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NEW MUSIC AUDIENCES: THE GENERATIVE IMPULSE

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Abstract

This paper looks at how the net neutrality debate relates to the music recording industry and considers how new media audiences consume music as social experience and with generative impulse. As the Internet appears to force the music recording industry to re-evaluate its function and change its approach to distributing music and making money, music artistes seem to no longer need to rely on 'record deals' to launch or build a music career; and music audiences no longer have to rely on Top-40 radio to be told what is popular listening. This phenomenon has serious implications for new and emerging Internet social networking audiences that are interested in new and innovative forms of music experiences. This paper explores the issues of corporate control on new forms of music consumption and commoditisation, where a dichotomous relationship has emerged involving the recording industry (which seeks to monetise and control access to music) and generative audiences (which seek to consume 'music on tap'). The centrality of generative music audiences to the changing relationships between professionals and amateurs in the music recording industry is discussed. The paper contends that the generative impulse of new music audiences present far greater opportunities to narrow the gap between what audiences derive from their desired music experiences and how the recording industry delivers those experiences now, and for the future.

Introduction

Pivotal to the ongoing chaotic debate on net neutrality is the issue of who should be entrusted with the responsibility of ensuring an open, non-discriminatory Internet for the future. Criticisms have been levelled at the major technology corporations, Internet content conglomerates, and telecommunication network operators like *Google* and *Verizon*, for promoting their commercial interests above others (de Bijl & Kocsis 2007).[1] The net neutrality debate has also raised concerns about handing over too much central regulatory power to Internet Service Providers (ISPs), as well as government agencies like the United States (US) *Federal Communications Commission* (FCC) (Singel 2010). Issues have also been raised regarding the ineffectiveness of national agencies on wider, international issues — as in the case of international music piracy — due to legal jurisdiction limits (*IPR Enforcement Report* 2009). Meanwhile, music industry trade lobbying groups such as the *International Federation of the Phonographic Industry* (IFPI), the *Australian Recording Industry Association* (ARIA), the *Recording Industry Association of America* (RIAA) and others have attempted to manoeuvre the net neutrality debate to suit their own business agendas (McCullagh 2010); leaving consumer audiences wondering about a future with a 'less neutral Internet' (AFP 2010).

[1] On 9 August 2010, *Google* and *Verizon* joined forces to publicly announced 'a joint legislative framework for net neutrality' (Davidson & Tauke 2010). The *Google-Verizon* statement limited non-discrimination to 'lawful' content without defining the term or indicating who decides what is 'lawful'.

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This paper highlights the issue of corporate attempts to control all forms of music consumption and commoditisation and makes sense of how new music audiences[2] have responded with generative impulse to seemingly defy the corporations, with the aid of the Internet and social networks. The body of this paper can be identified by three main areas: The first area describes new music audiences and discusses how their generativity — as 'generative audiences' — has been instrumental in driving the major changes taking place in the music recording industry, especially in the last decade. The second area examines the perceivable gap between the music business corporations, music artistes and their audiences, emerging in relation to those changes; and discusses what music qualities, technological tools and business models might lead to a vibrant musical ecology, where the boundaries between expertise and amateurism are blurred, and where there is potential for music excellence and enjoyment to be enhanced. The third area evaluates the music recording industry's current strategy to stabilise and capitalise on the monetisation of music by advocating the locking down of audiences' unfettered access to the Internet through Internet Service Provider (ISP) legislation and other forms of legal action; even when the industry is aware that generative music audiences increasingly seek to consume 'music on tap' (i.e. to consume any kind of music they want, anywhere, anytime and any way they want) (IFPI 2010). This paper argues that without clear consideration for the most important stakeholder of the Internet — namely generative audiences — a shift towards the regulation of net neutrality may make stagnant the generative impulse of new music audiences, fragment (online) music markets even further, and restrict or close down independent music audience-initiated communities.

Visualising the generative impulse

Audiences with 'something intended for exchange' (Appadurai 1986, p. 9) have paid performing artistes for centuries. The introduction of music printing and publishing in the 16th Century, followed by music copyright in the 18th Century, are said to have given rise to the notion of 'art for art's sake'.[3] French economist Jacques Attali surmised the impact of these developments on music as commodity: 'The artist was born, at the same time his work went on sale …' (Attali 1985, p. 47). Issues on new forms of consumption and commoditisation have traditionally been summed up by two main perspectives, 'bottom-up' and 'top-down': The bottom-up or 'grassroots' position argued that audiences made their own meanings out of mass-produced and mass-mediated cultural forms while the top-down position argued that cultural industries disseminated products on a largely unquestioning, naive public. The grassroots notion of popular culture has, in recent times, been the preferred reading over the less tenable top-down notion of 'mass culture' (Adorno & Horkheimer 1986; Hall & Jefferson 2006; Hebdige 1979). Even so, Adorno and Horkheimer's characterisation of culture industry did not necessarily mean that audiences could not make meanings out of the products they purchased; rather, cultural industries could 'astroturf', that is, disseminate products and manipulate audiences into buying those products by making such audiences think they make their own meanings.[4] A third perspective, that of 'generative audiences', is used in this paper to facilitate a multidimensional approach towards understanding the rapid developments taking place in the music industry (Tham 2009).

