

# The Technical Micropolitics of the Online Independent Music Industry, 1997-2007

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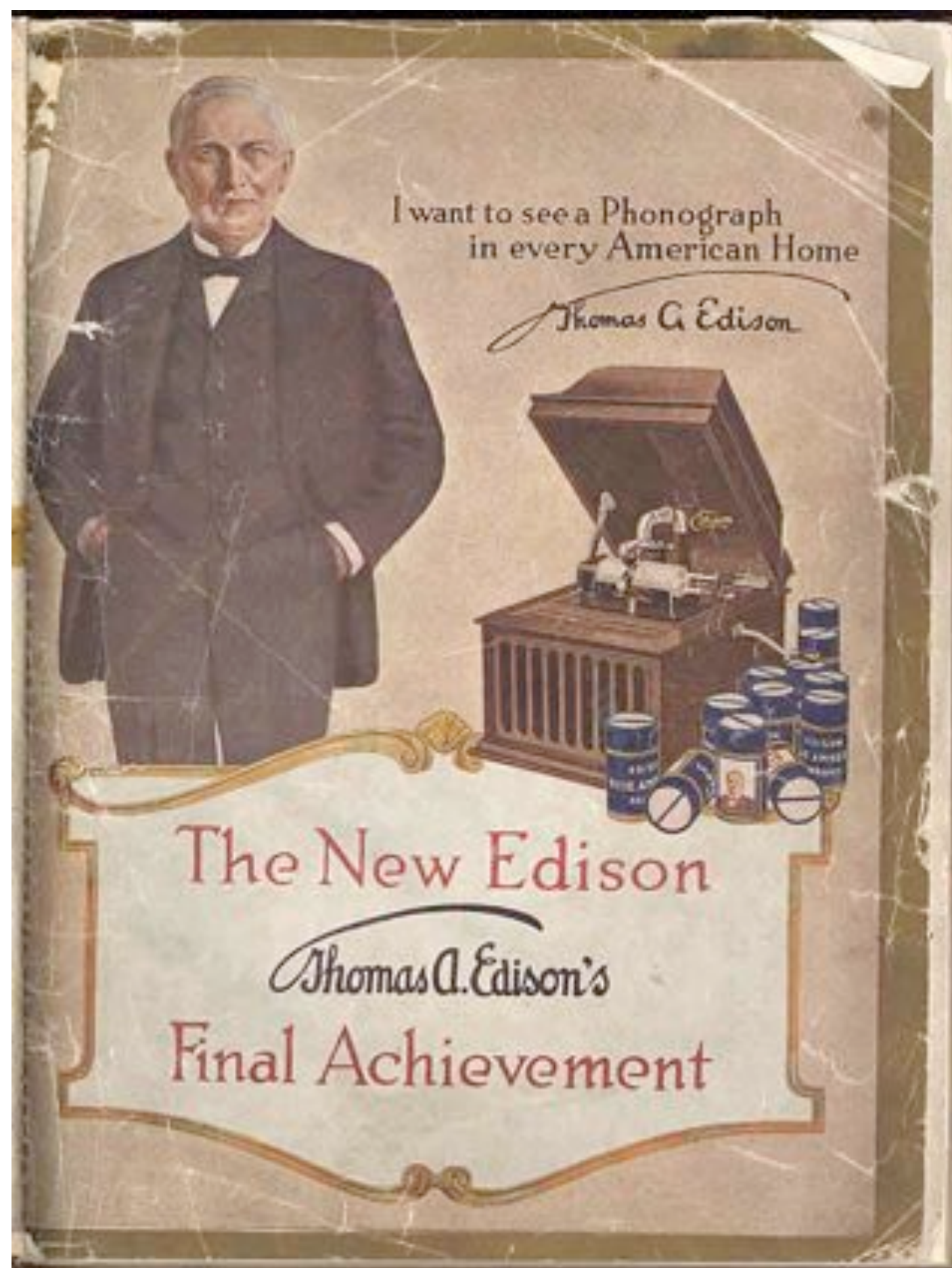
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The time period denoted in the title of this talk does little justice to the long history of the struggles I am about to describe. We can talk about the online music industry at its inception in 1997, but it inherits struggles that center around technology that date back at least a century, and assuredly longer than that.

