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The rise of the new amateurs

Popular music, digital technology, and the fate of cultural production

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A studio reverie

I recently spent some time in a popular-music recording studio. Not quite Abbey Road but a professional recording studio nevertheless. At its center, like an altarpiece, lay the mixing desk, its aura reinforced by a ring of synthesizers the likes of which I'd only read about in music magazines—a Roland TB-303, an old Mellotron, a Juno 106, a Yamaha DX7, a Moog. Next to the mixing desk sat a computer screen, with blocks of colorful data hinting at a mixing and mastering session that was to be more about software than hardware. For all their kudos as hardware classics, the synthesizers and outboard gear had been replaced by simulated versions in the form of "soft synths," all-in-one studios, and software programs like "Band in a Box," which allows users to generate music by inputting chord names, genres, styles, and rhythms. It was the sound engineer's job to negotiate, via a series of menus and mouse clicks, a virtual desktop replication of the very equipment that surrounded him.

And here, propelled by my professional myopia, I encountered a group of sociologists of culture. Howard Becker (1982) explained to me that the studio setting and its personnel satisfied a conception of art as collective activity. Even the student who made the coffee, he said, was a key link in an elaborate chain of cooperation that made the music world possible. In broad agreement, Paul Hirsch (1972) and John Ryan and Richard A. Peterson (1982) elaborated. The studio, they suggested, is part of a complex organizational system of popular music characterized by market structures, reward systems, and decision chains that work to reduce demand uncertainty. It's likely, they explained, that the cultural work put into the demo CD would make the songs sound more polished and professional, but it was gatekeepers further down the production chain who would really determine whether they would get airplay.

With varying degrees of detail, a group of sociologists of music refined my knowledge of the process, their responses displaying great diversity. Some, of a more Marxist persuasion, pointed to the interpenetrations of genre formation and niche marketing in a music industry that was increasingly part of a globalized market of taste, talent, and rights (Frith 1978); others dismissed the studio outright as a cultural factory peddling repetitive

dross to a manipulated mass of consumers. Others still identified a trend towards the fragmentation of music networks and a patchwork of micro-industries, from small record labels and unlicensed nightclubs to urban music scenes and amateur radio broadcasts. These less visible networks, they said, blurred boundaries between producers and consumers, professionals and amateurs, in ways that suggested historical fluidity in the organization of cultural work (Kealy 1979).

Finally, there was a group of scholars who wanted to talk specifically about the studio technologies—the microphones, the cables, the acoustic insulation, even the door closers (Kealy 1979; Latour 1988). Some took a shine to particular synthesizers in the studio, such as the Moog, whose history as a technological artifact was shown to be bound up with the practices, discourses, and biographies of designers and engineers (Pinch and Trocco 2002). A few gravitated towards the computer and waxed passionately about the potential for new digital technologies of cultural production such as software studios and samplers to promote vernacular creativity amongst an untrained mass of new producers (Chadabe 1997). Others pointed to the rise of virtual studios and virtual music scenes made possible by globalized networks of communication, mobile digital devices, and the internet (Bennett and Peterson 2004). In years to come, they explained, the locality of this recording studio, its connections to place, will be softened, perhaps even threatened, by its insertion into a global space of flows (Théberge 2004). Sure enough, around the time the music-based social networking site MySpace took off, the studio was forced to close down due to lack of demand. Still, at least it played host to all these cultural sociologists whose own work had enriched my experience of being there.

Digital transformations of popular music

The studio is not the only place where digital transformations are afoot in popular music, of course. The digital lies at the center of claims regarding root-and-branch changes in the way culture is produced, disseminated, and consumed. Sometimes lauded as a revolutionary new set of creative practices, sometimes denigrated as a technological beast responsible for destroying music, the digital has become a technocultural *leitmotif* for the twenty-first century. Most spectacularly, the globalized circulation of music in ones and zeros has been implicated in a radical overhaul of the music industry. The practice of digital downloading via peer-to-peer networks and file-sharing programs, it is claimed, is dissolving the hegemony of major entertainment conglomerates, replacing product-based economies of scale and control with gift-like networks of de-materialized exchange (Leyshon 2003). Mainstream channels of distribution have been joined by user-organized networks of creation and distribution that potentially undermine chains of production based upon rights and ownership.