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[2] As there is no single, unproblematic adjective to describe the changes to music consumption taking place today, this paper does not seek to delve into the definitional problems associated with digital media or 'new' media or 'new music audiences'.

[3] A set of ideologies as music composers were released from a patronage system to become freelancers in an open market

[4] When RealNetworks began the publicity campaign for its Harmony music software in July 2004, one of its key selling propositions was 'freedom of choice' for consumers. Although users of RealNetworks' Harmony software were the first group of online music consumers who were able to listen to copy-protected music tracks they had purchased from other online music stores (including iTunes), individuals' rights to play music tracks they owned on their own device had been astroturfed into a special privilege for the RealNetworks subscriber (Borland 2004).

The rise of social media and mobile networking audiences enabled music artistes to find, connect and interact with 'audiences on tap': basically, this means that artistes can now engage generative audiences in more diverse and more efficient ways anytime, anywhere (Tham 2009). This section looks at the phenomenon of how generative audiences are now increasingly able to consume 'music on tap' and discusses the convergence of roles involving music artistes and audiences respectively, in the context of the changing music industry.

The successive inventions of the phonograph, radio, cassette (tape) player, optical disc (CD/DVD) media player, portable media player (e.g. MP3 player[5]) and online digital music player, overshadowed the commodification[6] of music to such extent that audiences appeared to reflexively buy ready-made music products from accepted music artistes rather than make their own music (Lash & Urry 1994). From the perspective of music artistes, each successive invention revealed new avenues for the consumption, distribution and monetisation of music. Each subsequent invention also presented both audiences and their favoured artistes with more ways to experiment and interact cooperatively with music culture (e.g. as artiste-with-audience, audience-with-artiste, artiste-with-artiste and audience-with-audience); and generate music recordings and other memorabilia; not just the memory of physically attending a 'live' performance. In this context, music artistes are generative when they are actively 'creating and producing' recorded music, engaging fan audiences, and growing music networks — 'outcomes that are aimed at benefiting, in some sense, the next generation, and even the next' (McAdams, Hart, Maruna & de St. Aubin, p. 7).

Technological inventions had a role, but they were not the generative impulse. For example, when online digital music (e.g. digital audio music files) emerged, CD music lost its tactility as the CD became a temporary vehicle to transport music from the artiste to the CD store to the computer hard disk, MP3 player or Internet. Without the physical manifestation of the CD album as music commodity — usually represented by photos of artistes, album artwork and other information — the relationship between music (as creative works) and artistes (as creative persons) was abstract to audiences. However, audiences found alternative ways to experience artistes' generativity by shopping online as an expression of 'kinship and other relationship' (Miller 1998, p. 35) and sharing their experiences. Similarly, the shifting paradigms of the music industry — e.g. from artistes' reliance on 'live' performances, to recorded music, and back to 'live' performances again — brought pressure on artistes' visualisation of their music 'offspring' (i.e. their fans, community, mediated or networked audiences) (Tham 2009). When the phonograph and subsequent inventions arrived, the generative relationship between performing artiste and audience member lost its tactility as the artiste and the audience were removed from each other's present company. Music artistes sought alternative ways to define their abstract uniqueness and use their music styles to define their own firsthand audience interactions (e.g. with 'live' music tour performances/'gigs', as well as online music videos, 'live' webcasts and MP3 blogs) rather than be stereotyped by a particular music category an established music record label thought could sell. Thus, online music social network sites that allowed real time creative visualisations (e.g. photos/artwork and videos on demand) became very popular with new music audiences and increasingly important[7] to newer independent artistes like US musician and blogger Kina Grannis, and Australian band Homebrewe whose case studies are discussed briefly in this section.

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5 MPEG-1 Audio Layer 3 was approved as an ISO/IEC standard in 1991.

6 For a discussion on the distinction between the terms 'commoditisation' and 'commodification', see Rushkoff, D. (2005, 4 Sep). Commodified vs. Commoditized. Retrieved 16 Sep 2010, from http://rushkoff.com/2005/09/04/commodified-vs-commoditized/.

7 Online social network sites like *MySpace*, *Last.fm* and others grew in popularity with new music audiences because they allowed new artistes to share and distribute their own music independently of the major record labels.

As the ability to manipulate digital music recordings became more common, so too did the real value of music to generative audiences evolve in tandem with the real value desired by generative artistes (Monaghan 2007). The music of existing artistes was the raw material for other audiences' remixing skills and new forms of audience generativity. More importantly, this meant that audiences could express their musical generativity more frequently online, and were more likely to become independent music artistes themselves. A *Gartner Group* and *Berkman Center For Internet & Society* report on consumer taste sharing in the online music business showed that not only passive recommendation systems via collaborative filtering, but also 'direct'/'active' taste sharing was very important for the individual user and had high impact on the individual's purchasing behaviour (Slater & McGuire 2005). For example, instead of primarily music charts, radio presenters, music disc jockeys, or music videos shaping how audiences hear and view music, both music artistes and fan audiences now had a greater opportunity to hear from each other firsthand through the online social media — by creating and posting playlists, commenting on artistes, showing personalised profiles on music-related social network sites like *iLike*, *MySpace* and others. These networking tools allowed audiences to play a greater role in generating a culture of sharing and critique, which in turn, generated more audiences (Slater & McGuire 2005). In 2005, nearly 25 per cent of frequent online music users said that the ability to share music with others in some fashion was a key criterion when selecting an online music service, while 10 per cent of early adopters stated that they often made music purchases based on others' recommendations. One-third of early adopters of digital media surveyed stated that they were interested in online music discovery and recommendation technology that was powered by their taste in music. Some of the most-regular users of online music services, whether free peer-to-peer (P2P) or paid services, were the most interested in consumer-generated recommendation tools (Slater & McGuire 2005). Travis Heynen (cited in Goldstone 2006, p. 1), editor of BIGSTEREO music blog, observed that many MP3 blogs were started by people who wanted to introduce other music fans to music they might not be aware of.[8] In MP3 Blogs: A Silver Bullet for the Music Industry or a Smoking Gun for Copyright Infringement?, Andrew Goldstone (2006) explained how positive niche conversations about a new music band might spread virally online throughout the immediate niche community and then into the mainstream.

