"Are You Ready to Join?": Free culture and the dynamics of permissibility in private music BitTorrent trackers

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Abstract:

The regulation of membership and access in private BitTorrent trackers, often justified as a necessary precaution against detection by industry enforcement agencies, is symptomatic of the complex, hierarchical social configurations of file-sharing communities and the contested borders between public and private spheres online. While the evolution of the BitTorrent model has been implicitly informed by the 'free culture' movement, which proclaims that the exclusive power of copyright holders to limit the circulation and modification of intellectual property inevitably constrains creative expression, this paper will draw on ethnographic research within a private music BitTorrent tracker in arguing that its interview process and share ratio system contribute to the institution of free culture's negation, a 'permission culture': access to the community and the shared content is only granted after the demonstration of advanced technical knowledge, adequate understanding of the community's conventions, and a commitment to active participation through an extensive interview with a senior member of the community. Furthermore, the strict and immutable policing of the share ratio—except during designated 'freeleach' occasions, or through the gifting of unmetered download tokens by site administrators—engenders a structure of distribution whereby the power to grant or limit access to files is privately held by the tracker's administrators, not the imagined public of the community. In light of recent work on the economies of piracy, these file-sharing communities are demonstrated to represent not an inversion of capitalist culture industries but the formation of alternative but equally hierarchized inequalities of access.

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Introduction

This paper is based on very early findings from my fieldwork on practices of digital music circulation and consumption: I will focus on the membership procedures for joining a private BitTorrent tracker, which I will refer to as Jekyll[1], and consider how processes of governance, regulation and enforcement shape the social collectives that cohere around music and the orders of public and private spaces engendered by music circulation and consumption. The regulation of membership and access in private BitTorrent trackers, often justified as a necessary precaution against detection by industry enforcement agencies, is symptomatic of the complex, hierarchical social configurations of file-sharing communities and the contested borders between public and private spheres online. This work should be situated within the context of Georgina Born's recent call for "systematic consideration of the ways in which the social and technological mediation of music and sound enter into and animate their spatialities" (Born 2013, 24). Given that the spaces music animates include online forums, listening rooms, and file-sharing networks, my research into practices of musical circulation and consumption online must be concerned with the social and technical configurations of these practices: its platforms, politics, and modes of participation. My interest in presenting this early research is twofold: first, I want to move towards deeper understandings of how online communities construct and regulate themselves, and second, I want to consider the congruencies and points of disjuncture between file-sharing communities and free culture movements. My early findings suggest a multiplicity of ideological positions embraced by digital activists working towards the free exchange of information through the Internet, and although music may be 'free' on Jekyll, its circulation takes place within a highly managed environment, suggestive of free culture's negation, a 'permission culture'.

Jekyll and the Private BitTorrent Tracker

Jekyll, a private music tracker active for over five years, is one of the most prominent private file-sharing communities online, with well over 150,000 active members and nearly 1.7 million active torrents as of April 2013. File-sharing on Jekyll takes place through the BitTorrent protocol, the most popular peer-to-peer file distribution protocol worldwide. BitTorrent's widespread adoption can be linked directly to its approach to 'free-riding' behaviors: the protocol inherently incentivizes sharing, as a user's downloads are throttled if upload bandwidth is limited or deactivated, a response to the pervasive problem of non-

[1] While I am adhering to standard ethical guidelines for ethnographers by anonymizing the name of the field site and my informants, I also recognize that Jekyll can be easily identified by individuals familiar with the private tracker scene or even with a few casual search engine queries: this point is of equal relevance to theoretical reflections on the contested boundaries between public and private spaces as well as a methodological matter of concern for digital ethnographers working in privacy-sensitive field sites. Anne Beaulieu and Adolfo Estalella argue that aspirations of informant anonymity in digital ethnography are often unrealistic, suggesting that traceability and accountability are potential benefits for nuanced understandings of how certain types of seemingly private activities are now made public online (Beaulieu and Estalella 2012).

reciprocity on conventional peer-to-peer networks, such as Gnutella and Napster.[2] Like most trackers, Jekyll does not itself host media, it is an indexing service for 'torrent' files, which contain passkeys allowing users to join decentralized 'swarms' and participate in the circulation of data. While many public trackers serve as little more than a search engine for media piracy, lacking features distinctive of social collectives, Jekyll is clearly a community of sorts[3]: the site's forums and chat room channels are highly active, drawing together devoted and invested members into interactions beyond matters directly related to the core functions of the tracker.

