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CHAPTER TWO

From Free Software to Free Culture: The Emergence of Open Business

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This chapter examines the emergence of open business models – systems for the production of knowledge-based goods and services that do not rely on information enclosure, but are compatible with information openness. When considering the success of the free software movement, the proliferation of new open licensing models and the explosion of user-generated content on the Internet – all in a landscape that continues to evolve at breakneck speed – it is hard not to be inclined toward optimism. The openness versus enclosure metaphor, probably the most important structural component of current debates on intellectual property law, can sometimes be applied in such a way that openness ends up “enclosing enclosure.”

As the Internet has become a dominant mode of accessing knowledge, potential and actual changes in the processes of cultural production, transmission and archiving have come to the foreground – along with political, social and economic consequences (Benkler 2006). It was a natural progression for the legal and economic strategies employed within the free software movement to be replicated for other knowledge-based goods. Creative Commons and Wikipedia are two notable examples of the translation of free software licensing strategies to a broader repertoire of cultural production. Reflecting this shift, we now encounter terms like *free culture*, *open content*, *open business*, *open standards*, *open licensing* and *open educational resources*, that build upon the earlier concepts of *free and open source software*.

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The jump from the specificity of software to the generality of information goods has been made, but the situation is still somewhat chaotic – in a good sense – with regards to terminology, the definition of political programs, academic analysis and media evaluation of these new phenomena. This chapter seeks to advance analytical understanding of this new world of open business, drawing on a case study of the Brazilian *tecnobrega* music scene, which offers a mature example of a culture industry organized around an open business model. The chapter proceeds in four parts.

Part one situates the concepts of “free culture” and “open business” with reference to their origins in the open source software movement. In this presentation, the business models developed for free software are understood as early manifestations of a different strategy of doing business based upon the distribution of free content and the sale of ancillary goods and services. This strategy, we argue, is not necessarily limited to the software industry.

Part two presents a case study of an open business model in the culture industry, through an examination of the *tecnobrega* music scene in the Brazilian city of Belém. The study will show how *tecnobrega* artists, producers, and distributors create and distribute their cultural works, turning substantial profits in the absence of any meaningful intellectual property enforcement.

Part three develops a more theoretical perspective on open business models, using the *tecnobrega* case study as a touchstone. Of particular interest is the existence – in Brazil as in many developing countries – of a “social commons” existing outside the formal legal framework, in parallel to the “legal commons” that may be established by licensing.

Part four analyzes the lessons learned from this case study to highlight four critical issues facing the further development of open business models in Brazil and elsewhere. These are: converting social commons into legal commons, reconciling legal diversity across multiple jurisdictions, organizing effective communities for commons management, and fostering public debates on copyright within a broader information policy framework.

From free software to free culture

Open licensing and business models do not exist in a vacuum. They are part of a complex institutional environment that is under constant evolution, driven by regulatory, technological and economic change. It is not easy to track every development taking place in this global network of law, technology, norms, organizations, markets and jurisdictions. A high-level framework is thus needed to provide some structure, so that we do not get lost in the complexity

of the landscape. To draw a proper framework for the analysis of free software and open business in Brazil, however, we have to navigate through a sea of terms that run the risk of becoming empty buzzwords if we do not stop and critically examine them. Consequently, a closer look at these key terms – both what they mean and how they came to be – offers a useful introduction.

From “free software” to “open source”¹

The concept of free software, initially developed and promoted by Richard Stallman and the Free Software Foundation, grew through both activism and voluntary participation in free software projects by users and developers (Moody 2001, Williams 2002). As these free software projects accumulated, the ideological and discursive basis of the free software movement took definitive shape, achieving international status and a strong following. Around the late 1990s, the movement branched into two somewhat opposing camps with the establishment of a spin-off group, the Open Source Initiative (O’Reilly 2001). According to O’Reilly, the open source strategy was developed in response to potential misconceptions provoked by ambiguity between “free as in *gratis*” versus “free as in freedom,” as well as the perception that “free software” is strictly made by and for hackers and thus difficult for the average user to handle. A marketing campaign built around the new term “open source” sought to position free software as a more attractive idea from a business standpoint (O’Reilly 2001, Stallman 2007b).

The open source marketing strategy was accompanied by a strong shift in emphasis from “licensing models” to “*business models*.” The Open Source Definition – indirectly based on the Free Software Definition – still emphasizes licensing characteristics to define what is and is not open source software (Open Source Definition 2006). The discourse of open source advocates, however, emphasizes this licensing structure as a platform for innovative business models, based on selling software-related services rather than packaged goods (Raymond 2000b, Krishnamurthy 2005, O’Reilly 2005). As was correctly intuited by early open source advocates, services are the best way of profiting from a product that is easily available at no or negligible cost. Instead of simply selling a package containing a GNU/Linux distribution, companies such as Red Hat provide a wide range of services including customization, technical assistance and capacity building. Open source discourse also claimed technological superiority, based on

1 The following discussion assumes that readers are at least somewhat familiar with free software history and the literature that has been produced so far regarding that phenomenon and the debates surrounding copyright law reform (Boyle 1996, Lessig 1998 and 1999, Benkler 2006, Lemos 2007).

the fact that source code in large-scale open source projects is subject to the examination of hundreds of people, all presumably on the lookout for technical flaws (Raymond 2000b).

Table 2.1 highlights the key differences between the free software and open source doctrines, based on literature that is representative of each side (Raymond 2000a and 2000b, O'Reilly 2001, Stallman 2007a).