It also belies the fine distinction between the problematic term “independent” (which has vague connections to “industry”) and the more interesting term “amateur” (which is at some distance from industry). However, as I will show, these distinctions are collapsing, and their collapse is intensively technically mediated.

Since being removed from everyday contexts and turned into a contested site for commercial exploitation, musicmaking, for most people, has become quite a precarious affair. Historically, it has been torn from its original contexts of work and ritual, then subordinated by the pressing chores and ordeals of agricultural life, then professionalized by forces of industrialization and urbanization, and then later deeply embedded in elaborate systems of commodity production and consumption - systems which have become accepted and normalized (Attali 1985)



the dawn of modern industrial technologies that permitted the mass broadcast and reproduction of musical recordings upset the preceding era of printed sheet music for domestic musicmaking, splitting independent musicmakers into consumers of radio and television programs, on the one hand, and on the other, bearers of instrumental practices now deformed by the techniques of electrification, amplification, and replication.

According to Keith Negus (1992), the birth of the platter disc represents an early site of struggle over the conditions of consumption. The wax cylinder gramophone enabled those who owned the machinery to not only play back recordings, but to produce their own on blank wax cylinders.



RCA then went to great pains to market its competing technology, the platter disc, the players for which were explicitly designed to not permit recording. Wisely, these industrialists foresaw the value of dominating the control of musical recordings.



Since the inception of the platter disc, an number of technological developments have arisen that have variously permitted or restricted the flow of amateurs and consumers into the realm of production (Théberge 1996): 8-track tapes, the early era of compact discs, and the current crop of DRM-encrusted DVDs, blu-ray discs and Apple AAC files represent well known technologies of restriction, while cassettes [what Simon Frith once called "weapons" against the version of culture capital would impose on them (1986: 278)], minidiscs, CD-Rs, Mp3s, and the Internet have been used to reclaim at least the musical *recording* back as something that ought to be, once paid for, under the control of the person who paid for it.



The portable 4 track recorder started to hit the pawn shop circuit (around the mid 1980s). This is where the shift toward the current state of things really got going. Enabling anyone who could operate a cassette recorder the ability to layer, to time shift (and thus emulate the processes of multitracking common to mainstream music). This is the central predecessor for software-based musicmaking tools, although other influences have also played important roles...rhythm machines, synths and samplers have all had their impact - we'll return to these developments later. the important point is that the process of technical disintermediation and decentralization began for most unpopular popular musicians during this era

During the past 30 or so years, the RIAA has successfully lobbied the most powerful government in the world to, first, in 1976, to protect recordings of music at all, and later to, progressively, extend the term of copyright to 70 years beyond the death of the work's creator. Most recently, we've witnessed the rather hollow victory of the RIAA's first successful lawsuit against someone who shared a few mp3 files over the web. These have been decades where technology has figured as an inevitable site of struggle for consumers, amateurs, producers, technicians, and corporations engaged with music, whether for fun, or in the pursuit of some form of social or financial capital.



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But copyright and Digital Rights Management are not the only fronts on which conflicts over music are playing out. They are pivotal to be sure, but they are part of a broader system of conflict playing out across the entire production and consumption chain of popular music - some of which are old, some of which are new.

What distinguishes the contemporary scene from any scene in the historical overview I've just provided is that the struggle now has so many points of friction occurring all the way down the chains of production, distribution and consumption. In fact, there are at least ten such sites.

