



**A MANIFESTO ON THE ABOLITION OF COPYRIGHT PROTECTIONS**

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## I: COMMUNICATION

The world, not just now but at all times, is and has been hinged on communication. At certain points in history there are revolutions in communications which expand the existing circles of communication, and create entirely new ones. By making it faster, cheaper, easier, and more accessible, each revolution continues a trend towards the *democratization of communication*.

Until relatively recently in human history, the only way to deliver a transcontinental message was to physically send a person or group of people carrying the message to the recipient far away. Depending on landscapes, weather and natural phenomena, martial situations in intermediate nations, and proximity of the two parties among other things, this involved constraints of time, cost, and effort that ranged from burdensome to absolutely prohibitive, and thus made intercontinental communication between people or entities completely infeasible without large amounts expendable capital.

The first steps towards the democratization of communication came on the heels of the Industrial Revolution - and have been accelerating ever since. Building on the innovations and discoveries of the properties of electricity in the early 19th century, the electrical telegraph was at the point of its invention the most significant revolution in long-distance communications ever. Now long-distance communication was neither limited by weather and visibility, as was the case with semaphores and smoke signals, nor by time and capital if you wanted to send a messenger. The *marginal cost* - the wholesale cost to deliver one additional message - of long-distance communication became nearly negligible.

It was not long before the telegraph network fragments that almost immediately sprang up began to conjoin. In 1861, the Eastern network connected with the Western network, unifying the United States in the first transcontinental communication network and effectively obsoleting the Pony Express, which shut down only a month afterwards. Just five years later in 1866, the network was made permanently transatlantic with several connections to Western Europe. Never before in history had communication between Europe and the Americas been cheaper or more feasible. Businesses could conduct transcontinental affairs in minutes rather than weeks, and individuals could employ a telegram service such as Western Union's to send letters across the nation or across the Atlantic in a fraction of the time it would take for traditional delivery.

The next revolution made long-distance communication even more accessible by cutting out the middleman. In the 1870s, a rapid series of innovations occurred to bring forth the modern telephone. The technology evolved rapidly bringing such innovations as the ring to signal incoming messages, the handset/cradle design, operator switchboards, and as the networks grew more interconnected, long-distance telephony. By 1927, two-way transatlantic calls were possible. Though the telephone business got its start in a similar fashion to the telegraph business, telephones had a much shallower learning curve - using your voice and listening for another was far easier than using and deciphering Morse code - and so were much more suitable for common use. As more and more people got home or office telephones, telegram companies became more and more irrelevant: as they had displaced hand delivery, so they were displaced by the

telephone. Long-distance communication moved again from the hands of those with capital to invest in infrastructure, to the masses in their own homes.

The move from telegrams to telephones, in addition to bringing communication to the masses, marked a paradigm shift from *asynchronous communication* to *synchronous communication*. Long-distance communication was no longer relegated to a paradigm of delivery and reception - the telephone allowed it to emulate face-to-face communication. That is not to say that asynchronous communication does not have its advantages: the receiving end does not need to be immediately available. One trades durability for expediency: a telegram will wait for you, where a telephone call will not. In fact the shift from telephones to cellphones has augmented the advantages of the synchronicity of the telephone with the advantages of asynchronicity by including text messages and email.

The revolution succeeding the telephone however, unlike the two revolutions preceding it, took longer for its potential to be realized. It was not initially meant as a replacement for the previous because it operated with a different paradigm. Piggybacking on the development of the computer and the widespread deployment of telephone lines in the mid-20th century, the idea of networking computers across long distances over these lines became feasible. The first notable connection was between Stanford University and UCLA in 1969, called ARPANET. Over the next decade, hundreds of universities across the nation would tap into this transnational network to collaborate on research. Instead of sending morse code or audio signals, by connecting computers, the phone lines were carrying data of a more practical and usable form than voice - direct

and automatic computer input, which was much more flexible than manual transcription of a telephone conversation.

Like each network prior to it, the internet was born as the smaller networks that had sprung up in its initial phases coalesced. ARPANET merged with several more localized networks that had been built by the government or businesses, and with the advent of the common protocol TCP/IP used to communicate over them all, the internet was born.