The semantic battle between “free software” and “open source” has less resonance in Brazil than in the English-speaking world. Although the concept of freedom is as hard to define in Portuguese as it is in English, there is no

Table 2.1 : The free software and open source doctrines

The free software doctrine	The open source doctrine
Values	
Freedom Solidarity	Efficiency Technological superiority
Goals	
To guarantee the dominance of free over proprietary software, with the elimination of proprietary software as a widely adopted model.	To promote production and adoption of free software (re-named “open source software”) through recognition of its technological superiority, and of the opportunities it provides for new business models.
Main Arguments	
<p>Software users deserve to be granted four freedoms as a matter of moral necessity, namely: 1) the freedom to run the program for any purpose; 2) the freedom to study and adapt the program to personal needs; 3) the freedom to redistribute copies of the program; and 4) the freedom to improve the program and release the improvements to the public.</p> <p>Since proprietary software deprives users of these four liberties, it is morally questionable and thus should be avoided. Free software is a moral, not technological issue.</p> <p>Free software licenses that are built around a <i>copyleft</i> strategy – especially the GNU GPL – are preferable. <i>Copyleft</i> licensing ensures that free software remains free and is never taken away from the community of people responsible for its creation, use and distribution.</p>	<p>The open source phenomenon represents a paradigm shift from the proprietary model, forcing software providers to focus on selling services instead of products.</p> <p>Open source software is technologically superior to proprietary software because wide access to source code allows for bugs to be quickly detected and fixed.</p> <p>The open source development model provides opportunities for optimal allocation of resources as programmers self-assign to specific tasks. The elimination of formal hierarchies accelerates the process of innovation and production.</p> <p>Open source software ensures competition by eliminating monopolies and barriers to market entry, and frees consumers from vendor lock-in.</p> <p>Open source licenses should be judged by a variety of criteria. The GNU GPL is not necessarily the best choice for every project. Licenses such as the BSD and MIT licenses are legitimate alternatives.</p>

ambiguity in the word *livre* – it always means “free as in freedom,” and never “free as in *gratis*.” Since the term *código aberto* (open code) is not as straightforward, Brazilians use the label *software livre* almost exclusively (Souza 2006). Open source software discourse, however is alive and well in Brazil, even if the label itself is not employed.

From “free culture” to “open business”

After the derivation of *open source* from *free software* during the late 1990s, the arguments framing each of these concepts came to be so clearly defined, and acquired such strong rhetorical force, that they still provide the fundamental building blocks for discussions concerning not only software production, but also other types of cultural content. With the birth of the Creative Commons project in 2001, and the scholarly work of Larry Lessig, the concepts of “free culture” and “open business” emerged from efforts of conceptual translation.

Free culture refers to a loosely organized movement that seeks to apply free software strategies to the broader realm of cultural production. The free culture perspective critically examines the role of intellectual property law in providing incentives for the creation of content, as well as its impact on access to knowledge, education, freedom of speech and participation in cultural life (Lessig 2005a). Free culture establishes a normative desire for a culture that is free – as in freedom – very much the same way that free software expresses a normative desire for software that is free. Both free software and free culture carry moral and political undertones, and clearly point toward reformation of intellectual property law, while at the same time trying to offer alternatives to the current regime by means of licensing strategies that take advantage of the established system.

Open business, so far, can be broadly considered as a research effort to isolate and analyze business models based on more flexible approaches to intellectual property, particularly the distribution of free or open content.² When one goes from free culture to open business, there is a shift from affirmations that software/culture *should be* free – for one reason or another, and in one way or another – to an altogether different type of discourse. The reasoning goes as follows: If we consider that there is a significant amount of content that is

2 Our focus is on business models built around giving free content to consumers, not simply the “open” business strategy of promoting collaboration between the research and development (R&D) departments of different companies (compare Anderson 2008 with Chesbrough 2006). For a fuller definition, visit the Open Business project’s site at <http://openbusiness.cc>, or read The Open Business Guide at http://wiki.iccommons.org/index.php/The_OpenBusiness_Guide.

already free – either because it is licensed for open use or because intellectual property law is not enforced – how can we make money on it?

Just as early literature detected a change from the sale of packaged goods to the sale of services when jumping from proprietary to free software, the same is true when moving from proprietary to free culture. Instead of relying on the sale of what Jeff Tweedy calls “pieces of plastic” (Lessig 2005b), open business models emphasize sale of ancillary services and/or strategies that leverage the publicity generated by wide access to content to sell other goods. In both cases, the value of the market increases as collaboration in reproduction, distribution and adaptation of the freely shared goods multiplies. An example should make the notion clearer.

The English band Radiohead and the American musician Saul Williams recently devised open business models, taking for granted the fact that music nowadays is freely available online for download, and almost always before the official release date (New York Magazine 2007, Wired Magazine 2007, Pareles 2008). Instead of investing in digital rights management systems (DRM), digital fingerprinting and litigation to enforce their copyrights, these artists decided to make digital copies of their latest albums available for free on their websites. Radiohead allowed users to choose what amount to pay for the download, including the option to pay nothing at all. Through producer Trent Reznor, Saul Williams offered a free version of his album for download, as well as a choice of three different file formats for the fixed price of five dollars. In both cases, CDs were also made available in stores – Radiohead gave the consumer the additional option of purchasing a deluxe disc box at the premium price of £40.