**HOME SEWING IS  
KILLING FASHION**



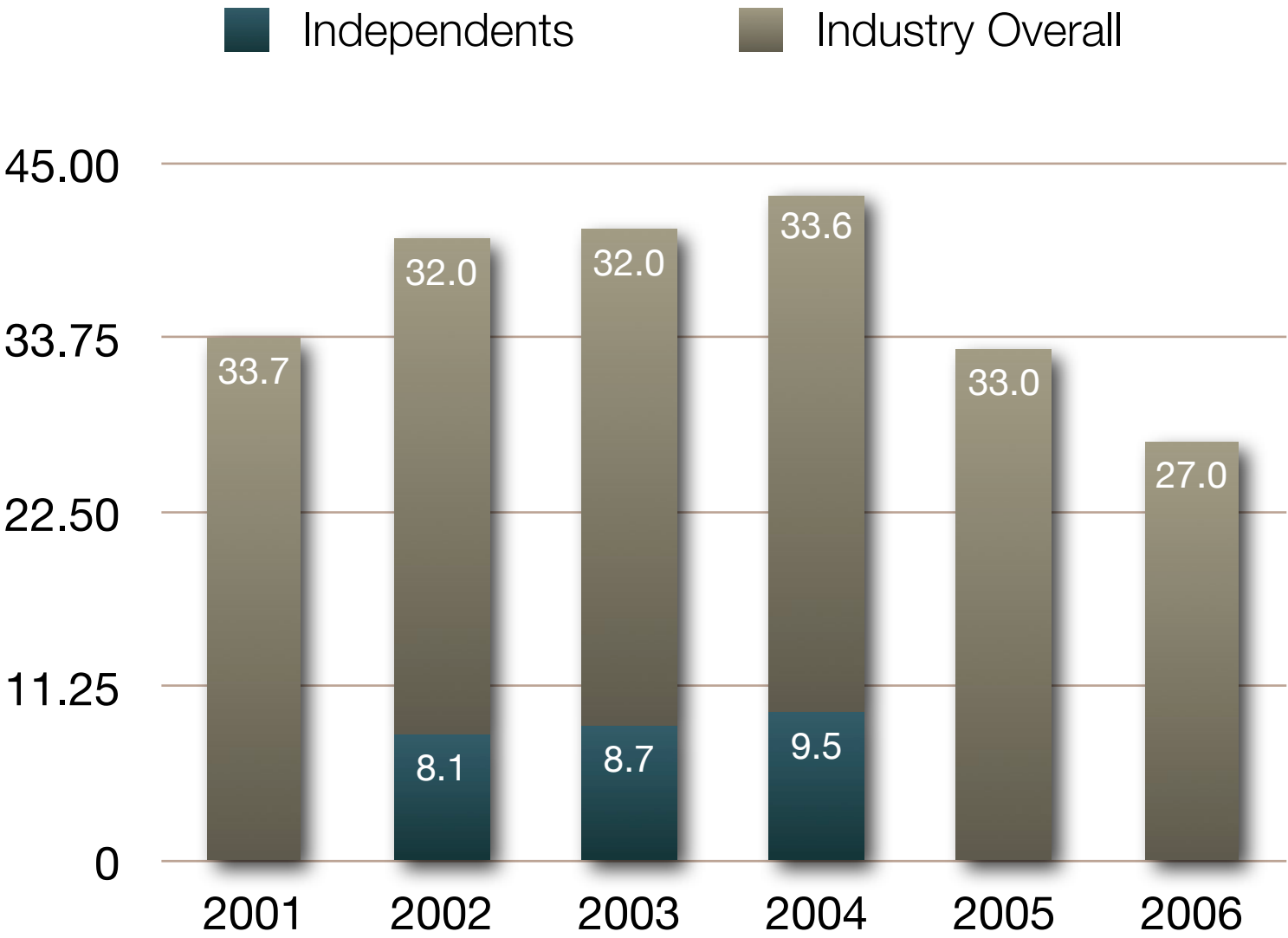
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# Global Music Industry revenues, USD (billions)



## Indie Music market share, global (IFPI)

2004: 28.4%\*\*  
 2003: 27.1%  
 2002: 25.3%

\*\*IFPI has not measured or publicly reporting indie market share since the 2004 figures were released in 2005.

Source: International Federation of the Phonographic Industry

IFPI music industry revenues figures reported 2001-2006, showing a partial increase in market share for independent companies and artists from 2002-2004.

# Technical Micropolitics

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- springs from a *critical constructivist* view of technology (Feenberg 1999)
- small, localized actions of resistance by users of technological artifacts and networks
- actions that work to democratize practice
- multiple competing and/or collaborating groups work to determine the multiple uses of a technology through use - they contribute to its design
- *disintermediation* of conventional uses of artifacts and restrictive network designs

critical constructivism: technologies and users co-construct each other. technology (artifacts and networks) is underdetermined, as are users. their interactions give each other meaning, identities, roles.

we can use this framework to interpret the actions, coalitions, and conflicts between various user groups in adopting (and shaping) the technologies of the internet to their own advantages. Viewed through this lens, the transformation of the online music industry may be viewed in terms of the varying degrees of success that a variety of user groups have met in their engagement with Internet and computing technologies - a micropolitical contest which has led to improved circumstances for some, and worsened circumstances for others.

with the increased ease of use of tools of music production, and the expansion of amateur musical practice, we are seeing a trend of increased individuation, DIY media, and independence from traditional music industry frameworks.