The internet, by automating certain forms of communication with computers, became the first widespread example of *agnochronous communication*. The particular advantage of this paradigm is that it encompasses both synchronous and asynchronous communication: you can send emails for asynchronous needs, and when expediency is necessary, you can make voice and even video calls over the internet in real time to anywhere in the world. Not only that, but it expands upon it with its own unique advantages. With always-on servers automatically and instantly delivering information in computer-readable form, the time preference of the party seeking information doesn't have to match the time preference of the party giving it. It combines the expediency of synchronous communication with the durability of asynchronous communication.

The structure of the internet today is such that it is nearly *infinitely extensible*, restricted only by infrastructure and computing power. When computers became capable of displaying color graphics, the internet flooded with masses of images. When users began to migrate to broadband connections from dial-up, static audio and video as well as live A/V communication became possible, and quickly

## 2: MEDIA AND CONVERGENCE

popular on the internet. Now that computers have sufficient power, we are beginning to see more and more interactive applications hosted online rather than on the computer.

This near-infinite extensibility means that *anything that can be represented as data can be put on the internet*, so to speak. Since the digital revolution, we've been figuring out more and better ways to represent more things digitally: music, movies, software, spreadsheets - anything that exists or can exist in the abstract. Intercontinental communication has never been easier or more flexible: any of these things can be sent anywhere else in the world as quickly as the infrastructure allows. Broadband and wireless technology are seeing increasing penetration throughout the world market - even in third world countries now, as was the goal of the One Laptop Per Child initiative. Because of the agnchronous communication paradigm coupled with the rapid acceleration of computing power and mass storage, an ever increasing number of people are gaining access to what could conceivably become the sum of all human knowledge.

The push of the market towards progress in every sector through evolving technology and economic growth that brought appliances, cars and computers cheaply to the masses is the very same that is now driving information and communication into free flow. The infinite demands of consumers for ever easier appliances, ever nicer cars, and ever faster computers than have ever existed is not less than the infinite demand for ever more information in its various forms. As we will see, the demand for one of these is satiable.

There are two ways of thinking about information: as a service, and as a commodity. The prevailing view up to and including this point in history has been the first - though the second has had much influence in the past century. Each of these views has economic implications that, though subtler in past decades, are becoming increasingly pronounced as the internet continues to enable cheap, simple, and fast distribution of data to a level unprecedented in the history of the world. The goal of this manifesto is the elucidation of the specific repercussions of each paradigm.

Prior to the invention of the Gutenberg printing press in 1440, data reproduction was a slow and tedious process. The act of transcribing the words of a book onto paper made that paper far more valuable than simply the ink used and the paper it was written on: larger books often ran for the price of a vineyard,<sup>1</sup> and literacy was practically restricted to the clergy. Because the work was time consuming, it incurred a large opportunity cost: the time spent transcribing books could be used in any other capacity to make money, so it was logical that the scribe be compensated for that time by a markup on the materials he sold.<sup>2</sup> In short, information was scarce because the *marginal cost of reproduction* was high: the scribes sold the information as a service - a markup on the medium - not as a commodity.

The view of information as a service was made manifest with the invention of the printing press. Had information been a commodity in itself - the thing for which the price of the book was commanded - then the invention of the printing press should have been

inconsequential. Though the process indeed became easier, the character of the information did not change from one era to the next, and there should have been a relatively negligible price drop in books.

This is obviously not what happened. The market became flooded with all sorts of books new and old, driving their cost down and preventing intransigent printers from continuing to sell at previous prices. Rather than spending weeks manually transcribing a book, one could simply arrange the letters once and stamp them onto paper as many times as needed. Once the initial purchase of the machine had been made, the marginal cost of reproducing printed information plummeted to a fraction of its former cost. The societal impact of this first step cannot be understated: literacy became a new priority across Europe, and a new emphasis was placed on learning that sparked the intellectual revival now known as the Renaissance.