These musicians incorporated the predictable flow of online music on the Internet into a realistic business model. Like many business ventures, the success of these endeavors is subject to mixed reviews. Trent Reznor expressed disappointment that only 18.3% of downloaders in the first few months chose to pay for Saul William’s album (Reznor 2008).³ Reznor’s initial disappointment, however, did not dissuade him from repeating the experiment with two future albums from Nine Inch Nails: *Ghosts I–IV* and *The Slip*, both also released under a Creative Commons license. Indeed, he later took back his initial disappointment about the Saul Williams release, noting “[Williams] made infinitely more money from that record than he did

3 In our opinion, this perspective fails to consider how many of the downloaders were only sampling the album and either decided to buy a physical CD when it came out or decided not to purchase a copy because it did not meet their expectations.

from his other one. It increased his name value probably tenfold” (Pareles 2008, 2).⁴

The parallel between free/open source software and free culture/open business is not a perfect one. A core tenet of open source discourse is the assertion that open software is of superior quality to proprietary software, thanks to the collaborative processes of production. This is not part of open business’s repertoire of arguments. Unlike open source software, open

Figure 2.1 : An historical-generative map of key terms and ideas

4 Radiohead have not disclosed any data on the downloads and sales of their album, *In Rainbows*, but have described the project publicly as “the most positive thing we’ve done” (Radiohead.com 2008).

business was never designed as a competitive marketing campaign and does not present claims of technological advantage linked to its production model. There is thus no sense of opposition between free culture and open business, as exists between free software and open source.

Summarizing the relationships between the key concepts introduced in this part, Figure 2.1 shows an historical-generative map of key terms and ideas, beginning with free software and moving through its evolution into other words and concepts.

Case study: the *tecnobrega* scene of Belém

Having positioned the concept of open business, we turn now to a case study of the *tecnobrega* music scene in the Brazilian city of Belém for a fuller examination of an open business model outside the software context. The account presented here is based on in-depth, on-site, qualitative and quantitative research carried out by the Center for Technology and Society (CTS), FGV Opinião, Instituto Overmundo and the Institute for Economics Research Foundation – Fundação Instituto de Pesquisas Econômicas (FIPE). This research was conducted as part of the Open Business project, with the support of the International Development Research Center (IDRC). All of the numbers mentioned below were taken from the project's final report (CTS-FGV and Overmundo 2007).

The *tecnobrega* case study confirms that there are, in fact, multiple economic strategies for the production of information, and that the nonexclusion/market production models (Benkler 2006) can be quite lucrative. *Tecnobrega* is an extremely important force in the local economy, employing thousands of people and moving millions of dollars every month. The fact that *tecnobrega* music even exists contradicts the usual narratives of content industry actors, which insist that a strong copyright regime is necessary to incentivize the creation and distribution of knowledge goods.

The *tecnobrega* industry is a complex ecosystem involving a variety of business practices. In order to understand how all of these elements come together in a coherent business model, we first need to examine how *tecnobrega* developed from the clash of new technologies with previous popular music traditions, subverting established business practices in the process.

Origins of the tecnobrega music scene

Tecnobrega is a fairly recent and extremely popular music genre, created in Belém, a city of 1.4 million people and the capital of the state of Pará,

in northern Brazil. As is true of many other music genres, the *tecnobrega* sound is tremendously difficult to describe in words, much more so if the description is directed toward people unfamiliar with the parent genre of *brega music*. *Brega* – roughly translated as *kitsch* or *tacky* – is not a precisely defined genre, but includes a variety of music styles of popular appeal, often containing romantic lyrics and themes. *Brega* music is not exclusive to the state of Pará, although *tecnobrega* is certainly a local creation, a spin-off of traditional *brega* with the addition of electronic elements.⁵

Traditional *brega* music was a very popular genre in Belém from the 1980s up to the beginning of 2000, although it has since been eclipsed by the newer *tecnobrega* style. Up through the 1990s, the *brega* scene in Belém reflected conventional practices of the recording industry – including the usual interactions between performers, composers, producers, recording labels, publishers and audiences. The output of production was publicized primarily through centralized channels such as radio and television.

Everything changed around 2001–2003, when a new musical style was born out of the fusion of traditional *brega* with electronic music, later dubbed *tecnobrega*. The *brega* scene of Pará then experienced a series of structural transformations, diluting the power of the intermediaries working in the production and distribution of *brega* music and turning the local processes of music production, distribution and consumption upside down. New digital technologies allowed for in-home studios and lower production costs – 48% of bands now opt for self-production – while also facilitating the inclusion of electronic music elements. These transformations provoked the explosion of a new music scene in the peripheries of Belém. Within this scene an open business model was widely adopted, as musicians realized that unauthorized reproduction and informal commerce were useful promotion channels.

The tecnobrega business model

To understand the underlying business model, it is first necessary to introduce the reader to the actors involved in *tecnobrega* production and distribution. These include artists, DJs, *aparelhagens*, party planners, mass reproducers and street vendors. The absence of traditional music industry institutions such as recording labels, music publishers, collecting societies and record stores should be noted. They play no part in the production and distribution of *tecnobrega* music.

5 To gain a better sense of what *tecnobrega* sounds like, readers are encouraged to watch the documentary *Good Copy, Bad Copy*, available for free download at <http://www.goodcopybadcopy.net/download>.

To see *tecnobrega* as based on a linear production chain, starting with artists and ending with consumers, is to mischaracterize the industry. These actors produce and distribute songs, performances, compilations and spectacles in a highly networked environment. Roles frequently overlap; a DJ may also work as an artist, and the line between producers and distributors is sometimes blurred. Figure 2.2 provides a basic map of the key relationships between the actors of the *tecnobrega* industry, though it does not attempt to fully illustrate the complexity of the scene. Solid lines indicate primary, frequent relationships. Traced lines represent secondary, less frequent relationships. A “\$” symbol marks the flow of money from one party to another. The symbol “🎵” indicates the flow of music.