Almost all notable private trackers work on an invite system, whereby an established member of the community vouches for the reliability of the invitee, primarily that the user will seed and maintain an acceptable ratio. Jekyll is unique among highly-respected private tracker sites in its implementation of an open interview system, where individuals seeking to join can access a chat room and undergo an interview with a senior member of the site — a process which I discuss in detail below. This system, whereby unknown individuals can gain access to the community, troubles some of the distinctions between public and private communities, and calls into question the types of private spaces Jekyll circumscribes. We know, of course, that the distinction between public and private is fluid and contested, and this dichotomy appears within many sociological frameworks. Jeff Weintraub identifies two fundamental distinctions that the public/private binary inscribes, which he calls *visibility* versus *collectivity*. Both meanings must be interrogated: why are the restrictions on the Jekyll community in place, and whose interests are being served by its specific socio-technical arrangements? Weintraub writes: "To understand what either "public" or "private" means within a given framework, we need to know with what it is being contrasted (explicitly or implicitly) and on what basis the contrast is being drawn" (Weintraub 1997, 4). While my research remains in its early stages, I suggest that a consideration of Jekyll's regulation of behavior may help illuminate what sort of private sociality Jekyll enacts.

The primary underpinning logic behind making a tracker private, besides security and the supposed evasion of detection by copyright enforcement agencies, is to enforce the necessity of long-term uploads, or 'seeding'. On a public tracker, users can 'snatch' files, which is downloading a file and leaving the swarm without re-contributing an equal amount, without consequence. Private trackers typically discourage hit-and-run activity through the implementation of a Share Ratio Enforcement (SRE) scheme, which tracks users' total uploads and downloads and prevents users with unacceptably low ratios from downloading additional content. While some private trackers do not employ a SRE scheme, entirely appealing instead to communal values of altruism and the mutual benefits of long-

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[2] A significant portion of scholarly attention to BitTorrent activity has been concerned with strategies for encouraging users to seed files: see Bharambe et al. 2006; Fan et al. 2006; Liogkas et al. 2006; Saroiu et al. 2002.

[3] While I will refer to the social formations on Jekyll in this paper as a 'community', I do not intend for the term to be understood unproblematically: ethnographies of online spaces that closely consider the utility of the community/network dichotomy can produce more nuanced understandings of online sociality (see Postill 2008; 2011).

term seeding, the importance of seeding on Jekyll is presented as both a moral imperative and an enforceable, regulatable mandate: one *should* and *must* seed to maintain download privileges and membership. Further unpacking the politics of Jekyll membership necessitates a close reading of the interview process, indicating what is asked and what is expected of members.

The Interview as Initiation Ritual

A vignette from my first day of fieldwork:
The IRC channel has been quiet, with only sporadic observations, complaints and short conversations observed, along with the sonic notifications of the joining and leaving of applicants. Over 50 people are in the room, of which at least 35 are idling staff members and at least one is an automated 'bot', which I observe enforcing many of the channel's rules, including accessing the channel from public or corporate connections, banned countries[4], use of anonymization software, and the 48 hour ban between interviews.
No one has been interviewed so far, a fact blamed by several on the early morning time for the primarily American staff, while applicants are identified from Australia, Vietnam, Lithuania, Canada, the United States and England.

All potential applicants see a channel entry message when joining, which reminds users of several commonly-enforced rules of the channel and forcefully instructs them to read the rules posted on a linked site and suggests the likely incomprehensibility of the process without adequate preparation. This channel, however, does not prepare applicants for the interview itself: it is a waiting room, where the only purpose is to 'queue' and wait for a staff member to approach them.