Meeting these undercurrents of "disintermediation" are the first signs that mainstream musicians are taking their cue from bottom-up developments in digital consumption. Recently, high-profile acts like Prince, Nine Inch Nails, and Jay-Z have distributed content direct to consumers via the internet, through newspapers or in constituent digital parts to allow fans to re-version tracks. The release of Radiohead's album *In Rainbows* was (initially at least) not only an all-digital affair, but fans were permitted to download the album at whatever price they thought fair, including for free. Meanwhile, consumers are increasingly invested in loops of feedback, commentary, and customization in the digital spaces of new music media, from music blogs to cell phone clips. They are

making use of digital infrastructures to pool knowledge with other music fans—annotating, filtering, and linking content and creating their own dissemination channels.

The implication is clear: If the classic model of the 1950s and 1960s saw a few firms and various independent labels involved in controlling the flow of production to sale, the contemporary model is much more diffuse and multiplicitous. The power that once resided in record companies to control the infrastructure and techniques needed to produce, promote, and disseminate commercial products is certainly less universal and, for many of them, has hemorrhaged (Ryan and Hughes 2006). In its wake has emerged a decentralized system of post-industrial cells—individually insignificant, but collectively powerful in providing alternatives to the mainstream commercial industry. In short, of all the identifiable trends that might be significant harbingers of systematic change in music over the last thirty years, from the rise of hip-hop and sampling to portable tape machines and CDs, the most vivid and far-reaching can be subsumed under umbrella processes and practices associated with digitalization—the turning of continuous information (sound) into discretely scanned symbols (binary data).

This chapter pursues the shifting terrains of popular music as they are nudged and shaken by the movements, constructions, and uses of digital technologies. Specifically, it will suggest that our understanding of the structure and culture of popular music needs to change if we are to analyze post-1980s developments in fast-paced, highly technologized societies with precision. Diagnosing change always has its perils, of course, and this is particularly apparent with new technologies, where the idea of transformation (*viz*. digital "revolution") is often overplayed, as if digitalization is a new "year zero" in popular music's history. Clearly, older industry structures of rights, contracts, and high-value capital remain largely intact, if only in adaptive or "residual" form, to use Raymond Williams' (1977) term. Moreover, an infrastructure of bedrooms, clubs, gigs, studios, festivals, rehearsal rooms, and record companies continues to be significant in the cultural life of any music scene, virtual or not. To assume nothing has changed, however, is exactly the mistake made by centralized firms in the music industry, shocked and overtaken by less than superficial changes in consumer practices. Although not just in consumer practices.

The rise of the new amateurs

For all the attention heaped upon Napster and music piracy, there is a less obvious, but by no means unimportant shift in the way music is created and circulated—a quieter, more subtle evolutionary process at work, threaded through these developments. It is a shift that brings into question the very separation between production and consumption as well as traditional boundaries around cultural expertise. If the "direct access relationship" between musicians and fans is fulfilling an ideal of unmediated contact between the two constituencies, another ideal is being serviced by digital technologies, that of the self-sufficient "amateur" producer. Digital technologies and corresponding practices have twisted, stretched, and radicalized older tendencies in modern culture, for sure, but they have also extended the very notion of production into realms previously estranged from academic and cultural analysis.

When *Time* Magazine made "you" the person of the year in 2006, it bucked the popular trend of identifying "great men" as sole influential agents of history, placing ordinary people, instead, at the center of an upsurge of productivity and innovation.

"You" were the passionate producers of a range of cultural forms and media, from home videos to personal blogs, bedroom songs to podcasts. Harbingers of a "digital democracy," ordinary people are making culture with an energy and in quantities never seen before, *Time* suggested. They are forming collaborative communities, customizing their own content, and shifting the principles upon which creativity rests.

