substances from which he was trying to escape. He wants to keep the world flat – to refuse to make leaps to essences called "ideas" that exist somewhere far above the material world, and are thus capable of entering into relationships of representation with it. He insists that there is nothing transcendental about knowledge and language, that languages are just noises and markings, and that terms like "mind" and "language" are "simply... a flag which signals the desirability of using a certain kind of vocabulary when trying to cope with certain kinds of organisms."[272] There is, Rorty suggests – no distinction between ideal and material, because knowledge is not a sort of substance, but a sort of action. There is no relationship of reference between word and world, because words are simply part of the world. But having got rid of these distinctions, it is hard to give any sense to the distinction that Rorty now wants to make between the social and the natural. If there is nothing special about knowledge or language, why would we want to make a fundamental distinction between things that know and speak, and other sorts of things? If

[271] Rorty, R., 1989. *Contingency, Irony, and Solidarity*, Cambridge: Cambridge University Press. p. 41
[272] Rorty, R., 1989. *Contingency, Irony, and Solidarity*, Cambridge: Cambridge University Press. p. 15

noises and markings are made of the same sort of stuff as mangoes and boa constrictors, why should we see the relations that bind one human marking to another as constitutive of "action" different in kind from the sort of relations of "causation" that might bind a mango and a boa constrictor? What is "social" designating here, if not a new sort of substance that, like knowledge or language before it, is peculiar to human beings?

In order to realise the promise of pragmatism, then, we have to give up on this idea of the "social" as a sort of substance, one that binds humans together and excludes everything else. This means giving up the belief that only human beings can act, whilst objects like mangoes can only cause. It means taking the claim that language is no more than an arrangement of things seriously, so much so that we stop talking about webs of language, and start talking instead about "a contingent tissue" of objects. To come to the point, in order to complete the sort of pragmatist project started by Rorty, we need to extend our semiotic turn beyond the scope of language – to see meaning as coming not from uniform networks of words or ideas, but from heterogeneous networks of things. This final turn – towards Actor-Network Theory and assemblages – lets us keep the valuable insight that we gained from the semiotic turn; knowledge, ideas, expression – the various things that we describe as being the subject of IP rights – are still seen as contingent webs, their reality exhausted by their relationships to other things. But rather than populating this network only with language and thought, it populates it with things.

The turn to Actor Network Theory – the semiotic system consists not just of other bits of knowledge, but of things. Indeed, knowledge is itself a material thing.

Rorty makes knowledge and ideas a matter of language games – a network of words which holds together, each one helping to give meaning to the others. It is only once they have established their own internal coherence, in Rorty's account, that vocabularies are then put to work in reality, at which point they may be judged as better of worse according to how well they work. Ideas, for Rorty, are incubated in the social world, before being put to work in the natural world. By contrast ANT wants to do away with the distinction between social and natural, and it does this first by holding much more rigorously to the course that Rorty has already plotted As Latour puts it:

> We do not think. We do not have ideas. Rather, there is the action of writing, an action that involves working with inscriptions that have been extracted; an action that is practised through talking to other

> people who likewise write, inscribe, talk and live in similarly unusual places; an action that convinces or fails to convince with actions that are made to speak, to write and to be read.
>
> When we talk of thought even the most sceptical lose their critical faculties. Like vulgar sorcerers, they let thought travel at high speed over great distances. I do not know anyone who is not credulous when it comes to ideas... Maps, diagrams, columns, photographs, spectrographs – these are the materials that are forgotten, the materials that are used to make "thought" intangible.[273]

Like Rorty, Latour rejects the notion of thought as a sort of substance, and insists that noises and inscriptions are objects. But where Rorty backs off from this point, Latour presses on, insisting that these things have to do their work in the world alongside all sorts of other objects. Defining an idea, in this account, is not a case of seeing how well a particular vocabulary works when it is put into practice, but of making connections between disparate things, of materials like inscriptions, bodies and instruments all coming together such that a discovery is, quite literally, *made*.

Latour, for example, considers a research expedition to the Amazon, investigating whether one part of the rainforest is giving way to savannah, or *vice versa*.[274] A group of researchers has to be assembled – some of them are transported from France, others from closer to the site. The Amazon itself must be read from maps by the researchers, who must then label trees and conduct on-site tests on the soil, before physically transporting labelled samples of soil back to the laboratory. Different soil samples have to be arranged according to their labels, with and the results have to be written down and rearranged. The same results are discussed informally over bottles of wine at a local restaurant, and an article has to be painstakingly drafted, printed, and published, examined by peers in other universities, and perhaps incorporated into other sorts of writing. If the researchers are deemed to have made a discovery – if we can say that the jungle is advancing or retreating – then it is not because this is an idea that represents the world, and not because the researchers have played the right language game. Instead, it is because a network of objects has held together to form something: the team members themselves; the plane that flew them across the Atlantic; the soil and the test-tube that held it; all of these constitute the fact. They are the materials from which it has been made; the assemblage of each of these things – from the trees in the rainforest to the postage stamp on the application for research funding – constitutes the entire existence of the fact.

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[273] Latour, B. "Irreductions" in Latour, B., 1993. *The pasteurization of France*, Harvard University Press. p. 218

[274] Latour, B., 1999. *Pandora's Hope: Essays on the Reality of Science Studies*, Cambridge, Mass: Harvard University Press. pp. 24-79

ANT's most notable contribution is to allow us to make the moves we made before, but without illegitimately confining our account to an account of language. Facts, according to ANT, are heterogeneous networks, assemblages of different objects, not substances, but performances in which a variety of different elements come together to produce a particular effect. If a fact seems solid and unyielding, that is because the assemblage holds together so well that it conceals its own workings. It has become, as Latour would describe it, a black box – something that we can simply take for granted. Scientific discoveries become real as they gather research funding, successful experiments, archived papers, approving citations, perhaps even national curricula, textbooks and school-children. They become more real as each of these things are folded into the network, held so fast that they disappear. Graham Harman uses Latour's example of DNA to illustrate the process:

> Here we have a progression of statements that become increasingly more solid: from 'we believe it's a double helix', to 'Crick and Watson claim it's a double helix, but certain doubts may be raised', to 'Crick and Watson have shown that it's a double helix', to the simple final stage of 'DNA is a double helix'. We have a true black box when a statement is simply presented as a raw fact without any reference to its genesis or even its author. [275]

The creation of a fact is not a moment in which reality is apprehended, but a slow process of network building, a binding together of disparate elements until they become a single entity, an aspect of reality that we can safely take for granted and reproduce without having to retrace every step of the initial construction. Latour makes the point explicit: "this is why logic is to be considered a branch of public works. We can no more drive a car on the subway than we can doubt the laws of Newton. The reasons are the same in each case: distant points have been linked by paths that were narrow at first and then were broadened and properly paved."[276]

This idea of discoveries as simply another form of infrastructure – a sort of connection between things – is a symmetrical principle. If statements are performative because they are like infrastructure, then, as Nigel Thrift points out, the reverse is also true "[i]nfrastructure has precisely to be performative, if it is to become reliably repetitive."[277] If the subway, like Newton's laws, is reliable, it is because it is a mesh of different elements – rolling stock, seating etiquette, payment

[275] Harman, G., 2009. *Prince of Networks*, Melbourne: re.press. p. 37
[276] Latour, B. in Harman, G., 2009. *Prince of Networks*, Melbourne: re.press. p. 22
[277] Thrift, N., 2004. Remembering the technological unconscious by foregrounding knowledges of position. *Environment and Planning D: Society and Space*, 22(1), p. 177

processing – bound together to make a coherent whole. Thrift reminds us that such binding of norms, things and bodies is always a process of picking winners and losers, of deciding what will become solid as it is bound to other elements in the network, and what will remain unrealised:

> This powerful infrastructural logic which allows the world to show up as confident and in charge is rarely written about in and for itself (for an exception see Gell, 1992) and yet this `emptiness' lies at the root of our being, producing senses of the rightness and wrongness of the world so fundamental that we find it difficult to articulate them or to consider that these senses could have been otherwise. But it is possible to find clock- faces in the 14th century that circuited counterclockwise (Glennie and Thrift, 2004); large parts of the world read from right to left (Goody, 1987); in the early days of the automobile, seats were not always arranged in a two in front and two behind formation; in Norway and Sweden washing up to the left or right of the sink can produce instant evaluations of worth (Linde-Larssen, 1996); and so on.

The point here is thus to highlight the essentially contingent nature of such facts. Whilst the fact that clocks run clockwise and cars cannot run on subways is usually thought of as a purely technical matter, determined only by conditions of material feasibility, Thrift tries to highlight the history and construction of what is now objective reality in order to show the points at which different decisions might have been made.

Hard scientific facts like the structure of DNA, as well as softer social facts like the fact that we read from left to right, are both, in this account, performative: they are brought about through the connection of different entities in a network. Just as in the semiotic turn, this challenge to the idea that knowledge is a substance can be applied to creations as well as discoveries, and it is at this point that we see the relevance of ANT for our theory of IP. Rather than directing our attention towards an essence, it sees an IP right as the result of a stabilisation of different entities, an assemblage of heterogeneous elements that have to be bound together in order to allow a knowledge object to appear. suggested that authorship could provide a limiting principle on the proliferation of meaning, stabilising the multiple meanings of a text, so an IP right is concerned to put a limit on the proliferation of things, ensuring that the subject of copyright or patent can appear as an object.

Seeing an idea as an assemblage of objects moves us away from the sort of legitimating function that, as I suggested in chapter 1, is performed in equal measure by phrases like “intellectual

property" and "the intangible commons of the mind." So, for example, when we say that *Harry Potter and the Deathly Hallows* is the property of J.K. Rowling, and suggest that this means that this material is enclosed, that it lies outside the commons, we give the impression that she is policing some sort of well-defined border – that the work is a "formed, unified, present, self-contained substance, something capable of being seen steadily and whole." Seeing Rolwings right as an assemblage reminds of the the legal truism that what she actually owns is the right to prevent unauthorised production of objects called books, to stop authorised objects from finding their way into the scanners of over-enthusiastic fans, to ensure that the proper university photocopying guides are being observed with regards to the books she has allowed to circulate, and prevent the circulation of other objects that seem to relate too closely to the set that she controls. Her rights are effective to precisely the extent that she can ensure that any copy of the book anywhere in the world is produced only with her permission, and is then used only in certain ways.

Once we have made the ANT turn, we can see an IP right as not simply a set of rights granted over an individual object, but a sprawling assemblage of laws, bodies, design decisions, institutional working practices, perhaps border controls, and much else besides. This has the salutary effect of making such a right seem both more precarious and more contentious. Precarious, because once we understand just how much of the world must be co-opted in order for an "intellectual object" to appear, we can also appreciate the multiple points of vulnerability that such an object will have. To look again at the *Harry Potter* case, millions of book-owners have to have their behaviour regulated in particular ways. Software programmers of hardware manufacturers who have never even owned a copy of *Harry Potter* may be prosecuted for "contributory infringement" if they produce code or devices that let *Potter*-like markings proliferate beyond their authorised scope. It is contentious for the same reason – preventing the misuse of an "intellectual object" sounds unexceptional. Regulating the behaviour of so many different people and objects does not.

ANT thus helps us build on two different strands of thought in chapter 1. In that chapter, I suggested that IP presented a political problem in that IP rights too often favour owners at the expense of users. This had come about, I suggested, because a well-organised constituency of rights-holders had come together to aggressively push the idea that their rights were a form of property – in the strong, constitutive principle sense – and that it should be afforded the same sorts of protections as other property. It then identified a specific problem – the sorts of theories that thinkers were pushing in order to combat this movement effectively amounted to an endorsement of its main contention.

Thinkers like Boyle, May and Harvey accepted the idea that IP was property, but then proceeded to contrast it with ideas of commons. This, I suggested, was actually a backwards step from the old tradition of opposition to IP, which had decried it as monopoly – an illegitimate restriction on the freedom of others to do as they would with their material property. The problem was that accounts of the commons accepted the dualist framing of "Intellectual Property", and agreed to view knowledge as a sort of substance. This, as McCann observed,[278] made the main argument of rights-holders groups – that knowledge was a valuable resource that needs to be enclosed – seem more powerful than it should.

The ANT perspective salvages the most important insight of the monopoly view: that IP is about objects, rather than ideas. Rather than focussing on the ideal text of *Harry Potter and the Deathly Hallows* in which a copyright subsists, it looks at every individual copy of that work, and notes that the copyright holder has the same sorts of rights of control over these objects as other monopolists do over other sorts of object. Thus, as well as its rhetorical advantages – reasonable people may differ on the subject of property, but very few will defend monopoly for its own sake – the monopoly view emphasises the problem that rights-holders have to overcome if they are to effectively exercise their rights. Rights-holders *qua* monopolists have to exert control over a geographically dispersed set of objects books, pills, branded goods, home computers, clinical laboratories, fields full of crops, etc. Marshalling all these objects so that they effectively constitute an IP right is a big, challenging, and politically contentious project. All these very material aspects of IP are obscured when we meekly accede to the idea that there exist unitary entities called ideas which people can exercise ownership rights over. Seeing knowledge as based in practices and objects is a better way to articulate these observable harms than through the poor metaphor of "the intangible commons of the mind."[279]

In this sense, the relational perspective completes the challenge to the idea of the "commons" offered by Anthony McCann. Such perspectives, McCann emphasised, reduced questions about whether knowledge should be property to questions of resource management:

> It is no coincidence that, in the past, resource management notions of "the commons" were

[278] McCann, A., 2005. Enclosure without and within the information commons'. *Information & Communications Technology Law*, 14(3), pp.217-240.

[279] Boyle, J., 2003. The Second Enclosure Movement and the Construction of the Public Domain. *Law and Contemporary Problems*, 66, pp.33-74.

> espoused by those intent on driving the logic of enclosures and capitalism to their best advantage. The possibilities of conceiving of "the commons" in terms of uncommodifying social relations, in terms of the political character of relationships at all, or even in terms of resistance to the dynamics of enclosure, are decidedly limited when resources are the focus of attention. [280]

ANT's relational perspective on knowledge lets us clearly see the force of McCann's point. Once we have accepted that ideas are assemblages, we must, as stated above, give up on the idea of substance. By getting rid of the idea that knowledge is a substance, it challenges the apparent naturalness of the resource management perspective. The relevant question is no longer "What should be done with this resource?" Rather, we should ask "How is it possible to arrange the world so that something like a resource becomes manifest in the first place?" Only after that can one begin to ask questions about whether such an arrangement is desirable.

Conclusion

In this chapter, having described the concepts of performativity and assemblage in the first section of this chapter, I have given some exposition of them over the next three sections. The series of turns involved in employing these concepts each has a particular significance for the debate about IP. The pragmatic turn shows us that there is no special difference between creation and discovery, the semiotic turn that knowledge cannot be ascribed to individuals in any straightforward way, and the ANT turn that the production of stable entities called "ideas" is necessarily an exercise in regulating the movement of material objects. The pragmatic turn challenged the divide between creation and discovery, suggesting that such a division required a sort of epistemological grounding – a connection between words and the world that was enjoyed by discovery, but not by creation. I followed Richard Rorty in arguing that such a grounding was impossible to achieve, and in thinking this claim amply illustrated by the apparently irresolvable debates that emerged from the divisions. The "Problem of Fictional Discourse" is an example of one such debate – an unsolvable problem that emerges only once we decide that there must be some special relationship between words and world. Rorty replaced the concept of knowledge with the concept of language games, thus implying a semiotic turn in which ideas could be defined only by their relationships with other ideas, and challenging the romantic idea of a creation as something that derives its meaning from its

[280] McCann, A., 2005. Enclosure without and within the information commons'. *Information & Communications Technology Law*, 14(3), pp.217-240.

relationship to an individual author. Finally, in the ANT turn, this notion of definition through relation was expanded to include objects – knowledge was seen as a relationship between things.

Under such a view, IP rights do not grant rights over ideas. Instead, they allow rights-holders to exercise authority over a diverse range of objects and people. In the next chapter, I substantiate this claim with reference to a historical example – the origin of English copyright law in the Stationers' monopoly over printing. This account bears out my contention that IP rights are regulatory assemblages rather than ideas in a very literal way – the exclusive right to make copies of books was introduced as a form of regulatory apparatus long before it was used to grant ownership of ideas. Indeed, the concept of owning ideas only became possible once such an assemblage had been firmly established. This early history of copyright is not so much a moment in the commodification of knowledge, as the invention of a knowledge object.

CHAPTER 4: Assembling Copyright

Copyright protection – the right of the copyright owner to prevent others from making copies – trades off the cost of preventing access to a work against the benefits of providing incentives to create the work in the first place.[281]

Introduction

In Landes and Posner's account, above, copyright is there to ensure that we get new texts. The account brings with it an implicit story about what the creators of copyright actually do – they strive for economic balances. It is thus perhaps fitting that this is simply one of many stories that are told about it. This particular story – in which wise rulers recognised that authors would need property rights if they were to go on writing in the age of the printing press – is taller than most, but like all the best fairy tales, it builds its more outlandish edifices on a firm enough foundation of historical detail, conventional wisdom and popular prejudice to convince most observers that it must at least have some foundation in fact. And indeed it does. Keeping up the supply of books is probably exactly what the drafters of what is usually acknowledged to be the first Copyright Act – the Statute of Anne – were intending to do.

The obvious thing that the story misses, however, is what happened before copyright. The Statute of Anne did not spring forth from nowhere, and there is a wealth of historical scholarship on the subject that emphasises its antecedents in systems of mercantilism and censorship, and the way in which these doctrines have left their mark to this day. Indeed, the Statute of Anne being the prototypical modern copyright law, almost all historical explanations of copyright make at least some mention of this rather seamier pre-history. Any attempt to offer a really compelling explanation of a historical phenomenon is always something of a flirtation with teleology. That is, after all, what explanations do. Where before history is simply an assortment of events, texts and dates – "one damn fact after another" as the cliché has it – a powerful explanation is one that imposes some sort of logic on all this disorder. It turns it into something with a bit of structure and direction – a beginning, a middle and an end, and quite possibly even a moral. So, for example, when scholars describe the history of copyright as being an example of the way that capital

[281] Landes, W.M. & Posner, R.A., 1989. An Economic Analysis of Copyright Law. *The Journal of Legal Studies*, 18(2), p. 326

appropriates surplus from labour, or a result of the high initial expenditure and uncertain pay-offs that make rights of exclusion essential for publishing, or of a system of decentralised incentives for the creation of expressive work as part of a wider liberal project of creating a public sphere, they are trying to convince us that this is the only way to make all the facts fit together into something like a coherent picture.

My purpose here is rather different. Instead of trying to offer another explanation for why events proceeded as they did, I want to emphasise their contingency, to re-open the controversies that resulted in copyright, and show that they need not have turned out as they have. Primarily, I want to show that things like literature and intellectual labour were not so much enclosed or commodified by this process, as created by it. The notion of the author as we understand it emerges only slowly and haltingly from the records of the Stationers' Company, the pamphlets discussing the evils of their monopoly, the negotiation of the Statute and the early case-law that resulted from it. Of course, I am also trying to tell you a story, and all stories have to try and impose some sort of order: "It was all a most unlikely coincidence" does not make for very satisfying reading. Readers, especially readers of that sadly neglected sub-set of fiction known as scholarship, like their stories to have a point. And since one of the conventions of scholarship is that this point should not be introduced only as a twist in the final act, it will come as no surprise to regular readers of the genre that this point is one that I have dwelt on at some length earlier.

So, the point of my story is that the best way to think of copyright is not as a manifestation of capital's need to commodify labour, or the tendency of the property system to internalise externalities once as soon this becomes worth the cost of doing so, or the need to subject knowledge to the subject, but as an assemblage. The right that was granted by the Statute of Anne was a patchwork, cobbled together from any number of different sources. The basic structure of the right, – a monopoly over production, was a common tool of mercantilism that rulers put to use for certain political ends. Initially a means of industry development, it also served as the mechanism for the enforcement of censorship, a function that the Crown located in the Stationers' Company: in a move that would be repeated throughout the subsequent history of copyright law, the Crown ensured the regulability of texts by delegating their control to a single authority, an "obligatory point of passage"[282] when dealing with the problem of printed material. It is in the internal arrangements of

[282] Callon, M., 1986. Some Elements of Sociology of Translation : Domestication of the Scallops and the Fishermen of

this body that we find copyrights most direct antecedents, as printers fostered individual rights to texts in order to prevent over-production of them.

Much of the form of copyright then, was conceived as a printers right with a legal basis in an authoritarian censorship regime. The vesting of the right in the author, often conceived of as the reason for the act, was a largely tactical move by drafters whose main concern was to vest the considerable powers they were granting in someone other than the Company of Stationers who had held them until that point. The Statute was thus not a recognition of authorship, in the sense that we would understand it, because this and related ideas like intellectual labour, abstract objects and, of course, intellectual property, had not yet been formulated. Copyright, as I argued in the last chapter, is not about ideas, but about things. More specifically, one of the vital preconditions of its emergence was a system for the regulation of physical objects – printed matter and those responsible for its production.

Mercantilism and Censorship

Both copyright and patent law owe their genesis to European rulers' practice of using grants of monopoly and privilege as a tool of statecraft – a ready method of raising revenue, rewarding loyal followers, or more subtly of directing and shaping economic activity.[283] In particular, as Christopher May notes, they could be used as a means for the importation or development of particular technologies – a method which the Venetian government adopted extensively throughout the fifteenth century. This was the prototype for modern copyright and patent law, and it is, as he emphasises, significant that it was "concerned not so much with not concerned with the idealised individual and his rights, but rather [with] the development of competitive advantage."[284] The printing press was one such technology.

Printed books were first imported into England in the 1460s, with Caxton's printing press following in 1476. Eight years later, parliament passed what probably qualifies as the first piece of English

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the Saint Brieuc Bay. *Power, Action, and Belief : A new sociology of Knowledge?* Available at: http://ci.nii.ac.jp/naid/10018137272/ [Accessed September 15, 2010].

283 Machlup, F., 1952. *The political economy of monopoly*, Johns Hopkins Press. p. 288

284 May, C., 2002. The Venetian Moment: New Technologies, Legal Innovation and the Institutional Origins of Intellectual Property. *Prometheus: Critical Studies in Innovation*, 20(2), p. 174

legislation directly relating to printing. The ninth statute of Richard III's only parliament, "In what sort Italian merchants may sell merchandizes. Several restraints of aliens",[285] was, as the title suggests a broadly protectionist act intended to stop foreign merchants from selling their wares in England and repatriating the profits. Merchants were required to "change from retail to wholesale trade, and spend the purchase-money derived from their sales to retailers 'in the commodities of this realm,' on pain of forfeiting it."[286] An exception, however, was to be made for "any scrivener, alluminor, binder or printer of... books"[287], the intention being that such an exception would continue to encourage the import of printed works and the immigration of foreign printers, bookbinders and stationers.