The rise in popularity of MP3 blogs may have contributed to a greater degree of eclecticism in music consumption (Johnson 1997).[9] For example, an individual fan would previously have cultivated an interest in only a few music genres, for example, jazz, rock, and/or new age; whereas with the advent of technology, the individual is now able to easily acquire any desired genre of music and without significant cost through the Internet. Scott Lash and John Urry explained this eclectic mode of consumption as a form of 'reflexive consumption',[10] which they ascribed to the decline of traditional social influences (such as the individual's family, social class, or corporate association, etc.) over an individual consumer's choice (Lash & Urry 1994). For example, unlike their analogue (i.e. pre-digital) predecessors who physically gathered as like-minded fans to form bricks-and-mortar fan clubs, digital music fans can find other digital music fans with similar tastes and other overlapping interests (not necessarily related to music); and visualise their virtual fan-club and club-membership through the World Wide Web.

Artistes and audiences alike are increasingly aware of the inexpensive creative opportunities that digital encoding techniques present for individuals to copy, share and/or resample different pieces of music into mashups[11] using a home computer. In the past, music was manufactured by the

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[8] Andrew Goldstone's E-mail Interview with Travis Heynen, (http://this.bigstereo.net/) (10 April 2006).

[9] MPEG-1 Audio Layer 3 was approved as an ISO/IEC standard in 1991.

[10] Lash and Urry used the term 'reflexive accumulation' as a general term, with 'reflexive consumption' as a subset or category of reflexive accumulation.

[11] A 'mashup' can refer to the musical genre encompassing songs which consist entirely of parts of other songs (i.e. music mashup), or a digital media file containing any or all of text, graphics, audio, video, and

recording corporations — only a professional studio could manipulate a music recording — while audiences only had control over the playback/stop and fast-forward/rewind functions. An individual today can play an MP3, or play *with* an MP3 and collaborate with other individuals to produce further creative works of musical expression. In other words, an individual can be more than a listener: the person can also be a producer or co-producer of remakes and remixes. Therefore, reflexive consumption, and its parent term 'reflexive accumulation' (Lash & Urry 1994), are inadequate to explain the changes to music consumption. Audiences cannot simply be accumulating reflexively — new music consumption, regardless of eclecticism, is not noumenon but *phenomenon*, which includes audiences' *deliberate* self-production and co-production of music, remixes and mashups. The social forces that influence an individual's choices are more compelling now than before because the experience of new music consumption is also a haecceity[12] of audience generativity.

Hence, generative audiences can *choose* to be eclectic in their music preferences because audience individuals can increasingly connect more personally in different ways and maintain wider heterogeneous sets of audiences/social influencers through the varied combinations of physical-world and virtual-world relationships they generate. For example, instead of identifying themselves with an artiste's fan club, audiences may identify with the personal influences of the artiste. Independent music artiste[13] Kina Grannis' fans, for instance, formed 'street teams' situated across various locations around the world and who communicated with each other (or with the artiste, or with the artiste's other less-involved fans) through the same social networking/social media platforms the artiste chose to publicise her music.[14] These street team members are essentially generative fan-club members who not only promoted the artiste and her music, but who also had considerable influence over where the artiste chose to tour and perform, even though most of their social interactions occurred online rather than in-person. And fans' influence over the artiste can be powerful: Kina Grannis' siblings, parents and online fans reportedly influenced Kina Grannis' decision to not sign with a major record label company and forgo 'hundreds of thousands of dollars in big-time backing — instant fame' (Berg 2010).

Music artistes can also choose to be eclectic — in their preference for audiences — because, like audiences, they too are generative. Recently, a number of prominent music artistes have given their music away for free. Examples include British band Radiohead who told their fans that they could pay 'as much or as little as they like' for the band's new album 'In Rainbows', and then sent out a music piece on the Internet, allowing anyone to remix it; and the artiste Prince, who gave away his album '3121' through Britain's Daily Mail newspaper. US independent artiste Kina Grannis explained the rationale for giving away her music single 'Valentine' free-of-charge (as a MP3 download) instead of putting the song for sale on iTunes:

> … [T]he mindset behind giving away my single was just that for one, just a big thank you to these people that have been helping me get through the last two years and have made it all possible. But also, not being on a major label, not having hundreds of thousands of marketing dollars, there are really only so many ways for me to try to get the word out. And so my thinking was that if I give this away for free, and I encourage everyone to just give it to everyone you know, I don't care, please just give it away, that hopefully somewhere in there,

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animation, which recombines and modifies existing digital works to create a derivative work (i.e. digital mashup).