Actors involved in tecnobrega production

Tecnobrega production is the result of the cumulative efforts of artists, *aparelhagens* (see explanation below), DJs and party planners.

The **artists** of the *tecnobrega* scene include both solo performers and bands. Most performers (84%) are also composers, but there are almost no individuals working exclusively as composers. Because royalties are not a feature of the *tecnobrega* business model, live performance is a necessary activity for all musicians. Nevertheless, the absence of economic incentives for the role of full-time composer does not mean that less music gets written. Rather, the nonexistence of royalties has the effect of driving musicians to perform what they compose, establishing a more immediate relationship with their audience. In *tecnobrega*, artists are compensated primarily through payment for live performances – on average, a band receives around R\$2200 per concert. This income is supplemented by sales of the band’s recordings at these venues – an average of 77 CDs and 53 DVDs are sold per show. To ensure a steady stream of work, artists need to work on their popularity and build a reputation. The strategy is as follows: instead of writing songs to be aggregated in packages of new material, musicians first try to make individual songs “explode” in the informal market. Only then will they build albums, assembling the proven hits alongside a few new compositions.⁶ This means that all *tecnobrega* music must first pass through a distributed network of gatekeepers – DJs and audiences – and achieve a certain degree of success before an album is even considered.

6 This is not to be confused with the singles model adopted by major record labels. In that model, the single is a track selected from a pre-recorded album and popularized on the radio as a marketing tool to motivate purchase of the entire album on compact disc.

The ***aparelhagens*** (*aparelhagem*, singular) are the second crucial element of the *tecnobrega* scene. Similar to Jamaican sound systems, these can best be described as large structures of electronics, combining computer hardware, sound, video and lighting technology. These machines provide all the equipment necessary for large parties in which recordings of *tecnobrega* music are played, accompanied by visual effects and live performances put out by the commanding DJs and the musicians. *Aparelhagens* interact in a highly competitive circuit, and the degree of investment in technological apparatus is an important factor when measuring prestige. Yearly launch parties exhibit each *aparelhagem*'s latest hardware acquisitions and new aesthetic configuration in huge celebrations. Running an *aparelhagem* is an entrepreneurial activity, and they are typically managed by family businesses. Depending on their relative size and popularity, *aparelhagens* can charge from R\$300 to R\$10,000 for a single performance. The *aparelhagem* market in Belém is dominated by four major players, followed by a handful of mid-range *aparelhagens* and approximately seven hundred smaller ones. Only 10% of *aparelhagem* owners currently manage to earn a living exclusively from this work; most have a day job as well.

A third crucial set of actors are the **party planners**; these individuals have the money and managerial know-how necessary to stage the *aparelhagem* parties. Party planners organize all logistical aspects of the events, hire the *aparelhagens*, secure venues, oversee ticket sales, pay municipal fees, sell beverages and take care of security. Party planners profit from ticket sales – usually priced in the range of R\$10 to R\$20 – as well as beverages. Throwing a *tecnobrega* party can be lucrative, but also involves considerable risk. Planners spend an average of R\$22,000 for each large-scale event. While profits can reach around 100% of initial investment, events may not turn a profit at all due to the aggressive competition found in the party market. *Aparelhagem* parties occur on at least four days a week, especially in Belém's peripheries, but also in the countryside. The Open Business study estimates that over 4000 *tecnobrega* parties take place in the state of Pará each month. The average number of people attending the largest *aparelhagem* parties in Belém ranges from 3000 to 5000. On special occasions – such as the launch of a new DVD – party attendance can reach up to 8000. The most successful party planners often sponsor *aparelhagens*, investing money in the acquisition of new technological equipment in exchange for performances at future events.

The stars of the *aparelhagem* parties are the **aparelhagem DJs**. If bands have their lead vocalists as the main focus of audience attention, *aparelhagem* parties are led by the DJs, who often achieve celebrity status. *Aparelhagens*, much more than bands, are the central players in the Belém *tecnobrega* scene. Only a few *tecnobrega* parties involve live performances by artists. Most are run exclusively by DJs playing recorded content against a backdrop of technological pyrotechnics.

Actors involved in tecnobrega distribution

The main agents of the distribution circuit of recorded *tecnobrega* music are studio DJs, unauthorized reproducers and street vendors. Compilations produced by studio DJs are replicated by unauthorized reproducers and then exclusively distributed through the informal market by street vendors. *Tecnobrega* CDs are not, in other words, sold at stores.

The **studio DJs** run home recording studios and edit compilations of *tecnobrega* songs, which are one of the most important vehicles for the distribution of *tecnobrega* music. Studios serve both as production facilities and as meeting points for the key actors of the entire *tecnobrega* scene. Studio DJs thus play a role not unlike that of the master printers of early print culture – establishing networks between actors in an emerging system of cultural production.⁷ The longest-running studio in Belém charges artists around R\$300 for the recording of a single song. Fees can be as low as R\$30, however, depending on the sophistication of the studio. An additional fee – up to R\$50 – may be charged by the most popular DJs to include a band's song in their compilations. As a general rule, however, DJs simply select what they feel are the best or most relevant songs at the time. The most famous studio DJs may also sell custom-made jingles or songs to *aparelhagens*. Less famous studio DJs will typically perform this service for free, in exchange for the publicity gained through the use of their content. Since almost half of artists self-produce their songs, the studio DJ's primary role is that of a tastemaker.