The exception had the desired effect, and fifty years later, with Henry VIII on the throne, Parliament felt that Britain's printing infrastructure had developed to the point where the exception was no longer needed. The wording of the 1534 act makes their logic clear:

> Whereas by the provision of a Statute made in the firste yere of the reygne of Kynge Richarde the thirde, it was provided... that all strangers repayring into thie realme might lawfully bring into the saide realme printed and written bokes to sell at their libertie... By force of which provision there hath comen into this realme... a marvellous number of printed bookes... And the cause of the making of the same provision semeth to be, for that there were but few bookes and fewe printers within this realme at that time, which could well exercise the said science and crafte of printynge. Nevertheless, sithen the making of said provision, many of the realme being the Kinges naturall subjectes, have given them so dillignetly to lerne and exercise this saide craft of printing that at this day there be... a great number of connyng and experte in the said science of crafte of printing, as able to exercise the saide crafte in all pointes as any stranger in any other realme of country.[288]

For Cyprian Blagden, the passage of the Act merely brought the printing trade in step with the mercantilist logic of the time: opening the country to foreign books and printers insofar as it contributed to the development of a strategic industry, and then closing the borders in order to ensure that the benefits of that industry accrued to the state. Indeed, Blagden goes so far as to suggest that "this Act was passed only as a result of representations from an interested body [printers and booksellers]" as a result of "the general anti-alien feeling [which] was bound sooner or

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[285] Hanbury, H.G. 1962 The Legislation of Richard III, *The American Journal of Legal* History, 6(2): 95-113.
[286] H.G. Hanbury (1962) "The Legislation of Richard III" *American Journal of Legal History* Vol.6 No.2
[287] 1 Richard III c.9 in E. Gordon Duff (1978) *The Printers, Stationers and Bookbinders of Westminster and London, from 1476 to 1535* (Manchester, NH: Ayer Publishing) p. 75
[288] 25 Henry VIII c.15 in E. Gordon Duff (1978) *The Printers, Stationers and Bookbinders of Westminster and London, from 1476 to 1535* (Manchester, NH: Ayer Publishing) pp. 75-6

later to affect native booksellers."[289]

The printed word, however, had a significance for monarchs out of all proportion to its share of the country's import/export balance. The printing press was a strategic technology not simply, or even primarily, because of the direct economic role it could play in the manufacture of books for sale, but because of the political role it played as a communications technology, and most especially its role in purveying religious doctrine. After the fall of Constantinople, as Elizabeth Eisenstein notes, "Western Christendom had... called on printers to help with the crusade against the Turks. Church officials had... hailed the new technology as a gift from God, as a providential invention that proved Western superiority over ignorant infidel forces."[290] The printing press was here used for what one might think of as broadly logistical or informative purposes, "informing... people about planned crusades, victories and losses and the character of the Turks."[291] The "first movement... to use the new presses for propaganda and agitation",[292] however, was Protestantism, and we may safely conclude that the Vatican found rather fewer traces of providence in the rapid spread of Martin Luther's theses.

In England, policy towards religious doctrine was an understandably delicate subject during the sixteenth century, experiencing dramatic changes of direction according to the personal conviction or political convenience of various monarchs. Henry himself had, prior to this law, issued two proclamations banning a total of nineteen seditious texts written in English but imported from the continent. The 1534 repeal of the 1484 exception for books, whilst undoubtedly a boon for the English printers protected against foreign imports, is thus best understood as part of the Crown's ongoing project to systematise its control of the publication of religious works. In 1538, a further proclamation instituted a licensing system for all books, with licenses refused for politically sensitive topics. Edward VI's government briefly relaxed the licensing laws when his reign began in 1547, before reintroducing them with a vengeance four years later, in a proclamation that mandated pre-print licensing for all works, with the list of taboo topics expanded to include more broadly political and moralistic concerns than the comparatively confined list of challenges to official Church doctrine that had earned a refusal-of-license under Henry's system.

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[289] Blagden pp. 25-6
[290] Eisenstein, E.L., 1980. *The Printing Press as an Agent of Change*, Cambridge University Press. Ch. 4 p. 303
[291] Bisaha, N., 2006. *Creating East and West*, University of Pennsylvania Press. p. 61
[292] Eisenstein, E.L., 1980. *The Printing Press as an Agent of Change*, Cambridge University Press. Ch. 4 p. 304

Mary's accession, and the accompanying return to Catholicism, necessitated the dismantling of many of the specifics of this system. State control of the printing press continued through new mechanisms, however, when Mary had the treason laws revised to include the written word and instituted her own licensing system in 1553. The licensing system was supplemented with new provisions for the Crown's agents to conduct ever-more-intrusive searches of the persons and property of subjects, finally culminating in a proclamation that "exempted censorship from the due process provisions of English common law, and ordered that anyone possessing 'wicked or seditious books' should be 'taken for a rebel, and... without delay executed for that offense.'"[293]

The rather *ad hoc* mix of approaches to Crown censorship that had existed up until this point was finally incorporated into a more durable institution in the final stages of Mary's reign, when in 1557 the Stationers' Company was granted extensive new privileges under a Royal Charter:

> It was laid down, firstly that no one in the realm should exercise the art of printing, either himself or through an agent, unless he were a freeman of the Stationers Company of London or unless he had royal permission to do so; and secondly that the Master and Wardens of the Company were to have the right to search the houses and business premises of all printers, bookbinders and booksellers in the kingdom for any printed matter, to seize (and treat as they thought fit) anything printed contrary to any statute or proclamation, and to imprison anyone who printed without proper qualification or resisted their search...[294]

As such, the company, which consisted of stationers, printers and booksellers, became the official vehicle of government control of the production and distribution of printed texts. New texts would be licensed with the crown before publication, and the Company itself would pursue the Crown's interest in the suppression of unlicensed texts as part of the protection of its profitable monopoly on the publishing trade. Such a process came to be self-policing – the Master of the Company and the Wardens, who obviously had every interest in maintaining cordial relations with the government on whom they ultimately depended for their monopoly, largely exercised their own discretion as to which books to censor. Additionally, the guild being primarily London-based, the formation of the Company accelerated the existing tendency to concentrate the trade in the capital, from where government oversight of its activities could be more easily conducted.

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[293] Clegg, C.S., 1997. *Press Censorship in Elizabethan England*, Cambridge: Cambridge University Press. p. 28
[294] Blagden, C., 1960. *The Stationers' Company: A History, 1403-1959*, Allen & Unwin. p. 21

The advantages for the Company itself were equally clear: the charter gave legislative backing to its own rigid internal hierarchies and structures. The much more extensive powers granted to the Company lent weight to the former guild's[295] strict rules concerning the number, location and activities of printers and booksellers – as well as of their apprentices. By far the most significant aspect of the guild's internal organisation, for our purposes, was the practice of apportioning rights to the copying of a particular text – an entitlement then simply referred to as a copy. In order to avoid possibly ruinous competition for the quite limited number of buyers for a particular work, sixteenth century printers had begun to devise agreements through which they agreed to apportion rights to the printing of individual texts. The guild provided an institution through which to co-ordinate these arrangements; members could register copies that they planned to print with the guild and, assuming no prior registration of the same text, could proceed to produce as many copies of a book as the market would bare, safe in the knowledge that each would find a buyer. The Company's system of registration of copies also nicely dovetailed with the Crown's censorship policy – by providing an existing central authority through which texts already had to pass before printing, the licensing system provided the ideal checkpoint at which to vet texts deemed to politically sensitive.

The guilds system of copies, then, was greatly strengthened by the near elimination of the possibility of competition from outside the Company. The Charter was not the first instrument to grant a monopoly in the book trade. Monarchs had granted privileges for the printing of particular classes of text– such as royal statutes, bibles and law books – since William Facques was made the King's Printer in 1504.[296] The passage of the charter, however, marks a qualitative change. The entire act of printing itself was now regulated by the Stationers Company, and the printing of any book without prior license was now a crime against the Crown. Within the Company, there now existed an elaborate system of claims texts – intangible assets that could be exploited, traded, and sub-divided amongst members. The resemblance of this description to modern copyright is no coincidence. As we shall see, it was to the maintenance and limitation of the copy system that the drafters of the Statute of Anne would address themselves some one hundred and fifty years later.

[295] The organization was not known as the Stationers' Company until the 1557 charter.

[296] The ownership of printing patents was largely consolidated amongst members of the Stationers' Company throughout the sixteenth century. In 1603, the majority of the printing patents were formally consolidated into the English Stock, a joint-stock company whose shares were owned entirely by, and traded exclusively between, members of the Stationers' Company.

Whilst it is easy to see the contours of modern copyright in the Companies registration arrangements, however, it is important to be a little careful with regards the distinction between the copies of the Stationers, and copyrights that would later supersede them. The most obvious and significant difference, of course, was that these rights were never owned by authors, and never conceived in terms of authorship. Modern copyright, as was described in chapter 2, is viewed as accruing to the creative individual as a result of their labour and individuality. The Stationers' copies, by contrast, were regarded more prosaically as a means of organising the trade so as to avoid over-investment, and after the charter, as a useful and obvious way of dividing up a Royal trade concession. Certainly, they were thought of as property – and valuable property at that; but they were not rights to ideas so much as claims on potential revenue streams. A more helpful analogy might be with trade concessions or financial assets; copies were agreements to respect claims to particular markets and future revenue streams – intangible, but not intellectual, property.

It is worth also considering quite how extensive this prototypical form of copyright was. As Paul Goldstein argues, even today's copyright laws, after two centuries of massive expansion, offer a level of protection that "falls well below the level established by copyright's only historical antecedent – the printing monopoly of England's seventeenth century Stationers' Company."[297] Unlike modern copyrights, licenses did not expire after a set time, but remained in force for ever. Additionally, there was no criterion of originality, other than that another member should not already have a license to the same text. As Mark Rose points out, the combination of these two factors meant that "even such Latin and Greek classics as Aesop, Cicero, Ovid, Terence, and Virgil were protected titles, the property of the Stationers' Company itself"[298] and the concept of a "public domain", in the sense of titles that could be freely printed by anyone, had yet to come into being.

The Stationers' Company largely managed to maintain its monopoly of licensed printing until 1695. Given the political turmoil of seventeenth century England, this was no mean feat – the Company succeeded in making itself the mechanism of censorship for both the Commonwealth and the Protectorate, before resuming its position under the Crown after the restoration. It did not, however, survive this process undamaged, and several of the key factors that eventually undermined its

[297] Paul Goldstein (2005) "Copyright's Commons" *Columbia Journal of Law and the Arts Vol.* 29 No. 1
[298] Mark Rose (2003) "Nine Tenths of the Law: The English Copyright Debates and the Rhetoric of the Public Domain" *Law And Contemporary Problems* Vol. 66 p. 76

dominance are vital in understanding the later development of copyright. In the first place, the Stationers' Company increasingly fell foul of anti-monopoly sentiment. Much of the most vociferous criticism actually came from within, as apprentices trained within the guild found that there was little work to be had outside the rigidly controlled hierarchy of the Company, which provided too little employment for the growing number of workers entering the trade. As such, many junior members turned to unlicensed printing to make ends meet, thus setting the stage for confrontation their seniors.

Outside the company, anti-monopoly sentiment was growing as a result of the Crown's practice of granting monopolies in an ever-growing number of items in order to raise revenue or bestow favours. The case was most forcefully made by Michael Sparke, a disgruntled bookseller, published his pamphlet *Scintilla, or a light broken into dark warehouses*, in which he launched a scathing attack on the "Printers, Sleeping Statiioners and Combining Booksellers" and "their forestalling and ingrossing of Books in Pattents, and Raysing them to excessive prices."[299]

As Harold G. Fox notes, the practice of granting monopolies over such petty luxuries as soap, salt and clothing led to repeated attempts at curtailment by parliament. Discontent over the granting of monopolies also fed into the widespread opposition to the Crown's extra-Parliamentary means of raising revenue that simmered throughout the 1630s, and these, in turn, to the more general grievances with the extent of Royal authority that eventually led the country to Civil War in 1642. The intimate connection of monopoly to arbitrary authority was most forcefully stated in the radical pamphleteer John Lilburne's *England's Birthright Justified*, in which the notion of monopoly was developed into a sweeping criticism not just of restrictions on the import of commercial goods, but also of religious doctrine and the printed word: "that insufferable, unjust and tyrannical Monopoly of Printing, whereby a great company... are invested with an Arbitrary unlimmitted Power".[300]

More generally, for the early years of the Civil War and the constitutional instability leading up to it, printers experienced an almost unprecedented level of practical freedom and economic demand. In part, this was a result of the temporary breakdown of the established controls . Many of the legal mechanisms on which control of the trade relied were dismantled as Parliament sought to limit

[299] Sandra Sherman (1993) "Printing the Mind: The Economics of Authorship in Areopagitica" *ELH* Vol. 60 No. 2 . 341
[300] John Lilburne (1645) *England's Birth-Right Justified*

Royal authority. Specifically, the Star Chamber and High Commission, under whose authority licensing had taken place, were abolished in 1641. An unprecedented number of new publications flowed onto the breach; as the increasing political uncertainty fueled the public's demand for news, Crown and Parliament both developed increasingly sophisticated propaganda machines as they competed to establish official accounts of events rushed, and the multitude of competing factions that comprised the uneasy alliances of both sides rushed to make their voices heard. In this environment, anti-monopoly sentiment combined with puritan notions of freedom of conscience to produce an early politics of the freedom of the press.

A free press had certainly not been parliament's intention, and in 1643 it sought to reintroduce controls by passing a Licensing Act under as a parliamentary statute, as opposed to the Royal Prerogative under which it had existed before. In terms of restoring censorship, the immediate effects of the Act were underwhelming; a printing monopoly is, after all, ultimately dependent on a monopoly of political authority – a description that could no longer be applied to English government. What it did immediately succeed in, however, was provoking a violent reaction from the more radical political factions who had been offered their first glimpse of a free press. Amongst the most famous of these was John Milton, who, in his *Areopagitica*, suggested that the re-introduction of controls would be simply a sop to "the fraud of some old patentees and monopolizers in the trade of bookselling", famously declaring that "truth and understanding are not such wares as to be monopolized and traded in by tickets and statutes and standards."[301] Milton's criticisms notwithstanding, however, the press was slowly brought back under control as the tide of the War turned in Parliament's favour, a process facilitated by their control of the capital. By the middle years of Cromwell's Protectorate, control of the press was far tighter than it had been under Charles II.

The Restoration, in many respects, restored the publishing industry to the pre-revolutionary *status quo*. As with so many other areas of life, however, there were some important differences. The Stationers' Company was restored to its original role as the vehicle of censorship and register of copies, but instead of censorship being left largely to the discretion of the Master and Wardens of the company, an official Licenser was appointed as part of the office of the Secretary of State.[302]

[301] John Milton (1644) *Areopagitica* [available online at http://www.uoregon.edu/~rbear/areopagitica.html, last accessed 24/09/2008]
[302] Feather, J., 1988. *A History of British Publishing*, London ; New York: Croom Helm.

Further, the Licensing Act was a temporary piece of legislation, to be renewed every three years; Parliament was anxious to ensure the monarchy's dependence upon it, and building a system of government that required constant parliamentary maintenance seemed a sensible way to ensure this end; any monarch wishing to embark on a period of personal rule would quickly find that the formal mechanisms for control of the press had lost their statutory basis and, as the anarchic and unregulated pamphleteering of 1641 and subsequent statute of 1643 had shown, the effects of this could be remarkably difficult to contain.

While deliberate weakening of the Stationers' monopoly as such may not have been the aim of the provision, however, it proved to be one of the consequences. As a result of clashes over the Exclusion Bill, the Charles II repeatedly dissolved Parliament before it could pass legislation, and the Act lapsed in 1679. It was restored when James II ascended to the throne in 1685, but lapsed again in 1695, this through deliberate parliamentary decision. In part, such a decision may have reflected the growing polarisation of Parliament into separate parties and the resulting possibility of the use of censorship for party political ends.[303] Additionally, there was increasing dissatisfaction amongst the reading public with the high prices of books, a condition they blamed, not unreasonably, on the monopolistic organisation of the trade. John Locke, in a letter on the subject to the MP Edward Clarke, was especially vexed about the high costs of the classics in England as compared to other parts of Europe, a problem he laid squarely at the door of the "lazy, ignorant Company of Stationers."

Locke's view was timely: the Act was never renewed, and the years directly following the lapse of the Licensing Act were a time of considerable consternation for the established figures and institutions of the publishing trade. As John Feather recounts:

> For the trade, the immediate consequences were potentially catastrophic. Much of the superstructure of protection which the Stationers Company had so carefully erected and so assiduously defended was swept away... There were no restrictions on the number (or location) of printers, or on the numbers of journeymen or apprentices. There were no restrictions on the import of books. Above all there was no longer any legal obligation to enter new books on the Stationers Register, and, given the absence of any unambiguous precedents, certainly no

[303] Starr, P., 2004. *The creation of the media*, Basic Books. p. 35 See also Deazley, R., 2004. *On the origin of the right to copy*, Hart Publishing. p. 10-7

guarantee that the courts would uphold the claims of the copy owning booksellers.[304]

This uncertainty regarding the legal standing of copies was a source of considerable consternation for Booksellers. Except for brief periods of political crisis, the trade had, for most of its development, been built around a system of private monopolies, guaranteed ultimately by government as part of its system of pre-publication censorship. In the absence of such a guarantee, those who held the profitable copies needed to find alternative means of preserving continuity with the existing system. In the short term, this was achieved through the introduction of new methods of cartelisation in response to competition from outside the Company. Sale to the retail trade was largely monopolised within trade groups composed of each of the major London booksellers, known as congers. The congers controlled much of the book supply, and membership was dependent on respect for the legal status of member's copies.[305] Such arrangements, however, were simply a stop-gap pending legal recognition – market power was a much more precarious basis for the force of law, and the London booksellers engaged in repeated attempts to gain legal recognition for what they had come to view as their property.

The Statute of Anne

As the government turned to post-publication censorship, first through the treason laws and then through the law of seditious libel, it became increasingly apparent that the Licensing Act would not, in fact, be renewed. The Stationers protested that such a move was little more than annexation or destruction of their property. Nor was this stance entirely disingenuous. Recalling the analogy drawn earlier between the Stationers' copies and company shares, it is not hard to see why; the business of publishing in England had, for over 150 years, been built around the reality of copies, of real assets that could be bought, sold, inherited and used for dowries. Some had remained in particular families for generations. Given the diminishing currency of censorship as a justification, the Stationers were forced to look for new arguments to persuade Parliament again to secure for their assets the full protection of the law.

It is thus probably no coincidence that this is the stage at which the author, up until this point a rather peripheral figure, began to assume a more central place in the publishing industry. In 1704,

[304] Feather, J., 1994. *Publishing, piracy and politics*, Mansell. p. 50
[305] Feather, J., 1994. *Publishing, piracy and politics*, Mansell. p. 65-6

just three years after the failure of the stationers' final attempt to see the Licensing Act renewed, Daniel Defoe published his *Essay on the Regulation of the Press*. Whilst repudiating the licensing system, Defoe – in what Mark Rose suggests "may be the earliest such advocacy in English history" – called for Parliament to protect the interests of authors in their works. As Rose points out, the notion of authorial interest advanced by Defoe and others stands at some remove from the more developed idea of "intellectual property" as a natural right that was to succeed it; the sympathetic figure of the hard-working author as a stalking horse for renewing the legal standing of copies, however, certainly seems to have appeared a winning argument to the booksellers of the Stationers Company. First in 1707, then again in 1709, they represented the case to the legislature with some vigour, once again petitioning Parliament to recognise their copies and, instead of arguing for the restoration of the licensing system, couching their argument in terms of the security of "literary property."[306]

On the second attempt, in 1709, permission was granted to bring a bill before the house. The move to authorship was, from the Stationers point of view, simply a tactical shift. If censorship could no longer provide the basis for property rights in copies, then the notion of the author could take its place. Indeed, the Act to restore the existing system of ownership of copies, as recorded in the Stationers' Company register. Booksellers, to whom these rights were granted, were held in this early draft of the Act to be "such persons to whom Such Authors for good Considerations have lawfully transferred their Right and title."[307] Such wording pays lip service to the author, the worker who toiled over the manuscript, but maintained the *status quo* in terms of who could own rights – only members of the Stationers Company could register copies, and it was only once a copy was registered that it could be protected by law.

This initial draft, however, was significantly modified as it moved through Parliament. In addition to a number of smaller modifications, such as allowing the import of scholarly works from abroad, the drafting process yielded two crucial changes: rights were to be granted for only limited terms – twenty-one years for existing titles, and fourteen for new ones, and, where before only members of the Stationer's company could hold copies, the right was now vested directly in the author who composed the manuscript. Both the manuscript and the rights to its reproduction could now be sold

[306] Feather, J., 1988. *A History of British Publishing*, London ; New York: Croom Helm. p. 74
[307] Rose, M., 1993. *Authors and Owners: The Invention of Copyright*, Cambridge, Mass: Harvard University Press. p. 42

to whosoever the author pleased. As Patterson argues, these two provisions, taken together, seem to suggest a preoccupation with breaking the monopoly power of the Stationers, rather than any particular concern with the author as such: "Making the copyright available to all was a move directed to the monopoly of the company itself; limiting the term of copyright was directed at preventing future monopolies such as the existing one of the booksellers based on old copyrights."[308]

The author was, for Patterson, less an end in himself, and more a convenient tool for establishing a balance between the protection that a capital-intensive process seemed to require, and the possibility that such protection would provide the basis for a single entity restoring the system of copies devised by the Stationers' Company for avoiding ruinous over-investment. It allowed Parliament to restore some order to the business of making books. But vesting copies in their authors – to sell on to whoever they pleased – provided a legal mechanism for getting those copies outside the control of the Company:

> Although the author had never held copyright, his interest was always promoted by the stationers as a means to their end. Their arguments had been, essentially, that without order in the trade provided by copyright, publishers would not publish books, and therefore would not pay authors for their manuscripts. The draftsmen of the Statute of Anne put these arguments to use, and the author was used primarily as a weapon against monopoly.[309]

The drafters of the Statute of Anne, in Patterson's account, were recognising the author's right to the ideas he had created. The author did not so much create ideas, as write manuscripts. Vesting printing rights in manuscript makers was not a recognition of the importance of intellectual labour, so much as a neat piece of legislative jiu-jitsu, breaking the power of the Stationers by using their most powerful argument against them,

The Statute, as Benjamin Kaplan argues, assumed a very materialistic view of "a book as a physical entity; of rights in it and offenses against it as related to printing and reprinting the thing itself."[310] The slightly jarring conclusion is that, at the time of drafting, the Statute of Anne – the first modern copyright act – was not really about IP law. It was not concerned with granting rights to intellectual

[308] Patterson, L.R., *Copyright in Historical Perspective*, Nashville: Vanderbilt University Press, 1968. p. 147
[309] Patterson, L.R., *Copyright in Historical Perspective*, Nashville: Vanderbilt University Press, 1968.p. 147
[310] Kaplan, B., 1967. *An unhurried view of copyright*, Columbia University Press. p. 9

creations, because the legal concept of intellectual creations had not yet been properly formulated. This would only happen, as I argue in the next section, in the succeeding years. Throughout the 18th century different parties battled over the precise nature of the rights the statute had granted, and the author, as the justificatory principle of the contested rights, assumed more central position in their rhetoric and sometimes, in the case of Alexander Pope, in the courtroom itself. As a discourse of the author developed, so authorial expression and creativity – abstracted from the material pages in which it was manifest – came to be seen as the "property" that the Statute of Anne protected. But to see this as the point of the Statute is to get things back-to-front. If we really must view historical acts through the lens of modern legal concepts, then competition law probably provides us with a clearer picture than "intellectual property."

"Property in the product of the mind"[311]

The provisions of the Statute, however, took some time to be fully realised. The congers that the London Booksellers had put in place as a stop-gap pending new legislation were put to further use in ensuring that members of the trade who wished to find markets respected the legality of copies. Moreover, for the initial part of the eighteenth century, the London Booksellers managed a fairly successful defence of the legal *status quo* by simply acting as though their right was perpetual. Chancery judges tended to support this, granting injunctions against the printers of pirate editions, even when the exclusive right to the work had expired under the terms laid down in the Statute of Anne.

Most of these cases concerned booksellers but authors occasionally brought suits to defend their own interests. Of particular interest here was the case of Alexander Pope, who, in 1741, brought a suit against Edmund Curll in order to prevent the latter from publishing a book of their private correspondence. Lord Chancellor Hardwicke's ruling for Pope is thus, as Mark Rose recognises,[312] an early moment in the recognition of copyright as something that was conceptually distinct from the original page on which the words were printed: "I am of the opinion that it is only a special property in the receiver, possibly the property in the paper may belong to him; but this does not give

[311] Warburton, W. & Hurd, R., 1811. *The works of the Right Reverend William Warburton*, Printed by L. Hansard & sons for T. Cadell and W. Davies. p. 408

[312] Rose, M., 1993. *Authors and Owners: The Invention of Copyright*, Cambridge, Mass: Harvard University Press. p. 64

a licence to any person whatsoever to publish them to the world, for at most the receiver has only a joint property with the writer."[313] The vesting of the right of reproduction in the author, it will be recalled, amounted to claim that authors, when they transferred title to publishers, were passing on not just the manuscript, but also the rights to its reproduction. The question of whether the two could be decoupled was not one that had often occurred – authors, in the usual course of events, transferred title over their manuscripts only to those they wanted to publish it. It was certainly not one that had ever been put to a court. The Lord Chancellor stops short of a full decoupling of the two – Curl only "possibly" owns the paper, right over paper and publication may in fact be a "joint property" of the Pope and Curl – but his insistence that transfer of the original copy did not automatically involve transfer of the rights to its reproduction is nonetheless a significant step.