[12] In this context, haecceity or 'thisness' denotes the discrete qualities, properties or characteristics of the music experience which make it a *particular* generative thing.

[13] 'Independent' or 'indie' musician describes a musician's creative style, related acts and record labels primarily equated with alternative music and authenticity, and diametrically opposed to a stereotyped mainstream (Shuker 2002, pp. 170–1).

[14] Kina Grannis » Street Team. Retrieved 23 September 2010, from www.kinagrannis.com/streetteam.

> someone might become a fan of the music and might come back to hear more. (Kina Grannis interview 2010).

Kohen Grogan, lead singer of the independent band Homebrewe, explained in an interview that before giving away the Australian band's music free-of-charge as a music CD album, the band was at first reluctant to put their music on the Internet 'thinking that people would download them for free and we wouldn't make any money but … then we just quickly started to realise that we'd rather be heard anyway …' (Grogan 2010). Through the CD album giveaways, Homebrewe created more audience awareness about its music and found new opportunities overseas. Grogan explained that they experimented with the social network site *MySpace* in the beginning:

> We didn't have distribution. We didn't know how that worked. But from that, we put some of our tracks up on MySpace and started to get a bit of online presence with our own music and that opened up opportunities in the US that there's no way we would have got otherwise. And those opportunities have resulted in some of our songs featuring on compilation CDs, airplay across the US on college radio, and a whole bunch of other things that if we hadn't engaged in social media, it would not have happened unless we actually … flew over to the US and toured extensively or somehow managed to get airplay another way. But it really was MySpace that really got all that to start happening. It opened a lot of doors … (Grogan 2010).

For the established artistes, the giving away of free music was designed to drive demand for 'live' tours. Whereas for newer artistes, who may struggle to be signed by a record label, or who, as independent artistes, may be reluctant to share their profits with a record company, giving away free music was the means for such artistes to build an independent business model that suited their needs (Monaghan 2007). As newer artistes, both Grannis and Grogan (representing Homebrewe) were active users of social network sites and motivated by the desire to create real value by sharing their music freely with audiences on tap. They each had opportunities to sign with a record label, but chose to be eclectic and use their own preferred music styles to grow their own fan audiences rather than be defined by the kind of music style categories established by the music recording corporations.

There is emerging evidence that eclecticism has its advantages: In a blog entry on her self-titled website 'Kina Grannis',[15] Grannis documented the recollections of her own stage performance at the Lilith Fair, 'a tour/travelling music festival of sorts' started by well-known recording artiste Sarah McLachlan, to celebrate female music artistes. Grannis herself was a big fan of several of the music artistes at the Lilith Fair, and this was evident by the way she adulated those artistes in her blog. On the same blog page, Grannis embedded a *YouTube* video to provide instructions for her 'Co-write with Kina' series of online videos which she had begun several weeks earlier, where she invited her online fans to submit their own lyric compositions to suit a musical tune which Grannis herself had composed.[16] Grannis used the *YouTube* videos to engage with and entertain her fans, but what was remarkable about this 'Co-write with Kina' series was that a number of her fans responded with not only text lyrics as Grannis instructed, but they also posted videos of themselves on *YouTube*, singing with the lyrics they had composed for Grannis; and by so doing, created a (smaller) subgroup of fans from Grannis' (larger) pool of fans. And because those fans were singing Grannis' music, other online friends of those fans also came to know about Grannis' other music. In this way, Internet social media and social network sites such as *YouTube*, *Facebook* and *MySpace*, have enabled independent artistes (like Kina Grannis) to rise to seemingly greater popularity over more established and commercially viable artistes of her time such as U2, Kelly Clarkson, and Mariah Carey (Berg 2010).

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[15] Retrieved 26 September 2010, from Kina Grannis website: http://www.kinagrannis.com/2010/07/co-write-part-iii-verse-2-lilith-recap/.

[16] Retrieved 26 September 2010, from YouTube: http://www.youtube.com/watch?v=atduuVecrMA.

On the Internet, Grannis' phenomenal rise in popularity over more established artistes was likely due to issues of slower or later adoption of such media and sites by those artistes since such online 'popularity' was measured in terms of the number of online fan subscriptions to music-related social network sites and social media, as well as the amount of fan activity visualised through the online media and which were tracked by Internet search engines. Nevertheless, Grannis' case provides evidence that audiences are interested 'in doing more than sitting back and listening to music in the background, somehow being part of a music experience, touching music, engaging in music, playing back and forth, participating with others' through social media (Machover 2008).

The next section describes the perceivable gap between what the music business corporations, music artistes and their audiences consider might lead to a vibrant musical ecology; where the boundaries between expertise and amateurism are blurred; and where there is potential for music enjoyment to be enhanced for everyone, both music artistes and audiences alike.

Fuelling the generative impulse

As the lines between music audiences and artistes are blurred, and each becomes more self-aware of their independent generative capability, artistes are increasingly finding newer ways to distribute their music and bypass the major record labels. In response, the music recording industry has sought to capitalise on audiences' latent generativity by monetising music through newer forms of consumption and commoditisation (IFPI 2010; Kennedy 2008), such as the electronic music video games market.