7 “As the key figure around whom all arrangements revolved, the master printer himself bridged many worlds. He was responsible for obtaining money, supplies and labor, while developing complex production schedules, coping with strikes, trying to estimate book markets and lining up learned assistants. He had to keep on good terms with officials who provided protection and lucrative jobs, while cultivating and promoting talented authors and artists who might bring his firm profits or prestige. In those places where his enterprise prospered and he achieved a position of influence with fellow townsmen, his workshop became a veritable cultural center attracting local literati and celebrated foreigners; providing both a meeting place and a message center for an expanding cosmopolitan Commonwealth of Learning” (Eisenstein 1997, 55–56).

Unauthorized reproducers run mass reproduction facilities and distribute their goods through street vendors. These are elusive, secretive individuals, since they also deal with the unauthorized reproduction of traditional music genres. Due to this fact, personally knowing the largest mass reproducers is a sign of prestige in the *tecnobrega* scene. Studio DJs typically act as the agents to establish bridges between artists and the mass reproducers, though artists can also make their songs reach the hands of unauthorized reproducers simply by leaving a CD with a street vendor. Nevertheless, the most popular CDs sold by street vendors are compilations authored by studio DJs. These reproducers should not be considered “pirates” as far as *tecnobrega* is concerned, however, since the unauthorized reproduction and sale of songs in the *tecnobrega* scene is based on a tacit agreement and backed by social norms. Although there is no explicit, formally granted authorization to reproduce these works, the entire production and distribution network of the *tecnobrega* industry depends on this reproduction and immediate distribution, which is taken by almost every actor to be both natural and desirable.

The **street vendors** are the final step in the distribution chain, retailing *tecnobrega* music at an average price of R\$3.54 per CD and R\$4.17 per DVD. Bands also sell their own CDs and DVDs in venues after live performances, typically at higher prices – on average, R\$7.46 and R\$10.00, respectively. Street vendors, however, are the source for the vast majority of *tecnobrega* purchases, selling an average of 286,208 CDs and 178,708 DVDs each month in Belém alone. In theory, street vendors could reproduce discs themselves. In practice, however, only 16% do so, while 80% rely on supplies from mass reproducers. A handful of production facilities manufacture most of the CDs and DVDs sold on the streets of Belém. Street vendors often sell discs without correct documentation; thus *tecnobrega* artists frequently work personal references into their music to ensure attribution of their works.

Emerging artists understand street vendors as allies in their promotion efforts. According to our research, 66% of the interviewed artists encouraged – to a greater or lesser degree – the sale of their works through street vendors, while only 34% actively discouraged it. Similarly, 59% of the artists said they considered street vendors to be beneficial to their careers and 32% considered them detrimental, with the remaining interviewees taking a neutral stance. When musicians achieve greater popularity and start to press their own CDs and DVDs, they begin to look at unauthorized reproducers and street vendors in a more ambiguous light. Bands sometimes adopt an anti-piracy discourse with respect to albums, but continue to

make use of unauthorized reproducers and street vendors in order to push individual songs forward. This is the way the *tecnobrega* scene operates – for beginning and established acts.

Learning from the social commons

One of the most striking features of the *tecnobrega* business model is how informal it is. This is apparent both in the illegal – but tacitly approved – sale of mass reproduced copies by street vendors, as well as in the informal nature of business relations and general absence of written contracts. *Tecnobrega* is an example of a business model based upon *norms* rather than *law*. Intellectual property rights play absolutely no role in providing incentives for content creation. Instead, the *absence* of players seeking effective enforcement of intellectual property rights and the *absence* of a strong copyright culture are the dominant factors of an environment in which a new, different cultural industry has been able to evolve.

Institutional ecology: legal and social commons

We assume, following Yochai Benkler, that the current transformations caused by the Internet and digital technology – with the emergence of a networked information economy and the explosion of commons-based peer production – offer opportunities for positive economic and social change. These opportunities, however, may be undermined if the wrong choices are made (Benkler 2006). Benkler's framework puts heavy emphasis on the role of social practices in the shaping of the institutional ecology, particularly as a source of openness (ibid. at 394–395). With that in mind, we also make use of the complementary notions of the legal commons and social commons developed by Ronaldo Lemos (2007) to handle a set of problematic issues that are particularly present in developing countries.

Legal commons are commons established by law, or with support in the legal system. An example is the case of open content licensing. By voluntary action, and aware of the legal implications, content producers license their works under terms that will allow for the building and management of a commons. Social commons, on the other hand, are created when historical and social circumstances “generate a situation in which the very idea of intellectual property becomes inapplicable, irrelevant, unfamiliar or unenforceable” (Lemos 2007, 34).

A social commons, by definition, is not generated by intellectual property regimes, such as copyright law. Social commons depend, instead, on tensions between “legality” and “illegality” when intellectual property enforcement

efforts are overwhelmed by deeper structural problems. A good example is the incompatibility between the conventional business models of the music industry and economic realities in Brazil – where legal albums are marketed at a price well above what most of the population of the country can afford (Lemos 2007, 10–12). In situations where intellectual property enforcement is either impossible or counterproductive, people frequently *behave* toward protected content *as if it were part of a commons*, and *as if intellectual property regimes did not exist, or simply did not matter*. The concept of a social commons incorporates the actual relations people establish with content and information – both as producers and consumers – into a theoretical model that does not turn a blind eye to the production of content in zones outside the effective domain of intellectual property regimes.

Lessons of the social commons

What, then, can we learn from the social commons? The most obvious lesson is that adaptation to adverse conditions can lead to innovation. The collapse of intellectual property enforcement in the music industry of Pará did not lead to a decline in music production, nor even to the end of music as a for-profit endeavor. Rather, entrepreneurial initiatives emerged with new business models that take advantage of the social commons.