The dizzying proliferation of digital folk culture is nowhere more apparent than on the new digital repositories of demotic creativity such as YouTube (for videos), MySpace (for social networking and music), and Flickr (for photos). This is content dominated by non-specialists at a range of levels and in a range of forms, circulated through rapidly expanding global networks of communication. Beyond the hype of "web 2.0" and the fact that leisure time, technical capital, and access to a computer are still fundamental passports to this form of creativity, the underlying point is incontrovertible. Huge swathes of the population are making, filtering, editing, and distributing digital culture, creating micro-organizational worlds with systematic, macrological effects.

It is a point that should not be lost on cultural sociologists, not least because it has implications for how we see production, expertise, and modes of creativity. If those previously considered non-specialists are actively producing websites, on-line photography galleries, radio broadcasts, and the like, not only are they failing to fit models of passive consumers suggested by the Frankfurt School and "hypodermic syringe" models of consumption (media and technology studies scholars have known about this poor fit for a long time), but they are threatening the very boundaries around professional and amateur, expert and non-expert, so central to modern social configurations. The welling up of small-scale, specialized, and participatory projects is, in other words, meeting top-heavy delivery of content head on, potentially chipping at the surety bestowed upon modern credentialism and the status of the modern professional.

In historical terms, this valorization is actually a return. Just over a century ago, the amateur was lauded as the epitome of virtue, respectability, and grace. In eighteenth- and nineteenth-century Britain, the evaluative standards of the aristocratic amateur were central to the development of "polite culture." By dint of their supposed disinterestedness and adherence to neo-platonic truths—both of them, ideological products of a privileged structural location—amateurs were, it was believed, exclusively qualified to act as arbiters of taste, shaping the contours of public virtue, and the ideals of civic heroism. Processes of modern professionalization and commercialization inverted this status hierarchy, however, consigning the amateur to the status of dabbler whose expertise was weakened both by lack of time dedicated to their pursuit and by institutional affiliation, training, and credentials. Indeed, for most of the twentieth century, the amateur was a fringe figure, propping up hierarchies of quality in a normative system dominated by professional groups.

In the last two decades or so, the status and position of the amateur have been redeemed and a new, less aristocratic, breed of amateur has emerged. These are technologically literate, seriously engaged, and committed practitioners working to professional standards but often without the infrastructural support or conventional credentials of the professional. Disproportionately, though not exclusively, drawn from the educated middle classes, they deploy their cultural capital in projects and self-organized cultural milieux (Bourdieu 1990; Leadbeater and Miller 2004; Battani 1999). They are unlikely to earn much of their total income from their activities, but their sense of identity is firmly attached to the pursuit of "serious leisure" (Stebbins 2007).

If the twentieth-century professional was defined partly by a monopoly over a specialized field of knowledge, objects, and esoteric skills, such monopolies are mutable and under erosion. This has partly to do with material and technological processes: the objects and tools that once separated amateur and professional now travel between them more readily. The complex machines and spaces that once imposed financial barriers to production are no longer the necessary prerequisites for quality. And boundaries around technical expertise are more permeable with the rise of mass higher education and dispersed digital technologies of communication. It is nowadays a fairly straightforward exercise to find out how to make your own movie, add expressive filters to your photos, or publish your own newsletter. If only a decade ago we saw computers as esoteric business machines and word-processors, we now think of them as cultural devices for generating images, editing movies, and mixing tracks.

Convergence and the fate of "DIY" music production

In the domain of music, the idea of the "amateur" has been given especially short shrift. Indeed, with the exception of Ruth Finnegan's (1989) now classic ethnography of music-making in a small English town, very few studies have tackled the amateur in any detail. Finnegan herself notes how musicological analysis has gravitated to the "best" or "highest" forms of music-making. In popular music studies this has meant skewed attention to the highly commodified and spectacular domains of the large-scale sub-field (Bourdieu 1993). A careful stock-take of music-related activity, however, reveals a diverse set of amateur networks, practices, and creative forms outside the commercial domain, from choirs and brass bands to family gatherings and karaoke. In the UK, arts surveys suggest that around 9 percent of the population play musical instruments, 2 percent play to audiences, and 5 percent sing to audiences at least once a year (Leadbeater and Miller 2004). Indeed, many of the musical organizations noted in Finnegan's study still exist, including formal music-making communities and local groups.