The subsequent introductions of electronic music games *Guitar Hero*, *Rock Band*, *Paper Jamz* and others, have allowed audiences to simulate being performing and recording musicians, without the need for practice or in-depth musical instrument knowledge. Such ready-made rhythmic-music-themed hand-eye-coordination games represent a new cultural phenomenon because the user immerses in the fantasy of generating ready-made music; that is, no real new music is actually being created while the game is being played. In the case of *Guitar Hero*, the game required the user to push buttons on the fret board of the game controller (which button to push was dictated by similarly coloured dots that scrolled on the video game screen at increasingly higher speeds). To unlock the music that a real guitarist pre-recorded in the game, the user was required to press the correct button at the precise time, giving the illusion that the user was actually producing guitar sounds.

While such electronic music games have marked the growth of a profitable music-rhythm game market[17] which has introduced more social gaming concepts and gaming console interactivity to the existing video game market (Zezima 2007), these games have the potential to revive music sales for established artistes who pre-record their music on game devices, to newer, typically younger generations of audiences. However, the impact on everyday musicianship is debatable: for example, by bestowing the rewards of virtuosity to those who have not spent time to earn it, do these games dumb down real musicianship? And, if an individual could easily become a 'Guitar Hero' or 'Rockstar',[18] will that distract the individual from mastering the real thing? Therein lies the paradox where audiences seem to be increasingly immersing themselves in highly mobile ready-made everyday music listening entertainment activities, yet those same audiences are unlikely to be involved in 'touching music or involved in making it', which Tod Machover, professor of music and media at the MIT Media Lab, observed 'is not a good thing' (Machover 2008). Although there has been a boom in user-created content, and music-related video-game applications, such as *Guitar*

[17] The electronic music games market represents a confluence between the music recording industry and videogame entertainment, especially in the area of music licensing.

[18] Paper Jamz, for example, has been described by its makers as 'a range of cool new guitars, drums and amps with unique paper thin technology that turns you into an instant Rockstar'. Retrieved 26 September 2010, from Paper Jamz: http://www.paperjamz.com/.

Hero and *Rock Band*, had seen international success, Machover argued there was a widening gap between 'professional musicians' and 'an interested public' and that audiences needed to engage (more) actively in music in order for the full effect of music to be revealed (Machover 2008).

Speaking on The Future of Music to the Royal Society for the encouragement of Arts, Manufactures and Commerce (RSA) in 2008, Machover described his experimental work with 'Hyperinstruments' — basically, a series of digital instruments that can be played by individuals who are not trained musicians — and explained how they might hasten the blurring of the relationship between professionals and amateurs in the music recording industry (Machover 2008). *Guitar Hero*, the first commercially available hyperinstrument, opened the door for audiences to be more than passive listeners, to be real active participants in music. However, Machover admitted that, at the current time, *Guitar Hero* was 'not very musical', and that it was potentially 'very destructive because it makes you feel like you're doing something musically that you're not doing' (Machover 2008). Machover explained:

> Amplified sound is loudly present and 'surrounds' us ever more, but still emphasizes the boom box aspect rather than the 'still small voice'. And there isn't yet a performance measurement system that could come close to interpreting the exuberance, range and immediacy of someone like Gustavo Dudamel or truly enhancing the experience of an 'unplugged' symphony orchestra (Machover 2010).

The current version of *Guitar Hero*, for instance, may be rhythmically interesting but it is insufficiently expressive or truly creative — it is a tethered[19] experience that does not necessarily lead audiences to better musicality, listening or ensemble awareness, let alone generativity.

Machover is currently developing a series of hyperinstruments (e.g. the hypercello and the hyperviolin) for grassroots audiences who enjoy music but who may not be competent with a musical instrument (and this can apply to singing and the human voice as well). The idea was to enable audiences to mimic or enhance traditional instrument sounds using implements that can be operated using what Machover called 'natural skill' (Machover 2008). By making instruments that respond to peoples' natural movements and gestures, Machover envisioned hyperinstruments as a way of bringing music 'to people who don't normally get involved with this stuff' (Interview with Tod Machover 1996).

Whether hyperinstruments will effectively promote music culture to the less music literate is currently debatable, but if hugely popular, what is certain is that the music corporations will try to commoditise such new devices to perpetuate their business models, just as they have done with *Guitar Hero*, *Rock Band*, and other similar electronic music video games. *Gibson Guitar* for example, is aggressively integrating computer technology into new product lines. Henry Juszkiewicz, CEO of *Gibson Guitar* said:

> Building calluses and painstakingly learning all the musical fingering is not creative, but is the discipline to get the creative rewards … In the future we want to reduce the crap you have to deal with to allow people access to that creativity (Levy 2007).

The next section of this paper discusses the dichotomous relationship that has evolved between the music business corporations and generative audiences, at the boundaries where expertise and amateurism have converged with new ways to share the experience of music. The section highlights the perceivable gap and underlying tensions between the different perspectives of which generative music qualities, what increasingly pervasive technological tools and whose business models might lead to a vibrant musical ecology.

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[19] Internet researcher Jonathan Zittrain (2008) used the term 'tethered' when he considered the impact of 'more centrally controlled … information appliances', such as the MP3 player, emerging: To 'further facilitate glitch-free operation, devices are built to allow no one but the vendor to change them' (p. 101).