Conventional intellectual property thought assumes that legal protection is necessary for content production and for the existence of a healthy cultural market. According to this argument, the law must provide incentives for money to be invested in the production, distribution and upkeep of content, and society is better off suffering some restrictions on access in order for a thriving culture to exist. Production models based on both legal and social commons challenge this traditional justification for intellectual property.

Legal commons approaches – such as open content licensing – prove that content can be produced outside the realm of all-rights-reserved copyright and that creators are willing to work in a system that operates on freedom of access, nonexclusion and unfettered creativity. Social commons-based approaches, in turn – such as the *tecnobrega* business model – prove that cultural production, and even a mature industry, can emerge in spaces where intellectual property protection is either *nonexistent*, *irrelevant* or *unenforceable*.

These legal vacuums are a problem that is most visible in developing countries, but they can and do exist in developed countries as well. An example of a social commons born in developed countries is that of the mix

tape markets in New York and London. Thus, social commons should not be considered as a phenomenon observed only in global *peripheries*; it is also applicable to the *center*. Indeed, the center/periphery distinction can also be applied within the center itself; the center has its own peripheries.

This also applies to the peripheries of the global Internet community. Away from the centers of industrial distribution, where intellectual property is simply not a force to be reckoned with, communities of file sharers behave toward the material they share as though it were part of a commons. This does not mean that there is no wealth to be captured from file sharing; both legal and social commons strategies could be pursued to facilitate new business models. A legal commons approach would be to establish a system based on compulsory or voluntary licenses, as has already been proposed (Netanel 2003, Shih Ray Ku 2003, Fisher 2004, 199–258, von Lohmann 2004). A social commons approach would be to simply face reality and offer consumers the option to pay *something*, as Radiohead, Saul Williams and Trent Reznor did; taking advantage of the value created by openness in terms of concert attendance, sale of merchandise and increased popularity.

Four challenges facing open business

The free software phenomenon is now well studied, but researchers have only begun to turn attention to how law and policy can encourage open cultural production more generally. As Yochai Benkler writes, the correct question to be asked is “Are we leaving enough institutional space for the social-economic practices of networked information production to emerge?” (2006, 393). Looking more narrowly at licensing for open business models, we could ask: How can free/open licensing models for intellectual property be translated into public policy, legal doctrine, activism, and research in a variety of disciplines, so as to construct institutional spaces within which creators, consumers and entrepreneurs may find safe room for social action?

“Room for social action,” in this understanding, refers to room for collaboration in the production of information – which can be valuable in and of itself or as a building block for other activities, including entrepreneurial ones. This question can be used to focus research efforts and convert them into public and community policy, legal doctrine and further research agendas. It can also be used as a starting point for thinking about free software and open business in a more strategic and focused way, emphasizing the creation and defense of a healthy institutional environment.

A preliminary sketch of prominent challenges for the establishment of a receptive institutional environment for open business models in Brazil can be made around four main issues. The four interrelated challenges identified below are intended to provide a starting point for policy analysis and research. They relate to: 1) bridging the legal and social commons; 2) organizing communities of information users/producers; 3) reconciling diversity in legal regimes and multiple jurisdictions; and 4) educating public opinion for the purposes of reforming information policy.⁸

Solving the social commons conundrum

While functional business models can and do emerge from social commons, this should not be taken as an excuse for a “divided kingdom” approach to IP law. Rather, opportunities for convergence between the social and legal commons should be actively pursued. Legalization of social commons can provide greater certainty to producers and users, and a better business climate for entrepreneurs.

The *tecnobrega* business model is, above all, a viable business model; yet its informality comes with a price. Some *tecnobrega* actors are held back by the same informality that gave birth to their success. Such is the case of the *aparelhagens*, which are financially dependent on party planners. Only a handful of *aparelhagem* enterprises are formally constituted as a corporation, and thus able to pursue a wider range of financing options. In addition, any situation involving lack of certainty in legal status is a potential source of financial and personal risk. Are these businesses operating legally or illegally, after all? Tacit permission to reproduce and distribute *tecnobrega* music might not be a sufficient defense, given that Brazilian copyright law states that these acts demand “previous and express authorization” from rightsholders (Lei 9.610/98, Article 29). It may be possible to find legal arguments outside the copyright statute to support the legality of these activities. If a *tecnobrega* artist decided to sue, however, the outcome would be very difficult to predict. The fact that Brazilian law also designates every act of copyright infringement as a criminal offense further raises the risks for actors in the *tecnobrega* industry.

8 These issues do not cover the entire range of problems. Two basic structural problems of Brazilian society are not covered here: unequal access to information - processing tools and online connectivity (the digital divide problem), and especially, insufficient access to education. These related problems are deeply connected to the issues examined in this report, but are also part of a much broader context, which cannot be examined with proper depth here. Suffice it to say that there is more to be done in the area of information policy than can be accomplished through intellectual property reform alone.

The social commons of the *tecnobrega* scene does not need to be a social commons – there is no reason not to pursue legalization. The problem, however, is exactly how to translate such opportunities for convergence into public policy? Creative Commons licensing could be a good instrument to move some of the actors of the *tecnobrega* production and distribution networks into the security of legality. This is, of course, easier said than done. The *tecnobrega* culture is now an established one, and intellectual property law is certainly not a popular topic. To expect judges and legislators to become aware of the *tecnobrega* phenomenon, and translate experiences such as this into legal rules, is probably also wishful thinking at the present moment. Nonetheless, it is not an unreachable goal.

Reconciling legal diversity and multiple jurisdictions

Licensing provides a way to give legal structure to a social commons, without requiring wholesale shifts in IP law. Since open content licenses are intended to create platforms for collective international collaboration, however, licenses must be written with a global community in mind. This entails challenges of both textual and legal translation. Open content licensing is very jurisdiction-sensitive, and diversity of legal interpretations and implementations is to be expected.