This revolution did have its discontents, however. Over the course of the centuries succeeding the invention of the printing press, the new publishers became as entrenched and intransigent as the old scribes, until by the 16th Century the Worshipful Company of Stationers and Newspaper Makers accrued the powers of a publishing monopoly in England and the right of force to hold on to it. This power was later removed from them with the Statute of Anne in 1709, which gave the monopoly right to authors rather than publishers.

Though the modern American copyright regime is descended from the ideology of the Statute of Anne, it now bears more resemblance to the Stationers' Company's regime. Publishers and distributors of books and media have again accrued for themselves the right of monopoly on production and distribution, as well as the right to use

the legal apparatus of coercion for their own ends.<sup>3</sup>

Prior to the advent of the internet, the business model of media distributors - record labels, movie studios, publishing houses, and the like - worked relatively well. Recorded music distributed on vinyl records or tapes can be reproduced at a low marginal cost in a similar manner to a printing press: like the publishers' monopoly of old England, the key feature was that though the *marginal* cost was relatively low, the *fixed costs* - the costs of the means of reproduction - were relatively high. The Stationers' Company was able to entrench itself because the masses did not have the means to buy for themselves printing presses. The record companies were able to entrench themselves because the masses did not have the means to make for themselves vinyl records. Even after the advent of cassettes and CDs - media which consumers could easily reproduce - consumers still were not inclined to reproduce media beyond one or two copies for themselves and their friends. Mass production was still the domain of the publishers (though that did not stop the publishers from collectively lobbying in a panic for an orgy of draconian legislation, especially regarding VCRs).

Communication and media distribution during this time and until recently were largely separate spheres: certainly one could telegraph a book or play a phonograph over the telephone, but these means were largely impractical. The entrenched distributors of information and media faced no competition from the development of communications - until the internet.

The internet has proven to have as much revolutionary potential as the printing press. It is the convergence of both communication technology and information-media distribution. It is the culmination of the

history of both. Suddenly the means of mass reproduction has fallen into the hands of consumers - along with the means of mass distribution, all in the same development. The worst fears of the entrenched publishers and distributors were realized. As a perfect digital abstraction of what they had been selling, there was no medium to mark up. Their service had become obsolete overnight.

So those industries whose existence was based on the markup of media did what any doomed but intransigent industry does: it went to the government for protection. From the litigation against and shutdown of Napster, to the passage of the Digital Millennium Copyright Act, to the RIAA's continued campaign against music downloaders, these distributors have since the advent of the internet continued to accrue legal powers of coercion for themselves.

How did they do this? All legal support of copyright regimes is based on an ideology of information as a commodity, rather than a service. When the distribution and publishing industries faced no competition from developments in communication, information was tied to its particular medium. The text of a book, for example, cannot be transferred by the consumer to different paper: it was impossible to abstract out of the medium. Thus, though consumers might like to think of information as a service, and distributors might like to posture as if it were a commodity, as long as the information is tied to a scarce medium - a medium with a price - it makes little practical difference in the end which ideology prevails. What the consumer sees as a markup on the medium for the service of reproduction and distribution, the distributor considers his due for the information itself separate from the medium.

The realization of digital information as perfectly

abstract suddenly makes salient the difference between these ideologies. There is no longer a place for what the consumers saw as markup on the medium - there is no medium at all: markup and commodity price no longer coincide.

The distribution industries have tried a number of tactics trying to continue to exact commodity prices from abstract media. The first means is to *ignore the change* and continue to tie the information to its medium. The industry has experimented with actual physical value in their products: autographs on books, jewel cases and ornate cover art on CDs, coupons and bonus features on DVDs. In addition, it's still a lot more convenient to distribute vast amounts of content physically - for example, HD movies are for the moment infeasible to deliver digitally simply because of size considerations. There is also the consideration of comfort: Some people also prefer reading a physical book to looking at a screen.