A more philosophically developed separation of the two came from the theologian William Warburton, whose widely published *Letter from an Author to a Member of Parliament Concerning Literary Property* aimed to set that question on a more secure philosophical footing than it had previously enjoyed. Warburton's letter is a small masterpiece of the sort of dualistic reasoning that I have been criticising in the last three chapters – nature vs. society, discovery vs. creation, material vs. ideal.[314] Indeed, it is a significant moment in the binding of that sort of dualism to the legal mechanism of copyright law, and as such is worth explaining at a little length.

Warburton first defines things that may be property in terms of two characteristics: "that they be useful to mankind, and that they be capable of having their possession ascertained". Such things are of two potential types: "some are movable as goods; some are immovable, as lands", which may be further subdivided into those "natural" sorts in which property is gained through "occupancy," and "artificial" property for which title is awarded due to the labours of the owner, or "improvement." Crucially, "improvement" itself can take one of two forms – "of the hand" or "of the mind."[315] Authors own the right to the products of the mind that they have created. Of course, the problem for Warburton is that individual books are also quite obviously "works of the hand", and his reply is to claim that works of the mind are inherently superior:

[313] Pope v Curl 2 ATK 342
[314] Rose, M., 1993. *Authors and Owners: The Invention of Copyright*, Cambridge, Mass: Harvard University Press. p. 72
[315] Warburton, W. & Hurd, R., 1811. *The works of the Right Reverend William Warburton*, Printed by L. Hansard & sons for T. Cadell and W. Davies. p. 408

> He who makes an utensil, in imitation of another he sees made, must necessarily work with the same ideas the original proprietor had, and so fitly acquires a property in the work of his own hands. But the most learned book in all the world may be copied by one who hath no ideas at all. What pretence, then, hath such a one to property, in a work of the *mind*, who hath employed, in copying it, only the labour of the *hand*.[316]

It is only at this late stage that we see the idea of knowledge as a substance – as the sort of resource that one could enclose or leave in the commons.

Warburton's treatise was not an altogether disinterested exercise in metaphysical speculation – he was heir to Pope's copyrights which, as Rose points out, puts him in something like the position of a publisher. Moreover, the question of author's rights had, since Pope's case was argued before Hardwicke, taken on rather more commercial significance. Booksellers in Scotland had emerged as a powerful source of competition for the London congers, and had even started printing unlicensed copies of works whose statutory term had expired. Warburton's letter thus constituted one small, but very significant, salvo in a half century dispute that the newspapers referred to as "The Battle of the Booksellers", an epithet that accurately captured the bitterness of the emerging commercial struggle between the established booksellers of the London congers, and the emerging Scottish printing industry.

The London Booksellers' strategy was now to argue that the Statute of Anne was merely a supplement to an existing common law right that authors had always held in their works, and that instruments like printing patents and the Stationers copies had been realisations of. Thus, in an ingeniously specious piece of legal reasoning, the emerging idea of authorship articulated by Warburton was put to work as the transcendental principle that publishing monopolies had always been based on. Through a combination of canny identification of suitable forums, careful selection of cases, and one attempt at outright collusion, the stationers established a favourable precedent in 1769, in the case of *Millar vs. Taylor,*[317] to the effect that authors held a common law right in their work that was unaffected by the statute. In effect, copyright was held to be perpetual.

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[316] Warburton, W. & Hurd, R., 1811. *The works of the Right Reverend William Warburton,* Printed by L. Hansard & sons for T. Cadell and W. Davies. p. 409

[317] Goldstein, P., 2003. *Copyright's highway: from Gutenberg to the celestial jukebox,* Stanford University Press. p. 36

The ruling stood for only five years, however. Alexander Donaldson, a Scottish bookseller from outside the Stationers' Company, had built up his business in large part through the printing and sale of works whose statutory term had expired, some of them to the English provinces. Copyright's status being less certain under Scottish law, this had taken place in something of a legal grey area, and had constituted a significant source of irritation for the Stationers for some years. Uncertain of what the outcome of a legal challenge might be, in the early 1760s they sought to eliminate the threat using the conger system, tightening still further the integration of wholesaling, supply and final sale. Scottish booksellers felt the pressure correspondingly, and Donaldson actively sought legal confrontation, opening a bookstore in London, and using it to sell unlicensed copies of books whose protection under statute law had already expired. Faced with such a challenge in their traditional power centre, the Stationers were forced to act. The ensuing legal battle was appealed up to the House of Lords where, in 1774 arguments were heard in the case of *Donaldson vs. Beckett.*

Donaldson's case before the house was, in part, a recapitulation of the standard arguments about the evils of monopoly. Such ideas, however, had become increasingly sophisticated over the course of the century and there now existed a growing body of ideas that advocated free trade in terms of its positive benefits. Donaldson was fond of presenting himself as a principled free trader from the Scotland of Adam Smith.[318] Whilst one might legitimately harbour some reservations about the excessively close fit between principal and convenience in Donaldson's specific case, the characterisation of *Donaldson vs. Beckett* as a clash between Scottish liberals and more conservative defenders of the *status quo* seems correct. The House of Lords record for *Donaldson vs. Beckett* recounts the aggressive Whiggishness of the counsels for the appellants – John Dalrymple and Edward Thurlow – in marvellous detail. Much was made by Dalrymple of the authoritarian beginnings of the claims of "common law rights" in the Stationers Company:

> Sir John then stated the history of the institution of the Stationers Compnay. He said, it was instituted in the reign of Philip and Mary, princes who ruled with a despotic sway; that they, like every other despotic prince, wished to crush the liberty of the press; the booksellers, however, acquiesced in the Act, because such of them as were members of the Stationers Company were benefited by it.

The proposed common-law right was here presented as a mere vestige of a less enlightened age. Its limitation, by contrast, was argued in Smithian terms – open commerce would increase the general

[318] Cobbett's "Parliamentary History of England", London, 1806-1820, vol. XVII

wealth:

> Besides all this, sir John contended, that a decision in favour of the appellants would benefit authors, promote trade, and increase the revenue. It would benefit authors because the old stock upon booksellers' hands becoming common, authors would be applied to for new works; hence trade as well as authorship would be served, and the revenue by consequence encreased considerably.[319]

These arguments for Donaldson narrowly carried the day, and the notion of a perpetual common law right was narrowly rejected: texts whose statutory protections had expired were held to be part of the public domain.

The "chimerical idea of the actuality of literary property"[320]

One important point here is that the relationship between property rights and limitation is not one that narratives of public and private, or enclosure and commons, are necessarily very well equipped to capture. In the property context, enclosure suggests the replacement of social understandings with the less flexible and more absolute restrictions of law and physical protections. Enclosure, in short, is about putting up barriers.[321] By contrast, the Statute of Anne was more concerned with demolishing, or at least limiting, them.

This does not, however, mean that it in any way resisted the commodification of writing. Indeed, as John Brewer describes, the liberalisation of the book trade was a vital step in the commodification of culture:

> Scottish political economists and their followers believed that property acquired value not because it was a 'thing' that was owned, but through its circulation and exchange in a system of commerce. The application of this view to literature not only bolstered the case against

[319] Cobbett's "Parliamentary History of England", London, 1806-1820, vol. XVII pp. 962-3
[320] Cobbett's "Parliamentary History of England", London, 1806-1820, vol. XVII pp. 962-3
[321] Boyle, J., 2003. The Second Enclosure Movement and the Construction of the Public Domain. *Law and Contemporary Problems*, 66, p. 35

> monopolizing booksellers… but focused public attention on a literary system… The end of perpetual copyright helped to clarify the idea of a national tradition and simultaneously created a commercial environment in which it could be realized. Any enterprising publisher could now compile his own anthologies of plays, poems or essays.[322]

Limited copyright vested in the author reflected the Enlightenment belief in the need to encourage the production and circulation of ideas, alongside an increasingly stable belief that such ideas were produced by rational, independent individuals. The limiting of copyright terms, then, was *both* a repudiation of strong property rights, *and* a significant step forward in the commodification of culture. The public aspects of such a process, meaning those processes through which ideas were allowed to circulate unrestricted, were as important as the restrictions that allowed authors to make temporary profits. As Habermas has famously put it:

> Inasmuch as culture became a commodity and thus finally evolved into "culture" in the specific sense (as something that pretended to exist merely for its own sake), it was claimed as the ready topic of a discussion through which an audience-orientated (*publikumsbezogen*) subjectivity communicated with itself.[323]

But the reverse was also true – by removing restrictions to printing, the limitations on copyright allowed the "audience orientated subjectivity" to communicate with itself more freely, and thus to develop apace. A robust public domain that printers could exploit resulted in cheap editions of works whose copyright had expired, edited anthologies of classics, voluminous literary criticism and opinion: all helped to cultivate a national market for books.

This account presents a challenge to the sort of account of IP that sees its expansion as a straightforward triumph of commodification and liberal values. Consider this, from Karl Polanyi, describing the success of the liberal creed: "What made economic liberalism an irresistable force was the congruence of opinion between diametrically opposed outlooks; for what the ultra-reformer Bentham and the ultra-traditionalist Burke equally approved of took on the character of self-evidence."[324] Compare this to Miranda Burgess's description of Donaldson vs. Beckett:

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[322] Brewer, J., 1997. *The Pleasures of the Imagination: English Culture in Theeighteenth Century*, London: HarperCollins.*Pleasures of the Imagination* p. 480-1

[323] Habermas Strucutral Transformation p. 29

[324] Polanyi, K., 2001. *The Great Transformation*, Beacon Press.

> Donaldson was a landmark in British literary and political culture... Its influence may be felt, in particular, in the new political alliances that were expressed by writers degrees of support for or opposition to commercial freedom, as expressed in their reactions to the competing claims of Donaldson and the London Congers. For refocusing British liberalism and conservatism... the effects of Donaldson vs. Beckett may be compared in character, though not in historical duration or geographical extent, to those of the 1745 Jacobite Rebellion. The New Whig conservatism of Edmund Burke, for example, stood firmly against Scotland's "pirate" printers and in support of established trade... Attorney General Thurrow, on the other hand, damned Beckett and his colleagues as 'impudent, monopolising men.'"[325]

Copyright was a subject on which political consensus was pretty scarce – there was little agreement about whether the right at stake was an author's property or a publisher's monopoly.

This lack of consensus was in part a result of the fact that the Statute of Anne was intended not so much to create a right for authors, as to ensure that rights were no longer the exclusive preserve the London Booksellers – the "ignorant and lazy stationers" against which Locke had railed. My account has made much of this, and in doing so it closely follows Patterson's excellent *Copyright in Historical Perspective*. For Patterson, and for me, the vesting of the right in the author has been over-emphasised, to the extent that many modern accounts interpret the act as having been meant to provide for authorial rights in a much more considered and fundamental way than seems warranted. The author, in this account, was more a useful tool for breaking the monopoly of the Stationers Company than an end in himself. It might be thought that too much is being made of this point. As May and Sell argue:

> Although Patterson accords little weight to this difference, to us it seems fundamental; from whom else could a copyright be purchased in the first instance if not an author (at least for new works)? [The vesting of copyright in the author] is a significant move into the realm of property in the production of authorial outputs, the clear commodification of literary property.[326]

The practical effect of the Statute was, after all, to ensure that authors were systematically granted rights in their copies. This is, quite obviously, its most lasting legacy, the only reason that copyright scholars keep returning to the text of a three hundred year old document. For May and Sell (and it is

[325] Burgess, M.J., 2000. *British fiction and the production of social order, 1740-1830*, Cambridge University Press. p. 86

[326] May, C. & Sell, S.K., 2006. *Intellectual Property Rights: A Critical History*, Boulder, Colo: Lynne Rienner. p. 93

easy to see their point) the current copyright regime Statute of Anne unquestionably put in place is its most enduring legacy. It is a legacy with material effects which, as they go on to show, are making themselves forcefully felt to this day. In the face of this real, and increasingly ugly, record, is it not rather perverse to speculate about what the drafters *thought* they were doing?

Patterson's argument, however, is not so much that the vesting of the right in the author was not significant, as that it was not very well thought through. Whilst the Statute was undoubtedly "a significant step into the realm of property", it was also a very confused one. This confusion, for Patterson, is the real historical legacy of copyright: "The developments following the enactment of the statute created the principle source of discontent for copyright. This was the ill-considered transformation of a protection for publishers created by the Stationers' Company into a corresponding right for the author created by law."[327] The legislative jiu-jitsu of the drafters vested monopoly rights over the production of books in the author, and this in turn became the accepted method of granting rights to the immaterial "intellectual property" that those books were later taken to embody.

As the discourse of the creative individual with an authorial property right in their work was developed and stabilised throughout the 18th century, it was too readily accepted that the natural form of such a right was a monopoly right developed in the 16th century to organise the activities of printers and book-sellers. By the 19th century, Thomas Babington Macaulay's claim that monopoly was generally an evil, but a necessary one if authors were to be remunerated without recourse to some form of patronage, was simply an objective statement about how the world worked. The conventional wisdom has moved on very little since. Patterson again:

> The ideas – that copyright is a monopoly; that copyright is primarily an author's right; that the author has natural rights in his works that must be limited by statute, once stated by the courts became a fixed part of the heritage of copyright... Copyright history thus gives us reason to pause: Is the concept as presently constituted best suited to resolve the fundamental problems of reconciling the interests, conflicting in some respects, compatible in others, of the author, the publisher, and society?[328]

[327] Patterson, L.R., *Copyright in Historical Perspective*, Nashville: Vanderbilt University Press, 1968. p. 223
[328] Patterson, L.R., *Copyright in Historical Perspective*, Nashville: Vanderbilt University Press, 1968. p. 225

Patterson helps us understand that copyright is not an assemblage – a coming together of different parts that might have stayed apart. He reminds us that the extensive regulatory apparatus that controls the circulation of books was developed for in a context of control and censorship. Rose and Brewer show us that literary works were not so much commodified, as invented for the purpose of saving it.

Copyright was not a necessary response to the public goods problems of knowledge, because copyright was not about knowledge. It was about books and manuscripts, and their regulation for a variety of purposes, both commercial and political. Once manuscript writers were made the centre of the system, they were recast "intellectual labourers" creating "knowledge goods." The conventional account of copyright thus has the matter exactly backwards

The conventional wisdom, meticulously articulated by Landes and Posner at the beginning of this chapter, posits the existence of ideas and things, and says that we have to pick one or the other. IP, for Landes and Posner, is fundamentally a zero-sum game – you cannot have benefits on one side without an equal and opposite number of costs on the other. Similarly, when IP is framed as a trade-off between a market for physical goods and a market for ideas, or commons and property, or public and private, any gain in the freedom of those in the physical world/commons/public has to come at the expense of the rights of the intellectual property owner, and vice-versa. In these formulations, you can have incentives for the writer of a text, or a free market for the manufacture of copies of it, but you cannot have both. Patterson argues that there may be more to say. In particular, he argues that the idea of rewarding writers, having been grafted on to the system of book monopolies, might perhaps be detached from it.[329] Such a prospect should seem agreeable to those who, like me, are attracted by the idea that there should be some sort of reward for those who engage in practices like writing, but unhappy with the restrictions on physical action that are put in place in order for that to happen.

Conclusion

This chapter has been a brief history of an episode that is already very well documented in the historical literature. I have charted the progress of printing monopolies from their use as a tool of

[329] Patterson, L.R., *Copyright in Historical Perspective*, Nashville: Vanderbilt University Press, 1968. p. 223-9

industrial development, through their association with censorship, to their recognition under the Statute of Anne and the subsequent development of the idea of authorship with which they are now primarily associated. Convincing stories can and have been told in which the same process is described as a manifestation of some underlying logic – capitalism, individualism, the marvellous self-organising power of the free market and the common law. The only difference I can claim for my history of copyright is that, following Latour and Thrift, it depicts logic and structure as not a cause but an effect of its history. In the final section, I go on to explain why I think this difference is important. A focus on contingency gets us away from the sort of teleological account of copyright where the system of protection we have now is the inevitable outcome of a logic that inheres to the production of creative works. Monopoly rights for copying came together in a mish-mash of royal grants, aggressively worded lobbying campaigns, established business practice in the printing trade, popular suspicion of arbitrary power, outlandish metaphors and hundreds of other things. Had the mix been just a little different, they could have been abolished altogether, or granted in perpetuity, or left in the hands of publishers. In still more alternate histories, writers activities might have been funded exclusively by the state, or by patrons, or undertaken only by leisured hobbyists. In particular, they might have been funded through rights to writing that were much more effectively decoupled from the monopoly rights which were their predecessors. Presumably each of these systems would also have come complete with a Landes and Posner (or equivalent) to explain to us why that particular outcome was, in fact, the most efficient, and hence the only, possible result. But that does not mean we have to believe them.

CHAPTER 5: Assembling the commons

A science fiction writer coined the useful term "cyberspace" in 1982. But the territory in question, the electronic frontier, is about a hundred and thirty years old. Cyberspace is the "place" where a telephone conversation appears to occur. Not inside your actual phone, the plastic device on your desk. Not inside the other person's phone, in some other city. The place between the phones. The indefinite place out there, where the two of you, two human beings, actually meet and communicate.

Although it is not exactly "real," "cyberspace" is a genuine place... Since the 1960s, the world of the telephone has cross-bred itself with computers and television, and though there is still no substance to cyberspace, nothing you can handle, it has a strange kind of physicality now. It makes good sense today to talk of cyberspace as a place all its own...

People have met there and been married there. There are entire living communities in cyberspace today...[330]

– *Bruce Sterling*

Introduction

Spatial metaphors seem a natural tool for talking about digital networked communications. It is now entirely unremarkable to hear couples talk about how they "met" online before meeting in "reality", businesses complain that "cybersquatters" are currently occupying "domains" that should rightfully be theirs, and newspapers warn parents that the "online world" might not be safe for their children. The language of place is now so prevalent in our discussion of networked communications that we hardly even consider it to be figurative. Surely, people actually do meet (no scare-quotes needed) on the internet – how else could we see it? With this question in mind, it is interesting to consider the passage above, in which the activist and science-fiction writer Bruce Sterling explains the new concept of "cyberspace" to readers who had yet to acquire this vocabulary. More interesting than the fact that the concept once required explanation, however, is the explanation itself. Sterling does not expect his readers to take it for granted that telephone conversations happen in an "indefinite place out there, where the two of you, two human beings, actually meet and communicate." Indeed, whilst we are now comfortable talking about meeting in cyberspace, the vast majority of us still feel

[330] Sterling, B., 1992. The Hacker Crackdown - Introduction. Available at: http://www.dina.kvl.dk/~abraham/crackdown/crackdown_3.html [Accessed September 16, 2011].

no urge to employ spatial metaphors to explain how it is that we can be talking to each other on the telephone. It is only communication on the internet that seems to require us to postulate a "'place' where the telephone conversation appears to occur." "Cyberspace" directs our attention away from people sitting at screens and towards something rather more nebulous.

This is the same function that, as I argued in chapters 1 and 2, is performed by the term "intellectual property." Instead of seeing a collection of similar goods linked together by a monopoly right and a controlling assemblage, the idea of "intellectual property" directs our attention to a single, disembodied object, and so makes the controversies and compromises surrounding IP disappear. The property label makes IP seem much more natural and self-evidently sensible than it actually is. This is why, as I suggested in those chapters, the use of the "commons" as a focal point for countervailing political thought seems so misguided. By continuing the spatial metaphor, it accepts this naturalisation at face value.

In the first chapter, I summarised the tendency in critical thought to view questions of IP through the dialectic of enclosure and commons, whereby the commons was conceived of as a sort of space that must be preserved from the excesses of the logic of property. As I noted in that chapter, one of the criticisms of this strategy, forcefully made by Anthony McCann, is that to argue against IP rights in these terms is to argue on the basis of resource management – to claim that the management of knowledge through the commons was simply a more economically efficient way of managing knowledge.

McCann's critique identifies a certain ambiguity in the use of the word "commons." In one sense, the commons can refer to "a particular character of uncommodifying social relations in a localized context of community"[331] – a way of life that precedes capitalist developments, and is often swept away by it. In this sense the commons is – by definition – the antithesis of capitalist development. In another sense, however, the commons is simply a pool of resources that is managed in common. Defenders of the commons in this sense accept the basic framing the issue as a question of what is to be done with a particular resource, but emphasise that, as Elinor Ostrom has shown,[332] the fact

[331] McCann, A., 2005. Enclosure without and within the information commons'. *Information & Communications Technology Law*, 14(3), p. 222

[332] Ostrom, E., 1990. *Governing the Commons: The Evolution of Institutions Forcollective Action*, Cambridge ; New

that a resource is managed within a commons need not necessarily lead to a tragedy.[333] Rather, it is quite possible that management through the commons will, by the utilitarian standards of economics, contribute more to net welfare than management through the property system. This is true, argue proponents of this more measured commons, given that the resource in question is information: many of the traditional "tragedy of the commons" justifications for property seem less relevant when it is impossible to deplete the resource in question.

McCann's argument is that these proponents of the commons are essentially arguing in bad faith by pretending that they are fighting for the commons in the first sense, but actually agitating for the commons in the second sense: "It is an attempt to outline a notion of non-marketability without acknowledging that the attempt is taking place firmly within an overarching normative framework of free-market capitalism and orthodox economic discourses."[334] By assuming the garb of the commons, they attempt to place themselves in a long and honourable tradition of opposition to the expansionary logic of capitalism. All they are really offering, however, is a programme for realising orthodox economic goals a little more efficiently and a little less coercively.

In one sense, McCann's account echoes my own. Like McCann, I think the basic failure of the accounts of the commons is that they agree to treat knowledge as a sort of resource. Thus I think there is a significant problem with an account that sees IP in terms of an attempt to move a particular resource to within the realm of private property. As I argued in the first half of this thesis, to accept that knowledge is a substance is essentially to frame the debate on the terms of those who are looking to further the process of enclosure – knowledge that we see as a substance is more than halfway to becoming private property. Like McCann, I want to construct an account based around knowledge as communal practice, rather than as a resource that the community should have access to. His diagnosis of the strategy being employed here – a bait-and-switch between subtly different meanings of the word "commons" is also highly perceptive. There is, I think a fundamental ambiguity about the way that the trope of the commons is viewed.

York: Cambridge University Press.

[333] For a good example of this sort of approach, see Madison, M.J., Frischmann, B.M. & Strandburg, K.J., 2009. Constructing Commons in the Cultural Environment. *Cornell Law Review*, 95, p.657.

[334] McCann, A., 2005. Enclosure without and within the information commons'. *Information & Communications Technology Law*, 14(3), p. 224-5

Where I disagree with McCann is in the precise nature of this ambiguity. Whilst I think the resource management is ambiguous, this is not for the reasons he suggests. For McCann, the essential problem of the resource management view that it is not as anti-capitalist as it pretends to be. It pretends to be a sort of Luddism – opposed to commodifying social relations *tout court* – but in reality, it is at most a modest plea that some resources be managed in a novel way. It may even be, as McCann later suggests "open to accusations of complicity with, or, at the very least, enthusiastic participation in broader processes of enclosure."[335] Thus, the "information commons" for McCann is ambivalent with regards to capitalism, and shuttles back and forth between a stance of challenging it, and a stance of accommodating it. My own account, by contrast, locates the ambiguity of the commons not in its stance towards capitalism, but in its stance towards knowledge.

In this chapter, I argue that the "information commons" is indeed ambiguous, but that this ambiguity is not so much between anti-capitalism and capitalism, but between creation and discovery. The demonstration of this point takes the form of a genealogy of the idea of the commons. In the first section, I argue that the information commons, as developed by thinkers like Boyle, Lessig, and Benkler developed out of a specific concern with the regulation of information on the internet. This view saw the online communities as engaged in separate practices, of which the writing of Free and Open Source Software (FOSS) was perhaps the paradigmatic example, and IP rights as a threat to such practices. Crucially, they also saw the online world as literally that – a separate world: "cyberspace."