At 5:02 PM, a new applicant, EW, joins the channel. As over fifty individuals are logged in, many newcomers expect a staff member to greet them upon arrival. EW addresses the room: "Hello! i want to join Jekyll, can you help me?" He is shortly directed by MC, an applicant who has been waiting for several hours, to "follow the instructions". EW enters the proper command to join the queue and is subsequently silent. Five minutes later, another applicant, DV, joins the room, and similarly addresses the anticipated public: "May i apply for Jekyll", to which EW responds "folow [sic] the instructions".

We wait together for several more hours, with no interviews taking place. After five hours of no contact with Jekyll staff, several applicants and I decide to try at a different time.

After signing off that night, I reflected on the significance of the exchange between MC, EW and DV. While the foremost question on my mind — that is, why individuals choose to submit themselves to the regulations of this particular community, when an abundance of

[4] Strikingly, the interview IRC channel automatically bans individuals whose IP addresses originate from particular countries, and attempts to circumvent this restriction result in a permanent ban from Jekyll, even if an invite is procured. This includes highly developed as well as developing digital economies, such as Argentina, Brazil, China, Egypt, India, Israel, Mexico, Morocco, Pakistan, Portugal, Romania, Saudi Arabia, Thailand, Turkey, and Ukraine. This quite blatant exclusion of billions of individuals worldwide is puzzling, and I have not yet learned the justification for this decision.

alternative avenues for obtaining music are available — was not answered, I recognized that I had observed something of the mechanics of self-regulation that the site employs: EW had transitioned from uninformed outsider to an unofficial supervisor within a span of minutes.

While this may seem to be a trivial example, I argue that the interview process should be understood as an initiation ritual. The ritual's effects include the heightening of a sense of accomplishment and belonging upon its successful completion, the enforcement of particular ideologies of music, sound, and technology, and its own self-legitimization: the potential rewards for participating in this network of music circulation — in the form of obscure, well-organized, high-quality media — are portrayed as adequate justification for the stringent restrictions on technical behavior as compared to public trackers. Several informal discussions with individuals involved in private trackers mentioned that they understood the interview as an initiation ritual, serving the dual functions of eliminating those who were only mildly interested in joining Jekyll as well as ensuring new users understood the gravity of deviating from accepted practices of music circulation.

Social scientists studying rites of passage have suggested they can be understood pedagogically, conveying cultural knowledge experientially, generating social cohesion, and instructing individuals on the importance and mechanics of communal belonging (Kamau 2009; Maruna 2011). Alternately, it has been suggested that unpleasant initiation rituals can bring about cognitive dissonance, inducing disproportionately positive responses and feelings of affiliation towards the group (Aronson and Mills 1959; Gerard and Mathewson 1966; Kamau 2012). Similarly, studies of hazing rituals in fraternities suggest that negative induction experiences — including requiring initiates to wait for extended periods of time before being interviewed — can engender social dependence, tune individual opinions into alignment with group ideology, and enforce the hierarchical social dynamics between group leaders and initiates (Keating et al. 2005; Pomerantz 1995). While acknowledging the potentially helpful resonances of each of these formulations to my research, I want to avoid reductive comparisons of Jekyll's interview process to other orders of initiation activity, preferring instead to closely examine the preparation and enacting of the interview process.

Jekyll staff and senior members direct applicants to carefully read through an online guide, which explains the interview process itself as well as providing an overview of the information on which users are tested. Jekyll is well known for its strict enforcement of rules regarding audio formats, bitrates and encoding methods — to the extent that web-only releases encoded below community standards are sometimes not allowed, an example of Jekyll administration prioritizing adherence to quality guidelines over the expansion of communal resources — and the overwhelming majority of questions in the interview are related to audio compression, permitted formats, acceptable procedures for ripping audio