Take for example, the legal status of the GNU General Public License (GPL). The Free Software Foundation maintains that the GPL is not a contract.⁹ Under American law, that may be a valid statement (Rosen 2005). According to the laws of Continental European or Latin American states, however – where contracts do not always require consideration – the situation may be different. Under Brazilian law, the GPL is unquestionably a contract (Lemos and Senna 2007). A similar interpretation prevails under German law (Metzger and Jaeger 2001).

Both the Free Software Foundation and Creative Commons have done a great deal to ensure that their licenses are appropriate for an international community of users (Stallman and Moglen 2005, Garlick 2008). Even after conscientious internationalization efforts, however, the possibility remains for conflicts due to legal diversity. Problems of “legal interlinking” need particular consideration. Most discussions on the legal aspects of free and

9 “Licenses are not contracts: the work’s user is obliged to remain within the bounds of the license not because she voluntarily promised, but because she doesn’t have any right to act at all except as the license permits.” (Moglen 2001) While some licenses could be contract-based, the official position of the Free Software Foundation is that it is strategically sounder to base licenses on copyright law because this is more uniform globally than contract law (Stallman 2006).

open licensing concentrate on intellectual property law. A wealth of possible interactions, however, exists between these licenses and other fields of law, again with great room for diversity from country to country. The connections that can be drawn between copyright law, and contract law, consumer law, administrative law, and constitutional law in Brazil are good examples.

This challenge is not exclusive to communities of users and creators of content. It also affects individuals holding positions in all branches and at all levels of government. Correct interpretation of licenses requires not only knowledge of a given jurisdiction's law and international law, but also a considerable amount of background information that is not necessarily the domain of judges, legislators, and administrators. There are consequently many opportunities for error in establishing the proper meaning of licenses, and relating them correctly to the facts at hand. This might happen even when licenses are considered to be clear by the communities and actors that are most directly involved in their use.

Legal scholarship can play an important role in preparing legislators, judges, administrators, and communities to adapt previous legal doctrine to new licensing models, and in mapping the territory of possible interactions between copyright law and other fields of the law, to provide solutions for potential controversies. This is a challenge not yet taken up by the legal community in Brazil, albeit with occasional exceptions (Falcão, Lemos and Ferraz 2007). Key problems remain to be unpacked by legal scholars: How do these new licensing models fit in with the existing legal categories? How can legal instruments created for a certain legal reality be translated into doctrine that is understandable in terms of the law of other countries?

Community organization for commons management

Open licensing gives birth to project-oriented communities, which can be managed in varying ways. Each free software/open content project has the potential to attract groups of developers, users and other supporting individuals whose interpersonal relationships surround the creation, use and management of a commons. The potential to form communities, however, is not always met. Many free software projects, for example, are run by one or two developers, with user bases that are negligible in size or structure. This means that not every open and collaborative project will result in a commons-based peer production model. When projects succeed in attracting an active community, however, new challenges of community policy and commons management arise. What specific license terms best

reflect the community's intentions toward the content to be produced? How should a project be organized in order for it to be sustainable and achieve its goals?

Licenses are, in many ways, the most important political documents of communities built around the production of information over the Internet, "used as glue to bind groups of people together in common" (St. Laurent 2004, ix). Licenses function like social contracts, or even constitutions (Moody 2001, 27), establishing the ground rules for efforts of collaborative creation. Because of this importance, licenses can also be a key source of controversy and dissent. Some people may believe that the GNU GPL is the best license for a specific project, while others consider it too restrictive when compared to the BSD or MIT licenses. When use of material produced by other communities is necessary, moreover, licensing turns out to be more than an ideological problem; the range of choices is actually constrained by the licensing terms attached to existing material.

As an example, consider the issue of interaction between Wikipedia's GNU Free Documentation License (GFDL) and the Creative Commons' popular attribution share alike (CC-BY-SA) license. In their current forms, these licenses are incompatible, meaning that a world of valuable Creative Commons content cannot legally be integrated into Wikipedia. This situation may eventually be fixed through a change in the GFDL terms, "retro-fitting" them for compatibility with Creative Commons content (Wikimedia Foundation 2007). In order for this to occur, however, extensive discussion and negotiation efforts were necessary between leaders of the two communities, all subject to community approval. There is thus a significant cost to solving problems of incompatibility retroactively, in terms of community time and energy spent.

Deciding on proper licensing arrangements, then, becomes one of the key problems when building a community based on information production and sharing. But how to achieve consensus in an organized fashion? Content licensing communities can exist on a spectrum of formality. Some communities work perfectly well with ad hoc leaderships and a total lack of internal organization. Others end up adopting political structures and procedures modeled after corporate or governmental organization for the sake of decision-making efficiency.

Hacker ethos – or one conception of what qualifies as a hacker ethos – may resist such efforts at centralization (O'Mahony 2005). Centralization and the acquisition of legal personhood, however, can be crucial for some

communities to defend the environment that allows them to thrive, and to establish relations with other actors, such as corporate entities. This can be seen as both a defensive and an offensive strategy that should be considered by communities, depending on how hostile the institutional environment is to informal collective action, or how active the community feels it should be within environments that work on different terms, such as that of traditional businesses.

That does not mean – borrowing terms from software development (Raymond 2000a) – leaving the bazaar entirely to take refuge inside the cathedral. Two different issues are at stake here. The decentralized production of information is to be maintained in the way community members relate to each other. The institutional centralization provided by the status of being a legal person, however, enables the community to relate to those outside. The acquisition of legal personhood is not something that should be done by every community involved with open content projects, but for some, it may be a necessity.