This idea of the online world as a sort of separate space originated, famously, in cyberpunk fiction, before the mass adoption of networked computing that took place in the nineties. In the second section I provide a short analysis of this cyberpunk, explaining the way in which it tied the idea of a transcendental kingdom to frontier narratives of exploration, individualism and colonisation. As Martin Dodge and Rob Kitchen, and John McGregor Wise all argue, the tropes of such fiction had an effect on the adoption of this technology, the culture surrounding it, and possibly the technology itself. In the third section, I examine this process, focussing particularly on the development of a politics of cyberspace, and in particular the claim that "information wants to be free."

[335] McCann, A., 2005. Enclosure without and within the information commons'. *Information & Communications Technology Law*, 14(3), p. 224

There are, I argue, two ways to interpret the claim that information wants to be free, depending on whether one adopts the creation or discovery view of information. Insofar as one views information through the lens of creation, the claim is a radical challenge to intellectual property – that cyberspace is a realm in which there will be no property. The project of capitalism is defeated in cyberspace, as capitalists belatedly realise that the key source of wealth in the modern economy is impossible to own. Viewed through the lens of discovery, by contrast, it is simply a claim cyberspace is a realm of "friction free-capitalism." The project of capitalism is completed in cyberspace, as all the transaction costs that bedevil transactions in the material world are overcome in the ideal one. My argument is that "the commons," as applied to IP, is in fact a combination of these two views.

In this chapter I first look at the origins of the term cyberspace, coined by William Gibson and popularised in his work *Neuromancer*. I briefly survey that work, noting that it constitutes a very explicit meditation on the sorts of dualism discussed in earlier chapters. I examine the cyberspace metaphor in some detail, noting its reliance on older ideas of the kingdom of heaven and the American frontier, before examining how the idea was put to use by the builders and political activists of the early Web. I then consider how the trope influenced the legal scholars who sought to develop a politics of IP based on metaphors of environmentalism and the commons in the late nineties and early twenty-first century, noting the influence of cyberpunk fiction in both direct and more subtle ways.

My argument is that, by providing an appealing metaphor for thinking about issues of information as essentially *spatial* issues, cyberpunk fiction provided one important imaginative resource for the accounts of "enclosure", "public domain" and commons" that now pervade the politics of IP. Scholars thinking about law, and especially about IP law, in the modern age thought through these issues in terms of space, and cyberpunk fiction provided a vocabulary in which to talk about these issues. As described above, I think that this vocabulary has significant shortcomings and that we need to stop talking about information as a substance, and consider it in the pragmatic, relational, and object-oriented way I described in chapter 3. I conclude by offering some accounts from contemporary science fiction, taken both from an extensive reading of more than 50 post-cyberpunk works, as well as interviews with authors, that, I suggest, might provide such a resource.

The information commons

As McCann observes "[d]iscourses of 'the (information) commons' tend to be always-already couched within progress doctrines of technoboosterism, technoromanticism, and technodoctrine."[336] The point is well taken. Most accounts that use the enclosure/commons trope as a framework through which to examine IP rights draw on the internet for at least some of their empirical examples, and this is especially true when it comes to accounts of the commons. So for example, Debora Halbert's *Resisting Intellectual Property*[337] sets out its aims in terms of the development of the "cultural commons" and two of its five empirical chapters focus specifically on the issues of peer-to-peer networks and Free and Open Source Software. Yochai Benkler's *The Wealth of Networks*[338] – one of the most ambitious and far-reaching developments of an account of the knowledge commons – confines itself almost exclusively to questions about the internet. Christopher May's *The Global Political Economy of Intellectual Property*[339] offers a wide-ranging account of the harms caused through IP, but even here, its account of "openness" - the countervailing logic to "enclosure" - focuses largely upon the reaction against digital rights management schemes and the possibilities opened up by FOSS. In each case, some innovative use that people are making of networked technology is offered as a countervailing trend to IP – a commons that is either threatened by, or that offsets, enclosure.

In this section, I want to argue that this apparent "technoromanticism" is more than just a coincidence. Rather, the idea of the information commons is inextricably linked to a narrative of increased productivity and efficiency achieved through technology, of which FOSS is the central example. FOSS is the umbrella term for software released under any one of a variety of licences that guarantee the user the right to examine, modify and redistribute the software's source code. If the licence is a Free Software licence, as in the various versions of the General Public Licence, then any modifications or redistributions must also be licensed under the same terms. Software code – or any other sort of information – released under such a licence is thus available for anyone to use, and anyone to modify. The interesting point about FOSS is that it works, and it works well. The GNU/Linux family of operating systems, the Apache web servers and the Firefox web browser are

[336] McCann, A., 2005. Enclosure without and within the information commons'. *Information & Communications Technology Law*, 14(3), p. 231
[337] Halbert, D.J., 2005. *Resisting Intellectual Property*, London ; New York: Routledge.
[338] Benkler, Y., 2006. *The Wealth of Networks: How Social Production Transforms Markets and Freedom*, New Haven [Conn.]: Yale University Press.
[339] May, C., 2009. *The Global Political Economy of Intellectual Property Rights: The New Enclosures* 2nd ed., Milton Park Abingdon Oxon: Routledge. pp. 125-46

the amongst the most commonly cited examples of FOSS that work at least as well as their proprietary counter-parts. The online encyclopaedia Wikipedia is also frequently used as an example of the same basic process, whereby an online community will come together to work on a project, to which no-one has exclusive rights.

The fact that such a process is taking place at all, let alone producing high quality software, seems to pose a challenge for the standard account of IP rights. In this account, as I explained in the first chapter, creators are granted exclusive rights in the works they create, and this is meant to provide an incentive for them to go about their creation. But FOSS is software that is released under a licence that is designed to defeat what we usually think of as the whole point of IP rights – the exclusion of others from the use of information. In contrast to what are usually termed proprietary models – models of software development that use IP rights to exclude others from the software pending payment – FOSS deliberately sets out to ensure that everyone has access to it. The software is, as theorists of the enclosure/commons dialectic like to say, in the commons, but is nonetheless developed to a high standard. Thus whilst it would be a mistake to take this challenge to the justificatory narrative of IP too far – very few of those interested in FOSS suggest that its successes mean that IP has no role to play in information production – it does at least demonstrate that it is not always necessary.[340] It is proof that resources can be developed in a commons instead of through the mechanisms of private property.

FOSS has theoretical significance – it provides empirical evidence against the claim that IP rights are always needed if knowledge production is to take place. In order to understand the second reason for the importance of FOSS as an example, we need to think a bit about why FOSS works. After all, whilst it is easy to imagine that some individuals will sometimes write software for reasons other than the hope of being able to charge others for the privilege of using it, it does seem strange that this software should be of a standard that competes with the efforts of well-paid professionals. The answer to this paradox, in many accounts,[341] is that the question of incentives is less important than the fact of having immediate access to a large pool of workers. This is the

[340] Boyle, J., 2003. The Second Enclosure Movement and the Construction of the Public Domain. *Law and Contemporary Problems*, 66, pp.33-74.

[341] See for example Benkler, Y., 2002. Coase's Penguin, or, Linux and "The Nature of the Firm." *The Yale Law Journal*, 112(3), pp.369-446; Boyle, J., 2003. The Second Enclosure Movement and the Construction of the Public Domain. *Law and Contemporary Problems*, 66, p. 46; Himanen, P., 2001. *The Hacker Ethic, and the Spirit of the Information Age* 1st ed., New York: Random House.; Raymond, E.S., 1999. *The Cathedral and the Bazaar: Musing on Linux and Open Source by an Accidental Revolutionary*, Cambridge: O'Reilly.

significance of the Internet for the account of the commons: because an incredibly large number of people to have access to FOSS projects, it greatly increases the likelihood that individuals who wish to write software will discover those projects, and thus be able to contribute to them.

Moreover the virtue of this mechanism is that individuals *self-identify* for projects, rather than having to be assigned to them. The significance of this latter point only becomes apparent, as Yochai Benkler explains, once one realises that one of the more difficult problems of software development is not so much in incentivising contributors, but in assigning the right contributor to the right task. In a proprietary model, as Benkler argues, this can be done either through the firm – trying to work out which of a limited number of employees is best suited to a particular task – or through the market – using the price mechanism to try to discover the right person. Contributors to a FOSS project, by contrast, are those who have identified themselves as being likely to be able to contribute to a given problem. To the extent that FOSS out-performs proprietary software, in Benkler's account, it does so because it solves this co-ordination problem – it provides a mechanism for discovering the right answer to the question of who should work on what.

FOSS thus exemplifies an innovative third way, that Benkler terms "commons-based peer production,"[342] for developing software. Rather than using formal management structures or market pricing systems, this method allows projects to, in a sense, discover the programmers best suited to working on them, drawing contributors from the large pool of individuals connected to the network. But such a method works only to the extent that there are resources left in the commons for these thinkers to work on. As Benkler points out:

> The current heavy focus on strengthening intellectual property rights is exactly the wrong approach to increasing growth through innovation and information production if having a robust peer production sector is important to an economy's capacity to tap its human capital efficiently. Strong intellectual property rights, in particular rights to control creative utilization of existing information, harm peer production by raising the cost of access to existing information resources as input.[343]

By taking knowledge out of the commons, strong IP rights make it less likely that the sort of peer

[342] Benkler, Y., 2006. *The Wealth of Networks: How Social Production Transforms Markets and Freedom*, New Haven [Conn.]: Yale University Press.
[343] Benkler, Y., 2002. Coase's Penguin, or, Linux and "The Nature of the Firm." *The Yale Law Journal*, 112(3), p. 445

production that Benkler values will take place: more IP means less knowledge for the networked community to work on. FOSS and other peer production projects are not just interesting evidence against the theory that knowledge will not be developed without IP. It is also, as a practical matter, under threat from the extension of IP.

For thinkers like Lawrence Lessig,[344] Johnathan Zittrain,[345] and Yochai Benkler, FOSS – and the range of "commons-based peer production" processes that it exemplifies – is not simply the most compelling example of a commons. It *is* the commons. For each of these thinkers, the notion of enclosure and commons have use to precisely the extent that they can be used to tell a tale about the exciting creative possibilities released through creative technology, and the way that IP law threatens such developments. The "commons" in this sense, is simply just a place-holder for exciting new uses of technology that are threatened by an over-expansive IP regime.

All this, I think, helps us see that McCann sees of optimism about communications technology as "ironic, given other analysis that suggests that '[t]he development of . . . new Enclosures is being massively facilitated by the introduction of information and communications technologies.'"[346] Whether or not this technological pessimism is appropriate, it is important to understand that this is not simply a case of theorists of the information commons, being lead astray by their fondness for technology picking some bad examples of the commons with which to illustrate their case. FOSS is, as I have shown in this section, far more than just one example of a commons. It is, as Boyle puts it, "'the paradigm case' the core example, or irresistible counter-example, in shaping our ideas... the real-world spur to re-think the public goods problem, the tragedy of the commons, on which the economic rationale for intellectual property was based."[347] But such an example depends crucially on the internet – without which FOSS would no longer have access to the pool of volunteers that make it perform so well. More than this, for many legal thinkers, the commons is useful only insofar as it helps to describe internet-based activities that they see as threatened by strong IP rights.

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[344] Lessig, L., 1999. *Code: And Other Laws of Cyberspace*, New York, N.Y: Basic Books; Lessig, L., 2001. *The Future of Ideas: The Fate of the Commons in a Connected World* 1st ed., New York: Random House; Lessig, L., 2004. *Free Culture: How Big Media Uses Technology and the Law to Lock down Culture and Control Creativity*, New York: Penguin Press; Lessig, L., 2008. *Remix: Making Art and Commerce Thrive in the Hybrid Economy*, New York: Penguin Press.

[345] Zittrain, J., 2008. *The Future of the Internet and How to Stop It*, New Haven [Conn.]: Yale University Press.

[346] McCann, A., 2005. Enclosure without and within the information commons'. *Information & Communications Technology Law*, 14(3), p. 231

[347] Boyle, J., 2003. The Second Enclosure Movement and the Construction of the Public Domain. *Law and Contemporary Problems*, 66, p. 64

But this still leaves open the question of why we would talk about the commons in the oddly metaphorical sense in which Benkler uses it. If the concern is that IP enforcement interferes with the use of communications technology, why not just say that? The "commons" simply seems to confuse the issue. On this point, I think accusations of "technoromanticism" are exactly right. Accounts of the "information commons" are part of a tradition of thought that, as I describe in the next section, fuses individualism with the possibility of escape to an immaterial realm.

Neuromancer

Since its publication in 1984, William Gibson's Sprawl Trilogy – *Neuromancer*, and its sequels *Count Zero* and *Mona Lisa Overdrive* – has become a sort of foundational text for people thinking about the recent impact of information communications technologies (ICTs). More than twenty-five years on, the Sprawl Trilogy continues to offer uncomfortable and insightful parallels to contemporary problems; concepts such as the growth of corporate power as a challenge to the nation state, its symbiosis with organised crime and the commodification of life from the genome up were explored in *Neuromancer* long before they gained much currency elsewhere. As James Kneale and Rob Kitchin have observed, writing fifteen years after Gibson's first novel brought the movement to public attention, cyberpunk still provides a useful resource for geographical researchers in so far as it "details the destabilization of the modern period, maps out possible future spatialities of the postmodern condition, and provides cognitive spaces which are being used by individuals and institutions in conceiving and making future society."[348] *Neuromancer* was, famously, the novel that popularised the term "cyberspace", Gibson having coined it two years before in the novelette *Burning Chrome*. It is described by Gibson as a "consensual hallucination experienced daily by billions of legitimate operators, in every nation, by children being taught mathematical concepts. … A graphic representation of data abstracted from banks of every computer in the human system. Unthinkable complexity. Lines of light ranged in the nonspace of the mind, clusters and constellations of data."[349]

This conception of information as a separate space provides an example of the sort of very spatial conception of information that, in chapter 1, I suggested was a problem for theories of IP. Indeed,

[348] Kitchin, R. & Kneale, J., 2001. Science fiction or future fact? Exploring imaginative geographies of the new millennium. *Progress in Human Geography*, 25(1), p. 32

[349] Gibson, W., 1995. *Neuromancer* (Reissue)., London:Voyager.

the plot itself can be read as a development of this initial dualism. Case, *Neuromancer's* protagonist, is a contract criminal who, having tried to cheat an employer, has fallen on hard times. Gibson's twist on this hard-boiled staple is that Case is a hacker: a “cowboy” who made his living by “jacking” into cyberspace to commit sophisticated data theft and financial fraud, a process that requires the hacker connect their nervous system directly to the cyberspatial “matrix.” At the start of the novel, Case has had his nervous system damaged beyond repair by his former employers and can no longer access cyberspace. He is now committing a sort of probabilistic suicide in Tokyo, taking amphetamines, committing petty crimes and antagonising drug dealers, one of whom kills his some-time girlfriend Linda.

The possibility of redemption is offered when Case is apprehended by a “Street Samurai” called Molly, and taken to a meeting were a man called Armitage makes him the proverbial offer he cannot refuse. Armitage – brutally efficient but short on personality – offer's to have Case's nervous system temporarily in order to have him carry out a particularly difficult heist, on the understanding that the repair will be made permanent if the work is carried out successfully. By way of assistance, Case is provided with a recording of the personality of his old mentor, McCoy Pauley. The recording can interact like a normal person, but as the nature of the heist is revealed, it becomes clear that Armitage's lack of distinctive character is a result of a previous psychological breakdown. A former special forces operative, he was betrayed by his superiors, experienced a total breakdown, and was psychologically reconstructed by the principal for whom he now works as an agent.

That principal – Case's real employer – is a native of cyberspace: an artificial intelligence (AI) named Wintermute, designed by the eccentric mistress family of wealthy plutocrats called the Tessier-Ashpools and given free range of the Matrix. Realising that the personality he has constructed for Armitage is unstable and prone to breakdowns, he makes contact with Case directly, and explains his plans. Construction of entities above a certain level of intelligence is forbidden, but the AI's creator has circumvented this by making it one of a pair. Whilst Wintermute has extensive capabilities in terms of gathering and processing information, it is limited in terms of its ability for creative engagement, communicating with Case only through simulacra of people he already knows in the real world. Its goal is to merge with its counterpart – Neuromancer – an entity protected by formidable security systems in both cyberspace and the real world. The heist thus consists of a two-pronged attack – Case will deal with the cyber-security in the Matrix, whilst Molly will mount an assault on the Tessier-Ashpool family home in order to force them to release the physical locks.

The plan encounters difficulties on both fronts. Molly is disabled by the family bodyguard and Case, whilst entering the complex to rescue her jacks into a terminal controlled by Neuromancer. Neuromancer, who has no wish to be merged into a larger entity, traps Case in a closed virtual world in order to prevent him from carrying out Wintermute's plan. Here Case is reunited with Linda, his dead girlfriend. Convinced that she is simply a replica controlled by Neuromancer, he escapes and completes his mission, and helps Molly to complete hers. Before the two AI's are finally united, however, Neuromancer reveals to him that the virtual Linda was an entire person, not simply a construct like Pauley or Armitage: "I do not know her thoughts. You were wrong Case. To live here is to live. There is no difference."

Neuromancer thus incorporates a number of different sorts of dualism, including, but not limited to, the ones I have discussed in chapters 2 and 3 of this thesis. Fundamental to this is the division between the material world – "meatspace" – and the ideal world of "cyberspace", and it is instructive to note the way in which further divisions flow from this initial schism: Case is masculine and thus occupies the world of the mind, Molly feminine and consigned to the world of the body. Wintermute is a purely technological phenomenon – rational and objective, and thus capable only of representing and processing the material world, and thus ultimately subordinate to it. By contrast, Neuromancer is capable of actual creativity in a way that seems distinctively human.

Going forward, meditation on these sorts of philosophical distinctions became a key marker that a work of fiction was seeking to situate itself within the tradition. Even more than the inclusion of chrome and mirror-shades (usually thought of as the ultimate cyberpunk cliché) the incorporation of such themes was a clear signal to the reader that what they were dealing with here was cyberpunk, with works by authors such as Bruce Sterling and Rudy Rucker basing their fiction very explicitly on the these sorts of binaries. Perhaps the most engaging, and certainly the most deliberate, example of this sort of incorporation can be seen in Neal Stephenson's *Snow Crash,* which incorporates all the staples of cyberpunk fiction – a physical world dominated by rapacious corporations, an online virtual reality (this time called the Metaverse) to which people escape, a male protagonist who prefers to spend his online, a streetwise female co-protagonist more firmly anchored in the real world, and:

'Dualists believe in the binary universe, that there is a spritual world in addition to the material world.'

'Well, as a computer geek I have to believe in the binary universe.'

The Librarian raises his eyebrows. "How does that follow?"

'Sorry, it's a joke, a bad pun. See, computers use binary code to represent information. So I was joking that I have to believe in the binary universe, that I have to be a dualist.'

'How droll,' the Librarian says, not sounding very amused. 'Your joke may not be without genuine merit, however.'

'How's that? I was just kidding, really.'

'Computers rely on one and zero to represent all things. This distinction between something and nothing – the pivotal separation between being and non-being – is quite fundamental and underlies many Creation myths.'[350]

Indeed, *Snow Crash* can be read as a sort of destruction test of cyberpunk's guiding themes, explicitly addressing the genre's implicit dualisms and pushing them as far as they can conceivably go.

I explained in chapter 2 that one of the more persuasive critiques of IP focused on the way in which a focus on authorship and originality can become a distraction from the way the more collective and structural aspects of their creation. This is as true of cyberpunk of anything else, and it is worth remembering that the place of *Neuromancer* in cyberpunk's own creation myth can be overstated – cyberpunk did not spring forth whole from the mind of William Gibson. This is especially true of cyberspace – Gibson's most apparently original creation – which has a number of antecedents. In the next section, I consider two of the more important ones. One – the conception of the ideal in spatial terms – is at least as old as Plato's cave, and is frequently encountered in Western thought, most obviously in the Christian concept of the kingdom of heaven. The other, the use of the frontier as a metaphor for progress, is more recent. Cyberpunk's particular take on both of these, as I shall argue later in the chapter, has had important consequences for the way that political and theoretical accounts of IP have been formulated.

[350] Stephenson, N., 2003. *Snow Crash*, New York: Bantam Books. p. 194-5

The Kingdom of Heaven and the Open Plains

Much of the academic engagement with Gibson's work focuses on the way in which it incorporates a number of different philosophies and myths. The most obvious of these is the dualism between mind and body discussed above, which Dery sees as the books thematic core. Such a reading is supported by commentary from Gibson himself, who recalls that the novel was shaped by "some ideas I'd gotten from reading D.H. Lawrence about the dichotomy of mind and body in Judeo-Christian culture. That's actually what I was thinking about, and it's all there [in] that wool gathering Case does about the meat and what it needs."[351]

As Margaret Wertheim argues, the portrayal of the mind/body dichotomy in terms of two different worlds is itself a continuation of Christian themes:

> All this may sound rather radical, and many cyberspace enthusiasts have suggested that nothing like cyberspace has existed before. But on the contrary there is an important historical parallel here with the spatial dualism of the Middle Ages. As we have seen, in that time Christians believed in a physical space described by science... and a nonphysical space that existed "outside" the material domain. This nonphysical space metaphorically paralleled the material world, but it was not contained within physical space. Although there were connections and resonances between the two spaces, medieval spiritual space was a separate and unique part of reality from physical space. [352]

The other important myth that cyberspace incorporates is that of the frontier, and particularly of the idea of the frontier as a metaphor for progress and the advance of civilisation. The idea of a border between a bounded space of civilisation and a barbaric other is both long established[353] and quite general,[354] its use as a metaphor for progress is both more recent and more specific, being most closely associated with the 19th century historian Frederick Jackson Turner claim that the frontier was a distinctively American phenomenon. Turner's thesis was that the presence of an ever-expanding frontier was a decisive influence on the political and social development of the United States. In particular, he suggested that American political institutions and social attitudes were an

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[351] Gibson, William in Dery, Mark. 1996. *Escape Velocity: Cyberculture at the End of the Century*. New edition. Hodder & Stoughton Ltd. p. 248

[352] Wertheim, M., 1999. *The Pearly Gates of Cyberspace: A History of Space from Dante to the Internet*, London: Virago. p. 227

[353] Said, E.W., 2003. *Orientalism*, London: Penguin.

[354] See, for example, Nashihara, D., 2007. "Said, Orientalism and Japan" in Ghazoul, F.J., 2007. *Edward Said and critical decolonization*, Cairo:American Univ in Cairo Press pp. 241-53

adaptation of the more civilised traditions of Europe to the harsher conditions of the New World: "This perennial rebirth, this fluidity of American life, this expansion westward with its new opportunities, its continuous touch with the simplicity of primitive society, furnish the forces dominating the American character."[355] Whilst Turner's "Frontier Thesis" may no longer command respect as a sociological account, the romance of the frontier continues to exercise a profound influence on both the political[356] and artistic imagination. As Richard Slotkin has extensively documented, the frontier has proved a fecund and adaptable metaphor for American political actors seeking to situate their proposals and actions in terms of an over-arching national myth, appealing variously to the progressive, libertarian, and conservative strands that dominate American political thought; from Jefferson's ideal of a republic of pioneering smallholders, to Kennedy's call for the colonisation of a "New Frontier", to George W. Bush's *faux* cowboy persona, the symbolism of the frontier seems lend itself to nearly any political ideal.