Tapping the generative impulse

The expansion of digital music markets globally has been attributed to new business models involving the digitisation of music distribution, and the rise of portable music entertainment devices, such as *Apple*'s iPod and *Creative*'s ZEN (IFPI 2009 2010; Yoshikawa 2009). New music audiences are able to personalise their listening and viewing experiences, and make their own music more easily than before. Music audiences are generative (Tham 2009): they are increasingly aware of the creative opportunities digital encoding techniques present for individuals to copy, share and resample different pieces of music into mashups; as well as collaborate with each other to produce further creative works of musical expression; becoming artistes themselves. However, despite knowing the huge potential for audience to consume 'music on tap' (IFPI 2010), the music industry trade lobbying groups representing the music corporations/record labels, such as the IFPI, the RIAA, the ARIA and others, seem to be working to stamp out the generative ability of music audiences to self-produce musical expression and share experiences. Hence, a clearer understanding of the tensions arising from this dichotomous issue first requires a brief discussion on the significant developments in the music industry over the last two decades:

Before digital music file-sharing service *Napster* began in 1999, downloading music from the Internet was a relatively complicated process: an Internet user would have had to search various websites and servers before finding a place that claimed to give access to a song (or music file), and then the user would often run into broken links or registration requirements. *Napster* was revolutionary because it made music downloading and uploading comparatively easier than before, and brought together a significant number of online music collectors and their collections to a one-stop place as a virtual community. At the height of its popularity, *Napster*'s easy access to free music reportedly attracted more than 70 million registered users (Halliday 2010; Menn 2003). Ironically, *Napster*'s immense popularity may also have been its downfall because the RIAA sued *Napster* in December 1999, accusing *Napster* of being a 'hijacker' of intellectual property, and alleging that *Napster* had cost the music industry 'more than US$300 million in lost sales'. As a result, *Napster* was eventually forced to shut down its services in 2001 (BBC 2000).

Napster might not have become popular in the first place, if not for the series of circumstances and events which took place even earlier, in the 1990s, with the commercial introduction of compact disc (CD) media. The CD was the first digital music product widely embraced by consumer audiences. At first, the recording industry saw CDs as the way to control music piracy involving analogue cassette tapes. The shape and nature of the music commodity had become informationalised, commoditising music into mechanical or downloadable objects (e.g. as computer file media) bound by limits of use (Virilo 1997). With the standard music CD, the recording industry could commodify up to only 74 or 80 minutes of music at a time. Audiences needed an intermediary device, such as compatible CD player, to activate the CD's music file contents. But by the mid-1990s, audiences could easily transfer digital music tracks onto their home computers using a CD-ROM drive or create physical copies of CDs using a CD-burner at home. In a reactive attempt to counteract declining CD sales figures, the recording industry responded by reducing the number of music singles released so as to compel audiences to purchase whole CD albums (Dean 2003); but this was clearly a stop-gap, astroturf solution by the corporations to control music audiences in the face of the rapid changes which were affecting the industry's music distribution business.

The rise and popularity of digital music file-sharing services like *Napster* meant that music distribution could be accomplished through file sharing and without the need for CDs. The recording industry could not monopolise music distribution through CDs after all. Furthermore, inexpensive recording hardware and software made it possible for individuals to create high quality music at home and distribute their music using the Internet to a worldwide audience (Graham 2009). As explained earlier in this paper, newer artistes were not considering contracts with

recording companies as an integral part of their music careers, giving rise to the popular notions of independent artistes and 'indie music culture'.[20] Thus the recording industry was losing control over the production aspect of music before distribution. Independent artistes and their fans were beginning to see more value in maintaining their own (independent) web sites that allowed them to feature and promote lesser known artistes and non-mainstream/niche music content. One early example of such an independent online music network website was the Substitute: Alternative Music Network website,[21] which was created in 1997 to promote 'home-grown' alternative music artistes to newly emerging Asia-based broadband[22] Internet audiences. A level playing field emerged through the Internet social media, where alternative music and even 'Asian music' which once existed as an 'other' to popular 'Western music', were being featured more prominently on the same platforms as Western commercial music and made more accessible to a wider range of both niche and mainstream audiences than before (Carew 2009; Tham 2009)

Over time, music-centric social network sites, music-related message boards and blogs, were increasingly being used by independent music companies[23] to further their business opportunities internationally (Leeds 2006). Some independent music company web sites relied on audience participation to impact on the success of an artiste or band which they promoted; for example, the company might require the website's fans to vote for an artiste's music performance. Basically, this audience participation provided benefits to the independent music company because it helped eliminate the need to invest in new talent search and development — one of the more costly areas of the music business. Today, other web sites allow artistes to upload their music and sell it at a price of their choosing without the need to involve traditional royalty collection agencies like the IFPI and associates (Pfahl 2001).

Following the footsteps of *Napster*, other P2P file-sharing programmes, like *Kazaa* and *Gnutella*, emerged to allow audiences to gather in various virtual chat rooms devoted to certain styles/genres of music and share/trade music audio and video files. Through a typical file-sharing programme, a set of audience users would have access to another set of users' MP3s (and vice versa), effectively turning each participating-user's computer into a 'server'. Such digital modes of distribution allowed audiences to share and download only those songs they wanted, or to subscribe to a download service, or to purchase music individually through a download service. Audiences could access and download a wider variety of music singles, just like they were able to before the recording industry tried to reduce the number of singles issued.