But the cat is out of the bag: consumers clearly prefer their information and media in fungible and abstract form. There is no going back; no ignoring the digital age of mass distribution. Internet service is getting faster and faster - imagine how preposterous the idea of YouTube would sound to a dial-up user in the 1990s, and then imagine how long it will be until it becomes feasible to distribute uncompressed HD content over the internet. Furthermore, the relentless innovation in digital technology is rapidly narrowing the options of distributors for including things of value that cannot be distributed digitally as well: full cover booklet scans are commonly distributed with pirated albums, for example, and record companies are experimenting with interactive digital booklets. Even the experience of reading a physical book is rapidly being

approached with highly regarded eBook readers such as Amazon's Kindle.

Which leads us to the second and more recent means of exaction: *to encrypt the information with DRM* - Digital Rights Management. This is implemented by coercing the makers of devices that deal with information and media, be they computers, MP3 players, or VCRs, by flexing their legal muscle to limit their own functionality by refusing to deal with information without a digital key certifying it was paid for (The DMCA actually makes it illegal to reverse-engineer a DRMed file, whether it has been paid for or not). The DRM put on media files by many companies from their download services, as well as software activation employed by Microsoft and Adobe (among many others) are prominent examples.

DRM is essentially artificial scarcity. The information itself exists in the abstract, and is not scarce. The distributors, however, manufacture a scarcity: not the information itself, but the use of it - for they make the information unusable without their express permission, always granted from a central source.

It's easy to see how arbitrary restrictions on a non-scarce resource are not in the best interests of the consumer. Indeed because the software limitations are self-imposed, it is necessarily possible and generally only a matter of time before the limitations are broken free of (usually by reverse-engineering the software) and the content is returned to an unprotected state. And even without the possibility of reverse-engineering, consumers do not like DRM: its limitations are simply too oppressive when compared to the freedom they are used to enjoying. The music marketplace is littered with music files made useless when the store from which they were bought went down -

for example, music from the late Ruckus music service.

The DRM experiment is now largely considered a failure: Apple's iTunes Music Store, once the most prominent employer of DRM, was forced to unlock its catalog under competitive pressure from newer stores like Amazon's, which sold unencrypted MP3s from its beginning. But though largely dead in music, DRM continues strongly in online video stores - most noticeably in video rental services, which in most cases sell self-destructing video files. Even so it is by no means a permanent solution, and once numerous video stores crop up and start failing after the pattern of the online music market, consumers will realize the fraud of video DRM as well.

The third means is by *coercion, litigation, and fear*. If people fear the possibility of a lawsuit, the hope is that they will not distribute data outside industry-approved channels. They aim here not to introduce an artificial scarcity, but to squelch directly the channels of abundance. Though the industries (RIAA, MPAA, BSA, etc.) have taken to filing multitudinous lawsuits, their efforts are nevertheless becoming increasingly futile as the number of people distributing information exceeds by an unimaginably wide margin the number of people that can be pinpointed. Industries that survive only by litigation cannot abide forever, and as their bubble continues to leak air, society will inevitably be forced to a crossroads: Will information be free, or will it, though free of its medium, be forever shackled to its distributors?

### 3: WHY NOT PROTECT?

Because the marginal cost of information reproduction is now zero, the unhampered market forces its price to zero. It may well be asked, however, why should we be content with the market outcome. Can it not be improved upon?

All laws enforcing intellectual property rights are by nature **1)** beneficial to the producer, and **2)** detrimental to the consumer. Why then favor the consumer over the producer? Does the producer not deserve for his productive effort the right to extract a stream of royalties from those who use the fruits of his labor?

In the absence of externalities, the unhampered market may be regarded as neutrally “fair” in the sense that it does not favor any party at the expense of another.<sup>4</sup> However, it is also true that the entire market for the reproduction of information consists of externalities. Digital technology has made it impossible for producers to collect revenue from reproduced information.

Ultimately we may concede that there is an optimal amount of intellectual property protection at which society as a whole is the best off - somewhere in the middle; a balance between the interests of the consumers and producers which internalizes the externalities without becoming harmful to the market.<sup>5</sup> The question then becomes, how do we know where that optimal level of protection is?

The most obvious possibility, and the one that most Western governments have elected to pursue, is setting intellectual property laws by the democratic process - the same way any other law is set. Indeed, intellectual property has never been considered on a plane separate from that of

any other laws by any government.