# Ten Sites of Political Conflict, 1997-2007

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## *CONSUMPTION*

- distribution (Napster, torrents, Internet radio)
- media (DRM, file formats, iPods)
- retail networks (Wal-Mart, Tower, iTunes)
- artist-fan relations
- criticism and taste

## *PRODUCTION*

- professional production tools/techniques
- sampling and appropriation
- amateur production
- performance (techniques and routines)
- composition

# Consuming Music, 1997-2007

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- file-sharing as prime mover (disintermediation of distribution networks)
- attempts by various parties to intervene meet limited success (Apple)
- consumer backlash against DRM? (DeCSS, etc)
- casualties (medium sized retailers)
- new ecosystem of criticism of taste multiplies
- consumption moves into private (iPods) and domestic (home computer systems) spaces; sharing moves into public networks

distribution, of course, was the prime mover in all of this (MP3, Napster, and bittorrent being the fulcra around which the whole conflict has turned). this extends to and imbricates with other fields - internet radio and its hybrids (Pandora, last.fm - over which other battles are fought - such as royalty rates payable to publishers by internet radio broadcasters

DRM and its discontents (Gillespie 2006) represent another space where the politics of culture are fought bitterly. On this front popular music audiences make simple choices - whether or not to download music for free, whether to circumvent DRM technologies, and/or actively sharing the spoils of their exploits in "freeing" locked media. to do so is to engage with the technology of the internet and computer media in subversive ways.

Competition between retailers has been fierce - emusic and others offering DRM-free music, iTunes locked into AACs, and Magnatune, and Radiohead challenging these models with experiments in variable pricing.

retail actors challenge p2p downloading by a countervailing strategy of increasing accessibility (e.g. iTunes Music Store) and ubiquity (Wal-Mart, Clearchannel) of competing products that are in any case locked up. the unintended consequences of this strategy, though, as we have seen, have produced casualties such as Tower Records (mid-sized retailers), but the tide of free downloading, unlocked emusic and small independent retailers has not been stemmed.

Artists and labels have been compelled to embrace the internet or not - with intriguing results (Einsturzende Neubauten's community harkening back to deadheads, albeit technically mediated quite differently).

to engage with audiences in ways that are inconsistent with mainstream models of revenue generation (ways that are, from the perspective of business, inefficient, and that look toward a longer tail) is a challenge to the prevailing technical regime - one in which audiences are configured as particular kinds of music consumers - who browse catalogs, respond to mass advertising, and make impulsive decisions that they may or may not regret soon afterward. the style of mass-engagement with audiences has given way to niche-engagement, niche branding and active audience niche research - in fact collaborating with fans in the design of revenue models (Radiohead, Barenaked Ladies).

Artists and labels also are directly posing a challenge due to this change in direction of the tide of consumer behaviour. an increasingly powerful power bloc (**A2IM, Future of Music coalition, Canadian Music Creators' Coalition**).

With the growth of online networks of exchange via myspace, facebook, last.fm, pandora, and other sites, the mediation of taste among music fans has usurped conventional channels of music criticism. While fans who occupy these sites contend with the multitude of different opinions about music, they also contend with the vicissitudes of the technological platforms that permit them to express and discuss preferences and playlists. The terrain is contested by the old players (AOLTW, EMI, UNI, SONY, BMG) via buyouts (News Corp/myspace, CBS/Last.fm, Apple/RIAA). As well, more conventional indie players such as Pitchfork have played an important role in mediating and stemming the tide of "bathroom wall" criticism.

amateur hackers of musical taste create dialogues that challenge the canon of popular music, but are subject to challenge from existing channels of criticism. However, the technical milieu is an ongoing site of struggle - anyone can start a last.fm group, but those sophisticated enough to tinker with the technical environment (using plugins and widgets to export their taste to a broader audience, for example) gain an advantage in the arbitration of taste.



ProTools board and computer software, c.1997



“Logic Audio”

console/tape metaphor

A quick glance at screenshots from major music creation software attests to this (show Logic, Reason, and Ableton) - examples of strict control and path building for artists.