from physical media, and detecting poorly encoded audio.[5] The interview often takes as long as an hour, as several questions are re-presented in different guises and close attention to detail is required: for example, users are expected to have the target and average bitrates of each preset of the LAME Variable Bit Rate MP3 encoder memorized, an esoteric bit of knowledge that few filesharers — even those experienced with digital audio encoding — hold before studying. As reference to notes or online study materials is not allowed during the process, individuals can be failed for not answering quickly, and the decision to accept or reject an interviewee rests solely with the interviewer. After failing to be interviewed in the first day, I rejoined the channel the following day, prepared to wait indefinitely until interviewed. I remained online for over eight hours, during which several applicants questioned the legitimacy of the interview process and suggested that we were just 'wasting our time', before a staff member began contacting applicants. After an additional hour of waiting for my turn to be interviewed, I quickly failed the interview, after incorrectly identifying a banned lossless audio format as permitted and incorrectly ordering a series of lossy encoding presets in terms of 'quality'. I was banned from the channel for forty-eight hours, and successfully passed the interview without complications on my second try three days later.

The question "Are you ready to join?", displayed in bold on the interview preparation website, is indicative of this disposition and regulation of members: the multiple connotations of the phrase suggest both the desirability and the difficulty of the initiation process. Indeed, my own experience verifies this interpretation: my relaxed read-through of the interview preparation site and community rules was inadequate in preparing me for the process, and failing the interview induced me to study in earnest over the following days. If, as I suspect, one of the functions of the interview process is to regulate the commitment level of applicants, then my own experience seems to corroborate the efficacy of the administration's approach. The enforcement of technical proficiency within new users on Jekyll is indicative of what Andrew Barry calls a 'technological society', in which technology is not only embedded in modes of economic production, but in the political imagination, in the manner in which social collectives conceive of the possibilities and responsibilities of government (Barry 2001). Barry argues that a central characteristic of technological societies is "a concern with the technical skills, capacities and knowledge of the individual citizen" (ibid., 3): responsible citizenship is understood as entailing technical proficiency and engagement beyond that of the receptive consumer. Jekyll attempts to govern not only behavior also knowledge: not only the practical knowledge obtained through participation, but theoretical knowledge about audio production and transcoding — even if the participant does not intend to contribute new files to the site — perhaps with the intention that sustained engagement with the psychoacoustic bases of perceptual coding will influence users to prefer high-bitrate audio.

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[5] Jekyll is infamous for its large contingent of audiophile members: approximately 30% of all music on the site are encoded in lossless formats, which ensures the audio is CD-quality or better, but at the expense of much larger file sizes. While a thorough discussion of audio formats and perceptual coding is essential for understanding the musico-technical social formations on Jekyll, it is beyond the scope of this paper: on audio compression, see Sterne 2012.

A stipulation regarding note-taking is symptomatic of Jekyll's presumption to govern behavior beyond its own communal spaces: interviewees are not only instructed to close all web browsers during the interview, they are also informed that referring to handwritten notes during this time is equivalent to cheating, and any attempt to cheat during the interview can warrant a permanent ban. Of course, while both restrictions are undeniably unenforceable, it demonstrates that the domains of human action Jekyll considers regulatable extend even into offline realms, into the private physical space of applicants and their surroundings. Interviewees are also asked to share personal information, including their musical background, their history with file-sharing, their record collection, documentation of their home broadband connection and computing resources, and if they have participated in the buying or selling of tracker invites — one of the most serious offenses on Jekyll, which warrants exploration in greater detail.