Electronic and digital technologies have expanded these networks, not just by bringing like-minded musicians together, but by establishing alternative modes of creativity through non-institutional means. In an initial phase of distribution in the 1980s and 1990s, the development of affordable technology for music production significantly lowered thresholds for making professional-sounding music. As the prices of four-track recording devices, drum machines, effects boxes, and synthesizers dropped, so they migrated from high-end studios to the bedrooms of non-professional producers. Associated techniques like multi-tracking, once the preserve of experimental producers and super-studios like Abbey Road, became relatively normalized practices outside the studio.

In a subsequent phase, an expanding global market for domestic personal computers and music-authoring software (in some cases, as with Apple's *GarageBand*, shipped free with the computer) has transferred a colossal bulk of recording equipment onto the desktops and laptops of ordinary musicians. All-in-one software studios like *Cubase*, *Logic*, *Acid*, *Ableton Live*, and *Reason* combine the functions of a range of hardware separates such as mixers, compressors, sequencers, and samplers into a single virtual unit. Whole orchestras—indeed music's whole sonic palette—can be conjured up in these digital spaces, giving rise to new stylistic combinations and borrowings not just in hip-hop, but

in pop and rock generally. What a multi-million-dollar recording studio once contained as its top-end equipment is now actively appropriated in simulated form by non-professionals, many of whom have never set foot in a "real" studio—or, indeed, had a music lesson.

The new amateurs are taking advantage of music promotion and dissemination sites like MySpace to reach audiences directly, bypassing the mediating chains populated by gatekeepers, marketers, A& R men, and label bosses. In effect, the internet has become the stage for a continuous performance and audition, a space for hopeful musicians to arrange gigs or try out songs. But it is only one of the stages. As well as live performances, musicians are taking advantage of CD-burning capabilities to create their own demo CDs for distribution amongst local communities, friends, and fans, potentially turning their homes into processing plants. This was unthinkable little more than a decade ago, when the music business had a monopoly over factory production, the pressing of vinyl, and CDs.

Such developments are convergent in nature. What is, after all, distinctive about the computer is that it is a meta-device—the first device in the history of popular music to converge production, distribution, and reception. Operations and techniques that were once separate have been unified in the digital spaces of sequencing software and Digital Audio Workstations, making it possible (and in some respects expected) for musicians to write, record, mix, master, upload, distribute, promote, download, and listen to music using a single unit. Convergence is also, by implication, an occupational folding. Tasks that were discretely allocated in modes of production have collapsed, giving new amateurs the opportunity to become specialists in a range of professional occupations.

Kealy (1979) provides a benchmark for comparison. He sketches the occupational transformation of the sound mixer from craftsman to artist in the United Stated during the 1950s and 1960s as this group became professionalized and unionized. This shift was dependent upon protectionist strategies and boundary work designed to stave off the encroachments of other emerging audio professions. Nowadays, however, sound mixing is just one of a range of practices undertaken by self-producers whose amateur CVs are boasting expertise in all phases of production—from composition and sound engineering to promotion and distribution. They are learning their multiple trades in formal educational establishments, as well as through informal networks of friends, on-line databases, consumer magazines, and discussion forums.

All this makes for a denser cultural life, where pluralized expressions of creativity are bubbling up amongst a diversifying body of creators. With cultural gatekeepers relatively displaced, musicians are getting closer to fulfilling the "do-it-yourself" ideologies of punk and hip-hop, reinstating practices of homemade art that existed long before the rise of transnational media conglomerates and mass distribution. And they are making a difference, not just in the dark corners of the internet but throughout the cultural system. For, although non-professionals and independent producers have always been active producers of music, they rarely matched the success of those sponsored by the established culture industries. Today, they still suffer structural disadvantages, not least in advertising, promotion, and marketing. But they are making up some ground.