In more narrowly literary terms, the frontier has provided American writers with both a flexible trope and a theme that is explored in many more works than just the Westerns that are its most obvious provenance, as Edwin Fussell has argued. Like Slotkin, Fussell also emphasises the malleability of the frontier, stressing the way the word has changed throughout the 19th century, losing the associations it had in the European context as it was adapted for use on the other side of the Atlantic:

> [T]he American frontier was sometimes a line and sometimes a space... the frontier was a figure of speech, gradually, but never entirely, sloughing off European implications as it assumed new functions in a new context... The frontier was the imaginary line between civilisation and nature, or the uncreated future.[357]

This dual conception of the frontier as both a line and a space eloquently summarises why the frontier continues to retain the political currency identified by Slotkin. The frontier was Janus-faced – symbolising both the inevitable progress of civilisation, as well as the as-yet-uncolonised space in which it might be possible to escape the excesses and predations of that progress.

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[355] Turner, F.J., 1996. *The frontier in American history*, Courier Dover Publications. p. 2-3

[356] Slotkin, R., 1992. *Gunfighter nation: the myth of the frontier in twentieth-century America*, University of Oklahoma Press.

[357] Fussell, E.S., 1965. *Frontier: American Literature and the American West*, Princeton, N.J: Princeton University Press. p.17

Given the strong association with narratives of progress, it is unsurprising that it is a well-worn theme in science-fiction – a genre that is largely concerned with speculation on that subject. As David Mogen suggested, writing in the early eighties:

> The frontier has simply moved to outer space now that the historical frontier has been domesticated. The frontier metaphor, applied to the future, expresses both deeply-ingrained atittudes towards the challenges the future represents – the spirit of the indomitable pioneer – and, in many cases, fantasy of a particularly American kind, expressive of desire to recover a sense of heroic purpose identified with the frontier past, a sense of infinite possibilities.

Immediately familiar to us from many of the novels of classic science-fiction authors like Asimov, Heinlein and Campbell, films like *2001: A Space Odyssey*, and TV series such as *Star Trek*, this blueprint of space as a venue of "infinite possibilities" to be explored with "heroic purpose" is the stereotype that most people still associate with science-fiction.

This preoccupation with space travel, however, is not a defining characteristic of the genre. There is no necessary reason why meditations on the "uncreated future" need necessarily involve the exploration of outer space. Indeed science-fiction's preoccupation with space is really a by-product of advances in transportation technology throughout the 20th century that made space colonisation seem a plausible topic on which to speculate. As one science-fiction author suggests, the science-fiction's preoccupation with these themes has relaxed as advances in transportation technology have become more incremental:

> SF was self-defined for its first sixty years -- roughly until 1968 – as being about progress in speed and power. However, the exponentiating increase in speed and power that typified the early 20th century (Jack Williamson, who was writing SF in the 1930s, crossed the American midwest as a kid in a covered wagon; he lived to see the current Space Station) dead-ended when it ran into barriers dictated by physics. We can go faster only if we want to use nuclear propulsion tech that is generally considered risky and undesirable, or if we want to burn unfeasibly large amounts of fuel.

One of the effects of this deceleration was to focus the attention of authors and readers on other technologies that were advancing fast enough to provide the sort of disruptive social effects that science-fiction has traditionally thrived on.

> But around the late 1940s some SF writers began at least thinking about progress in terms of another yardstick -- information and computing. This remained an embryonic thread until, I guess, the 1980s, when it burst upon the scene...
>
> What we see today is a whole generation of people... who have grown up *knowing* that airliners aren't going to go supersonic any time soon and that the flying car and jet pack have been postponed indefinitely, but also *knowing* that next year's laptop will have twice as much memory as the current one, for the same price.
>
> So the exponential (rather, accelerating sigmoid) curve from which the readership get their sense of wonder has changed from propulsion technology to information technology. [358]

As the interviewee points out, Gibson and the other cyberpunks did not invent the idea of advances in ICTs as a subject for science-fictional speculation, but they were a major factor in its popularisation. Central to this was the reinvention of the frontier as a space of information that could literally be explored by "console cowboys", this establishing a level of continuity with the more literally spatial preoccupations of the science-fiction tradition identified above by Mogen.

Cyberpunk's use of the frontier metaphor also reflected the trope's fundamental ambivalence – it's ability to function either as a celebration of the march of progress, or an elegy for those spaces and ways of life that were so far beyond the reach of that march. Much of the space colonisation literature had been cast in the former mould, with exploration of the frontier presented as the extension of the virtues of a civilised core. Cyberspace, by contrast, was not a frontier to be explored through the sort of benevolent governmental technocracy familiar to science fiction fans from Isaac Asimov and *Star Trek*. The heroes of cyberpunk were not enlightened scientists but rugged individuals – the cowboy and the ronin. Their goal was not so much to civilise the new world that they found but to escape the restrictions and predations of the world that they left: if the "meatspace" of Gibson's novels played to our fears by extrapolating a world from some of the more brutal contemporary dynamics of capitalism and militarism, "cyberspace" offered the possibility of escape. As the reach of government and big business got longer, hacker cowboys continued to occupy those spaces just a little beyond it.

[358] Anonymous author, interview, conducted by e-mail 12th January _____ 2009

Building a politics for the "new home of the mind"

I was delighted when scientists and corporate technicians started to read me, but I soon realised all the critical pessimistic left-wing stuff just goes over their heads. The social and political naivete of modern corporate boffins is frightening, they read me and just take bits, all the cute technology, and miss about fifteen levels of irony. - William Gibson[359]

In the last section I considered various cyberpunk works, explored some of the commentary on them, and explained how this interacted with my own work. In this section, I want to explain why this is important. *Neuromancer* is, after all, a work of fiction, written by an author who is self-consciously trying to be post-modern, and I have read a *lot* of cyberpunk; the revelation that cyberpunk grapples with the same sort of critical and philosophical notions that I have been discussing throughout this thesis might thus seem a little underwhelming. What is interesting about cyberpunk, however, is not so much that I have read it, as that so many other people have. The images of cyberspace that the cyberpunk writers developed in the eighties and early nineties had a profound influence on both the development of the early web, and also on the development of a politics of IP which, as I described below, that development helped to spur.

This first perspective emphasises that "cyberspace" was a marketing tool: of all the buzzwords circulated to garner enthusiasm for the "technological forced march"[360] that constituted the early promotion of the internet,361 "cyberspace" was probably the coolest – it at least seemed less gauche than the "information super-highway."362 A related claim is that the concept of cyberspace had an effect on the technology of the net itself. Science-fiction, in other words, extreme versions of such a claim hold that cyberpunk fiction is was performative –in the strong sense of literally enacting what it enunciated. Jack Womack even goes so far as to claim that *Neuromancer* may have been a decisive influence on the subsequent design of the World Wide Web:

> What if the act of writing it down, in fact, brought it about? When *Neuromancer* appeared, it was picked up and devoured by hundreds, then thousands of men and women who worked in or around the garages and cubicles where what is still called new media were, fitfully, being

[359] Gibson, W. in Dodge, M. & Kitchin, R., 2001. *Mapping Cyberspace*, London: Routledge. P, 186
[360] Nigel Thrift (2005) "It's the Romance, Not the Finance, that Makes the Business Worth Pursuing: Disclosing a New Market Culture" in *Knowing Capitalism* (London: Sage) p. 127
[361] Turner (2006)
[362] Albert Gore Jr. (1991) "Information Superhighways: The Next Information Revolution" *The Futurist* 1st January [available online at http://www.allbusiness.com/technology/internet-technology/150025-1.html, accessed 01/09/07]

> birthed…. So, rather than the theoretical Matrix, we now, thanks to those beautiful William Gibson readers out there in the dark, have the actual Web — same difference, for all intents and purposes, or it will be soon enough.[363]

Womack's claim is that many of the web's early designers purposely set out to build the alternate world they read about in cyberpunk.

The claim may sound outlandish when applied to *Neuromancer* specifically – Gibson himself has expressed considerable scepticism about it – but the suggestion that science fiction is performative in this very Latourian sense of becoming more real as it gathers objects and bodies around itself is compelling. As Dodge and Kitchin observe,[364] early nineties literature from the computer scientists, engineers and academics involved in developing early web applications is littered with references to cyberpunk fiction, and to Gibson's work in particular. Especially striking in this regard is Stone's claim that *Neuromancer* "provided the imaginal public sphere and reconfigured discursive community that established the grounding for the possibility of a new kind of interaction."[365] One very striking example is of Second Life, the online virtual reality community. Second Life reflects the Metaverse described by Stephenson both in its overall design – users are given control of customisable human-shaped characters and use these to interact with each other with very little in the way of centralised guidance,[366] revenue is generated by selling digital "real estate" which individual users may then develop themselves – as well as smaller details of terminology – online personae are termed avatars.

One interesting aspect of this relationship that Dodge and Kitchin highlight is its reciprocal nature. As computer scientists performed the visions of science fiction writers, the technologies they created were absorbed into the next generation of science fiction stories, which in turn influenced the goals of those involved in building the next technologies. Dodge and Kitchin also point to four other groups who, alongside computer scientists, they suggest were involved in similarly recursive relationships with cyberpunk writers. These included social scientists – especially those of a post-modern turn – as well as politicians, artists (other than novelists, obviously), and techno-enthusiast

[363] Gibson, William. *Neuromancer*. New York: Ace Trade, 2000. p. 269
[364] Dodge, M. & Kitchin, R., 2001. *Mapping Cyberspace*, London: Routledge. pp. 185-7
[365] Stone, A.R., 1991. Will the real body please stand up? Boundary stories about virtual cultures. In *Cyberspace: First Steps*. Cambridge, Mass: MIT Press, pp. 81-118.
[366] Roush, W., 2007. Second Earth. *Technology Review*, p.38. Available at: [Accessed April 5, 2011].

subcultures.

One group that they do not specifically address is the activists and academics seeking to develop a politics of the IP. This omission is unsurprising – the group overlaps with the five groups that Dodge and Kitchin do mention to such an extent as to be nearly a subset of them, and might anyway seem to be of rather specialised interest. All this notwithstanding, the development of the politics IP provides a particularly striking example of the processes described by Dodge and Kitchin. a five separate groups, but there is, I think, enough overlap between each to see them as different facets of a wider community linked around a shared enthusiasm for digital technology, and sharing an imaginative sense of the possibilities of that technology that were powerfully shaped by cyberpunk. The point I now want to argue is that, naturally enough, the tropes and ideas of cyberpunk also contributed powerfully to the politics that this group developed. The development of digital activism provides a particularly striking example of the processes described by Dodge and Kitchin. Starting with the formation of the tellingly named Electronic Frontiers Foundation (EFF), via development of "cyberlaw" as an area of legal study, cyberpunk has been a powerful influence on the politics of the internet, and thus, as I showed in the first section, for the politics of IP. It therefore behoves us to study that politics quite closely.

The account begins in the same place as Dodge and Kitchin's, with an observation of the effect that cyberpunk writings had on the community of computer programmers. Gibson's depiction of the computer programmer who, as Scott McQuire puts it, Gibson "clothed in the new romantic garb of outlaw hackers and console cowboys."[367] In doing so he provided an image makeover for a section of society which until that point had been somewhat short on cultural cachet. This association of online activity with outlaw status was picked up and amplified by the popular media, and the word "hacker," entirely devoid of any legal connotations when it was used to describe computer programmers in the seventies, soon became synonymous with the menace of online crime.[368]

According to its founders, the EFF resulted largely from their urge to preserve civil liberties in the face of the governmental response to the perceived threat. John Perry Barlow recounts how

[367] McQuire, S., 2002 "Space for rent in the last suburb" in Tofts, D., Jonson, A. & Cavallaro, A. eds., 2004. *Prefiguring Cyberculture: An Intellectual History*, Cambridge, Mass: MIT Press. pp.166-80

[368] Thomas, D., 2003. *Hacker Culture*, U of Minnesota Press. p.

encounters with law enforcement officials and young hackers led him to conclude the policy response to computer crime was a subject for concern by civil libertarians. The combination of misunderstanding of the issues involved on behalf of law enforcement with braggadocio and exaggeration on the part of the hackers was likely to lead a policy response driven largely by moral panic. As Barlow explained:

> The perfect bogeyman for Modern Times is the Cyberpunk! He is so smart he makes you feel even more stupid than you usually do. He knows this complex country in which you're perpetually lost. He understands the value of things you can't conceptualize long enough to cash in on. He is the one-eyed man in the Country of the Blind... Those who are comfortable with these disorienting changes must do everything in our power to convey that comfort to others. In other words, we must share our sense of hope and opportunity with those who feel that in Cyberspace they will be obsolete eunuchs for sure.[369]

This passage, and the document as a whole, is a notable example of the way in which the vocabulary of cyberpunk literature provided a way to formulate concerns about digital rights. It is also an early instance of a form of argument that, as Ann Bartow argues,[370] was to become a recurring feature of political approaches to the internet. The key element of this argument, for Bartow, is that there are key features of digital technology that are latent in it, and that are of value to, a particular community – most likely technically adept users.

One important aspect of this was the way that the territorial metaphor seemed to invoke a specific legal principle: if cyberspace was properly conceived as a separate territory, did it not follow that it should be subject to its own laws? The job of digital activists is to both explain those features, and to promulgate and explain their value to newcomers how might otherwise misunderstand them. This thesis, sometimes termed “digital libertarianism”, was most stridently expounded in Barlow's “Declaration of the Independence of Cyberspace”, which addressed itself to the governments of the world before blithely informing them that “[y]our legal concepts of property, expression, identity, movement, and context do not apply to us. They are all based on matter, and there is no matter here.”[371] Digital libertarianism Barlow's argument thus shifted thus operated in both an objective

[369] Barlow, J.P., 1990. Crime and Puzzlement. *The Electronic Frontiers Foundation*. Available at: http://w2.eff.org/Misc/Publications/John_Perry_Barlow/HTML/crime_and_puzzlement_1.html [Accessed April 5, 2011].
[370] Bartow, A., 2010. Portrait of the Internet as a Young Man". *Michigan Law Review*, 108(6), pp.1079-1106.
[371] Barlow, J.P., 1996. A Declaration of the Independence of Cyberspace. *The Electronic Frontiers Foundation*. Available at: http://w2.eff.org/Censorship/Internet_censorship_bills/barlow_0296.declaration [Accessed October 5,

and normative sense. In the first place, it claimed that governments had no moral right to enforce their rules in "the new home of the Mind." More fundamentally, attempts to do so were destined to fail – cyberspace being entirely immune from territorial authority. As Barlow put it "the frontier may well be permanent."[372]

The reason that this new realm was necessarily guaranteed a greater degree of freedom than that presided in the space of material things, rested on a claim about the fundamental nature of information itself, a claim that, as Barlow was keen to emphasise, had a much longer historical trajectory than cyber-libertarianism. Enlightened liberal thought had taken it as an article of faith that information was a wholly separate sort of substance, the characteristics of which were memorably described by Thomas Jefferson:

> That ideas should freely spread from one to another over the globe, for the moral and mutual instruction of man, and improvement of his condition, seems to have been peculiarly and benevolently designed by nature, when she made them, like fire, expansible over all space, without lessening their density at any point, and like the air in which we breathe, move, and have our physical being, incapable of confinement or exclusive appropriation.[373]

The related claim that "truth" – the better sort of information – was synonymous with a lack of human interference was a sentiment given a pointedly political emphasis in another of Jefferson's aphorisms, quoted at the end of an early draft of Barlow's Declaration: "It is error alone which needs the support of government. Truth can stand by itself."[374] Information, ran the slogan, wants to be free.

Whilst, to modern ears, Barlow's Declaration sounds almost hopelessly naïve – a fact not helped by the deliberately bombastic in which it is written – the proposition that the online world was a separate space that could not and should not be regulated like other spaces was taken very seriously in the mid-nineties. In particular, many legal thinkers saw treating cyberspace as a separate place as

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2009].

[372] Barlow, J.P., 1994. Jack In, Young Pioneer! *The Electronic Frontiers Foundation*. Available at: http://w2.eff.org/Misc/Publications/John_Perry_Barlow/HTML/jack_in_young_pioneer.html [Accessed April 5, 2011].

[373] Jefferson, T. in Barlow, J.P., 1993. IP on The Global Net. *The Electronic Frontiers Foundation*. Available at: http://homes.eff.org/~barlow/EconomyOfIdeas.html [Accessed October 16, 2009].

[374] Barlow, J.P., 1996. A Cyberspace Independence Declaration. *The Electronic Frontiers Foundation.* Available at: http://w2.eff.org/Censorship/Internet_censorship_bills/barlow_0296.declaration [Accessed October 16, 2009].

an attractive way of dealing with some of the theoretical problems that ICTs presented. The field of cyberlaw developed and grew rapidly throughout the nineties, initially in response to the claim that the internet seemed to provide new problems for the enforcement and application of law. As Johnson and Post argued,[375] the majority of digital communications takes place in multiple jurisdictions: a user in jurisdiction A might access a site hosted in jurisdiction B offering content hosted by a company incorporated in jurisdiction C. In jurisdiction A it is illegal to host such content, but in jurisdictions B and C it is perfectly legal to do so.[376] It might seem obvious that parties should abide by the law of whichever jurisdiction they were physically located in. But this created problems for enforcement – jurisdiction A's power to stop users accessing content was rather toothless if providers in jurisdictions B and C could continue to supply them with it perfectly legally. If the law was applied somewhere, it was argued, then the nature of the technology meant that it had to be applied everywhere.

Faced with conundrums like this, the spatial metaphor offered by Barlow seemed to be, at the very least, an attractive legal fiction through which to broker a compromise: one rule for the cyberspace, others for physical world. Amongst other problems that this would solve, the problems of copyright law seemed foremost amongst them. Copyright law, it was suggested, was a particularly glaring instance of wrong-headedness of attempts to apply the laws of the "real world" to the realm of cyberspace. The argument, extensively explored in chapter 3, was that the nature of the internet, where copying is universal and "information wants to be free" was inimical to attempts by rights-holders to withhold such information, such that "any simple-minded attempt to map traditional notions of "copying" onto Cyberspace transactions will have perverse results." Once gain, it was suggested that online copyright should be allowed to develop as a separate body of law under a separate jurisdiction:

> Treating Cyberspace as a distinct location allows for the development of new forms of intellectual property law, applicable only on the Net, that would properly focus attention on these unique characteristics of this new, distinct place while preserving doctrines that apply to works embodied in physical collections (like books) or displayed in legally significant physical places (like theaters).[377]

[375] Johnson, D.R. & Post, D., 1995. Law and Borders--The Rise of Law in Cyberspace. *Stanford Law Review*, 48,
[376] Yahoo! Nazi memorabilia case.
[377] Johnson, D.R. & Post, D., 1995. Law and Borders--The Rise of Law in Cyberspace. *Stanford Law Review*, 48, p.1367.

Treating cyberspace as its own legal place seemed an attractive solution for copyright, as well as a number of other issues such as data protection.

Barlow's factual claim – that cyberspace could not be made subject to territorial laws – has been qualified to the point of having been effectively refuted;[378] the normative claim that it should not, as I argued in the first section, continues to be a key concern for theorists of the information commons. This common heritage is strikingly illustrated in James Boyle's seminal article A Politics of Intellectual Property: Environmentalism for the Net? As discussed in earlier chapters, the chief concern of IP activists is that the law is being created exclusively for the benefit of rights-holders, with little consideration given to the rights of those who would make use of the protected subject matter. Heavy-handed enforcement being one of the chief ways through which online activity is regulated, common ground between the two groups was easy to find.

Internet governance in fact provided IP activists with some of their most compelling accounts of the regulatory capture and bad policy making. Boyle's paper considered contained one case study which considered the political failures associated with IP rights in any detail, and that was "the Clinton administration's proposal for copyright on the Net, a document that provided the blueprint for the last two years of domestic and international regulatory efforts to expand intellectual property rights." However, Boyle's argument was not simply that this example provided illuminated the way in which policy efforts typically skewed towards rights-holders. The case was significant because the Internet was itself the exemplar of the behaviour of information: "If the information society has an iconic form (one could hardly say embodiment) it is the Internet."[379] Boyle's principal justification for this theoretical move is that this is the key insight of cyberpunk fiction:

> Sadly for academics, the best theorists of the information age are still science fiction writers, and in particular cyberpunks – the originators of the phrase cyberspace and the premier fantasists of the 'net...
>
> The theme of cyberpunk is that the information age means the homologization of all forms of information – whether genetic, electronic, or demographic. I grew up believing that genes had to do

[378] See, for example, Goldsmith, J.L. & Wu, T., 2006. *Who controls the Internet?: illusions of a borderless world*, Oxford University Press; Lessig, L., 1999. *Code: And Other Laws of Cyberspace*, New York, N.Y: Basic Books.
[379] Boyle, J., 1997. A Politics of Intellectual Property: Environmentalism for the Net? *Duke Law Journal*, 47(1), p. 101

> with biology, petri dishes and cells, and computers had to do with punch cards and magnetic disks. It would have been difficult to imagine two more disparate fields. In contrast, cyberpunk sees only one issue – code – expressed in binary digits, or the C's, G's, A's and T's of a gene map.

From this follows the idea that IP law is the key nexus of power:

> The cyberpunk writers also offer us a legal insight. The more one moves to a world in which the message, rather than the medium, is the focus of conceptual and economic interest, the more central intellectual property becomes. Intellectual property is the legal form of the information age. Like most property regimes, our intellectual property regime will be contentious in distributional, ideological and efficiency terms.[380]

From here, as extensively explained in chapter 1, Boyle goes on to develop an account of why IP rights are being strengthened too much and too hastily: a re-enactment of the original enclosure in a new space.

In Boyle's account, cyberspace is seen as a place that must be protected from the expansion of capitalism. There is, however, another way to develop Barlow's insights. In this vein, John McGregor Wise describes how publications such as *Wired* managed to connect the supposed revolutionary radicalism of the early web to the needs of capital in "an interesting blend of corporate individualism and capitalist libertarianism." Hacker "cowboys" such as Case provided a prototype for the image that ICT transcendentalists adopted for themselves in the 1990s, shrugging off their corporeal constraints to become "rugged individualists... lone pioneers connected across the wire."[381] With only a slight shift in focus, these became the rational, autonomous individuals of neoclassical economics, finally free of the messy transaction costs and physical transitions that had bedevilled their bodily existence. Given an alliterative twist by Bill Gates, this was the electronic utopia of "friction-free capitalism."[382]

A good example of this sort of phenomenon is Chris Anderson's book *The Long Tail: How Endless Choice is Creating Unlimited Demand*. Anderson, an editor of *Wired*, argues that the dramatically reduced search costs and expanded geographical reach of online commerce allow markets to

[380] Boyle, J., 1997. A Politics of Intellectual Property: Environmentalism for the Net? *Duke Law Journal*, 47(1), p. 88
[381] Wise, J.M., 1997. *Exploring Technology and Social Space*, Thousand Oaks, Calif. ; London: Sage. p. 151-2
[382] Gates, B., 1995. *The Road Ahead*, London: Viking. pp. 180-1.

flourish for a much greater variety of works than might previously have been the case. Because physical stores cater to local markets, and have only limited inventory space, suggests Anderson, the choices available for consumers are sharply limited. Sellers are forced to focus on a comparatively small number of successful titles, at the expense of the wide variety of "niche" products that characterise the "long tail" of the book's title. Using the example of Hollywood films, Anderson asks us to imagine a graph of titles, on the x-axis, against box-office success on the y-axis:

> If you plot the data the usual way, it's the familiar shape. A few blockbusters dominate the high part of the curve at the left and a vast population of others (non-hits, to use the least pejorative term) account for the low part at the right…. When you plot a proper powerlaw on a log scale on both axes… you should get a straight line sloping down. The natural angle of the slope varies from market to market, but… the natural angle of a market is a straight line.
>
> But all too often, in the real world, it doesn't look like that at all. Instead, the curve starts off as a straight line and then simply dies.[383]

The argument is almost identical to Gates's, albeit with more a little more formalism. In cyberspace, they both suggest, economics works as it was meant to, approaching perfection as its subjects become ever more ethereal:

> …there is no simple divide between traditional retailers and Long Tail ones. Instead, it's a progression from the economics of pure atoms, to a hybrid of bits and atoms, to the ideal domain of pure bits. Digital catalogues of physical goods lower the economics of distribution far enough to get partway down the potential Tail. The rest is left to the even more efficient economics of pure digital distribution.[384]

Rather than seeing cyberspace as something that needed to be defended from capitalism, cyber-activists as In Boyle's account of the commons, Anderson's ideal domain could instead stress that is was the perfection of capitalism.