This fact is symptomatic both of the insufficiency of the democratic process in resolving the question of the optimal amount of intellectual property protection, and of the wider problem with legislative power: lawmakers have no regard for economic optimums in any field. They are lawmakers, not economists, and their occupation is validated by tinkering - warranted or not.

Broad legislative ideas laws come from a variety of places, not the least of which is the pockets of the people likely to be affected by these ideas should they become law. But the details are almost invariably hammered out by these interests, with congressmen inserting amendments here and there at the behest of these interests. The history of intellectual property law in the United States is a testament to this truth. Since the eighteenth century, and especially since the 1970s, intellectual property protections have gone in one direction: more,<sup>6</sup> both in terms of what can be protected and the amount of protection afforded to those things.

These developments and others like them in other fields of law are one of the endemic features of representative democracies: if you give them the authority to take an inch, you give them the authority to take a mile. Especially with regard to a problem like intellectual property, where there are no qualitative boundaries by which to restrain a congress or benchmarks by which to evaluate them, the organizational advantage of information producers over consumers almost guarantees that protections will continue to increase at the expense of the consumer.<sup>7</sup>

But the problem is not simply that we have bad legislators and need new ones, or that we have bad laws

and need better ones. Even if we had a congress of benevolent economist-scientists, would they fare better than our current congress in finding the optimal amount of protection?

The question of the optimal amount of intellectual property protection has a lot in common with the question of “right” prices. Both are a balance between the interests of the producers and consumers. A government cannot successfully set and enforce prices, a fact which had been known for a long time<sup>8</sup> but was decisively shown to the world when the Soviet Union collapsed. A government must be equally doomed for failure when centrally planning intellectual property enforcement: no central body can ever do better than “best guess” at the optimum.

But we nevertheless have prices: the market operates decentrally under the institution of physical property rights (which may be clearly and qualitatively defined and enforced in a way that intellectual property may not) to coordinate resources and set prices in a way that could never be achieved centrally. Could a parallel decentralized system be instituted for intellectual property protection?

A key feature of prices is that they may differ for the same good from one place to another, though they will tend towards the same price plus transportation costs. Milk, for example, will be more expensive in the desert than in the farmlands because it takes more effort to get it there. But it may not differ by more than the price of transportation, or people will drive to the farmlands themselves to get milk, both profiting from the endeavor and driving down the price of milk in the desert.

Such a feature cannot exist for intellectual property, for once it is made available in one place, it is available

anywhere where there are computers and unhindered internet access. Illicit production, at least on the mass level, may be regulated with limited success, but illicit consumption is notoriously hard to deal with. Illicit production would concentrate in the more lenient countries, and each country would have an incentive to be more lenient. Even now vast amounts of pirated material reside on Russian servers, where intellectual property enforcement is low on the list of government priorities.

Any decentralized market-like system for setting intellectual property laws must therefore tend towards zero enforcement - the same as in the unhampered market. The success of enforcement throughout the Western world has been only due to centralization and coordination by the WTO. Such efforts at centralization are only intensifying and now spreading even to the developing world, with producer interests pushing for the Anti-Counterfeiting Trade Agreement (ACTA) which would dramatically increase both stringency and central control of IP laws worldwide.

We must therefore decide whether we are better off giving the authority to set IP laws to a body with no regard for optima, an authority which has expanded and will no doubt continue to expand, or to content ourselves with the market value for information. Given the history of such laws in the US, the constant controversy on the issue, and the state of technology, we are already doubtless far past the optimal level of IP enforcement. As the next chapter will demonstrate, we will not be worse off on the other side of the optimum.

#### 4: A POST-COPYRIGHT WORLD

Though it was originally instituted for the protection of distributors, copyright has come to be regarded in popular mindset as protection for the incentive of artists and innovators to create. The distribution industries know that its function of protecting the distributors as such has been made unnecessary by the advent of the internet, so they no longer try to justify themselves that way. They would have us believe instead that without copyright laws, actors, musicians, and writers could not make a decent living.