In addition to the interview process, Jekyll also allocates seasoned users a limited number of invites, which allow for trusted individuals to bypass the interview and immediately participate in the circulation of music. Selling invites to Jekyll to unknown individuals undermines Jekyll's regulatory structure in two ways: as invitees are not required to read community rules, if they are not trustworthy, responsible contributors, they can, in theory, negatively affect the health of the swarm; secondly, it contravenes the interview system and potentially negates the hierarchization it enforces. Additionally, Jekyll has evolved into a entryway of sorts for those seeking to participate in the broader private tracker scene. As Jekyll is widely considered to be the largest, most respected private tracker to not operate on an invite-only scheme, I have encountered individuals seeking access to other trackers — for example, trackers specializing in TV shows or Macintosh applications – who, lacking the endorsement of a current member, join Jekyll with no intention of building a music collection, only for the purpose of cultivating reputation, quantified in the form of the ratio. Once the user has been promoted to a higher 'user class' — an automated process calculated by the length of membership and amount of content uploaded — he or she can access a special sub-forum dedicated to sharing invites to other trackers. As only proven, 'trusted' members can participate in this forum, Jekyll administrators encourage the distribution of invites in this space, and strictly forbid it elsewhere on the site. Accordingly, as the health and security of the broader scene of private trackers depends on the reliability of invite sub-forums, access to Jekyll is strictly related, and attempts to circumvent these systems are understood as threatening the structural integrity of the community as a whole.

The Free Culture Movement and Private BitTorrent Communities: A Comparison

My experience preparing for and participating in the initiation ritual of Jekyll led me to question the ideological foundations of private trackers, which I had previously assumed to be closely affiliated with the Free Culture movement. The term 'Free Culture' was popularized by American legal scholar Lawrence Lessig, whose work on intellectual property is strongly influenced by free software activist and programmer Richard Stallman. The free culture movement, at the most basic level, seeks to "undo the exploitation enabled by private ownership of technology, media, and communication network" and "promote

the advancement [of] free software, free formats, & free cultural works", with a particular interest in promoting open, universal access to knowledge (Students for Free Culture).[6]

The BitTorrent protocol is a prominent example of a widely-adopted free/libre/open-source technology. Georgina Born, writing about the 2009 development of 'distributed hash tables' (DHT), which enables swarms to circulate content without a tracker service of any sort, describes the reconfiguration of "[. . .] the protocol and its instrumentally engineered virtual public into a fully rhizomatic system" — a alignment which is even more inclusive and equally distributed (Born 2013, 31). Similarly, BitTorrent technology has been described as playing an active role in the so-called "flattening of the Internet", and has even been proposed as a model on which to base an entirely new digital communication network (Towsley 2008). Inasmuch as the technology behind BitTorrent engenders the creation of new publics and affords the circulation of digital information outside corporate-controlled client-server relations, it can also be deployed within private spheres: the protocol can be used to distribute software updates on a company intranet, allow software development teams to collaborate from remote locations, or, in the case of Jekyll, be configured to only accept clients whose passkeys are verified by the tracker. A Free Culture advocate informed me that individuals are free to create private communities *using* open technology: the capacity to manipulate technologies to suit individual needs is a central tenet of the movement. While there is no inherent contradiction in the formation of private BitTorrent communities, it does not necessarily follow that usages of open technologies are themselves ideologically aligned with the Free Culture movement, necessitating inquiry into the relations between Jekyll and broader social movements. My early findings suggest a proliferation of 'free cultures', which implicitly or explicitly embrace aspects of Lawrence Lessig's work, but whose primary interests lie outside the abolition of private ownership in regards to media formats, communication networks and technology.[7] This understanding of Jekyll as only loosely affiliated with the free culture movement is supported by a recent decision to phase out the circulation of files encoded in the open-source format Ogg Vorbis

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[6] The Free Culture Movement distinguishes between no cost offerings, or 'gratis', to intellectual property which is open and carries no restrictions on its use or modification, referred to as 'libre'. The phrase 'free as in free speech, not as in beer' is a commonly-deployed cliché in free culture circles, but the distinction between the two becomes blurred in BitTorrent trackers, as the freedom to modify and distribute recorded audio and the freedom to obtain music without cost are interrelated. My preliminary findings suggest that some members of Jekyll choose not to use licensed streaming services like Spotify due to its closed source code, restrictive digital rights management software, and the inability to modify or remix locally saved files; others freely admit that they use Jekyll because obtaining music from licensed services is cost prohibitive or simply inconvenient.