The idea of cyberspace can thus be developed in two, apparently very different ways. This

[383] Anderson, C., 2006. *The Long Tail: Why the Future of Business Is Selling Less of More* 1st ed., New York: Hyperion. p. 127. Emphasis added.
[384] Anderson, C., 2006. *The Long Tail: Why the Future of Business Is Selling Less of More* 1st ed., New York: Hyperion. p. 91

difference, however, is more apparent than real. This is because the question of whether one sees cyberspace as capitalism's exterior or its apotheosis depends entirely on whether one views the question through the lens of creation or discovery. To the extent that we see it as knowledge as a creation – as something that people have to make – then talk of the information commons may have a decidedly radical sound to it. Thinking of knowledge as a matter of discovery, the knowledge commons is just a claim that better communications will expand the market by uniting buyers and sellers, employers and employees.

This confusion between creation and discovery can be illustrated by thinking about "commons-based peer production" the process of group development for software like Linux and sites like Wikipeida that I described in the first section. This phenomenon, recall, is the irresistible example around which the commons builds. Indeed, in Lessig, Benkler and Zittrain's accounts, an information commons simply *is* commons on which peer production can take place. These sorts of resources, argue proponents of the information commons, are creations that do not need the incentives IP to inspire their creativity. Indeed, they will be destroyed if they are enclosed. As soon as we think about why this should be so, however, we immediately shift to the realm of discovery. The great virtue of peer production, as Benkler emphasises above, is that it allows the right developers to be discovered – an insight that Anderson pithily summarises when he says that "[o]pen-source software projects such as Linux and Firefox are the Long Tail of programming talent."[385]

Conclusion

In the introduction to this chapter I presented a problem. Accounts of the information commons, as Anthony McCann observed, claimed to be resisting enclosure, but situated themselves within a logic of resource management that seemed to further its logic. Was this to be explained as simple hypocrisy – as McCann seemed to suggest – or was there something else at work? In order to shed light on this puzzle, I first examined the information commons movement itself, arguing that both its central concern and its most compelling example was the sort of commons-based peer production described by Benkler. This process was concerned to keep resources in the commons, the better to take advantage of the productive possibilities of networked technologies. The use of

[385] Anderson, C., 2006. *The Long Tail: Why the Future of Business Is Selling Less of More* 1st ed., New York: Hyperion. p. 50

ideas of enclosure and commons, I argued could be traced back to a the metaphor of place that, as I described in the second section, was introduced by cyberpunk fiction. Drawing on ideas of transcendence and frontier narratives, this metaphor helped shaped give a sense of identity to online communities, and also provided a language in which they could express their politics. Narratives of the information commons, I argued, are developments of such a politics.

I now want to return to McCann, and his claim that accounts of the information commons are "open to accusations of complicity with, or, at the very least, enthusiastic participation in broader processes of enclosure."[386] This makes it sound as though the participants are acting in bad faith, claiming to stand for the resistance of commodification through IP rights, when they in fact support the expansion of capitalism through ICTs. But this sort of distinction only makes sense to the extent that we are assuming a divide between creation and discovery. Once we abandon that distinction, the fact that proponents of the information commons agitate for fewer IP rights, whilst simultaneously engaging in an enthusiastic championing of new forms of technology, will no longer strike us as contradictory, or even as particularly remarkable. They are simply two elements of the same argument.

Unlike McCann, then, I do not think that proponents of the information commons are acting in bad faith. Like McCann, I think that talk of the commons is implicated in a view of information that sees it as a sort of resource, and that this view is at best a distraction, and at worst actively harmful. As I argued in chapter 1, I think that the attempt to conceive of information as a sort of resource is both unhelpful and confusing. It is unhelpful because conceiving of information as a resource makes an account of it as property more plausible. It is confusing because, as I argued in chapter 2, accounts of knowledge as a sort of resource have trouble drawing a distinction between the resource itself, and the representation of that resource, and must thus always shuttle back and forth between the language of creation and discovery.

Such an insight helps us understand the apparent ambiguity that McCann identifies in the information commons. Insofar as we see information as creation, the rhetoric of the commons appears to be a call to keep the logic of commodification at bay. Insofar as we see it as being about

[386] McCann, A., 2005. Enclosure without and within the information commons'. *Information & Communications Technology Law*, 14(3), p. 224

discovery, the commons is simply a celebration of "friction-free capitalism." The rhetoric of the commons is thus always vacillating between whether the commons is a resource outside of capitalist markets, or is in fact a part of them.

This does not mean I share McCann's pessimism about technology. I think there is actually something very attractive about the potential for creative collaboration over networks, and I am worried that excessive protection of IP will threaten this sort of practice. But the important word is *practice*. If, as I suggested in chapter 3, we see knowledge not as a sort of substance, but instead as an assemblage of elements, we will no longer have to claim that the process of creating FOSS, or contributing to Wikipedia, is useful because it creates a useful sort of resource. Rather we will be able to judge it on its own terms.

CHAPTER 6: Assembling a compromise

This is the thing I'm most worried about. I'm most worried that you guys will settle with this rich company, you'll settle. And what that will mean is that people who are not rich, libraries or universities or other people who want to engage in the same kind of freedom to copy and to build indexes in exactly this way can't, because you've imposed a tax on this particular kind of use. And you've made it harder for the next Google to come along and to displace Google.
– Lawrence Lessig, 2005.

Introduction

On 17 November 2005, the New York Public Library held a public symposium, addressing both the legal and social merits of the Google Book Search (GBS) Library program. The project, which involved scanning works from several major research libraries in the US and UK, had been under way for more than a year. In September and October of 2005, however, the Authors Guild of America, and then a number of different American publishers, had sued Google, claiming that the Library program amounted to copyright infringement on a massive scale. Google claimed that its use of copyright works was allowed under US law. Pressing the claims of the authors and publishers were Nick Taylor and Allan Adler, respectively. Arguing against them were David Drummond, Chief Legal Officer at Google, and Lawrence Lessig, the legal academic.

The event was remarkable at the time, both for the level of public interest – the dispute had already generated a vast amount of media commentary – and the subtlety of many of the arguments involved. To this we can add that, in hindsight, it serves as a sort of synecdoche for the litigation more broadly. This is true in the sense that, as in most litigation, it was a confrontation between two parties. This confrontation however, was framed as a clash of values along the sort of explicitly dualist dividing lines that I described in chapter 2: objective vs. subjective, material vs. ideal, and enclosure vs. commons.

As I explained in that chapter, justifications for IP do not simply have to make the case that some sorts of knowledge are actual commodities in the world which have been created by the hard work of individuals. They *also* have to explain the status of all the knowledge that is not, should not, and

probably cannot, be subject to IP rights. In doing so, they have to make the much more fanciful claim that there are sorts of knowledge that exist in the absence of individual thinkers: naturally-occurring objective facts. These ideal representations of material reality are taken to be devoid of individual creativity, which explains why we do not go attaching IP rights to the knowledge that the sky is blue, or that $E = mc^2$. As I explain in the first section of this chapter, Google's business model and brand identity incorporated these linked ideas of discovery, objectivity, representation of a material world, and public ownership of knowledge.

Google was thus generally acknowledged to be an "open"[387] sort of company – "differently capitalist" in the sense of not relying on strong IP law for its business. The pairing of Google's legal team with one of the leading advocates of the digital commons – Lessig is the architect of the Creative Commons licensing system – was more than just a marriage of convenience. Like many Silicon Valley companies, Google's business depended on its being able to make certain uses of the copyright work of others. It relied on content that remained, to use the terminology of chapter 1, "in the commons," and as such expended considerable resources on making sure that that commons did not succumb entirely to the enclosure of copyright over-reach. When the settlement that Lessig had worried about eventually emerged, many in the technology community viewed it as, if not exactly a betrayal, then at least as a departure from the more principled stance Google had taken in earlier legal disputes,[388] a pragmatic if disappointing compromise.

This notion of compromise is in one sense exactly right – the proposed settlement was presented as an attempt to balance the competing needs of public access to knowledge with respect for the private property rights of individual owners. As I explain in the second section, it attempted to solve this problem of public access to culture by granting Google an exclusive right to digitise those "orphan works" whose copyrights had previously presented an insurmountable barrier to book digitisation. In return, the copyright holders would receive revenue from the project. However, as a

[387] See, for example, Christopher May, *The Global Political Economy of Intellectual Property Rights: The New Enclosures*, 2nd ed. (Milton Park Abingdon Oxon: Routledge, 2009). p. 139

[388] See, for example, Mike Masnick, "Short Term Profits Over Long Term Principles; Google's Caving On Book Scanning Is Bad News | Techdirt," *Techdirt*, October 28, 2008, http://www.techdirt.com/articles/20081028/1218012674.shtml, Fred von Lohmann, "Google is Done Paying Silicon Valley's Legal Bills," *Electronic Frontiers Foundation*, November 20, 2008, http://www.eff.org/deeplinks/2008/11/further-thoughts-google-book-search-settlement, and Lawrence Lessig, "For the Love of Culture," *The New Republic*, January 26, 2010, http://www.tnr.com/print/article/the-love-culture.

number of legal academics have argued,[389] this focus on a compromise between extremes obscures the fact that the settlement, if approved, could have effectively created an orphan works monopoly. Unlike any of its competitors, Google would have had an exclusive license to digitise works whose creators could not be found – what Randall Picker nicely terms "a private public domain."[390]

The first section gives a brief overview of Google as a company, and describes the way that public perception of Google has been structured around three related themes of mechanical rationality, market efficiency and "openness" (in the sense of not relying on copyright law). These three factors combine to give an impression of objectivity. The second section describes the dispute between rights-holders and Google – this controversy, I argue, was structured as a dispute along the dualist lines of creation and discovery. The final section explains the resulting settlement between the parties, and the possible concerns that would have resulted. My argument is that a perspective that focuses only on property and enclosure is blind to such concerns. A relational perspective, by contrast, lets us see them more clearly.

Google

The approach to web search that is Google's core business began life when Larry Page, a graduate student at Stanford University's computer science school, decided to focus his dissertation research on the structural relations between web pages. The project was to represent the rapidly growing world wide web in terms of its links. In terms of any particular web page, this meant being able to represent not just the trivially easy question of which pages it linked to – discernible simply by inspecting the page – but the more difficult one of which pages were linking to it. This was something one could only know once one had actually visited each of those pages and analysed their links. If one wanted to know the number of pages that linked to any particular page, in other words, one was effectively aiming to index every link on the web, or at least as much as possible – the value of the results was a result of aggregating as many different sources as possible, with authority being a result completeness.

[389] See, for example, James Grimmelmann, "The Elephantine Google Books Settlement," *Buffalo Intellectual Property Law Journal* (2010), http://works.bepress.com/james_grimmelmann/32, Randal C. Picker, "The Google Book Search settlement: a new orphan-works monopoly?," *Journal of Competition Law and Economics* 5, no. 3 (2009): 383 -409, and Pamela Samuelson, "Legally Speaking: The Dead Souls of the Google Booksearch Settlement," *Communications of the ACM* 52 (July 2009),

[390] Randal C. Picker, "The Google Book Search Settlement: A New Orphan Works Monopoly?," *Journal of Competition Law and Economics* 5, no. 3 (2009): 402

In practical terms, this meant finding, copying, storing and analysing data from as many of the web's tens of millions of available documents as possible, and then compiling and updating exhaustive indexes of which pages linked to which other pages. It was thus a resource intensive project, both in terms the man-hours needed to solve the mathematical problems involved in writing the software to crawl from link to link on the web and sort through the pages retrieved, and the hardware needed to store that information and perform the actual computations. Page addressed the first problem by taking on collaborators – most notably his friend Sergey Brin – and the second by begging, borrowing or buying computers and bandwidth, all in an attempt to build a map of the link structure of the web.[391]

The use of such a map should be familiar to academics – the importance of whose work has traditionally been measured by number and identity of citations. As Page and Brin emphasised in a 1998 paper, this sort of ranking function was particularly useful for the business of retrieving information from the web. Existing commercial means of sorting through web documents the web tended to rely either on painstakingly compiled human catalogues – such as the early Yahoo! – or automated search engines that ranked pages according to the frequency with which search terms occurred – as with Lycos. Both had drawbacks:

> Human-maintained lists cover popular topics effectively but are subjective, expensive to build and maintain, slow to improve, and cannot cover all esoteric topics. Automated search engines that rely on keyword matching usually return too many low quality matches. To make matters worse, some advertisers attempt to gain people's attention by taking measures meant to mislead automated search engines.

Accurate link data, they suggested, promised a remedy to these faults, combining the rapidity and scale of automation with a more nuanced measure of a page's importance:

> The citation (link) graph of the web is an important resource that has largely gone unused in existing web search engines. We have created maps containing as many as 518 million of these hyperlinks, a significant sample of the total. These maps allow rapid calculation of a web page's

[391] John Battelle, *The Search: How Google and Its Rivals Rewrote the Rules of Business and Transformed Our Culture*, Rev. ed. (London: Nicholas Brealey, 2006).

> "PageRank", an objective measure of its citation importance that corresponds well with people's subjective idea of importance. Because of this correspondence, PageRank is an excellent way to prioritize the results of web keyword searches.[392]

Whilst PageRank was not the only, or even the most important,[393] mechanism determining Google's ranking system, it has come to symbolise the algorithmic approach to search more generally. As such, it provides a readily accessible way of communicating Google's appeal.

By emphasising the algorithm, Google is able to direct focus towards what Lorraine Daston and Peter Galison term as mechanical objectivity.[394] As Daston and Gallistion describe, mechanical representation and logical structures are the historical tools with which scientists and philosophers have traditionally sought to banish the fallibility and idiosyncracy of the individual subject. Google's insistence that its rankings are objective in the sense of being constrained by structural rules, rather than subject to the whims of individuals has worked both as a marketing tool, and as a means of disavowing any value-laden aspects of its search result. In 2004, for example, when Google consistently returned an anti-semitic site in response to queries for the word "jew" the company issued the following statement: "A site's ranking in Google's search results relies heavily on computer algorithms using thousands of factors to calculate a page's relevance to a given query. Sometimes subtleties of language cause anomalies to appear that cannot be predicted. A search for "jew" brings up one such unexpected result."[395] By assuming the mantle of objectivity, Google could invoke a sort of naturalism to its results, freeing them from difficult questions about social relevance. Google was in the business of discovering facts, however distasteful those might turn out to be.

The same sort of mechanical precision also animated what was to become the company's principle method of revenue generation. When the operation was moved out of the university, and formally incorporated, advertising was a popular and obvious means of making money from web traffic, and search engines differed from the many of the early internet ventures whose stock, in 1999, was beginning to plummet, in one crucial respect – they could use the information gleaned from a users

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[392] Brin, S. & Page, L., 1998. The anatomy of a large-scale hypertextual Web search engine. *Computer Networks and ISDN Systems*, 30(1-7), p. 109

[393] Levy, S., Exclusive: How Google's Algorithm Rules the Web | Magazine. *Wired.com*. Available at: http://www.wired.com/magazine/2010/02/ff_google_algorithm/all/1 [Accessed June 22, 2010].

[394] Daston, L. & Galison, P., 2007. *Objectivity*, New York: Zone.

[395] Google, "An explanation of our search results," *www.google.com*, n.d., http://www.google.com/explanation.html.

search terms to target them with advertising that seemed much more relevant to what they were looking for. This access to the users intentions, combined with the ability to monitor whether or not they actually clicked on a particular link, meant that Google could offer a much more finely tuned and accountable way of purchasing advertising. Companies bid to have their adverts placed opposite search results – Google refused to place results within its search rankings – for particular search terms. Advertisers need only pay for those users who actually clicked on the links. The ranking of links to advertiser sites was itself determined not simply by the price bid for a search term, but by the product of that price and the number of users who clicked through on it, making the ranking simultaneously more reflective of users' interests, and more lucrative for Google.

The application of mechanical objectivity to its business operations seemed to embody another sort of objectivity – the natural working out of economic forces. Indeed, Google seemed to realise the aspiration, described in Chapter 5, of "friction-free capitalism" - of economic efficiency achieved through a move from the material to the ideal. A particularly good example of this phenomenon is Chris Anderson's book *The Long Tail: How Endless Choice is Creating Unlimited Demand*. In an argument that echoed Bill Gate's pronouncements, Anderson, an editor of *Wired*, argues that the dramatically reduced search costs and expanded geographical reach of online commerce allow markets to flourish for a much greater variety of works than might previously have been the case. Because physical retailers cater to local markets, and have only limited inventory space, suggests Anderson, the choices available for consumers are sharply limited. Sellers are forced to focus on a comparatively small number of successful products, at the expense of the wide variety of "niche" products that characterise the "long tail" of the book's title. Using the example of Hollywood films, Anderson asks us to imagine a graph of titles, on the x-axis, against box-office success on the y-axis:

> If you plot the data the usual way, it's the familiar shape. A few blockbusters dominate the high part of the curve at the left and a vast population of others (non-hits, to use the least pejorative term) account for the low part at the right…. When you plot a proper powerlaw on a log scale on both axes… you should get a straight line sloping down. The natural angle of the slope varies from market to market, but… *the natural angle of a market is a straight line.*
>
> But all too often, in the real world, it doesn't look like that at all. Instead, the curve starts off as a straight line and then simply dies.[396]

[396] Chris Anderson (2006) *The Long Tail: How Endless Choice is Creating Unlimited Demand* (London: Random

The argument is almost identical to Gates's, albeit with more econometric formalism – in cyberspace, Anderson suggests, economics works as it was meant to, approaching perfection as its subjects become ever more ethereal:

> …there is no simple divide between traditional retailers and Long Tail ones. Instead, it's a progression from the economics of pure atoms, to a hybrid of bits and atoms, to the ideal domain of pure bits. Digital catalogues of physical goods lower the economics of distribution far enough to get partway down the potential Tail. The rest is left to the even more efficient economics of pure digital distribution.[397]

Thus, in the second big push of new economy rhetoric that went under the banner of "Web 2.0", Google was the acknowledged standard bearer, not least because its initial public offering in August 2004 was perhaps the key event signalling, after the dot.com bubble, that one might again wax lyrical on the subject of the World Wide Web without being considered a dangerous lunatic. Google, as the staff at *Wired* were keen to proclaim, seemed to epitomise many of the key tropes that Web 2.0 commentators would employ: the aggregation of a "long tail" of small advertisers, the harnessing of "the wisdom of crowds"[398] through its page rank system and the provision of "software as a service" delivered over the web.[399]

In what may at first seem like a paradox, approaches that lionise this sort of friction-free capitalism are also apt to champion the commons. The two are linked through the Hayekian ideal of the market as a means of aggregating information.[400] James Surowiecki presents a version of this thesis in his book *The Wisdom of Crowds*, citing Google's Page Rank system, in which users' linking practices are used to calculate the importance of a given web page, as an example.[401] These processes, both Hayek's idealised market and Google's actual ranking system, obviously rely on the collection and incorporation of separate items of information into a larger whole. What is important is not the

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House) p. 127. Emphasis added.

397 Chris Anderson (2006) *The Long Tail: How Endless Choice is Creating Unlimited Demand* (London: Random House) p. 91

398 Kevin Allison, "Stock-picking sites: the next frontier for Web 2.0" *FT.com* 22 January 2007 [www.ft.com, accessed 11/01/2007]

399 See, for example, Tim O'Reilly (2005) "What is Web 2.0?" *Wired.com* 30th September [http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html, accessed 11/08/2007] "If Netscape was the standard bearer for Web 1.0, Google is most certainly the standard bearer for Web 2.0"

400 See Steven Best and Douglas Kellner, "Kevin Kelly's Complexity Theory," *Organization & Environment* 12, no. 2 (June 1, 1999): 141 -162. Also, Friedrich Hayek (1945) "The Use of Knowledge in Society" *The American Economic Review* Vol. 35 No. 4

401 James Surowiecki (2004) *The Wisdom of Crowds* (London: Abacus)

individual parts, but their movement within a system that is free from interference. The image of freely flowing information thus underpins both the economic triumphalism of Anderson's long tail, but also the rhetoric of the border-less information commons.

Google's preference for the objective over the subjective and the ideal over the material was thus accompanied by a favouring of the commons over individual property rights. This is an important point to emphasise. Google did not subscribe, at least in any obvious way, to the sort information capitalism described in chapter 1. In that chapter, I looked the way in which IP rights allowed for a straightforward commodification of information through what Christopher May terms "the construction of scarcity." This account sees the natural state of information as free, ubiquitous, and plentiful, and notes that this presents a problem for capitalists who wish to charge for it. IP rights take information out of its natural state and enclose it, much to the satisfaction of capitalists who can now effectively withhold information pending adequate payment. The logic of capitalism is thus logic of enclosure, always seeking to restrict the openness of information so that it can attach a price to it. The history of the early internet – an initially open "space" of freely flowing information that needed to be tamed and enclosed in order to be made safe for capital – provided this analysis with many of its most compelling case studies, as well as much of its political impetus. Companies looking to sell information products online developed business strategies, technological protections and lobbying campaigns in order to thwart information's supposed desire for freedom.

On one account, Google's business is simply a variation on this dynamic. Vincent Mosco was already arguing in the eighties that terms such as "the Postindustrial Society, the Information Age [and] the Third Wave... embody general attempts to glorify the technology and gloss over the fundamental problems that it creates or accentuates." In place of these, Mosco proposed "an image that better captures the spirit of computer communications today: the Pay-Per Society."[402] The possibilities that the new technologies offered for surveillance would, he suggested, usher in an era in which the use of information could be much more tightly monitored, and thus charged for, than had previously been feasible. One could literally have one's customers "par per bit".

If the dreams of publishers and other content owners of more precisely extracting every single

[402] Mosco, V., 1988 "Introduction: Information in the Pay-Per Society" in Vincent Mosco and Janet Wasko (eds.) *The Political Economy of Infomration* (Madison: University of Wisconsin Press) p. 4

aspect of value from their catalogues seem to fit easily within this framework, it is also worth noting that Google's primary means of generating revenue can be usefully conceptualised in this way. As Mosco argues, the "pay-per" process of selling ever-more-finely granular information commodities to people is "complemented by what advertising people call pay-per body. Advertisers have long known that the cornerstone of electronic media is the process of buying and selling audiences."[403] Under the AdWords system through which Google auctions search terms to those wishing to be displayed in its "sponsored links" section, payment is made for each user who clicks on one of the links: advertisers can literally "pay-per-body", paying Google only for those users who express interest in their product. Additionally, the data that Google gathers on consumer habits allows them detailed knowledge of those who use their search service, allowing for much more sophisticated, and invasive, targeting of advertising. As John Battelle puts it, much of Google's business is about allowing advertisers to "buy direct access to your intentions."[404]

As Randall Stross notes: "Google's search engine needs to access the entire internet... The company's very existence depends on advocates of an open online environment holding at bay the threat of encroachment by their opponents."[405] If Google sells accurately targeted advertising, and achieves this accuracy by relying on information that users have revealed about themselves, then it can do so only because of the vast quantity of digital content available over the internet. Without free, ubiquitous and plentiful information on the web, the company would not have a business. Google's constant need for new information to access, search and index puts it in conflict with IP businesses. As Allan Adler, one of the counsels for the American Association of Publishers in their case against Google, put the matter: "Google sells advertising in connection with the operation of its search engine. In order to keep that fresh appeal to advertisers, to continue to sell advertising in that context, Google has to constantly come up with new things to search for."[406] Google's continued cultivation of sources of data for indexing – web pages, newspaper articles, images, maps, scholarly articles, and of course books – required it to make copies of all these things. To the extent that these uses are covered by copyright law, their inclusion becomes more expensive and less profitable.