This view of the role of copyrights is incomplete at best and deceptive at worst. It is the nature of the market economy to adapt to and make use of new technology. Though it may adapt in different ways than those outlined here, I intend to demonstrate that the end product of creative investment can be preserved even in an economy with no intellectual property protection. In fact, many of these environmental changes are well on their way to evolving by de facto necessity rather than by an explicit change in the legal environment.

##### *The Music Industry {*

Copyright is hardly a windfall for artists in the current regime, which as mentioned before, bears more resemblance to the Stationers' Company guild monopoly than any heir of the Statute of Anne. Royalties from media sales account for a very miniscule portion of artists' income, and as the major record labels move to extract an even greater portion of media profit for themselves, they only solidify their own irrelevance. The internet has made it possible for a single person to self-release without the aid a

record label, or even to run his own independent record label with minimal financial investment. Music distribution will soon be able to go all-online once lossless audio becomes the norm there, at which point there will be no need for record labels to negotiate for shelf space on brick-and-mortar stores. Radio stations can (and smaller ones often do) negotiate directly with artists, and freed from prohibitive royalty fees (which were intended more or less deliberately to kill smaller stations and consolidate the radio market into the hands of a few major syndicated stations<sup>9</sup>), will become less strictly syndicated nationwide as they respond to local taste.

In this way, by enforcing the distributors' claims on culture, we do not incentivize the creation of culture - we stifle it and homogenize it. Consumers have fewer choices in a world where copyrights are owned by a company whose only irreplaceable service is raw marketing muscle.

Because digital music would be shared freely in this economy, as people consume more, its perceived value relative to live acts declines. New emphasis is beginning to be placed on live music and seeing artists in concert - which along with merchandise is already the primary source of direct income for artists. Digital recordings become a promotional tool for concerts in such a world, with artists receiving direct profit from an actually scarce service. Concerts command higher prices (which allows them to be more elaborate), more people attend, and the net profit for the artist is higher than it would have been through a record label. }

##### *The Movie Industry {*

The movie industry because of its monolithic nature would be harder to adapt to the new model economy:

movies are a far greater commercial investment than audio recordings, and the actors cannot tour for live acts - else it would be theater, an entirely different medium which has only ever faced minor problems of this sort. Yet it is not in a fundamentally different situation from the music industry.

Just as copyright law has allowed the music studios to foist monolithic big-name artists upon us, copyright law has allowed the movie industry to foist upon us a monolithic group of A-list actors with immense brand recognition: for like the music industry, the movie industry's main irreplaceable service is marketing muscle. The effect is the same: our movie culture is as homogenous as our music culture. Without copyright protection, the door is suddenly opened for multitudes of smaller studios to replace the monoliths of Hollywood, and with them, a huge increase in the number and type of actors and movies, working for less exorbitant salaries and being produced on less exorbitant budgets.

But cost cutting alone does not provide revenue. Cinema shows are roughly analogous to live music performances in that they are a more enjoyable product than home video and are available with actual scarcity. Cinema shows will become more highly valued in a fashion similar to music concerts, with establishments enticing more customers with longer showing periods for movies, a fuller atmosphere and overall better experience, the particulars of which will be determined through competition among cinemas.

The cinema industry could even be taken over by the movie studios entirely, employing a similar strategy to the music industry's hypothetical strategy, with digital video becoming a promotion for the cinema experience. Movies could remain in theaters indefinitely, and specific

films could even be requested for parties or special events.

The movie industry has positioned itself such that there will be necessary pain in the transition period, but there is no lack of opportunities for the movie industry to market scarce services - ones that do not rely on artificial scarcity and legal threats to ensure survival. }

### *The Broadcast Industries {*

The Television and radio industries would hardly have to change their business models at all to accommodate information freeflow, since their core service is already free to consumers. Television and radio broadcasts are paid for by advertisements and commercials, and this need not change. The initial over-the-air broadcast may or may not abide into the long-term future depending on how much value consumers see in it. But regardless of the initial broadcast, the money is to be made in advertising on on-demand online copies of the shows, such as is now done on services such as Hulu. In addition, it is now the norm for radio programs to offer downloadable podcasts alongside their initial broadcast. As these participants have discovered, to prevent recording and distribution without commercials, networks and stations have to seed programs themselves.