Information policy and public opinion

The relationship between intellectual property law and public opinion is one of the greatest challenges for both free software and open business in Brazil. As we shall see in the next chapter on copyright exceptions and limitations, there is no tradition in Brazil of considering IP regulation as a matter of information policy. This is, however, beginning to change.

The Brazilian federal government, through its Ministry of Culture, has recently undertaken a year-long cycle of debates dedicated to the revision of Brazil's copyright law. This multi-stakeholder forum approaches copyright as a matter of public policy and balancing conflicting interests, instead of merely as a natural right, or as the only possible incentive for information production (Fórum Nacional de Direito Autoral 2008). The results of this process are still impossible to predict, but the fact that it is happening at all is a positive sign. An increase in public awareness of copyright law also occurs every time the entertainment industry publicizes a new piracy-related arrest, or a blogger gets sent a take-down notice. Copyright acceptance does not necessarily follow suit; instead such actions often breed dissent and outrage toward the law – dissent and outrage of the positive, democratically necessary kind.

Regardless of the desire and potential for legal reform, there is also much catching-up to do. Intellectual property policy has been, for a long

time, a game played by only a handful of corporate actors, mostly behind closed doors. The interests at stake are still unequally represented, and because *experience* in dealing with decisionmakers is a factor of the utmost importance, the scales are heavily tipped. This is not, in other words, a level playing field. Greater mobilization and coordination of the groups that find common interests in access to knowledge is urgently needed.

Since many of the issues involved are extremely complex and require high levels of legal and technical knowledge, public opinion is very easy to manipulate. Content industry actors have already begun to conduct campaigns that play upon the fears of Brazilian consumers. (e.g. Teixeira 2006). More recently, the Creative Commons project has suffered misinformation attacks from the Brazilian royalty collecting societies. These groups characterize the CC licenses as harmful to the interests of authors, culture and legislative victories dating back to the Enlightenment; and beneficial to only a small number of large content providers, such as Google and Microsoft. According to these recent attacks, CC licenses are ultimately conducive to “barbarism.”¹⁰

When these mischaracterizations reach a population that is not well informed about copyright law, and has no experience in dealing with these issues in terms of information policy, the results may be disastrous. These campaigns have an effect not only on the average citizen, but also on legislative and judicial decisionmakers. A state procurement preference for free software in Brazil has come under legal attack from proprietary software interests, aided and abetted by judges’ confusion about the nature of free software. This reinforces the conclusion that a greater degree of mobilization and organization of the affected communities is needed. Communities that rely on cultural commons must account for the costs of inactivity in a political context that is not necessarily friendly to the activities of building, fostering, and managing a commons – no matter how legally entrenched the licensing practices that enable them appear to be.

Conclusion

Although this chapter began with an invocation of optimism, it concludes on a note of caution; an evaluation of free software culture and open business trends could easily fall into two traps of excessive optimism.

10 The attacks have been mostly penned by Fernando Brant, a composer who is also the president of the Brazilian Union of Composers – *União Brasileira de Compositores* – but also by others (e.g. Brant 2006 and 2007, Lichote 2007).

To fall into the first trap is to look at how knowledge and culture continue to be produced and shared despite unfair and arguably irrational intellectual property legislation and to be satisfied. The free software movement has accomplished a great deal so far, and maximalist reforms to copyright law and new enforcement technologies have been extraordinarily unsuccessful in stopping the free flow of information. It would be a mistake, however, to conclude that we are hearing the last gasps of transforming industries and trust that the situation will eventually resolve itself in favor of access to knowledge. An open future is not inevitable.

The second trap is that of thinking that clever license drafting is sufficient to provide breathing room within legal and technological constraints over the production, flow and consumption of information and knowledge.¹¹ Free software licensing is an elegant reaction against improper or unfair use of copyright law, by means of copyright law itself. The same can be said of every licensing model inspired by the free software movement, such as the Creative Commons licenses. These licenses provide major relief, and they are powerful instruments for change. As intelligent and essential as these licensing models may be, however, they exist in institutional environments that are extremely hostile to their ultimate viability.

Both traps may lead to political inaction. This would be a grave mistake. As tempting as these optimistic scenarios may be, they give the impression of closure where in fact none has been reached. Recent developments are encouraging, but could be reversed. The complexity of these topics needs to be streamlined to facilitate informed public discourse and policymaking. This implies building a semantic repertoire that is not simply composed of buzzwords and slogans – “DRM is evil,” “Information wants to be free,” etc. – and backing this new analytical framework with serious research.

Areas in which a social commons produces viable open business models provide a privileged point of view for the analysis of copyright regimes. With tensions between legal and social norms increasing rather than diminishing, it may be more productive to find a solution that welcomes the social commons and tries to achieve convergence through cleverly drafted legal reform, rather than pursuing the enforcement of an ever more unreasonable

11 This is a trap that both the Free Software Foundations and Creative Commons, to name only two key organizations, are well aware of, and do a great deal not to fall into. But from the point of view of content creators and users – the communities that use these licenses – it may seem that all that could be done has been done, and that it is up to government, media, NGOs, and corporations to fight for new legislation, or adapt to the current trends.

copyright regime. This is an option that will remain open only if information policy discussions are themselves characterized by openness.

Finally, open content communities must also play a more active role. The *tecnobrega* case study highlights the disadvantages of informality and the need for greater coordination and mobilization. Instead of acting solely in the realm of content production and sharing, these communities must also organize to stand in defense of a legal environment that welcomes social production of information in a cultural commons.

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