[7] In discussing the possibility of a proliferation of free cultures, a passionate open source/free culture activist instructed me that the movement is often misunderstood and its vocabulary co-opted towards other aims, what he called 'openwashing'. The phrase Free Culture meant something quite definite to him — the promotion of open-source, publicly-held technical standards, and the dissolution of private control over digital infrastructures — and 'free cultures' interested in promoting other ideals were unrelated to the 'true' Free Culture Movement. While it is outside the scope of this paper to comprehensively identify and analyse the multiple movements affiliated with Free Culture, we might identify two broad categories: those primarily concerned with transparency and openness in digital infrastructure, and those interested in the reconfiguration of intellectual property law (see Coleman 2012).

in favor of the patented MP3 format, a clear violation of free culture's preference for open-source formats.

It is striking that Lessig, in writing about the evolving, regulatable architectures of the Internet, suggests a trajectory towards ever-increasing control over digital activity, and notes the regulatory indeterminacy of code: it can be used to open up or close down activities, connections, derivations. He writes, "the architecture of cyberspace is power" (Lessig 2006, 79). If 'code is law' online, then the share ratio enforcement scheme is a central actor in the designation and regulation of permissible behavior on Jekyll. When Lessig asks, "Should the architecture allow perfect control over intellectual property, or should we build into the architecture an incompleteness that guarantees a certain aspect of public use or a certain space for individual freedom?" (and, of course, implying the desirability of the latter), one then must ask what sorts of individual freedoms Jekyll challenges by delineating what, when and how individuals obtain music (ibid., 196). Considering the presumption of authority over applicant's offline actions during the interview, it is unclear what spaces remain not under the province of Jekyll administrators.

Jekyll as Permission Culture?

Within the Free Culture Movement, the loosely-defined term 'permission culture' is used to describe both the state of intellectual property law in the global North as well as a hypothetical IP 'police state', where all uses of intellectual property requires the licensed permission of rights holders. It is claimed that those seeking to reconfigure the Internet as a 'permission culture' would regulate behavior in such a way as to infringe upon the personal rights of creative expression, which were historically considered 'fair use'. If, as Lessig claims, the strict regulation of digital behavior with intellectual property by enforcement regimes constitutes a permission culture, what type of culture does Jekyll represent? In the remainder of this paper, I will offer a few thoughts towards understanding how Jekyll resembles, while not embodying, free culture's negation.

With very little modification, Lessig's primary criticism of permission culture — that it stifles creativity, innovation, and limits open and universal access to knowledge — and his assertions as to the importance of maintaining freedom to modify and distribute cultural content, can be directed towards the private tracker model. Lessig's argument is both ideological and economic, arguing that open infrastructures are of vital importance for healthy digital economies. With this in mind, one might consider the digital economy of file-sharing, and how private trackers should be conceptualized economically. Ian Kash et al. writes, "In accounting for consumption (download) and labor (upload), *private BitTorrent communities are as much economic systems as they are computer systems*" (Kash et al. 2012, 221; emphasis in original). If private file-sharing communities are to be understood as economies, one would expect a private community to be oriented towards an optimal economic structure, or, at least one marginally beneficial compared to other feasible alternatives. However, Jekyll's ratio-based economy suffers from multiple market failures, and it is apparent that the circulation network of users and the resources they control could be arranged in a more efficient configuration. For example, the serious problem of 'overseeding', where too few users are obtaining new content, has been considered as

analogous to a 'credit squeeze' (Hales et al. 2009; Jia et al. 2012). On Jekyll, this imbalance of 'credit' has been so prevalent that some prominent users with 'buffered' accounts — those who possess a very high ratio — will offer to 'snatch' the uploads of users in need with no regards to the actual content, analogous to donating a portion of their buffer.

Another study found that the 'tit-for-tat' (TFT) incentive mechanism defined in the BitTorrent protocol is designed similar to that of a progressive tax scheme: users with low upload bandwidth are capped at a lower download rate than users with higher upload rates, but those users with higher quality connections contribute a disproportionately high percentage of the swarm's total data (Piatek et al. 2006). This arrangement is found in most healthy swarms, suggesting that the most efficient arrangement may involve several high-bandwidth seeders providing a large proportion of data, rather than a system that necessitates each user contributing equally. On Jekyll, as a small minority of users with powerful connections accumulate the majority of upload credit, several individuals with sub-optimal connections told me of their selectivity when choosing new music to download, as it may take weeks to accumulate enough credit to download a full-length album. Secondly, the study argues that altruism does not necessarily follow from incentive mechanisms, calling into question the effectiveness of SRE schemes and other reward strategies.