This is how the industries cope: by making available on-demand online content - with commercials - alongside or instead of the initial broadcast, the demand for pirated programs is effectively quashed. People prefer the brand name: they'll pay a convenience premium for brand-name broadcast programs the same as they pay a price premium for name-brand groceries. the official program, though it has commercials, is easy to find, convenient, and official. Rather than make an outlaw of a third party who

would strip the commercials and redistribute the program, we make him irrelevant.

Though the threat of pirate competition forces the industry to keep the commercials small and unintrusive, internet advertising has the potential to be much more financially potent than television advertisement: the response is more easily measurable, and the possibility of interactivity gives it huge value potential. Though the total advertising revenue of the broadcast industries may go up or down, neither is a necessary consequence of the transition. }

#### *The Software Industry {*

Software, on the other hand, being an interactive rather than consumptive medium, must employ completely different models. There are two means by which software will survive in a post-copyright world, each of which to some degree is already employed by certain entities.

The first is the *open source model*: software is developed and debugged not only by teams of volunteer developers worldwide, but also by commissioned developers within large corporations such as IBM and Novell, both of which have invested heavily in Linux as an alternative to proprietary systems by Microsoft and its kind.

By embracing the internet as marketing and distribution tools rather than threats to profit, open source software comes unencumbered by copyrights and software patents. In many cases they already match commercial alternatives in quality. Even without legal protection, it is still worthwhile in many cases to develop products for in-house use and to release them afterwards: Facebook and Google are two prominent companies that contribute much to open-source projects for their own internal use, and do

not presume to exact a commodity fee for the result.

But open source software can certainly never completely replace proprietary software in all contexts. Closed-source software can still abide by adopting a *distributive model*: by developing software to drive sales of hardware and then using hardware profits to pay developers, companies can develop closed-source software safely within a profitable, vertically-integrated business model. This model is already used in nearly the entire embedded software market - cellphones, for example - and even to some degree in the PC market, with Apple's operating system tied to and exclusive to their own hardware. }

## 5: ACTION AND ACTIVISM

Information and distribution industries realize that maintaining artificial scarcity is paramount to continued existence and profitability, and so are ever developing and refining technologies for this end - not only in DRM and activation technologies, but more subtle things such as watermarked MP3s in pursuit of their litigious strategies. Their continued implementation is contingent, however, on two things: the support of governments worldwide, and a continued monopoly on digital content. Without either of these things, makers of audio and video players and computers will have no incentive to limit their own functionality simply to quell information brokers, so they must produce unlocked content in order to compete with products enabled and enhanced by the internet, such as independent media distribution and open source software. There are then two hats we must wear in order to break the strongholds of the established industries:

### *As Consumers {*

First, media must not be purchased on the terms of its brokers. Revenue for CDs, DVDs, and software from retail outlets such as Wal-Mart or Best Buy goes straight to their respective producers, fueling their fight for a world of restricted information flow. Download services - even DRM-free ones such as the iTunes Music Store and the Amazon MP3 store, and even ad-supported free services are all industry strongholds as well. Ultimately, even if the distribution industry succeeds in cutting off the channels of abundance, their survival is still contingent on how well they satisfy their consumers. If people unconditionally cease buying from intransigent distribution industries, they

will starve with or without the support of governments.

Boycott does not have to mean curtailed usage of software, movies, and music. Monetary transactions for these services are not inherently damaging; it is only when payment is mandated, when freedom is restricted, and information flow is purposefully restricted that harm comes. Paid music services from independent music services like eMusic come without restrictive DRM, and do not fund industry lobbies. The internet has opened innumerable venues both legal and currently otherwise to obtain both replacements and alternatives to almost anything that would force dependency on us.