Band in a boxroom

Here's a case in point. In the summer of 2008, I interviewed a British Asian musician called Jyoti Mishra, otherwise known as the band White Town. For a short moment in

the late 1990s, Mishra was the poster boy of musical geeks and bedroom musicians everywhere. In 1997, whilst studying for a film and sociology degree at the University of Derby, UK, Mishra produced a song, "Your Woman," in a nine-foot-square spare bedroom, using an eight-track recorder, a £35 microphone, and some free computer software. The song, a 1980s-inspired chunk of electro-pop, was arranged around a catchy 1930s trumpet sample from a song by Lew Stone and the Monseigneur Band called "My Woman."

In October 1996, Mishra sent a demo of this song to BBC Radio1 DJ Mark Radcliffe, who liked it so much he made it his "record of the week." This meant it was played every day that week on Radcliffe's evening show. A series of institutional contingencies followed. Radcliffe went on holiday, but his replacement continued to play the track. Chris Evans, a prime-time breakfast DJ, became ill and had to be replaced. Radcliffe replaced him, but kept plugging the song. Music journalists jumped on the homespun origins of the track and consumers became captivated by the catchy sample hook. Record companies queued up to sign White Town and in just a few short weeks, in January 1997, the record reached number one in the UK charts, eventually selling around 400,000 copies. It went gold in Canada, sold 250,000 copies in the United States, and proceeded to reach number one in eight different countries. "Bedroom to Big Time," *Wired* magazine put it (Pemberton 1997). Mishra signed to EMI/Chrysalis, went on to record an album, promptly fell out with the record company, but had made enough money on the basis of "Your Woman" to give up his studies and continue his life as an independent musician, self-producing, marketing, and distributing his own material.

This is a satisfying narrative, an antidote to the top-heavy, stitched-up ruthlessness popularly attributed to the record industry. If one can avoid the "never give up on your dreams" sentimentalism that Mishra's label promoted at the time, then it is still remarkable that an unknown Asian man in his thirties could single-handedly write and produce a hit song without huge commercial backing or support. It shows how cheap, modern musical technologies can be used to make professional-sounding tracks, and it demonstrates the viability of a grassroots mode of production. Musicians have always sought ways to "make do" in the sense implied by de Certeau (1984). In many respects, they are the consummate "creative consumers," improvising resourcefully with whatever materials and channels are available to them. In the past, this has meant sourcing equipment from unusual places, financing the recording, designing the sleeve, pressing and distributing the record, or even setting up a micro label. In other words, this DIY system has always been a viable option.

The difference today is one of global reach, speed, ease of use, and absolute scale. One might even suggest that the DIY ethic so cherished by punk rockers is no longer an activist ideology, but a systematic, structural condition of the production of music itself. And not just in the developed West either. For whilst the digital divide between rich and poor countries undoubtedly exists in a climate where "ethnic sounds" are sampled and fetishized by the likes of Missy Elliot and Madonna for their "exotic" quality, impoverished musicians in places like the Dominican Republic are managing to find access to digital recording facilities in order to record and press CDs on very tight budgets (Hernandez 2004). Meanwhile, digitalization has undoubtedly accompanied a creative cross-pollination of styles from around the world in a context of intensified migration, displacement, and mobility. Contemporary Bhangra, for instance, remixes Punjabi folk dance with Western popular music—rock, hip-hop, rap, and house music, in

particular—in an articulation of the hybrid identities of Asian migrants and their descendents in English and North American cities (Maira 2002). Here, the evolving complexity of diasporic identities is a product not only of urban or national settings but also of global soundscapes embedded within increasingly tangled webs of mass-mediated, transnational communication systems, including the internet (Connell and Gibson 2003).

Add to this the material affordances of wireless laptop computers and these global hybridities and DIY processes are infinitely flexible and geographically mobile. Musicians are making music on the move with others, in the spatial and temporal interstices of life, on a little-and-often basis. They are untethering cultural production from fixed locations and sending music into a fluid network of exchanges (Prior 2008). As broadband communication infrastructures become more widespread, they are collaborating remotely with other musicians (via email, virtual worlds, teleconferencing, or streaming audio technologies), displacing the need to be physically co-present with collaborators. Finally, they are finding new spaces in which to play and consume music, in the domains of interactive media forms such as video games, where mainstream music-making overlaps with music simulations, virtual gigs, and rhythm-action games like *Guitar Hero*. Production has truly evolved into "prosumption" (a combination of the words "production" and "consumption").