In 2003, the recording industry reportedly reverted back to single releases, and today, the industry continues to release even more pay-to-download singles in an apparent attempt to meet the growing demand from digital-download music audiences on the Internet (Dean 2003). The return to single releases via Internet digital-download services by the recording industry put the recording corporations in direct competition with the free Internet file-sharing peer-to-peer (P2P) networks. The upshot was a string of costly legal campaigns by the RIAA (sometimes acting in concert with the other groups under the IFPI umbrella) against the P2P networks, even though P2P networks were sites for virtual communities and other kinds of file sharing besides music.

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[20] Tom Berg wrote about solo artiste Kina Grannis walking away from a major recording deal to remain as an independent artiste (Berg 2010). Interviews conducted by the author of this paper, involving Australian artistes based in Perth, Western Australia, have revealed similar perspectives. There is mounting evidence that artistes choose to remain independent of recording companies in order to retain control over the direction of their music, the money they earned, or the release dates of their albums (Richardson & Hayslett 2007).

[21] Substitute (19 October 1997). Retrieved 2 November 2010 from http://www.substitute.com.

[22] The availability of broadband Internet services made it more efficient to upload and stream digital music files online.

[23] Also known as 'independent record labels', which set themselves apart from the major record labels by operating without external funding and/or specialising in niche music.

In February 2004, the ARIA announced its legal action against P2P network *Kazaa*, alleging serious copyright breaches in Australia. On 5 September 2005, the Federal Court of Australia ruled that *Sharman Networks* (*Kazaa*'s owners), though not itself guilty of copyright infringement, had illegally 'authorised' *Kazaa* users to share copyrighted music content (Wilcox 2005). On 5 December 2005, the Australian Federal Court forced *Kazaa* services to cease (Ferguson 2005); an imposition that, due to jurisdiction issues, was enforceable only in Australia and which had little impact on the rest of *Kazaa*'s international P2P network. The respective defendants of the lawsuit in Australia were required to pay for extensive damages to the record labels that instigated the legal action through the ARIA (Wilcox 2005). Similar legal action was undertaken by the RIAA against *Kazaa*, its owners, and individual users, in the US between 2003 and 2007. The lawsuits against *Kazaa*'s owners and users in Australia and the US respectively, was proof of the IFPI's latest tactic of employing collaborative strategies and costly simultaneous campaigns involving its member countries' representatives, to impact financially on a targeted international P2P service provider in the jurisdictions where the particular P2P network had its largest base of users.

According to the IFPI Annual Reports between 2009 and 2010, it would seem that the technological form of the MP3 changed the music recording industry. Both IFPI's Global Chairman and Chief Executive John Kennedy's 2008 speech to the Royal Society for the encouragement of Arts, Manufactures and Commerce (RSA) and his written Introduction to the IFPI Digital Music Report 2010 revealed the IFPI's consistent view that the only thing driving the music-sharing community was the lure of free MP3 music[24] and whose freeloading file-sharing habits needed to be checked (IFPI 2010; Kennedy 2008). There was no acknowledgement or sympathy from Kennedy that music file-sharing sites were also grassroots sites where a sophisticated culture of sharing music chords, lyrics, reviewing and discovering new music through user ratings, has grown since the earliest days of P2P. In fact, Kennedy hinted that audiences generally had little or no regard for intellectual property rights and that they were unconcerned about the impact of music piracy:

> … My subject could not be more difficult. I go to places around the world to be booed at for the things we're trying to do, to try and deal with online piracy and the problems of the music industry (Kennedy 2008).

However, a broader historical and international context of a worldwide file-sharing culture that, according to the IFPI and Kennedy, 'quite simply threatens to put the whole music sector out of business' (IFPI 2009, p. 3), brings to mind a previous crisis when cassette tapes were first introduced around the world (Manuel 1993; Wallis & Malm 1984). There are, of course, some subtle differences between the so-called crisis now and the crisis then, such as the larger profit margins and growth indices demanded[25] by conglomerate businesses which now owned the major recording companies — demands which have skewed stakeholder expectations just as they did when profits dipped before the introduction of CDs (Knopper 2009).[26]

This paper argues that it was not the technological form of the MP3 but new and generative music audiences — 'the generative impulse' — that changed (and are changing) the music recording

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[24] John Kennedy's view inferred that audiences shared music files online simply because they could do so freely.

[25] According to the IFPI 2010 Digital Music Report, in 2009, 'for the first time ever, more than a quarter of the recorded music industry's global revenues (27 per cent) came from digital channels — a market worth an estimated US$4.2 billion in trade value, up 12 per cent on 2008'. Nevertheless, overall music sales had been shrinking rapidly and digital sales only represented one small growing segment in an otherwise deteriorating market still dependent on CDs for distribution. (IFPI 2010)

[26] When CDs were first introduced, the IFPI's statistics at the time did not take into account that CDs artificially boosted music sales, especially back-catalogues, when audiences started to replace their phonograph machines and vinyl record collections, or cassettes tapes and cassette decks, for CDs and CD players.

industry. By launching legal action against the popular free P2P sites, the recording industry represented by the IFPI and associates incurred the wrath of P2P music fan audiences as the recording industry set out to progressively target each P2P music network that was in direct competition with the industry's conglomerate members' own digital-download pay-subscription services (Moses 2010). Although paid digital downloads continued to grow rapidly, and a number of the major P2P services that had shut down have since re-emerged[27] promoting licensed content and under newer owners (who were not necessarily from the music industry), the returns 'did not begin to make up for the loss of revenue from CDs' (Economist.com 2008).