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[403] Mosco, V., 1988. "Introduction: Information in the Pay-Per Society" in Vincent Mosco and Janet Wasko (eds.) *The Political Economy of Infomration* (Madison: University of Wisconsin Press) p. 6

[404] Battelle, J. 2006. *The Search: How Google and its Rivals Rewrote the Rules of Business and Transformed our Culture* (London: Nicholas Brealey) p.170

[405] Stross, R.E., 2009. *Planet Google: How One Company is Transforming Our Lives*, Atlantic Books. pp. 21-2

[406] Allan Adler (2005) speaking at *The Battle Over Books: Authors and Publishers take on the Google Print Library Project*, 17th November, The New York Public Library [transcript available at http://www.nypl.org/research/calendar/imagesprog/google111705.pdf, accessed 09/08/2007]

Given this, throughout the first decade of the 21st century, the company had an obvious interest in ensuring that copyright law did not become too restrictive. As Randall Stross has it: "Google's search engine needs to access the entire internet... The company's very existence depends on advocates of an open online environment holding at bay the threat of encroachment by their opponents."[407] The idea of Google as a champion of the commons was both closely bound up with this idea of the company as profiting from the essentially academic and mechanical process of indexing the links between different sorts of knowledge. Google, after all, produces and owns only a vanishingly small percentage of the information which people use it to access, even though the vast majority of that information is subject to copyright. Thus, like many companies providing information access services, Google's continuing success thus relies on its being allowed to access copyright holders' content. This dependence on others' material gives these companies an incentive to promote robust copyright exceptions such as fair use and to try to limit the extension of copyright more generally. Google, as Fred von Lohman describes, has an interest in shaping the law to ensure a favourable business environment:

> Google's executives (like AOL's and Yahoo's before them) understand that shaping the legal precedents is a critical part of their business... Small timers tend to lack the resources to bring top-drawer legal talent to bear in these fights. As a result, they often lose, creating useful precedents for the Google's of the world. In fact, Google has already been successful in securing good precedents against unsophisticated opponents who thought that they could squeeze a quick settlement out of Google (Field v. Google, Parker v. Google). What the small-timers don't appreciate is that Google would much rather spend money on setting a good precedent than on settling.[408]

It is striking to note how exactly this mirrors the sort of "concentrated benefits/dispersed losses" problem described in Chapter 1. Recall that IP rights expand as a result of well organised campaigns by interests with a clear understanding of what is at stake in the decisions of international trade organisations, national legislatures, industry standard setting bodies and courts of law. The interest of the public, meanwhile, tends to be much more widely distributed and thus less well-suited to effective action. Google seemed to provide a much-needed counterweight to this dynamic: a well-organised business interest that needed to spend money on limiting IP rights in

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[407] Stross, R.E., 2009. *Planet Google: How One Company is Transforming Our Lives*, Atlantic Books. pp. 21-2

[408] John Battelle, "A Brief Interview with EFF's Fred von Lohmann on YouTube, Copyright, Google, and More," *John Battelle's Searchblog*, October 10, 2006, http://battellemedia.com/archives/2006/10/a_brief_interview_with_effs_fred_von_lohmann_on_youtube_copyright_google_and_more.

order to succeed.

Google is very aware of this synergy between its business interests and the political project of defending the "information commons":

> To understand our position in more detail, it helps to start with the assertion that open systems win. This is counter-intuitive to the traditionally trained MBA who is taught to generate a sustainable competitive advantage by creating a closed system, making it popular, then milking it through the product life cycle...
>
> Open systems are just the opposite. They are competitive and far more dynamic. In an open system, a competitive advantage doesn't derive from locking in customers, but rather from understanding the fast-moving system better than anyone else and using that knowledge to generate better, more innovative products. The successful company in an open system is both a fast innovator and a thought leader; the brand value of thought leadership attracts customers and then fast innovation keeps them. This isn't easy — far from it — but fast companies have nothing to fear, and when they are successful they can generate great shareholder value.
>
> Open systems have the potential to spawn industries. They harness the intellect of the general population and spur businesses to compete, innovate, and win based on the merits of their products and not just the brilliance of their business tactics.[409]

The company thus seeks to define itself partly by what it is, but equally importantly through what it is not – a closed and monopolistic system. Additionally, the company is a strong supporter of commons-based projects like open-source software, creative commons licensing and Wikipedia. Academics and civil society organisations with a focus on digital rights issues like privacy or freedom of information often receive prominent speaking opportunities, funding and even offers of long-term employment from Google.

This might appear to be pure cynicism on Google's part, a clear example of Jessop's dictum from chapter 1 about companies wanting open access to knowledge resources whilst wishing to exert the strongest control possible over the knowledge that they produce. Good capitalists want their inputs

[409] Rosenberg, J., "The meaning of open," *Official Google Blog*, December 21, 2009, http://googleblog.blogspot.com/2009/12/meaning-of-open.html.

to be cheap and their outputs to be expensive, and Google is no different in this regard; every new piece of information made publicly available on the web is an input to their search engine, and Google is itself an IP owner. The PageRank algorithm and numerous other processes are still under patent, and many other aspects of the search process are closely guarded trade secrets.

The company always claims patents are held purely for defensive purposes. Certainly, it has yet to actually enforce any of its patents in court and, as anti-software patent campaigner Tim Lee argues:

> Google derives little, if any, of its revenue from patent royalties and has managed to dominate the search engine marketplace without suing its major rivals for patent infringement. Indeed, it appears that the primary function of Google's patent portfolio is as a defensive stockpile to be used if any competitors should sue it for patent infringement. If that's true, then the only real effect of software patent abolition on Google would be that the company could lay off its patent lawyers.[410]

Whilst the last sentence may be something of an overstatement, the broader point is well taken. If Google wields monopolistic power in online search, this is not because it has leveraged IP rights to become a privately owned platform in the same sense as, say, Microsoft Windows or iTunes. Whilst the PageRank algorithm is perhaps the most intuitively accessible aspect of Google's dominance of online search, it is worth noting that the patent for it is actually held by Stanford University, and used under license by Google.

What Google does have, of course, is a quite stupefying quantity of personal data, including both the index of the web returned by its crawlers and the record of queries made of its search engine. This data can certainly constitute a formidable barrier to entry from potential competitors since, as Orren Bracha and Frank Pasquale emphasise, the search business is subject to network effects: "The more searches an engine gets, the better able it is to sharpen and perfect its algorithm. The result is that each additional user decreases the cost of a better quality service for all subsequent users. Thus, incumbents with large numbers of users enjoy substantial advantages over smaller entrants."[411] Its ability to exploit this information is not so much a result of its exclusive right over it, as of the

[410] Lee, T. 2008, "Patent Office finds voice, calls for software patent sanity," *Ars Technica*, July 28, http://arstechnica.com/tech-policy/news/2008/07/patent-office-becoming-a-voice-for-software-patent-sanity.ars.

[411] Oren Bracha and Frank Pasquale, "Federal Search Commission - Access, Fairness, and Accountability in the Law of Search," *Cornell Law Review* 93 (2007): 1181

massive physical infrastructure that the company has put in place in order to gather, sort and organise it. These include clunky, material factors like the quantity of storage space, processing power, and redundant capacity provided by a world-wide network of data centres; a preference for using cheap, commodified equipment rather than expensive hardware from dedicated suppliers; a resulting ability to expand quickly; and the good fortune to have been doing so just as the dot.com boom burst and left an oversupply of cheap bandwidth, programmers and engineers.[412] As the company's CEO, Eric Schmidt put it in 2007:

> Google, by any measure, is much more capital-intensive than our competitors, and we're much further along in the build-out of data centres... in an internet market where you deliver your services by computers with spinning disks we have a competitive advantage because we have the cheapest and most scalable such architecture... virtually all the capital goes into the expenses that are associated with running data centres... the computers, and the disks, and the appropriate networking hardware, and literally the buildings now that house them. It used to be, right after the bubble burst, that you could go and purchase these inexpensive data centres that had been written off by people who overbuilt. But those data centres are long gone, and that's been our primary focus.[413]

Whilst is often cited as the leading example of a purely web-based business, then, the company is not some ethereal presence existing in the realm of information, but a gigantic network of privately owned computers, many of which have to be located near power stations in order to keep running.[414]

The idea of Google as an industrial giant holding mountains of data is sharply at odds with our conventional idea of it as one of a new breed of information economy companies that make money from ideas rather than from material things. The idea that it can, and that Google is simply a company that exists in the web, is something the company carefully strives to cultivate. As Google Vice President Marissa Mayer emphasises: "We think that that's the best way to do things. Our users don't need to understand how complicated the technology and the development work that happens behind this is. What they do need to understand is that they can just go to a box, type what they

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[412] See Randall E Stross, *Planet Google: One Company's Audacious Plan to Organize Everything We Know*, 1st ed. (New York: Free Press, 2008). p. 47-62

[413] "Eric Schmidt, CEO of Google," *iinnovate*, March 19, 2007, http://iinnovate.blogspot.com/2007/03/eric-schmidt-ceo-of-google.html. [Podcast transcribed by author]

[414] Ginger Strand, "Keyword:Evil," *Harper's Magazine*, March 2008.

want, and get answers."[415]

This deliberately cultivated unobtrusiveness, as Siva Vaidhyanathan amusingly notes, makes Google something like the opposite of a panopticon – the surveillance structure designed by Jeremy Bentham, and invoked by Michel Foucault as a metaphor for the modern approach to regulating behaviour:

> In fact, companies like ChoicePoint, Facebook, Google, and Amazon.com want us to relax and be ourselves. They have an interest in exploiting niches that our consumer choices generate. They are devoted to tracking our eccentricities because they understand that the ways we set ourselves apart from the mass are the things about which we are most passionate. Our passions, predilections, fancies, and fetishes are what we are likely to spend our surplus cash on.[416]

Whereas Bentham's structure was meant to constantly remind the subject of its presence, and regulate their behaviour in so-doing, Google seeks to have its infrastructure fade into the background as much as possible – to make its users focus only on the information they are using without any giving any thought to the structures that provide it.

Google thus emphasises the objectivity of its results – the fact that they are discoveries rather than creations – and it does so in a number of ways. In the first place, it emphasises that these results are a representation, an image of some underlying reality. It strives to eliminate any trace of the individual subject from its rankings. Where human beings are making choices – in terms of the actual links made between sites – this is safely aggregated to appear as collective behaviour, rather than individual choice. It is something that is being represented, rather than an expression of something. That process of aggregation, of course, is itself kept free of any individual human contact – Google maintains that its results are determined algorithmically. Google also works very hard to ensure that its facts remain, as Latour would put it, in “black boxes” – that its users focus only on the fact itself, and not the work that has constituted it.

The point here is not that Google's results are “really” less objective than the company likes to

[415] Mayer in Vaidhyanathan, S. 2011. *The Googlization of Everything: And Why We Should Worry*. Univ of California Pr,

[416] Vaidhyanathan, S., 2008. Naked in the 'Nonopticon'. ChronicleReview.com. Available at: http://chronicle.com/free/v54/i23/23b00701.htm [Accessed December 10, 2008].

suggest. Rather it is to emphasise that, as I described in chapter 3, this objectivity, this sense that the service provides a robust set of facts about the internet, this sense that we are dealing with the discovery of something real rather than the creation of something made-up, is something that has to be performed. Google's facts are the result of an extensive assemblage of heterogeneous elements – individual links and their status as facts is marked by our willingness to forget that assemblage, to treat them as black boxes and not question their composition. In this, of course, they are completely unexceptional – as Latour would remind us, the same can be said of any fact.

The Controversy

Book digitisation was, in one sense, a natural project for the company whose self-proclaimed mission was "to organize the world's information and make it universally accessible and useful."[417] Much of that information is, after all, in books rather than on web pages. Understanding why the company took a stance confrontational enough to generate a lawsuit from several major publishing houses, however, requires some explanation. Google's actions become more comprehensible when one recognises that GBS is really an attempt to incorporate two very different sorts of project: the digitisation of older works, and the digitisation of works that have just come to market. Each has its own peculiar sort of difficulty.

The digitisation of recently published books does not usually present serious technological problems. These works are easy to get copies of, and already exist in electronic format. Digitization is either a matter of securing an electronic copy from the publisher, or of securing a physical copy, removing the binding and scanning the loose leaves. The main obstacle for an organisation looking to copy these works is legal – making a digital copy of an in-copyright work without permission carries with it a risk of being sued for copyright infringement. The large-scale digitisation of recent works can thus be a significant organisational challenge; if a would-be digitiser wants to include a work, she needs to clear copyright on it – contacting copyright holders and negotiating an agreement for the digitisation of each individual work.

The digitisation of older works books on any large scale – whilst it is also viewed as an eminently

[417] "Company Overview," *Google Corporate Information Page*, n.d., http://www.google.com/corporate/.

desirable aim – is an expensive and challenging engineering project, and in practice only a very few organisations can afford to do it to a large quantity of books in any sort of systematic manner. A wide range of different organisations have undertaken efforts at digitization using a variety of different methods. In doing so, they have used a variety of different methods: buying or building optical character recognition scanners; shipping books to India in order to take advantage of low labour costs;[418] and using gangs of volunteers – most often co-ordinated via the web – to type out works by hand[419] and proof-read the results.[420]

Further complications result when, for example, one wants to scan a work without damaging it; the digitisation process is much easier to automate if the books can be unbound and automatically fed in front of a scanner page-by-page. This is not always a responsible thing to do with very old works. Finally, there is a need to maintain an acceptable standard of accuracy to the original text. Surveying state of the art technologies in 2006, Karen Coyle observed that some could "claim to get from 98 percent to 99.9 percent accuracy, but much depends on original text and the physical quality of the item being scanned." Whilst this sounds impressive, "[a]ccuracy tests are often done on selected works, so one should expect that some works will not achieve this rate. Note that 99.9 percent accuracy still means that one character in 1000 is wrong, averaging over one error per modern book page."[421]

GBS should thus be seen as a fusion of two very different sorts of project. One focuses the digitisation of those recently published works whose inclusion has to be negotiated in order to avoid an expensive lawsuit. Google's attempt to woo publishers, the Google Publisher Partner program (later contracted to simply the Partner Program), encouraged publishers to volunteer their works for inclusion in Google's database on the understanding that only small amounts – the popular term was "snippets" – of the copyrighted work would be shown to the user, who would then be provided with information abut how to buy the book.[422]

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[418] Raj Reddy and Gloriana StClair, "The Million Book Digital Library Project," *www.rr.cs.cmu.edu*, December 1, 2001, http://www.rr.cs.cmu.edu/mbdl.htm.

[419] Michael Hart, "The History and Philosophy of Project Gutenberg," *www.gutenberg.org*, August 1992, http://www.gutenberg.org/wiki/Gutenberg:The_History_and_Philosophy_of_Project_Gutenberg_by_Michael_Hart#The_Project_Gutenberg_Philosophy.

[420] Newby, G. B., and Franks, C., "Distributed Proofreading," in *Proceedings of the Joint Conference on Digital Libraries* (presented at the Joint Conference on Digital Libraries, Houston, Texas, USA, 2003).

[421] Karen Coyle (2006) "Mass Digitization of Books" *The Journal of Academic Librarianship* Vol. 32 No. 6 p. 643

[422] See *The Google Book Search Partner Program Home Page* [https://books.google.com/partner/, accessed 15/07/2007] and Amended Settlement Agreement at §1 66, Authors Guild, Inc. v. Google, Inc., No. 05 CV 8136-DC

The Partner Program, undertaken as it was with the consent of the rights-holders, was relatively uncontroversial. The same could not be said of the project to digitise out-of-print works was pursued through a partnership with libraries: The Google Library Program.[423] On December 2004 the company announced that it had reached agreements with five major libraries, with others to be included as the project proceeded, to digitize their entire collections. Libraries were to be given a digital copy of each that they submitted – thus providing them with a cost-free means of digitisation. This presented no significant problems in the case of libraries which submitted only out-of-copyright works. However, three of the initial library partners, the Universities of Michigan, California and Stanford, allowed Google to scan in-copyright works as well as those in the public domain. Like the books included in the Partner Program, these works would be returned as search results, but would only have snippets displayed to users. Additionally, rights-holders who did not want their work included could have their work removed from the results by informing Google that they wished to opt out of the program.[424]

Google's scanning of these works – subject to copyright but scanned without the permission of the copyright holders – constituted the basis of a succession of lawsuits for copyright infringement. In September 2005, the Authors Guild of America sued Google on this basis. The Guild applied for, and was permitted to, have the suit certified as a class action, allowing it to act not just for its members, but for the entire class of authors whose copyrighted works appeared in the University of Michigan library, who would, as a consequence be bound by any decision issued. A month later, on October 19th, they were followed by five publishers: McGraw-Hill, Pearson, Penguin, Simon & Schuster, and John Wiley & Sons. These two cases were consolidated into one legal action in 2006, with the class amended to include all holders of US copyrights in books.[425]

Google was thus engaged in litigation not merely with named publishers, but with a general class of copyright holders in print works. In many ways, the interests of the two parties – Google and the

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(S.D.N.Y. Nov. 13, 2009) [http://www.googlebooksettlement.com/agreement.html, accessed December 1st 2009]

423 Amended Settlement Agreement at §1 66, Authors Guild, Inc. v. Google, Inc., No. 05 CV 8136-DC (S.D.N.Y. Nov. 13, 2009) [http://www.googlebooksettlement.com/agreement.html, accessed December 1st 2009

424 Jonathan Band, "Google and Fair Use," *Journal of Business and Technology Law* 3 (2008): 17-8

425 Case Management Order Regarding Coordination and Scheduling at 2–3, Authors Guild v. Google, Inc., 05 Civ 8136 (DC) (S.D.N.Y. May 22, 2006)

copyright holders – seemed irreconcilably opposed, a classic case of commons vs. enclosure. From this point of view, the key question was whether one particular use of a book – the scanning of it for the purposes of indexing – fell within the scope of copyright. Google's business, as discussed above, relied on the idea that it would be able to do such scanning freely in the context of web pages – that this particular use remained in the commons. GBS was an attempt to extend the same logic to the world of books. Rights-holders, by contrast, saw themselves as opposed to this move almost by definition.

The views of both sides were echoed and amplified as supporters of "property" and "the commons" coalesced around the two sides. Kevin Kelly, for example, offered a broad brush defence of digitisation in terms of the flourishing of discovery and efficiency, projecting forward to a time when digitization of books allows a "universal library" – all texts available to all people which "unlike the libraries of old… would be truly democratic, offering every book to every person." More than universal inclusion and access this process, suggested Kelly, would involve a rethinking of the effective unit of the book itself, as they are "unravelled into single pages or… snippets of a page", and remixed and interlinked with one another. Authors themselves will benefit from this "single liquid fabric of interconnected words and ideas", he suggested, as economic efficiency is increased: "[f]ar out in the "long tail" of the distribution curve – that extended place of low-to-no sales where most of the books in the world live – digital interlinking will lift the readership of almost any title, no matter how esoteric." [426]

John Updike, speaking at the Saturday Book and Author Breakfast of BookExpo America, took the opportunity for a rejection of Kelly's piece, and a championing of individual creativity: "the book revolution, which from the Renaissance on taught men and women to cherish and cultivate their individuality, threatens to end in a sparkling pod of snippets... So, booksellers, defend your lonely forts. Keep your edges dry. Your edges are our edges. For some of us, books are intrinsic to our human identity."[427] Arguing in a similar vein, Andrew Keen suggests that "attitudes concerning "authorship"... are undergoing a radical change... In a world in which audience and author are

[426] Kevin Kelly (2006) "Scan this Book" *New York Times* 14th May [available online at http://www.nytimes.com/2006/05/14/magazine/14publishing.html?pagewanted=4&ex=1305259200en=c07443d368771bb8ei=5090]

[427] John Updike, in Bob Thompson (2006) "Explosive Words" *Washington Post* May 22 [available online at http://www.washingtonpost.com/wp-dyn/content/article/2006/05/21/AR2006052101349_pf.html]. A recording of Updike's entire speech is available at *bookexpopodcast.com* [http://bookexpocast.com/2006/05/26/bea-2-john-updike-speech/, accessed 15/08/2007]

increasingly indistinguishable, and where authenticity is almost impossible to verify, *the idea of original authorship and intellectual property* has been severely compromised."[428] Michel Foucault and Roland Barthes would presumably have applauded, but Keen is less impressed, suggesting that this "culture of the ubiquitous remix is not only destroying the sanctity of authorship but also undermining our traditional safeguards of individual creativity."[429] The case of publishers and other content owners was frequently phrased in exactly these terms, a fight for individuality and creativity and that can only be achieved through a respect for the hard edges and solid boundaries of *property*.

These pronouncements about the progress of science vs. the creativity of the individual may seem somewhat removed from the case itself. The question that the lawsuit sought to determine, after all, was whether Google's conduct actually constituted copyright infringement. In the US, certain uses of third party uses of copyright material may constitute be allowed under the doctrine of fair use, and many commentators and legal academics, as well as Google themselves, suggested that the company's scanning of works for these purposes might just qualify as a fair use, although this outcome was by no means certain.[430] Even in this more focussed debate, however, the case seemed to centre around a trade-off between individual creativity and universal discovery.

I argued in chapter 2 that many questions about the expansion of IP turn on the question of whether we see knowledge as found or made, and in chapter 3 that there are no transcendental answers to such a question. The debates around fair use provide another illustration of this principle. The arguments on both sides were given a very public airing at the New York Library symposium. Rights-holders maintained that running a book index was a valuable commercial concern that was only feasible because authors had created works in the first place. As such, it constituted part of their property right:

> [Y]ou seem to want to limit authors and publishers to only being able to sell the book outright. That's the way they can exploit what they've created. Only sell the book outright. But if Google wants to unbundle the book, if Google wants to be able to use the database, and market the database in a variety of different ways in which database materials can be marketed, that's all right. But why shouldn't the

[428] Andrew Keen (2007) *The Cult of the Amateur: How Today's Internet is Killing our Culture and Assaulting our Economy* (London: Nicholas Brealey) p. 23. Emphasis added.
[429] Andrew Keen (2007) *The Cult of the Amateur: How Today's Internet is Killing our Culture and Assaulting our Economy* (London: Nicholas Brealey) p. 25
[430] Hannibal Travis, "Google Book Search and Fair Use: iTunes for Authors, or Napster for Books," *University of Miami Law Review* 61 (2006): p. 87-168

> authors get the benefit of doing that too? It's a new market created by technology. Is it only the people who create the technology who get the benefit of that market? Especially when the value in that market is not the technology alone but the content that the technology manipulates? [431]

One way of viewing the index, then, was as a creation – a construction that the authors, as much as Google, had provided the resources for. The suggestion that Google's scanning was fair use amounted to an argument that, as Lawrence Lessig maintained, Google was only providing facts about books: "The facts about those extracted words aren't the underlying work any more, that's just an abstraction from the work, and the thing that's produced doesn't interfere with the underlying interest that I think the copyright was granted to secure".[432]

The GBS dispute is thus another of those instances in which we see note the way that the boundaries of creation and discovery are not transcendental. They are not determined by the laws of metaphysics but constructed through heterogeneous networks. We usually assume that there is a neat division between objects and their representations: on the one hand there is the information that we use to categorise and describe books – facts like "813.54" that describe a world which includes the works of William Gibson. On the other there are those little nuggets of authorial creativity that comprise a book by William Gibson: well-crafted phrases about glyphed taxis, long-chain monomers, and concrete bunkers comprise the actual substance of the work, as opposed to being facts about it. But the possibility of digitisation opens up the possibility that they could become facts about it: the fact that a book contains a given sequence of words, after all, seems as much like a fact as its Dewey decimal number.

This epistemological question can also be phrased as an economic one. As I described in chapter 2, the idea of a "market for information" is indeterminate insofar as it proposes two separate, and contradictory roles for information. On the one hand, information is a commodity to be sold. On the other it is a market signal. The GBS case illustrates this point in a very straightforward way. As one author and fair use campaigner put it:

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[431] Remarks in Authors Guild. 2006. The Battle over Books: Authors and Publishers Take on the Google Print Library Project", The Celeste Bartos Forum, held at The New York Public Library, November 17, 2005. Edited for the Authors Guild Symposium. *Authors Guild Bulletin.*

[432] Remarks in Authors Guild. 2006. The Battle over Books: Authors and Publishers Take on the Google Print Library Project", The Celeste Bartos Forum, held at The New York Public Library, November 17, 2005. Edited for the Authors Guild Symposium. *Authors Guild Bulletin.*

> [T]he way that you become a reader is by happening on a book, through serendipity... And that's where Google... comes in. It attempted to put book content on an even footing with all the other information on the internet. This is why it was such a ridiculous thing for authors and publishers to get together and oppose Google for taking this on.[433]

According to publishers, Google was impoverishing them by taking for free a commodity that they would otherwise be able to sell. On Google's account, however, they were in fact helping the publishers by creating a market for their commodities, signalling their existence to searchers who might then be persuaded to buy them.