Conclusion: why 1983?

Stock histories of popular music often gravitate to a "golden age" of rock, usually located in the late 1950s or early 1960s—a period of rapid socio-economic change that begat a pantheon of rockers, from Elvis Presley to the Beatles. In an article titled "Why 1955? Explaining the Advent of Rock Music" (1990), Richard A. Peterson points to that as the year consolidating legal, technological, and organizational developments conducive to the birth of rock music in the United States. These included the development of a "dual structure" industry of small firms and oligopolies, the spread of network radio programming, and the development of 45 rpm vinyl records (Peterson 1990). Even if there is a whiff of nostalgia about this analysis, the point is sound: a unique confluence of occupational, technological, and cultural elements in the mid-1950s comprised a system of production geared to the total transformation of the music industry.

What, then, of the last twenty-five years? If popular music is a moving object, how much has it moved during this time, how significant has this era been in transforming the auspices of pop, and what role have digital technologies played in catalyzing these developments? It is clearly perilous to assume that free-floating technologies in themselves have revolutionized music. New technologies do not create music worlds from scratch. But they have facilitated or afforded new possibilities.

The period 1982–83 was a particularly propitious one for pop. First, two of the most influential musical works of recent times were produced and disseminated around this time. One, Michael Jackson's album *Thriller*, remains the biggest selling album in history and turned Jackson into a global superstar. The other, New Order's *Blue Monday*, is widely perceived to be the biggest selling UK 12-inch record of all time and presaged a shift to dance-based pop of the 1980s. Second, in production terms, 1983 saw the invention of several influential musical devices and processes—their presence emblematic of a fundamental shift in the global structure of the electronics industry towards East and Southeast Asia (Gregory 1985). Such devices included the first commercially successful

digital synthesizer—the Yamaha DX7—affordable drum machines, commercial audio software packages, and the first desktop computers with monitors and graphic user interfaces. The year 1983 also witnessed the invention of MIDI, or "Musical Instrument Digital Interface," an industry-standard protocol set up by Japanese electronics corporations to enable different instruments to communicate streams of algorithmic data with one another (Kakehashi 2002). Like the spread of any universal language or technical standard, MIDI unified what could have potentially become a fragmented landscape of musical instruments, "locking in" subsequent technological developments around a new paradigmatic frame of recording and performing. Third, CDs and CD players were introduced to the mass market in late 1982—another step in a long line of format shifts in the history of music that changed how we listened to music, one that cemented the idea of the audio file as a unitary piece of digital information capable of being stored, catalogued, manipulated, and endlessly reproduced in chunks of binary data. Finally, 1983 was the year that ARPANET and its associated protocols (the first manifestation of internet technologies) were switched over to the TCP/IP protocol, establishing networking capabilities across different and hitherto incompatible computers. Today, the world wide web is largely based upon TCP/IP software that connects different networks of computers.

None of these four developments was independently responsible for creating the momentum necessary for wholesale changes in popular music. In many respects, they replicated and attended to an already emergent series of global processes that ushered in advanced, high-tech, networked societies favoring a re-ordering of modes of cultural production. In other words, they articulated with contemporary social, economic, and political practices to emplace key struts of a reconfigured system of cultural production and consumption—one that has blurred this very separation. The digital is many things: a rhetoric, a claim, a set of technologies. But it is also a shorthand, a formation, a condition—one that opens up creative agency, unhooks it from place, and sends it into flows of global information. What we hear, where we hear it, how we listen to new music, who produces it: these have all traveled. Musical styles have diversified and novel ways of making music have emerged. But in many ways, these are no more than the latest twists in popular music's history in the *longue durée*, a cat-and-mouse story of conservation, innovation, and subversion, a reconfiguration rather than a revolution. There is no last word to be had on these changes, not just because disagreements abound over their character and extent, but also because the pace of change leaves the analyst invariably trailing behind. What is for sure is that the struggle between technology, use, and control over protean networks and colonizing organizations will continue. As will the music.

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