Another disturbing trend within media industries has also emerged of late: streaming media. This is the ultimate business model for monolithic media: even if it is free on the surface, it is still consumed only on their terms, for you never own the actual media except in cache. Accordingly, streaming media may be used to augment, but not to replace, downloadable media. We as consumers must demand our media be stored locally, not "in the cloud".

In the realm of software, Free and Open Source Software (FOSS) has been making waves recently because of its increased presence in everyday life. From browsers like Mozilla Firefox to chat applications like Pidgin, image editors like Gimp, and even to operating systems like Linux and BSD, there are free and open source products that in nearly every case rival if not surpass their commercial counterparts. The Open Source movement is perhaps one of the biggest poster children for an open and free Internet: everything in the software is transparent, free, and editable by anyone. It embraces rather than fights new models of distribution and abundance, using them as marketing and quality control tools rather than enemies to development.

The old model's death knell and disincentive becomes the new model's life blood and incentive. }

*As Activists {*

In the courts, cases against copyright infringers must be defeated in order to set judicial precedent. In instances of corporate versus consumer - piracy cases, for example - the defendants must be supported to fight back. There have been several counter-suits against the RIAA for such offenses as invasion of privacy, hacking, and monopolistic collusion, which have been met with varying success, as well as an unsuccessful supreme court battle against copyright term extensions.<sup>10</sup> If these charges stick not only to the RIAA but to other litigious entities, then their onslaughts cannot be sustained. Their governmental support is effectively dead regardless of written law if the courts refuse to support them.

In the long run, however, legal change is necessary. A court unresponsive of the litigators is a temporary boon at best: the tide can sway back in their favor regardless of precedent. Congresses on both the state and national level must be petitioned and lobbied in the short term and elected in the long term to reform copyright laws in such a way as to eliminate control mandates over information.

On the government side, we must expose politicians who have been coerced, bribed, or otherwise captured - legally or not - by distribution industries. The lobbying arm of old media is extensive and influential in the entire Western world. Neither major party in America now questions the validity of the ideology of information as commodity, though in Europe the Piratpartei - the Pirate Party - has been met with surprising, though nevertheless small, success. The movement in Europe will not succeed,

and there will not be a movement in America, without a groundswell of public support for specific policies of freedom with regard to information. We must explode the fallacies of information as commodity and elect politicians who believe in the freedom of information.

Yet ultimately, even legislation is a temporary boon. There will not be lasting success until the constitutional authority to set intellectual property laws is revoked from congress - either by the courts with a constitutional challenge, or by a constitutional amendment. This must not happen prematurely or before all the previous steps have been accomplished, for to aim big and fail is a bigger setback than to wait, as gay marriage advocates found out in Maine in 2009. Yet even as we struggle for temporal victories, let us not lose sight of the ultimate goal: permanence and peace in the battle against restrictive flow of information, media, and culture. }

## 6: NOTES

1. Meggs, Philip B. *A History of Graphic Design*. John Wiley & Sons, Inc. 1998. (pp 58–69).
2. cf. Paul Graham's 2009 essay *Post-Medium Publishing* (<http://www.paulgraham.com/publishing.html>)
3. I have in mind the RIAA's litigious campaign against filesharers.
4. Ludwig Von Mises, *Human Action* (1949), cf. Chapter XV, *The Market*.
5. For a more academic discussion of social utility with regard to intellectual property stringency as well as the problems of arriving at the optimum, see Harwick, *A Social Utility Model of Intellectual Property Enforcement* (2010). Section 3 is summarized from that paper.
6. William W. Fisher III, *The Growth of Intellectual Property: A History of the Ownership of Ideas in the United States* (Harvard University, 1999).
7. Cf. James Buchanan, *The Calculus of Consent: Logical Foundations of Constitutional Democracy* (Ann Arbor: University of Michigan Press, 1962).
8. Ludwig Von Mises, *Human Action*, cf. Chapter XXVI, *The Impossibility of Economic Calculation under Socialism*.
9. <http://www.techdirt.com/articles/20070304/223155.shtml>
10. Eldred v. Ashcroft, cf. Lawrence Lessig, *Free Culture* (2004), Chapter XIII, *Eldred*.