Logic audio is exemplary of the “recording studio” paradigm in music production software. Locked and loaded, this black box of a product scripts users in very particular ways, enabling a whole ecosystem of training programs, beta tester groups, and desperate user forums.



“Reason”

“rack” metaphor

Reason - note the telling names “Logic” and “Reason”, and what these imply for the idea of the “rationalization” of musical practice. This program uses the “rack” metaphor, borrowed from the techno genre. It is so rigid that it cannot be resized horizontally (as this image indicates, with the computer’s desktop figured prominently on the right).



“Live”

“Modular” metaphor

Ableton “Live”, on the other hand, presents a more dynamic, fluid, and “modular” approach, with many drag and drop customization options. This is more of a “Music 2.0” environment - along with the complete problematic that that phrase implies.

# Producing Music, 1997-2007

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- ProTools locked into consoles in early days, Cubase and other options emerge as viable competitors (c.1999)
- Rack (Reason) and modular (Live) metaphors work their ways into musicmaking programs via extensive beta testing and user-centered market research
- sampling and remixing reach the masses (e.g. *The Grey Album*)
- amateur networks of production and co-production flourish (youtube, myspace)
- composition/collaboration tools extend over wide territory (Rocket Network, eJamming, Jamglue, ccmixer)
- amateur music moves increasingly into domestic spaces, “professional” music moves into public space, becomes ubiquitous

production has been decentralized, and this move has intriguing engagements with the forces of DRM and open source software, where the struggle of musicians with the designers of their tools of production is further mediated. hacked software is the lifeblood of amateur networks of practice, which renders the situation even more precarious, as open source alternatives (audacity) have a long way to go before they can provide an equivalent user experience.

remixing, sampling, and massively collaborative works have permitted new forms and new thinking about artistry to emerge, recalling the and reinventing the idea of collaboration [DJ Dangermouse, OK Go, Jamglue].

amateur musicmaking in the home - for fun and not profit - is becoming a more prominent phenomenon, and is enriched by the dissemination and diffusion of user-friendly technologies, usually when they're on their way out and thus not the focus of attention by technology companies looking to enhance their bottom line - lyric sites, tablature and sheet music abound on the web, permitting amateurs to retrieve practices that were for so long bound up in print media.

Further - other spaces and definitions of the "amateur" trace out more direct confrontations with the monolithic industry: Music industry outlook reports cite "the threat to branded digital music from YouTube, MySpace and other user generated music" as significant (Portio Research, 2007). The combined growth of these sorts of spaces for amateurs is at times viewed as a further complication (or extension) of the mainstream companies' loss of market share to independents in recent years.

much ado is made over the value of live performance revenue in remunerating artists. Not much has changed for indies, who still scrape by on their merch sales, from one small venue in one college town to the next. Towns like Vancouver, that let their small venue infrastructure dry up (RIP, in order, Niagara, Town Pump, Starfish Room, Cobalt, Brickyard) go off the indie circuit's map. some might describe online music as a form of "ghettoization" of indie music performance - indie bands increasingly do not have to tour, and increasingly cannot tour - while well-heeled mainstream artists launch costlier and costlier touring spectacles

composition is still contested space too, technically mediated - EJamming, Rocket Network (Théberge 2004) as sites for both cooptation and emancipation.

Latour (1983) argues that in the process of extending the laboratory into the world, distinctions between micro and macro, inside and outside, and laboratory and world are blurred. This bears an uncanny resemblance to the idea of a networked and converged "music studio", in which a broader network is implicated, including remixing, social networking, physical sites of music activity, and other agents of change.

currently there are many players - in various statuses in terms of being owned by profit-driven corporations (myspace, last.fm), the implicit prescriptions of venture capital (facebook, ilike), its opposite (bittorrent, pirate bay) or more altruistic goals (ccmixter, Cd Baby).

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# Questions

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- What are the possibilities of aligning various user groups in their localized struggles into more comprehensive programmes for transformation?
- Is Radiohead the way of the future?
- Is music something that should have an industry?
- How might the technical mediation of sampling and appropriation play out in the long term? What will become of authorship?
- How might these struggles relate to extra-musical struggles (class, gender, race, anti-war, environmental, media reform, etc)?
- Is there something about (popular) music which resists or transcends its historical embeddedness in technical networks?

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