In view of the anticipated returns by the music corporations, both the IFPI's 2009 and 2010 Digital Music Reports contained the repetitive theme of demanding ISP/legislative involvement to solve the issue of digital piracy. Kennedy argued that ISP/legislative involvement was the last stand of the music industry. Although attempts to stop piracy — using methods such as shutting down peer-to-peer (P2P) file sharing services, flooding P2P networks with corrupt files, suing people who participate in P2P file sharing, educating audiences — have aided the IFPI's cause marginally, but Kennedy has claimed that none of those methods were as effective as getting national governments to legislate ISPs to pressure their Internet subscribers to conform using a 'graduated approach' involving three consecutive warning letters and then an offender's Internet connection would be disconnected by the ISP (IFPI 2010, p. 3). In such situations, the IFPI argued that governments should pressure ISPs 'to act as proper partners in helping protect intellectual property' (IFPI 2009, p. 3), meaning that ISPs should engage in protecting intellectual content by acting as pre-emptive gatekeepers and regulation enforcers to their subscribers.

ISPs have previously demonstrated the kinds of gatekeeper control they possess: During the band Pearl Jam's performance at the Lollapalooza music festival in Aug 2007, ISP *AT&T* cut off the sound on a 'live' webcast when the band's Eddie Vedder began to share his opinion about the George W. Bush administration (AT&T Cuts Anti-Bush Lyrics From Pearl Jam Webcast 2009). In April 2008, US software quality engineer Robb Topolski testified at a FCC hearing that he had been downloading music files a Peer-to-Peer (P2P) file-sharing site, when he noticed something irregular about his Internet service performance. Topolski alleged that *Comcast*, his ISP, was intentionally impeding his ability to make downloads. Topolski petitioned the FCC, who then sued *Comcast*. In April 2010, the FCC lost the two-year US Federal Court case with *Comcast* even though there was undisputed evidence that *Comcast* had been discriminating content. The loss was attributed to legal jurisdiction (or the lack thereof on the FCC's part); highlighting the significant challenge consumer protection groups and government regulatory agencies face in the current legal environment.

Not surprisingly, music audiences are increasingly concerned about the net neutrality debate, especially the IFPI's proposal to involve the ISPs in policing the Internet. Consumer groups are concerned that ISPs, being mainly commercial entities, would rely solely on profit considerations to predetermine what content (e.g. music) should be made accessible (or made inaccessible) to consumers; fragmenting audiences along the lines of those who are allowed and those who are not; those who can pay and those who cannot; and, ultimately leading to a commercially centred music industry dominated by only a few corporations who would seek to increase profits further by controlling consumer access to services (e.g. restricting audiences' access to music services that facilitate audience generativity, such as the new hyperinstruments) and choice of products (e.g. particular music product brands) on top of charging a premium for the privilege of access (Schatz 2010). A premium on music services should in theory, lead to better quality music offerings; but at the present time, audiences still complain about the visible lack of quality music artistes being marketed by the major record labels (Moses 2010).

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[27] Napster and Kazaa were reincarnated into unlimited download pay-subscription services.

Conclusion

Changes in music consumption are changing the way corporations relate to generative music audiences. While the music recording industry has sought to monetise and control access to music, generative audiences have sought to consume 'music on tap' and bypass restraints laid down by the recording industry's regulators. On the surface, opportunities abound for music artistes to independently break into the mainstream with the help of online social media. These have raised serious questions about the relevance of trade lobbying groups (like the IFPI, RIAA and others) in today's industry context where artistes have inexpensive tools to interact and engage directly with their audiences and vice versa.

As digital technology becomes more deeply integrated into 'real' instruments, shortcuts to virtuosity will also become more commonplace in music. Audiences will increasingly have the opportunity to emulate their favourite music artistes without the need for virtuosity, and a few may become music artistes in their own right. As this happens, more audiences will seek to share or giveaway or sell their creative works to their own audiences as the lines between professional and amateur are increasingly blurred. New hyperinstruments are being developed for greater affordability, and with the promise of providing the delights of real musicianship to those audiences who would not otherwise have the opportunity. The motives for these hyperinstruments appear to support grassroots music development. However, there is evidence of astroturfing by the music corporations that finance these hyperinstruments, as the business corporations continue to try to monetise music by tethering music devices using ready-made pre-recorded music and marketing them in such a way that audiences might think they can become rock stars or celebrity entertainers without any training or practice. Ultimately, the endgame by the corporations has been to commoditise music audiences where commoditising music is not enough because of corporate demands for larger profit margins and growth indices.

This paper concludes that unless policymakers and the corporations recognise and respect the generative spaces of new music audiences without discrimination, the music industry looks set to teeter down a tethered, stable but stagnant path. It is essential that any resolution to net neutrality take into key consideration how new media audiences consume as social experience and with generative impulse.

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