From the perspective of property and enclosure, then, Google and the publishers seemed diametrically opposed. This perspective conceives of the digitised index of books as a sort of resource, and asks whether it should be enclosed, as rights-holders demanded, or left in the commons, as Google would have liked. As I emphasised in chapter 1, however, viewing information as a sort of resource leads to its own problems.

Instead, as I argued in chapter 3, we should adopt a relational perspective and see information as an assemblage – something that results from the stabilisation of different networks. From this point of view, Google and the rights-holders look less different or, more precisely, the sorts of knowledge in which they are dealing look less different. Both the works that rights-holders sell copies of and the facts to which Google attaches advertising are produced through a process of stabilisation. The particulars of such stabilisation are of course different. In the case of rights-holders, works are singular, stable entities only insofar as the machinery of copyright enforcement works to regulate the circulation of actual copies of the works. Google's facts are stabilised through the crawling, storage and processing and analysis of the world-wide web. And both are seen as trafficking in ideas only to the extent that this process is black-boxed and forgotten.

This difference between the enclosure view and the relational view becomes apparent in the next section, in which I describe the settlement that the two parties reached. In return for a share of advertising revenues, the proposed settlement – which the court has disallowed – would have released Google, and only Google, from the copyright claims of rights-holders. This arrangement

[433] Interview conducted 5th January, 2009

seems troubling for a number of reasons, but these reasons, I argue, are better articulated by a relational perspective – one that sees the settlement not as a compromise, but as a combination.

The Settlement

Alongside the legal question of fair use, there might seem to be a more practical question of why Google was scanning in-copyright works at all, especially since it already had a program for trying to persuade rights-holders to include their works. The partner program however, could only hope to incorporate those works which publishers were actively marketing – a tiny fraction of those in copyright. It was unlikely that rights-holders would bother to submit works that had been out of print for some time for inclusion. Indeed, in many cases, it was unclear who actually owned the rights to any particular work: there are thousands of publishers and millions of authors working in the US alone; many of these have gone out of business or died, leaving questions concerning who now owns the rights; publishing contracts negotiated more than twenty-five years ago tend to be understandably silent on the issue of digitisation rights; copyrights often, but not always, revert back to the author after a book has gone out-of-print, and authors and publishers may differ on what counts as "out-of-print" for these purposes. Where authors can be located, the process is long and expensive, and the majority of out-of-print books are thus classed as "orphan works": in-copyright works for which no owner can be found.[434]

Simply not scanning the books whose owners *could* be found was also far from satisfactory. Just as the search engine's authority rests in large part on the exhaustiveness of its index of the web, so a half-complete database of texts is less than half as attractive as a complete one. Einer Elhauge explains, commercial factors may make book digitisation an all-or-nothing proposition:

> [A] great deal of the value of [Google Book Search] comes from creating a common searchable database for locating and viewing a near-universal library of books. The whole is more valuable than the sum of its parts, and it is that collective value that makes it commercially feasible to offer books that otherwise would be commercially unavailable.[435]

[434] See generally US Register of Copyrights Report on Orphan Works (2006), available at http://www.copyright.gov/orphan/orphan-report.pdf.

[435] Einer R. Elhauge, "Why the Google Books Settlement Is Procompetitive," *The Journal of Legal Analysis* 2, no. 1 (May 17, 2010), https://ojs.hup.harvard.edu/index.php/jla/article/view/86.

Google is thus more interested in the collective value of out-of-print works than in particular titles. The point is not so much to offer access to individual works, but to present (apparently) complete, and thus authoritative, access to an impersonal body of knowledge.

This problem of orphan works constitutes a stumbling block not just for Google, but for anyone else looking to digitise out-of-print works. As Jonathan Band points out: the cost of tracking down a single author can easily surpass $1000, whilst the statutory damages for copyright infringement can amount to $150,000 for a single work – "the digitizing entity is caught between the cost of copyright infringement liability and the cost of copyright clearance."[436] Google's attempts to find a way out of this dilemma through litigation had the potential to solve this problem for other potential digitisers. Had the court accepted arguing the argument that scanning for the purposes of digitisation constituted fair use, the rule would have applied to everyone.

Rather than risk a potentially costly outcome, however, the parties opted to settle. The initial Settlement Agreement, dated 28 October 2008, granted Google immunity from copyright liability for its digitisation and uses of the books. Because the suit was negotiated as a class action on behalf of all owners of all US copyrights, this effectively solved the major barrier to book digitisation for Google. The class action mechanism allowed the Author's Guild to act on behalf of the rights-holders of orphan works, and thus to license them to Google, allowing it to scan them and include them in its index without fear of liability. The settlement also went much further in terms of the display of out-of-print and orphan works than would have been permissible under fair use, allowing Google to both sell and display adverts next to out-of-print works unless owners specifically opt out, with Google taking thirty per cent of the resulting revenue. The price at which books were to be sold was to be determined by an algorithm controlled by Google, designed to maximise the revenue from each work. The details of this would remain secret but rights-holders' representatives would be given regular access to inspect it on condition of non-disclosure. Additionally, it was agreed that Google would fund the creation of an independent Book Rights Registry, which would be charged with maintaining an up-to-date record of copyright ownership and organising payments to rights-holders.[437]

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[436] Jonathan Band, "The Long and Winding Road to the Google Books Settlement," *The John Marshall Review of Intellectual Property* 9 (2009) 230

[437] Settlement Agreement at 134, *Authors Guild, Inc. v. Google Inc.*, No. 05-CV-8136 (DC), available at http://www.books.google.com/booksrightsholders/Settlement-Agreement.pdf (accessed September 10th 2010)

The agreement attracted criticism from a number of concerned parties, including business competitors, non-profit digitisation projects,[438] the French and German governments[439] and disgruntled rights-holders.[440] Perhaps most significantly, the US Department of Justice (DoJ) issued a declaration of interest expressing the particular concern about a number of issues, a number of them relating to competition concerns. The DoJ was particularly suspicious of the suggestion that prices for books should be controlled by one central authority: "The Proposed Settlement also directs Google to develop a pricing algorithm to set default retail prices for individual books governed by the settlement. In other contexts, courts have repeatedly rejected as *per se* illegal the establishment of a joint price-setting mechanism."[441] This is a natural enough concern – one seller setting the price of a commodity so as to raise the maximum revenue possible is, after all, the definition of a monopoly, Interestingly, these objections seem to have been assuaged by Google's assurance that it's algorithm will simulate the functioning of actual competition:

> The Pricing Algorithm shall base the Settlement Controlled Price of a Book, on an individual Book by Book basis, upon aggregate data collected with respect to Books that are similar to such Book and will be designed to operate in a manner that simulates how an individual Book would be priced by a Rightsholder of that Book acting in a manner to optimize revenues in respect of such Book in a competitive market, that is, assuming no change in the price of any other Book. [442]

The DoJ's declaration also touched upon a more fundamental problem: the potentially exclusive license to digitise orphan works that the settlement was able to grant to Google. This, as it stated in its submission, seemed "to create a dangerous probability that only Google would have the ability to market to libraries and other institutions a comprehensive digital-book subscription."[443] Had Google successfully argued that digitisation and indexing of these works was fair use, that right would have

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[438] Most notably, Microsoft, Amazon and others joined with the not-for-profit Internet Archive to form the Open Book Alliance. Their *Amicus Curiae* brief to the court concerning the initial settlement can be found at: http://www.openbookalliance.org/wp-content/uploads/2009/09/OBA09082009googlebrief.pdf (accessed September 10th 2010)

[439] Notice of Intent to Appear by the French Republic, Authors Guild, Inc. v. Google Inc, No. 5-CV-8136 (DC); Memorandum of Law in Opposition to the Proposed Settlement on Behalf of the Federal Republic of Germany, Authors Guild, Inc. v. Google Inc, No. 5-CV-8136 (DC).

[440] See, for example, Supplemental Objections of Arlo Guthrie, Julia Wright, Catherine Ryan Hyde and Eugene Linden to the Amended Class Action Settlement Agreement Authors Guild, Inc. v. Google Inc, No. 5-CV-8136 (DC).

[441] Statement of Interest of the United States of America Regarding Proposed Class Settlement, Authors Guild, Inc. v. Google Inc, No. 5-CV-8136 (DC) p. 19

[442] Amended Settlement Agreement at 4.2 (c)(ii)(2) Authors Guild, Inc. v. Google Inc., No. 05-CV-8136 (DC)

[443] Statement of Interest of the United States of America Regarding Proposed Class Settlement, Authors Guild, Inc. v. Google Inc, No. 5-CV-8136 (DC) p. 24

been clearly identified as open to all – part of a commons to which both Google and its competitors would have had access. Instead the class action status of the case allows Google to negotiate with rights-holders as a single entity, and thus to negotiate a way around the orphan works problem for itself, whilst leaving it as a barrier to other digitisation efforts. As Randall Picker argues, "[t]he net effect of the agreement, bolstered by the unclaimed funds provisions, is to turn orphan works into a kind of private public domain",[444] and it is not clear that the amended settlement agreement did anything to help this problem.[445] There was thus a well-founded concern that the settlement will grant Google an effective monopoly over all uses of orphan works, and thus over all markets that involve comprehensive digitisation.

One possible way to see the settlement is as a compromise: the result of a battle between enclosure and openness – a question about public access to knowledge. Indeed, the way that the controversy was structured invites us to see it that way: it pits Google, a company that, as I argued in the first section, was commonly perceived as being on the side of openness – seeking to limit copyright wherever possible. Publishers, by contrast, regard it as almost self-evident that copyright should be stronger. As one former publisher frankly put it: "I've worked in commercial publishing so I've always seen things from the perspective of the rights-holder, and jealously guarding those rights, and battling away for term and wholly supporting any extension that might be in the offing."

Understanding the settlement as a dispute over knowledge may seem entirely natural. The dispute, after all, was framed as a clash between discovery and creation. On the one hand, advocates of fair use, alongside Google themselves, argued that digitisation of works for indexing purposes was not within the scope of copyright. It simply created facts about books, and allowed them to be discovered. Rights-holders, by contrast, argued that book digitisation was an annexation of their property – a whole-sale copying of work that they had created. Such a perspective, as James Grimmelman observes, makes a difference to how one evaluates the settlements:

> Both of these views... make simple, intuitive sense. One need not find them equally convincing to appreciate the philosophies behind them and the intellectual rigor that has gone into articulating

[444] Picker, Randal C. 2009. The Google Book Search Settlement: A New Orphan Works Monopoly? *Journal of Competition Law and Economics* 5, no. 3: 383 -409. doi:10.1093/joclec/nhp013.

[445] Picker, Randal C. 2009. Assessing Competition Issues in the Amended Google Book Search Settlement. *U of Chicago Law & Economics, Olin Working Paper U of Chicago Law & Economics, Olin Working Paper No.499* (November 16). http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1507172.

> them. They correspond, very roughly, to objections that the settlement goes too far or doesn't go far enough. At times it has seemed that the settlement was simply caught between the Scylla of overprotecting copyrights and the Charybdis of providing too much access, the twin poles of copyright policy since time immemorial. No compromise, no matter how elegant, could ever satisfy both camps.[446]

From the point of view of enclosure, then, the settlement seemed a messy compromise over the status of a particular sort of resource – the digital indexing of books. Whilst it did not go as far as some might like, and place the resource entirely within the commons, it at least overcame the worst problems of enclosure through the IP system. Works that had been kept from the public entirely would have been made available over the internet, even if only through Google's service. The settlement represented a balance between private and public, albeit a far from perfect one.

As Grimmelman observed, however, to see the settlement purely in terms of access to information was to miss an important point. In part this was simply a legal point – the settlement was not simply a question for copyright law, and but for class action and competition law. The competition concerns were discussed above – bringing together competing authors and publishers into a single arrangement for setting prices. This in turn was exacerbated by the fact that the suit was a class action – a device usually reserved for injured parties to claim compensation for past harms, was being used in this instance to bring rights-holders together in order to create a business arrangement going forward.

The unifying theme of both these concerns, for Grimmelman, was the concentration of power – the use of the law to focus multiple different entities into a single point. Such a view can also be applied to copyright, he argued, if one sees it in historical perspective:

> Meanwhile, copyright law also struggles with the danger of concentrated power. Modern Anglo-American copyright law was born with the 1709 Statute of Anne, a deliberate choice for creative and economic decentralization and a rejection of the concentrated power of the Stationers' Guild. But this decentralization also creates anti-commons problems (orphan works being only one example), which copyright worldwide often tries to solve with centralized institutions: registries,

[446] Grimmelmann, J., 2010. "The Elephantine Google Books Settlement," *Buffalo Intellectual Property Law Journal* , http://works.bepress.com/james_grimmelmann/32. p. 121

compulsory licenses, and collecting societies.[447]

This turn towards the historical is enlightening, because it lets us see the settlement not as a compromise, but as a combination – a folding together of smaller individual networks that the law had been at pains to keep separate.

From the perspective of concentrated power, then, the significance of the settlement was not that it would have aided public access to knowledge, but that it would have set up Google as the single channel through which orphan works could be sold.

> From the perspective of concentrated power, however, the actual proposed Authors Guild settlement, elegant though it may be, may also actually be worse than either extreme. A world with no sellers of orphan books and a world where anyone can sell them are both still primarily decentralized. The settlement, however, would create one seller of orphan books, pulling together all of the necessary rights into a single company's hands. This "compromise" between authors' rights and the public's access to books just so happens to also hand Google a dominant position in selling older books.[448]

The real significance, of the settlement, for Grimmelman, was the power that it concentrated in Google's hands.

Conclusion

As I argued in the first section Google's reliance on mechanical procedures to generate results, combined with its commitment to maintaining an unimpeded flow of online information, and the sense it cultivates of being an entirely web-based phenomenon, combine to make the company's services and business methods seem natural and unobtrusive. This is in stark contrast to the authors and publishers who, as copyright holders, portrayed their rights as creative, individualistic and solid – intellectual property rather than information monopolies. The legal dispute between the two thus played out along the sort of dualist lines that I described in chapter 2 – as a fight over a particular

[447] Grimmelmann, J., 2010. "The Elephantine Google Books Settlement," *Buffalo Intellectual Property Law Journal* , http://works.bepress.com/james_grimmelmann/32. p. 119

[448] Grimmelmann, J., 2010. "The Elephantine Google Books Settlement," *Buffalo Intellectual Property Law Journal* , http://works.bepress.com/james_grimmelmann/32. p. 121

use of information. The problem with this view, however, became apparent as soon as the parties opted to compromise, to find a middle path between the two extremes in the form of a settlement. From the point of view of enclosure and commons, such a settlement might seem second best – far from the sort of spirited affirmation of fair use that many were hoping for, but at least better than the total enclosure of the right to digitise.

Instead, the "middle ground" seems worse than either extreme. The reason, as I emphasised in the final section, is that the settlement is not a compromise at all. Instead, it is an accumulation. This becomes apparent as soon as one adopts the perspective given in chapter 3 – that ideas are not discrete ontological essences, but exist only through material assemblages. From this point of view, the settlement was an attempt to combine one system of producing stable ideas – the small system of monopolies we call copyright – by folding it into another – the universal system of facts produced by Google.

CONCLUSION

In chapter 1, I argued that IP is expanding, and this is in part a result of a campaign by rights-holders to ensure that their rights are viewed not as controversial monopolies, but as property. As I observed in that chapter, the problem for critical theory is that it too often accepts this framing, seeing IP rights as continuous with other property rights, even if knowledge – the substance over which such rights are granted – possesses special properties of non-scarcity and non-rivalrousness. The theoretical problem with such a view, I suggested, was that it implied two different and contradictory roles for knowledge: as well as being a substance to be allocated, it also functioned as a representation of that substance.

In chapter 2 I suggested that the tension between knowledge-as-substance and knowledge-as-representation was mediated by romantic authorship. By assuming a difference between individual perspective and objective knowledge, it was possible to make a distinction between creation and discovery, and thus between knowledge that functioned as a substance, and knowledge that was a representation of such a substance. The boundary between creation and discovery, I suggested, was not the result of the transcendental laws of epistemology, but was a construction. Indeed, much of the expansion of IP law could be conceived of as a reconstruction of the division, as knowledge that was previously seen as unownable fact was re-imagined as the product of human creativity.

Given the importance of this distinction, I suggested that critical theories of IP would do well to incorporate perspectives that, rather than assuming a boundary between creation and discovery as a premise of their enquiry, instead examined the construction of that boundary. Such an approach, I argued, would incorporate the insights of pragmatism, but would go further than the purely linguistic incarnations of that philosophy offered by Richard Rorty, in that it would be an account of objects rather than an account of language. The result of this move, I suggested, was that we should follow Actor-Network Theory (ANT) in seeing knowledge not as a sort of substance, but instead as an assemblage of different elements.

In the last chapter, I described the Google Book Search controversy, and its attempted settlement. Such a settlement could have been viewed as a compromise, a balancing act between the claims of authors and publishers, and the need for access to knowledge. Instead, I argued that seeing this as a

question of knowledge was a distraction – both the facts produced by Google and the creative works owned by rights-holders were, I argued, systems for regulating and controlling the proliferation of things. The settlement would not have been a compromise between these two systems, but a combination of them – a centralisation of power, as Grimmelman put it.

This analysis built on the perspective developed in chapters 4 and 5. In these chapters, I offered historical accounts of the way in which the idea of knowledge as a substance had come to stand for complex assemblages. Chapter 5 focussed on the genealogy of the commons. I argued that the defences of the information commons were largely a defence of the importance of the activities of particular communities made possible by access to networked technologies. This in turn was a reflection of the tendency to think of such communities through the metaphor of place. But this metaphor, I argued, simply caused confusion. Theorists of the information commons were, justifiably, excited by the new possibilities for communication and collaboration that were opened up by new technology, and concerned that IP rights threatened such collaboration. It was these practices, rather than a particular sort of resource, that they wished to defend. In chapter 4, I considered the origins of the English copyright system in the Statute of Anne. Here again, I argued that the notion of knowledge as a substance led us astray. Because copyrights are rationalised in terms of providing incentives for creative work, we see the passage of the statute as directed towards that end. The statute, however, was not so much an exercise in ensuring that creators had ownership of their ideas, as of recognising the interests of a printing trade that had historically divided up its monopoly according to particular works.

In order to understand the significance of this argument, it may be helpful to consider a sentence that, for a while, came to symbolise all that was new about "new economy", the management guru Peter Drucker boldly proclaimed that "[t]he basic economic resource... is no longer capital, nor natural resources, nor labour. *It is and will be knowledge*."[449] This thesis has been a sustained attack on this sort of concept of knowledge – a resource that some people have and others do not. I know of no better way of summarising such an attack than the aphorism offered by Latour in chapter 3:

> We do not think. We do not have ideas. Rather, there is the action of writing, an action that involves working with inscriptions that have been extracted; an action that is practised through talking to other

[449] Drucker, P., 1993. *Post-Capitlist Society*, Oxford: Butterworth Heineman. p. 7

> people who likewise write, inscribe, talk and live in similarly unusual places; an action that convinces or fails to convince with actions that are made to speak, to write and to be read.
>
> When we talk of thought even the most sceptical lose their critical faculties. Like vulgar sorcerers, they let thought travel at high speed over great distances. I do not know anyone who is not credulous when it comes to ideas... Maps, diagrams, columns, photographs, spectrographs – these are the materials that are forgotten, the materials that are used to make "thought" intangible.[450]

From this point of view, the answer to the thesis's first research question – whether it is possible for knowledge to be property – has to be negative. Knowledge cannot be property, at least not in the strong "constitutive principle"[451] sense of the word "property" offered by Burch in the first chapter, because knowledge is not a sort of substance. Knowledge, as Latour reminds us, cannot be abstracted from its assemblage, from the materials that are used to make it real. If it seems to be intangible – a public good that will, unless painstakingly constrained – spread at high speed, then this is only because its materials are so extensive.

In light of this insight, the second research question takes on a different meaning. The construction of a boundary between what is IP and what is not is seen not as a secondary question, but as a vital part of the claim that knowledge can be property. After all, Latour's point sounds, from one point of view, like common sense. Very few of us are actually committed to the idea that, somewhere behind and above the millions of aspirin sitting in bottles in medicine cabinets and chemists, there lurks one, ideal aspirin, of which all existing aspirin are merely the physical incarnations. Nonetheless, the view that knowledge is a substance, that each physical aspirin has some knowledge element that is conceptually distinct from the material substrate in which it is embodied, persists. The fact that it does so, as Rorty argues, is a result of the way that we think about truth. We maintain that knowledge is a substance in order to maintain the idea that reality can constrain us to believe things – that there is some sort of material inside of us in which the world can leave its imprint. Such a view relies on our making a distinction between discovery and creation – between knowledge that starts in the world and goes into the mind of the individual, and knowledge that starts in the mind of the individual and goes out into the world.

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[450] Latour, B. "Irreductions" in Latour, B., 1993. *The pasteurization of France*, Harvard University Press. p. 218

[451] Burch, K., 1997. *Property and the Making of the International System*, Boulder, Colarado: Lynne Rienner Publishers Inc.

But just because knowledge cannot be property does not mean that we do not need to worry. The widespread view that knowledge is, in fact, a resource has been accompanied by a claim that this resource must be well-stewarded – and that this should be done through IP rights. These rights of control – over bodies,[452] objects[453] and practices[454] – should concern us, the more so because rights-holders continue to successfully agitate for their extension.[455] This vocabulary of material harms, is actually what concerns us.

But how are we to articulate such harms? At this point, the language of substance returns in a different guise. As I described in the first chapter, one of the main arguments of theorists of the information commons is precisely that it allows us to give a unified account of such the harms caused by IP. As James Boyle put it:

> The idea of the public domain takes to a higher level of abstraction a set of individual fights – over this chunk of the genome, that aspect of computer programs, this claim about the meaning of parody, or the ownership of facts. Just as the duck hunter finds common cause with the bird-watcher and the salmon geneticist by coming to think about "the environment," so an emergent concept of the public domain could tie together the interests of groups currently engaged in individual struggles with no sense of the larger context.[456]

Boyle suggests that, in order for the various parties who are adversely affected by IP rights to conceive of themselves as having a common interest, they literally need a commons – some sort of substance, the defence of which they can all commit to.

I am not sure that this follows. Boyle argues that without a commons, there is nothing that unites those who are harmed by the extension of IP rights. But their unity is clearly to be found in the fact that they are, in fact, harmed by the extension of IP rights. These harms already have a point of unity – the copyright, patent and trademark maximalists who have organised in an effort to extend their rights. Their claim is that this unity has some sort of theoretical coherence outside of that

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[452] May, C., 2002. Trouble in E-topia: Knowledge as Intellectual Property. *Urban Studies*, 39(5-6), pp.1037 -1049.
[453] Gillespie, T., 2007. *Wired Shut: Copyright and the Shape of Digital Culture*, Cambridge, Mass: MIT Press.
[454] Lessig, L., 2004. *Free Culture: How Big Media Uses Technology and the Law to Lock down Culture and Control Creativity*, New York: Penguin Press.
[455] Sell, S., 2010. The Global IP Upward Ratchet, Anti-Counterfeiting and Piracy Enforcement Efforts: The State of Play. *PIJIP Research Paper Series*. Available at: http://digitalcommons.wcl.american.edu/research/15.
[456] Boyle, J., 2003. The Second Enclosure Movement and the Construction of the Public Domain. *Law and Contemporary Problems*, 66, p. 73

coalition – that all these separate rights are reducible to the principle of property, and that the question of IP is simply a question of whether one is for or against property. We do not need to construct the commons, we simply need to pay attention to political assemblage that is "intellectual property."

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