The logic of making file-sharing private resembles the arguments against free culture itself*:* that incentivizing labor with financial reward and continued control leads to better quality work. Permission culture does not regard the stifling of innovation as its objective, it is the byproduct of a prioritization of the rights of creators to control the use of their work over the rights of the public to make use of it. Similarly, Jekyll administration's right to control the flows of media on their network is structurally engrained in its technical configuration, even as the socio-technical arrangement works to inhibits the free flow of information. While an analysis of the economies of file-sharing is a welcome contribution, understanding SRE schemes as simply mediums for exchange lacks attention to other meanings, and indeed, mediations, including the social, cultural and musical actualities embedded within the numerical values (see Born 2005).[8]

A final example may help demonstrate how the regulation of circulation is comparable to the control over derivative rights in permission culture. Amidst some controversy, Jekyll administrators banned the circulation of all 'binaural brainwave entrainment' recordings

[8] A consideration of the ways in which SRE schemes serve to exclude certain individuals and reinforce inequal social relations draws out yet another parallel to free culture. Open-source software communities have been criticized for exclusionary practices, especially towards women (Reagle 2013). Reagle's analysis of the dynamics of inequality in the free culture movement presents an interesting parallel to the modes of governance found on Jekyll, in that both spheres presume to be based on a form of meritocracy: open-source software communities claim that reputation is obtained through the production of refined code, and reputation on Jekyll is directly related to the amount of data contributed back to the community. The myth of meritocracy and how these socialities systemically exclude disadvantaged individuals is well documented (see Deckelmann 2011), but we might imagine how the dynamics of inequality in online 'meritocratic' structures enact a form of permission culture, in that the acquisition of agency within the community is based on public approval.

— stereo audio files containing two slightly different sine waves in each channel, which some claim may alter mental states if listened to through headphones — as staff decided that these recordings could not be accurately categorized as music. This decision is grounded in aesthetic, social and technical judgments: beyond concerns over its dubious claims of cognitive effects and decisions regarding its musical value, there is evidence to suggest that it was also banned due to its evolution into a so-called 'ratio trap'. The files had originally been labeled as 'freeleach', a special class of torrents chosen by moderators which can be downloaded without counting against the ratio, while all uploaded data improves the user's ratio. As expected, 'freeleach' torrents are typically among the most popular torrents at any given time, regardless of their content: staff members choose which files will be marked 'freeleach' based on differing criteria, including personal aesthetic preferences, an interest in promoting under-heralded artists, or to enliven forum discussion with controversial choices. When administrators decided that the recordings should no longer be subject to the freeleach label, the body of seeders remained so high that new entrants to the swarm were unable to seed any content back to the community, leading to disastrous ratio consequences for some new users.

Conclusion

While I am suspicious of the productivity of understanding the forms of governance within Jekyll as constituting an IP-agnostic permission culture, my early fieldwork has demonstrated that some 'free as in 'gratis' cultures' are not 'free' as in 'libre': an extraordinary range of behavior and knowledge is subject to discipline, with regulatable domains extending even into the private, offline world of users. The interview process, understood as a initiation ritual, is a key site for the disciplining and reeducation of applicants, engendering inequalities in regards to reputation, status and access. While the BitTorrent protocol offers a decentralized and non-hierarchical public system of distribution, private communities have also developed alternate affordances of the technology, including share ratio schemes, which, while existing outside client-server models, reinscribes some of the inequalities these systems engender. As file-sharing communities control powerful repositories of culture and information, scholars studying the digital circulation of media must attend to questions of access and work towards deeper understandings of the demographics of private communities.

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